2019
Annual Report

TIM

This document has been translated into English for the convenience of the readers.
In the event of discrepancy, the Italian language version prevails.

Cover Picture:
2019 TIM 5G commercial_Prof. Francesco Musumeci

Dear Shareholders,

In 2019 we achieved great results in terms of our strategic positioning, the efficiency of our cost structure and operations, our reputation, and improving our commercial offering. We were able to do all of this by focusing on strengthening a cohesive, determined and high-quality management team. The various initiatives we put in place had a single objective: to build the foundations for a stronger, more resilient and authoritative TIM both internally and externally, aware of the role that it can play for innovation in Italy, today and in the future. As such, the decision of the Board of Directors to propose the distribution of an ordinary dividend – the first since 2013 – is testament to the major process that has been carried out to bring the Group back to "normality and stability".

Italian GDP growth was marginal in 2019 (about 0.2%). In particular, the contraction in the last quarter of the year (-0.3% compared to the previous quarter) brought the Italian economy back to the levels recorded in the last quarter of 2018. At the same time, the prices of telecommunications services and in particular mobile network services, which have always been among the lowest in Europe, have fallen significantly further (about 8 percentage points).

The unfavorable macroeconomic scenario, combined with strong price pressures on telecommunications services, has led to a re-reading of our strategic positioning.

With the dual objective of achieving greater operational efficiency and at the same time consolidating our competitive advantages, we have built solid alliances with leading international groups. The three main agreements concerned the development of mobile network infrastructures (with Vodafone), management of consumer credit (with Santander) and the development of cloud computing services (with Google). We have also moved to develop our fixed ultrabroadband networks (FTTH), having published a co-investment proposal at the end of last year that aims to reduce development costs and speed up implementation times, which is aimed at all operators in the sector.

The funds freed up by the agreements signed with Vodafone and Santander, plus the cost reductions resulting from organic rationalization, led to an overall saving of more than 3 billion euros, enabling us to take significant action on debt reduction. This is absolutely essential not only to shore up our financial and asset indicators, but also and above all to regain flexibility and greater room for maneuver in the future.

Aside from their financial effects, the agreements are strategically important value and reflect our vision of an industry evolution based on technical and operational efficiency, which must be combined with distinctive competitive advantages built on the quality of the services offered.

We want to continue to be leaders in terms of the quality and pervasiveness of our fixed and mobile networks, while at the same time offering simple and innovative services based on advanced cloud-computing infrastructure and data centers, which will be further improved thanks to the partnership with Google.

Considering the current economic and competitive environment in which, TIM has once again shown a resilience and reactivity superior to its competitors. In mobile network services, the churn rate for 2019 fell by 6 percentage points compared to 2018, while average revenues per line during the year showed gradual signs of recovery.

Access to fixed-network ultrabroadband continued to grow, with an overall retail plus wholesale increase of more than 1.5 million lines. Looking to the future, the migration to FTTcab and FTTH networks promises much in terms of greater customer interest in more advanced and high-performance services, and in terms of the gradual abandonment of traditional platforms (copper/ADSL) with a corresponding reduction in associated costs.

Developments in fixed networks are reflected in mobile networks, too. Thanks to the scale and quality of the frequencies acquired, we will be able to strengthen our current leadership also in the context of 5G networks.

Our quality leadership in fixed and mobile networks is a USP that we intend to exploit even more through the offer of convergent fixed-mobile solutions that can provide an even more comprehensive answer to the needs of our customers.

In addition to the quality and reliability of our networks, the attractiveness and solidity of our customer offering are also (and above all) based on the breadth and variety of the audiovisual content that we have been able to bring together within TIM VISION. Our content platform is now a genuine "mega-store" where each customer can freely choose how to build their own"*a la carte*" service according to their budget and preferences.

We know that one of the main obstacles to the country's digital growth is the much lower level of demand than in other major European countries, due to the low level of digital skills among certain sections of the population. As a result, we also set out to intervene on the educational front by creating Operation Digital Risorgimento. Initially conceived as a travelling digital school that would stop in every part of Italy, in light of new requirements dictated by the Coronavirus emergency the project will be gradually transformed into a broader container for various initiatives aimed at making it easier to use digital technologies in response to the health emergency.

In Brazil, we concentrated on building commercial packages with a focus on value rather than on increasing volumes, resulting in significant improvements in the post-paid segment – the segment with the highest added value. Average revenue per line has increased by more than 5% as a result of this strategic repositioning. In general, our main objective is still to increase the share of customers using broadband services over 3G and 4G networks. Customers who use broadband services not only generate a higher average revenue per line, but are also more loyal.

As in Italy, the consolidation in Brazil of the customer base that uses the most advanced services has been made possible by our solid leadership in network infrastructure, in terms of quality, size and coverage. We continue to strengthen this leadership position through the use of the leading radio access technologies (massive MIMO antennas) and through the growth of the backbone and backhauling infrastructure, with more than 100,000 k, of fiber now laid.

In more general terms, the overall revenue growth of Tim Brasil, achieved despite strong competitive pressure and general macroeconomic uncertainty, shows that the turnaround of the Brazilian business continues successfully and that the Brazilian market is still a core strategic element for Group-level growth prospects.

Our strength and ability to compete will continue to guide our work, aware of the the responsibility, commitment and passion that this requires in what is a dynamic and constantly changing competitive scenario that requires us to make even greater efforts to evolve. Pursuing shared growth opportunities with other major industrial partners does not mean giving up our identity. On the contrary, it means strengthening what we already are and will increasingly become: an advanced digital technology group that aims to meet the "digital needs" of citizens, businesses and public administrations through a comprehensive and high-value range of products and services.

To respond to Italy's digital needs and to be able to do so comprehensively and in synergy with our economic and social environment, we have to – and want to – behave in a sustainable and responsible way. Indeed, our sustainability and social responsibility goals are a fundamental part of our new industrial plan.

The role that we have always played in economic and social development – and want to continue to play – cannot ignore the difficulties that Italy is facing at the moment.

The health crisis caused by the spread of the Coronavirus involves us all and affects us all personally. The current state of emergency imposes significant changes and radically alters our normal way of life. It is still too early to assess with reasonable certainty the economic and social impact of what is happening, but there is no doubt that there will be consequences both on company turnover and on world gross domestic product.

The one thing we can be sure of, as a country and as citizens, is that TIM is here and will continue to be here. Our support for Italy's economic and social fabric will continue, where possible even more intensely. Wherever we can and wherever we have the capacity, we will continue to take prompt and proactive action – without waiting for anyone to ask us.

We have already brought in a wide range of initiatives in a very short period of time, ranging from free voice and data traffic for citizens and businesses to providing specific digital services and products for schools (Weschool), hospitals and prisons (tablets and smartphones), businesses (remote working kits), and from network expansion/extension to free migration to ultrabroadband services.

We repeat again: TIM is and will remain at the country's side.

Salvatore Rossi

Luigi Gubitosi

2019 Annual Report

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BOARD OF DIRECTORS

Chairman	Salvatore Rossi (independent)
Chief Executive Officer and General Manager	Luigi Gubitosi
Directors	Alfredo Altavilla (independent)
	Paola Bonomo (independent)
	Franck Cadoret
	Giuseppina Capaldo (independent)
	Maria Elena Cappello (independent)
	Massimo Ferrari (independent)
	Paola Giannotti de Ponti (independent)
	Marella Moretti (independent)
	Lucia Morselli (independent)
	Dante Roscini (Lead Independent Director)
	Arnaud Roy de Puyfontaine
	Rocco Sabelli (independent)
	Michele Valensise (independent)
Secretary to the Board	Agostino Nuzzolo

BOARD OF STATUTORY AUDITORS

Chairman	Roberto Capone
Acting Auditors	Giulia De Martino
	Anna Doro
	Marco Fazzini
	Francesco Schiavone Panni
Alternate Auditors	Andrea Balelli
	Antonia Coppola
	Franco Dalla Sega
	Laura Fiordelisi

Independent Auditors	EY S.p.A.

Report on Operations

2019

TIM Group

Key operating and financial data (comparable data)

REVENUES 17,977 Millions of Euros

EBITDA

7,489 Millions of Euros

EBITDA MARGIN

organic excluding non recurrent 42.0%

ADJUSTED NET FINANCIAL DEBT

23,839 Millions of Euros

CAPITAL EXPENDITURES & SPECTRUM

3,784 Millions of Euros

HEADCOUNT ITALY

45,266 numbers

HEADCOUNT OUTSIDE ITALY

9,932 numbers

HEADCOUNT AT YEAR END

55,198 numbers

KEY OPERATING AND FINANCIAL DATA - TIM GROUP

Consolidated operating and financial data (*)

(millions of euros)		2019	2018	2017	2016	2015
Revenues		17,974	18,940	19,828	19,025	19,719
EBITDA	(1)	8,151	7,403	7,790	8,002	7,006
EBIT before goodwill impairment loss		3,175	3,151	3,291	3,722	3,203
Goodwill impairment loss		–	(2,590)	–	–	(240)
EBIT	(1)	3,175	561	3,291	3,722	2,963
Profit (loss) before tax from continuing operations		1,739	(777)	1,777	2,799	453
Profit (loss) from continuing operations		1,226	(1,152)	1,287	1,919	50
Profit (loss) from Discontinued operations/Non-current assets held for sale		16	–	–	47	611
Profit (loss) for the year		1,242	(1,152)	1,287	1,966	661
Profit (loss) for the year attributable to Owners of the Parent		916	(1,411)	1,121	1,808	(70)
Capital Expenditures & spectrum		3,784	6,408	5,701	4,876	5,197

Consolidated financial position data(*)

(millions of euros)		12/31/2019	12/31/2018	12/31/2017	12/31/2016	12/31/2015
Total Assets		70,104	65,619	68,783	70,446	71,268
Total Equity		22,626	21,747	23,783	23,553	21,249
- attributable to Owners of the Parent		20,280	19,528	21,557	21,207	17,554
- attributable to non-controlling interests		2,346	2,219	2,226	2,346	3,695
Total Liabilities		47,478	43,872	45,000	46,893	50,019
Total Equity and Liabilities		70.104	65,619	68,783	70,446	71,268
Share capital		11,587	11,587	11,587	11,587	10,650
Net financial debt carrying amount	(1)	28,246	25,995	26,091	25,955	28,475
Adjusted net financial debt	(1)	27,668	25,270	25,308	25,119	27,278
Adjusted net invested capital	(2)	50,294	47,017	49,091	48,672	48,527
Debt Ratio (Adjusted net financial debt/Adjusted net invested capital)		55.0%	53.7%	51.6%	51.6%	56.2%

Consolidated profit ratios(*)

		2019	2018	2017	2016	2015
EBITDA/Revenues	(1)	45.3%	39.1%	39.3%	42.1%	35.5%
EBIT/Revenues (ROS)	(1)	17.7%	3.0%	16.6%	19.6%	15.0%
Adjusted Net Financial Debt/EBITDA	(1)	3.4	3.4	3.2	3.1	3.9

(*) As of January 1, 2019, the TIM Group has adopted the new IFRS 16 (Leases) with the modified retrospective method (without the restatement of comparative financial information of previous years). In addition, effective from January 1, 2018, the TIM Group has adopted: The new IFRS 9 (Financial Instruments) retrospectively - making use of the specific exemptions provided for by the same standard and without restating the previous periods under comparison - and the new IFRS 15 (Revenue from contracts with customers) using the modified retrospective method. Consequently, operating and financial data of previous years have not been restated. Further details are provided in the Note “Accounting Policies” to the Consolidated Financial Statements at December 31, 2019 of the TIM Group.

(1) Details are provided under "Alternative Performance Measures".

(2) Adjusted net invested capital = Total equity +Adjusted net financial debt.

Headcount, number in the Group at year end (1)

(number)	12/31/2019	12/31/2018	12/31/2017	12/31/2016	12/31/2015
Headcount (excluding headcount relating to Discontinued operations/Non-current assets held for sale)	55,198	57,901	59,429	61,229	65,867
Headcount relating to Discontinued operations/Non-current assets held for sale	–	–	–	–	16,228

Headcount, average number in the Group(1)

(equivalent number)	2019	2018	2017	2016	2015
Headcount (excluding headcount relating to Discontinued operations/Non-current assets held for sale)	51,917	54,423	54,946	57,855	61,553
Headcount relating to Discontinued operations/Non-current assets held for sale	–	–	–	2,581	15,465

Financial performance measures

TIM S.p.A.

(euros)		2019	2018	2017
Share prices (December average)				
- Ordinary		0.56	0.55	0.73
- Savings		0.55	0.47	0.60
Dividends per share	(2)			
- Ordinary		0.0100	–	–
- Savings		0.0275	0.0275	0.0275
Pay Out Ratio	(2) (*)	35%	13%	9%
Market capitalization (in million euros)		11,762	11,153	14,779
Market to Book Value	(**)	0.65	0.61	0.74
Dividend Yield (based on December average)	(2) (***)			
- Ordinary		1.80%	–	–
- Savings		5.04%	5.86%	4.55%

TIM Group

(euros)	2019	2018	2017
Basic earnings per share - ordinary shares	0.04	(0.07)	0.05
Basic earnings per share – savings shares	0.05	(0.07)	0.06
Diluted earnings per share - ordinary shares	0.04	(0.06)	0.05
Diluted earnings per share – savings shares	0.05	(0.06)	0.06

(1) Includes employees with temp work contracts.
(2) For the year 2019, the ratio was calculated on the basis of the proposed resolutions submitted to the Shareholders' Meeting of April 23, 2020. For all periods, the reference index was assumed to be the Parent's Earnings, calculated by excluding non-recurring items (as detailed in the Note "Significant non-recurring events and transactions" in the Separate Financial Statements of TIM S.p.A. at December 31, 2019).
(*) Dividends paid in the following year/Profit for the year.
(**) Capitalization/Equity of TIM S.p.A..
(***) Dividends per share/Share prices.

HIGHLIGHTS OF 2019

In the last quarter of the year, management continued to accelerate the achievement of the plan's objectives, particularly with regard to debt, about 6 months ahead of the plan presented to the financial community last year.

Operating free cash flow reached **3.1 billion euros**, recording an improvement of 1 billion euros compared to 2018, thanks to the continuous cost reduction and optimization of working capital management. **Equity free cash flow** amounted to **1.7 billion euros**, up by over 1.1 billion euros YoY.

Consequently, **comparable net financial debt** at December 31 fell by 1.4 million euros from the end of 2018 and by 473 million euros compared to September 30, 2019, amounting to **23.8 billion euros**.

With reference to the **development of strategic initiatives**:

- **Network-sharing partnership with INWIT and Vodafone Italia**: following the green light from the European antitrust authority, the creation of the new INWIT and the implementation of the planned programs for the sharing of passive mobile network infrastructure with Vodafone will be monitored, with benefits in terms of lower capital invested and shorter development times for 5G networks.
- **Fiber networks**: a period of exclusivity has been granted to the KKR Infrastructure fund as financial partner for the development of the fiber network in Italy following the submission of a non-binding offer for the purchase of approximately 40% of TIM's secondary fiber/copper network and in view of the desired integration with Open Fiber.
- **Partnership for Cloud Services**: signed the final agreements with Google Cloud, which start a technological collaboration to create cloud services and enrich TIM's technological services offering, which will lead to the development of a business of about 1 billion euros in revenues and 400 million euros in EBITDA up to 2024.
- **Exclusive deal with Disney**: the big world player in the content industry has chosen TIM Vision for the exclusive distribution of Disney+ in Italy, confirming TIM Vision as the reference operator in the aggregation of premium content in Italy, a position achieved in just one year.

In 2019, **revenues from** Group **services**, net of the contribution of Telecom Italia Sparkle (International Wholesale), amounted to **15.6 billion euros** (-2.6% YoY in organic terms), while total revenues reached 18.0 billion euros (-4.9% YoY in organic terms).

Group **comparable EBITDA** was **7.5 billion euros**, up 1.2% YoY, thanks to the ongoing cost-optimization actions and to a positive balance of non-recurring items benefiting from 685 million euros from the favorable outcome for TIM Brasil of the disputes over double taxation, partly offset by 756 million euros in provisions relating to staff leaving as well as risks relating to penalties.

The **Reported EBITDA – CAPEX** indicator reached **3.7 billion euros**, benefiting from ongoing improvement in expenditure terms and conditions and from the levels of coverage already reached both in fixed and in mobile.

The **net result** attributable to shareholders of the parent company amounted to **1 billion euros** (negative 1.4 billion euros in 2018).

The Board of Directors has therefore approved, for the first time since the 2013 financial year, a proposal to pay a dividend of 0.01 euros per ordinary share. The proposed dividend for savings shares remains unchanged at 0.0275 euros.

PERFORMANCE IN THE FOURTH QUARTER 2019

Service revenues totaled **4 billion euros**, down 261 million euros in organic terms compared to the fourth quarter 2018 (-6.1% YoY), due to the significant reduction in low- or zero-margin International Wholesale services contracts started at the beginning of the year. Net of the latter impact, revenues from services were down by -3.8% YoY at Group level and by -5.9% for the Domestic.
Total Group **comparable revenues** in the fourth quarter were **4.6 billion euros** (-6.6% YoY on an organic basis).

In Italy, the trend of weakening of the market's **Mobile** Number Portability dynamics was confirmed again in this quarter, demonstrating greater rationality at the top end of the market while the most price-sensitive market segment remained very competitive. The total number of TIM mobile lines was 31 million at the end of December, slightly down compared to the previous quarter with a reduced churn rate compared to the third quarter of last year (5.5% compared to 6.2% in 4Q 2018). The policy of reducing volumes of mobile devices sold (94 million euros in the fourth quarter, -30% YoY) with zero or negative margins brought the expected significant EBITDA benefits.

In the **fixed** segment, broadband lines continued to grow (+60,000) as did the continued migration of the customer base to the ultra-broadband (93,000 net increases in the fourth quarter, compared to 68,000 in the third quarter).
Also in the fourth quarter, fixed line telephone prices were not increased. Retail and Wholesale **fiber lines** reached **7.0 million** units, up 27% YoY and 5% QoQ. Revenues from ICT continued to grow in the business segment (+13.7% YoY), confirming and consolidating TIM's leadership in the ICT segment in terms of both offer and market presence.

In **Domestic Wholesale**, service revenues benefited from the continued migration of customers from copper to fiber, balancing the churn of copper-only customers.
In Brazil, TIM increased revenues from services by 3.2% YoY (+3.0% YoY in the third quarter) thanks to the commercial policies implemented in the mobile segment and despite the adverse macroeconomic and market changes, with guidance confirmed.

Group EBITDA After Lease totaled **1.8 billion euros** (-1.0% YoY on organic basis).

Group **organic EBITDA** (IFRS 9/15) amounted to **1.9 billion euros** (-1.6%) with a 40.7% EBITDA margin (+2.1 pp YoY) thanks to the cost containment measures taken. The EBITDA of the Domestic Business Unit came to 1.4 billion euros (-4.7% YoY) while the EBITDA of TIM Brasil went up 8.3% YoY (+6.8% YoY in the third quarter).

At Group level, fourth quarter investments totaled 1.5 billion euros (-1.8% YoY) of which 1.2 billion euros in Italy (-1.5% YoY).

Financial highlights for the year

(millions of euros)		2019	2019 comparable (a)	2018 (b)	% Change (a-b)	organic excluding non-recurring
Revenues		17,974	17,977	18,940	(5.1)	(4.9)
EBITDA	(1)	8,151	7,489	7,403	1.2	(2.8)
EBITDA Margin		*45.3%*	*41.7%*	*39.1%*	*2.6pp*	
Organic EBITDA Margin excluding non-recurring		*45.7%*	*42.0%*	*41.1%*		*0.9pp*
EBIT before goodwill impairment loss		3,175	3,058	3,151	(3.0)	
Goodwill impairment loss		–	–	*(2,590)*		
EBIT	(1)	3,175	3,058	561		(11.2)
EBIT Margin		*17.7%*	*17.0%*	*3.0%*	*14.0pp*	
Organic EBIT Margin excluding non-recurring		*18.1%*	*17.5%*	*18.7%*		*(1.2)pp*
Profit (loss) for the year attributable to Owners of the Parent		916	962	(1,411)		
Capital Expenditures & spectrum		3,784	3,784	6,408	(40.9)	
		12/31/2019	12/31/2019 comparable (a)	12/31/2018 (b)	Change Amount (a-b)	
Adjusted net financial debt	(1)	27,668	23,839	25,270	(1,431)	

Financial highlights for the fourth quarter

(millions of euros)		4th Quarter 2019	4th Quarter 2019 comparable (a)	4th Quarter 2018 (b)	% Change (a-b)	organic excluding non-recurring
Revenues		4,551	4,554	4,863	(6.4)	(6.6)
EBITDA	(1)	1,652	1,481	1,625	(8.9)	(1.6)
EBITDA Margin		*36.3%*	*32.5%*	*33.4%*	*(0.9)pp*	
Organic EBITDA Margin excluding non-recurring		*44.5%*	*40.7%*	*38.6%*		*2.1pp*
EBIT before goodwill impairment loss		463	341	534	(36.1)	
Goodwill impairment loss				*(590)*		
EBIT	(1)	463	341	(56)		(9.4)
EBIT Margin		*10.2%*	*7.5%*	*(1.2)%*	*8.7pp*	
Organic EBIT Margin excluding non-recurring		*18.7%*	*16.0%*	*16.5%*		*(0.5)pp*
Profit (loss) for the period attributable to owners of the Parent		64	31	(543)		

(1) Details are provided under “Alternative Performance Measures”.

NON-FINANCIAL PERFORMANCE

The obligations laid down in Legislative Decree 254/2016, regarding the disclosure of sensitive information of a non-financial nature and on diversity, have been the object of reporting by TIM Group since 1997, the year in which the Group published its first "Social Report", subsequently extended to cover environmental issues.
The current Sustainability Report follows a multi-stakeholder approach involving the joint analysis of actions taken in respect of the main stakeholders with whom the Company interacts. It is based on the main reference standard for Sustainability Reporting and on the principles (inclusivity, materiality, responsiveness) of the AA1000 AccountAbility Principles Standard (APS 2008), adopted by the Group as of the 2009 Financial Statements.
The 2019 materiality matrix, which summarizes the point of view of the Company and stakeholders, also identified the Sustainable Development Goals which the Group considers it can significantly contribute to, through its own operations.
The Group's commitment to integrating sustainability within its corporate strategy is proven by it being included in the **Dow Jones Sustainability Index Europe (DJSI Europe)** for the 16th year in a row.
TIM's presence in the Dow Jones is added to other important world indexes, including the **FTSE4Good** and **Euronext Vigeo Eiris**.
For more details of TIM's approach to sustainability and results achieved, see the 2019 Sustainability Report - Non-Financial Disclosure.

INTRODUCTION

The TIM Group and TIM S.p.A. Consolidated Financial Statements for 2019 and the comparative figures for the previous year have been prepared in compliance with the IFRS issued by the International Accounting Standards Board and endorsed by the European Union ("IFRS").

The accounting criteria and consolidation principles adopted are homogeneous with those used when drawing up the Consolidated Financial Statements of the TIM Group and the Separate Financial Statements of TIM S.p.A. at December 31, 2018, except for the adoption of IFRS 16 (Leases) adopted starting from January 1, 2019 with the modified retrospective method (that is, without recalculating the comparative figures of previous years), whose effects are explained in the Note "Accounting Policies - Adoption of the new IFRS 16 (Leases) standard" to which reference is made for further details. It should be noted that, starting from January 1, 2018, the TIM Group adopted IFRS 15 (Revenues from contracts with customers) and IFRS 9 (Financial instruments).

To allow the comparability of the economic and financial performances of 2019 with the previous year, the financial figures and main income statement balances of 2019 are shown in this Report on Operations in a "comparable" layout, using the previous IAS 17 (Leases) accounting standard and relevant interpretations (IFRIC 4, SIC 15 and SIC 27) in order to distinguish between operating and finance leases and the resulting booking of the lease contracts payable.

TIM Group, in addition to the conventional financial performance measures established by the IFRS, uses certain alternative performance measures in order to present a better understanding of the trend of operations and financial condition. Specifically, these alternative performance measures refer to: EBITDA; EBIT; organic change and impact of the non-recurring items on revenues, EBITDA and EBIT; EBITDA margin and EBIT margin; and net financial debt carrying amount and adjusted net financial debt. Following the adoption of IFRS 16, the TIM Group also presents the following additional alternative performance indicators:

(1) EBITDA adjusted After Lease ("EBITDA-AL"), calculated by adjusting the Organic EBITDA, net of the non-recurring items, from the amounts connected with the accounting treatment of the finance leasing contracts according to IAS 17 (applied until year-end 2018) and according to IFRS 16 (applied starting from 2019);

(2) Adjusted net financial debt After Lease, calculated by excluding the liabilities connected with the accounting treatment of the finance leasing contracts from the adjusted net financial debt according to IAS 17 (applied until year-end 2018) and according to IFRS 16 (applied starting from 2019).

The meaning and content of the alternative performance indicators are provided in the "Alternative performance indicators" chapter; analytical detail of the amounts of the reclassifications introduced and of the methods for determining indicators is also provided.

Lastly, the section entitled "Business Outlook for the year 2020" contains forward-looking statements in relation to the Group's intentions, beliefs or current expectations regarding financial performance and other aspects of the Group's operations and strategies. Readers of this Annual Financial Report are reminded not to place undue reliance on forward-looking statements; in fact, actual results may differ significantly from forecasts owing to risks and uncertainties depending on numerous factors, the majority of which are beyond the scope of the Group's control. Please refer to the "Main risks and uncertainties" section for more information. It provides a detailed description of the major risks pertaining to the TIM Group business activity which can, even considerably, affect its ability to meet the set goals.

NON-RECURRING EVENTS

In the years 2019 and 2018, the TIM Group recognized **non-recurring net operating expenses** connected to events and transactions that by their nature do not occur on an ongoing basis in the normal course of operations and which have been shown because their amount is significant. Non-recurring charges include, among others, any goodwill impairment changes, provisions for regulatory disputes and potential liabilities related to them, liabilities with customers and/or suppliers, and charges associated with corporate reorganization/restructuring and prior-year adjustments. In 2019, the positive effect from the recognition in the Brazil and Domestic Business Units of receivables consequent to the favorable result of disputes is also noted.

In detail:

(millions of euros) **Non-recurring expenses (Income)**	**2019**	**2018**
Revenues		
Revenue adjustments of previous years	15	62
Other income		
Brazil Business Unit Tax recovery and Domestic Business Unit operating expenses recovery effect	(706)	(37)
Acquisition of goods and services and Change in inventories		
Expenses related to agreements and the development of non-recurring projects	21	15
Employee benefits expenses		
Charges related to corporate reorganization/restructuring and other charges	282	233
Sundry expenses and provisions		
Expenses related to disputes and regulatory sanctions and potential liabilities related to them, and expenses related to disputes with former employees and liabilities with customers and/or suppliers	459	135
Impact on EBITDA	**71**	**408**
Sale of Persidera S.p.A. (Domestic BU)	18	
Goodwill impairment loss on Core Domestic and International Wholesale		2,590
Impact on EBIT	**89**	**2,998**

In particular, the non-recurring events for the year 2019 included:

- the adjustment of some Domestic BU contractual liabilities in order to align them with their estimated period end value. Specifically, liabilities relative to "prepaid" contracts were adjusted by a total of 15 million euros, wholly attributable to previous financial years;
- other income of 706 million euros of which:
  - 685 million euros, connected with the recognition in the Brazil Business Unit of tax credits consequent to the favorable result of the tax disputes connected to the inclusion of the ICMS indirect tax in the basis of calculation of the taxes on PIS and COFINS revenues, of which 407 million euros related to the recovery of indirect taxes and 278 million euros for the legal revaluation;
  - 21 million euros, in the Domestic Business Unit, related to the recognition of the receivable for the reimbursement of the fine relating to the Antitrust proceeding I761, following the related Council of State ruling of December 2019;
- expenses related to company restructuring processes (282 million euros);
- sundry expenses for 459 million euros mainly due to provisions for regulatory disputes and potential liabilities related to them, as well as liabilities with customers and/or suppliers.
- following the sale of Persidera, which generated proceeds of 142 million euros, as required by IAS 36, paragraph 86 the derecognition of the associated goodwill amounting to 68 million euros was carried out, with the result shown in the table below. In the Separate Financial Statements, this disposal transaction generated a total gain of about 8 million euros.

Non-recurring charges in 2018 included, mainly due to the goodwill impairment changes allocated to Core Domestic and International Wholesale (2,590 million euros), the expenses related to the corporate restructuring (233 million euros) and other expenses (135 million euros) including the provision to cover the fine for alleged infringement of article 2 of Decree Law 03/15/2012 no. 21 (the "Golden Power" rule).

MAIN CHANGES IN THE SCOPE OF CONSOLIDATION

The main changes in the scope of consolidation during 2019, were the following:

- Persidera S.p.A. (Domestic Business Unit): sold, after the demerger into two separate entities, on December 2, 2019.

The following should also be noted:

- Infrastrutture Wireless Italiane S.p.A. (Inwit) (Domestic Business Unit): on December 19, 2019 the Shareholders' Meeting approved the merger by incorporation of Vodafone Towers S.r.l. into Inwit. The transaction, preparatory to the creation of Italy's leading Tower Operator, entails the sale by the TIM Group of its controlling interest in Inwit. Therefore, as at December 31, 2019, Inwit is presented as an "Asset held for sale", since it is highly probable that the transaction will be completed by 2020. Further details are provided in the Note "Events Subsequent to December 31, 2019" in the consolidated financial statements at December 31, 2019 of the TIM Group. Accordingly, the financial assets and liabilities have been reclassified in the "Discontinued operations/Non-current assets held for sale" and "Liabilities directly associated with Discontinued operations/Non-current assets held for sale" items of the Consolidated Statements of Financial Position at December 31, 2019. The consolidated income data and cash flows for 2019 include the entire year figures from Inwit S.p.A.

- Noverca S.r.l. (Domestic Business Unit): merged into TIM S.p.A. on November 1, 2019 with accounting and tax effects backdated to January 1, 2019;

In 2018, there were no significant changes in the scope of consolidation.

CONSOLIDATED OPERATING PERFORMANCE

Revenues

Total TIM Group revenues amounted to **17,974 million euros** for the year 2019.
Comparable revenues - recognized on the basis of the accounting standards consistent with those adopted in 2018 - amounted to 17,977 million euros, down by 5.1% compared to 2018 (18,940 million euros); organic change in total revenues was -4.9%.
TIM Group revenues from services, not including the contribution coming from the Telecom Italia Sparkle group, which is repositioning its business with the exit from voice contracts with lower margins, amounted to **15,608 million euros,** in organic terms, down 2.6% compared to 2018 (16,021 million euros).

The Telecom Italia Sparkle group underwent market repositioning in 2019, which at the end of the year made it possible to achieve progressive and significant integration of the Sparkle group's business with the Core Domestic business. This integration is linked to the transformation of the Sparkle group, aimed at innovating the traditional business by focusing on more innovative areas that can meet the challenges of the new Gigabit Society. Therefore, starting from the end of 2019, the distinction between Core Domestic and International Wholesale no longer applies, with information provided solely for the Domestic Business Unit.

Total TIM Group revenues amounted to 4,551 million euros for the fourth quarter of 2019; comparable revenues amounted to 4,554 million euros, a decrease of 320 million euros in organic terms (-6.6%). **TIM Group revenues from services**, not including the contribution by the Telecom Italia Sparkle group amounted to 3,834 million euros in organic terms, down 3.8% compared to the fourth quarter of 2018.

The breakdown of total revenues for the year 2019 by operating segment in comparison with 2018 is as follows:

(millions of euros)	2019 comparable		2018		Change		
		% of total		% of total	amount	%	% organic excluding non-recurring
Domestic	14,081	78.3	15,031	79.4	(950)	(6.3)	(6.7)
Brazil	3,937	21.9	3,943	20.8	(6)	(0.2)	2.3
Other Operations	–	–	–	–	–		
Adjustments and eliminations	(41)	(0.2)	(34)	(0.2)	(7)		
Consolidated Total	**17,977**	**100.0**	**18,940**	**100.0**	**(963)**	**(5.1)**	**(4.9)**

The organic change in consolidated revenues of the Group for the year 2019 is calculated leaving out the negative effect of the changes in exchange rates[1], totaling -81 million euros, non-recurring expenses of 15 million euros (62 million euros in 2018) attributable to adjustments to revenues from previous years and the effect of the change in consolidation scope due to the sale of Persidera S.p.A. for -6 million euros.

EBITDA

Reported EBITDA for 2019 was **8,151 million euros**, and benefited, for the amount of 662 million euros, from the application of IFRS 16 following which, with reference to lease liabilities covered by the standard, the lease payments are no longer recognized as costs for acquisition of goods and services, but a financial liability must be recognized in the statements of financial position, represented by the current value of future payments, and the right of use under assets, amortized along the probable term of the contact with the relevant finance expenses posted to the income statement.

Comparable EBITDA for the year 2019 - prepared on the basis of accounting standards consistent with those adopted in 2018 - amounted to **7,489 million euros** (7,403 million euros in 2018; +1.2%), with an EBITDA margin of 41.7% (39.1% in 2018; +2.6 percentage points).

(1) The average exchange rates used for the translation into euro (expressed in terms of units of local currency per 1 euro) were 4.41422 in 2019 and 4.30628 in 2018 for the Brazilian real. For the US dollar, the average exchange rates used were 1.11954 in 2019 and 1.18121 in 2018. The effect of the change in exchange rates is calculated by applying the foreign currency translation rates used for the current period to the period under comparison.

The breakdown of comparable EBITDA, on the same accounting basis, by operating segment for 2019 compared to 2018 is shown below, together with the EBITDA margin.

(millions of euros)	2019 comparable		2018		Change		
		% of total		% of total	amount	%	% organic excluding non-recurring
Domestic	5,345	71.4	5,955	80.4	(610)	(10.2)	(5.0)
% of Revenues	*38.0*		*39.6*			*(1.6) pp*	*0.8 pp*
Brazil	2,153	28.7	1,467	19.8	686	46.8	6.8
% of Revenues	*54.7*		*37.2*			*17.5 pp*	*1.6 pp*
Other Operations	(10)	(0.1)	(19)	(0.2)	9		
Adjustments and eliminations	*1*	–	–		*1*		
Consolidated Total	**7,489**	**100.0**	**7,403**	**100.0**	**86**	**1.2**	**(2.8)**
% of Revenues	*41.7*		*39.1*			*2.6 pp*	*0.9 pp*

Organic EBITDA **- net of the non-recurring items** amounted to **7,560 million euros**; the EBITDA margin was 42.0% (7,774 million euros in 2018, with an EBITDA margin of 41.1%).
Specifically, EBITDA for 2019 reflected a negative impact totaling 71 million euros (negative for 408 million euros in 2018) referring to net non-recurring expenses as already described.

For further details, see the Note "Non-recurring events and transactions" in the Consolidated Financial Statements as at December 31, 2019 of the TIM Group.

Organic EBITDA, net of the non-recurring component, is calculated as follows:

(millions of euros)	2019 comparable	2018	Change	
			amount	%
EBITDA	**7,489**	**7,403**	**86**	**1.2**
Foreign currency financial statements translation effect		(34)	34	
Changes in the scope of consolidation		(3)	3	
Non-recurring expenses (Income)	71	408	(337)	
ORGANIC EBITDA, excluding Non-recurring items	**7,560**	**7,774**	**(214)**	**(2.8)**

Exchange rate fluctuations mainly related to the Brazil Business Unit, while the effect of the change in the scope of consolidation was connected with the sale of Persidera S.p.A..

EBITDA was particularly impacted by the change in the line items analyzed below:

- **Acquisition of goods and services (6,463 million euros; 7,128 million euros on comparable basis; 8,186 million euros in 2018):**

(millions of euros)	2019 comparable	2018	Change
Acquisition of goods	1,396	1,957	(561)
Revenues due to other TLC operators and costs for telecommunications network access services	1,324	1,787	(463)
Commercial and advertising costs	1,351	1,370	(19)
Professional and consulting services	220	242	(22)
Power, maintenance and outsourced services	1,119	1,103	16
Lease and rental costs	1,093	985	108
Other	625	742	(117)
Total acquisition of goods and services	**7,128**	**8,186**	**(1,058)**
% of Revenues	*39.7*	*43.2*	*(3.5)pp*

The decrease mainly relates to the Domestic Business Unit for around -952 million euros and the Brazil Business Unit for around -98 million euros.
Regarding the Domestic Business Unit, the change was mainly due to both the decrease in purchases of goods for resale, linked to the decrease in sold volumes of mobile handsets, in line with the repositioning of the current

commercial strategies, and the reduction in the revenues due to other operators and costs for access services to telecommunications networks

- **Employee benefits expenses (3,077 million euros; 3,077 million euros on comparable basis; 3,105 million euros in 2018):**

(millions of euros)	2019 comparable	2018	Change
Employee benefits expenses - Italy	**2,730**	**2,765**	**(35)**
Ordinary employee expenses and costs	2,463	2,541	(78)
Restructuring and other expenses	267	224	43
Employee benefits expenses – Outside Italy	**347**	**340**	**7**
Ordinary employee expenses and costs	332	331	1
Restructuring and other expenses	15	9	6
Total employee benefits expenses	**3,077**	**3,105**	**(28)**
% of Revenues	*17.1*	*16.4*	*0.7*

The net decrease of 28 million euros was mainly driven by:

- the decrease of 78 million euros of ordinary employee expenses in the Italian component, mainly due to the benefits related to the reduction in the average salaried workforce amounting to a total of -2,428 average employees, of which -319 average employees related to the "Solidarity Agreement", which expired in June 2019 and the subsequent expansion contract applied with effect from August 2019;
- the increase of 43 million euros mainly for restructuring expenses in the Italian component. Provisions in 2019, amounting to 267 million euros, were related both to the revised estimate and start date for staff leaving the Parent scheduled for the 2020 financial year (also in accordance with the application of article 4 of the Law of June 28, 2012, no. 92, as last defined in the union agreement of February 26, 2019) and the expenses recognized in light of the agreements signed by Olivetti on July 12, 2019, by H.R. Services on November 29, 2019 and Telecom Italia Sparkle on December 18, 2019 with the trade unions, based on the application of article 4 of the Law of June 28, 2012, no. 92. In 2018, provisions were made for expenses totaling 224 million euros following the updated actuarial measurements for provisions related to the application of Article 4, of Italian Law no. 92 of June 28, 2012;
- the increase of 7 million euros of the outside Italy component, mainly for restructuring and other expenses.

- **Other operating income (933 million euros; 933 million euros on comparable basis; 341 million euros in 2018):**

(millions of euros)	2019 comparable	2018	Change
Late payment fees charged for telephone services	59	60	(1)
Recovery of employee benefit expenses, purchases and services rendered	50	27	23
Capital and operating grants	33	39	(6)
Damages, penalties and recoveries connected with litigation	20	29	(9)
Partnership agreements and other arrangements with suppliers	–	22	(22)
Estimate revisions and other adjustments	36	73	(37)
Income tax Brazil Business Unit	685	37	648
Other	50	54	(4)
Total	**933**	**341**	**592**

Other operating income for 2019 benefited from 685 million euros from the Brazil Business Unit (classified as non-recurring), connected with the recognition of tax credits consequent to the favorable result of the tax disputes connected to the inclusion of the ICMS indirect tax in the basis of calculation of the taxes on PIS and COFINS revenues, which the company has been pursuing in court since 2006, with requests for reimbursement referring - as is allowed - to the previous five years, and therefore with effect from 2001. The amount includes 407 million euros related to the recovery of indirect taxes and 278 million euros for the legal revaluation.
The use of the recognized tax receivables started from the end of 2019, in compliance with the formal certification procedures established by the Brazilian tax authorities with a conjectured horizon of three years, and will be subject to taxation; therefore, deferred direct taxes with a similar time horizon were recognized for a total of 233 million euros.
Other operating income also includes a non-recurring component of 21 million euros relating to the recognition by the Parent of receivables for the repayment of the fine relating to Antitrust Case I761, following the ruling of the Council of State of December 2019.

- **Other operating expenses (1,625 million euros; 1,625 million euros on comparable basis; 1,259 million euros in 2018):**

(millions of euros)	2019 comparable	2018	Change
Write-downs and expenses in connection with credit management	577	518	59
Provision charges	497	189	308
TLC operating fees and charges	268	286	(18)
Indirect duties and taxes	124	125	(1)
Penalties, settlement compensation and administrative fines	58	73	(15)
Association dues and fees, donations, scholarships and traineeships	12	12	–
Other	89	56	33
Total	**1,625**	**1,259**	**366**

Other operating expenses included a non-recurring component of 459 million euros (135 million euros in 2018) mainly related to regulatory disputes and potential liabilities related to them and liabilities with customers and/or suppliers. The overall increase mainly relates to the Domestic Business Unit (around 336 million euros) and the Brazil Business Unit (around 32 million euros).

Depreciation and amortization

Depreciation and amortization amounted to 4,927 million euros, up by 536 million euros due to the application of IFRS 16.

On the same accounting basis as 2018, depreciation and amortization amounted to 4,391 million euros, breaking down as follows.

(millions of euros)	2019 comparable	2018	Change
Amortization of intangible assets with a finite useful life	1,675	1,599	76
Depreciation of tangible assets and rights of use assets	2,716	2,656	60
Total	**4,391**	**4,255**	**136**

Gains/(losses) on disposals of non-current assets

The item shows losses of 49 million euros and includes the effects deriving from the termination of finance lease agreements.

On the same accounting basis it showed losses of 40 million euros (1 million euro loss in 2018) and mainly included:

- the loss of 18 million euros, net of incidental costs, realized on the sale, after the demerger into two separate entities, of Persidera S.p.A. (Domestic Business Unit). The first entity (Persidera S.p.A.), is the holder of the five digital terrestrial agreement frequencies and the related revenue-generating and employee contracts, was sold entirely to F2i TLC 2 S.p.A.; the second entity (NetCo S.p.A.), with the entire network infrastructure and its employees, was sold it its entirety to EI Towers S.p.A.; the second entity (NetCo S.p.A.), with the entire network infrastructure and its employees, was sold it its entirety to EI Towers S.p.A. Following the sale of Persidera, which generated proceeds of 142 million euros, as required by IAS 36, paragraph 86 the derecognition of the associated goodwill amounting to 68 million euros was carried out;

- net losses related to the disposal of equipment and other assets of the Domestic Business Unit.

Net impairment losses on non-current assets

In 2019, this item amounted to nil.

In preparing the Annual Report for 2019, the TIM Group carried out an impairment test on goodwill. The results of that testing, carried out in accordance with the specific procedure adopted by the Group, confirmed the amounts of Goodwill allocated to the Group's individual Cash Generating Units.

In 2018, net impairment losses on non-current assets amounted to 2,586 million euros (2,590 million euros, net of 4 million euros of impairment reversals). Impairment losses for 2018 (2,590 million euros) refer to the goodwill impairment loss attributable to the Core Domestic unit and International Wholesale. Further details are provided in the Note “Goodwill” to the Consolidated Financial Statements at December 31, 2018 of the TIM Group.

EBIT

Reported EBIT amounted to **3,175 million euros** for 2019.
Comparable EBIT for 2019, net of the impact of IFRS 16 of 117 million euros, amounted to 3,058 million euros (561 million euros for 2018), an increase of 2,497 million euros compared to 2018, the EBIT margin stood at 17.0% (3.0% in 2018).
In detail, in 2019, the TIM Group recognized non-recurring charges of the Domestic and Brazil Business Units, totaling 89 million euros, mainly relating to provisions for regulatory disputes and potential related liabilities, to liabilities with customers and/or suppliers and to charges related to corporate reorganization/restructuring as well as the capital loss realized following the sale of Persidera S.p.A. and the adjustments to revenues from previous years;
In 2018, net non-recurring operating expenses attributable to EBIT amounted to 2,998 million euros, including the abovementioned goodwill write-down.
For further details, see the Note "Non-recurring events and transactions" in the Consolidated Financial Statements as at December 31, 2019 of the TIM Group.

Organic EBIT, net of the non-recurring component, amounted to 3,147 million euros (3,544 million euros in 2018), with an EBIT margin of 17.5% (18.7% in 2018).

Organic EBIT, net of the non-recurring component, is calculated as follows:

(millions of euros)	2019 comparable	2018	Change	
			amount	%
EBIT	**3,058**	**561**	**2,497**	**-**
Foreign currency financial statements translation effect		(14)	14	
Changes in the scope of consolidation		(1)	1	
Non-recurring expenses (Income)	89	2,998	(2,909)	
ORGANIC EBIT, excluding Non-recurring items	**3,147**	**3,544**	**(397)**	**(11.2)**

Exchange rate fluctuations mainly related to the Brazil Business Unit.

Finance income (expenses), net

Finance income (expenses) showed an expense of 1,436 million euros.
On the same accounting basis, without taking into account the effects of the adoption of the new IFRS 16, financial income/(expense) showed an expense of 1,237 million euros (expense of 1,348 million euros in 2018): the improvement was mainly driven by lower finance expenses, connected to the reduction in the Group’s average debt exposure and a drop in interest rates.

Income tax expense

This item amounted to 513 million euros, up by 138 million euros on 2018 (375 million euros). Specifically, the figure for 2018 included 200 million euros of deferred tax assets from the Brazil Business Unit, related to the tax recoverability of past losses recorded in previous years. In the 2019 financial year, the reduction in taxes paid by the Parent (-244 million euros) due to the contraction in the taxable base, was mainly offset by the higher deferred tax liabilities recognized by the Brazil Business Unit mainly against the aforementioned non-recurring income relating to tax credits following the favorable outcome of the disputes relating to the inclusion of the ICMS tax in the basis for calculating the PIS/COFINS contribution.

Profit (loss) from Discontinued operations/Non-current assets held for sale

Profit from Discontinued operations/Non-current assets held for sale of 16 million euros relates to a partial repayment of taxes, whose collection became certain in 2019, connected to the sale of the Sofora-Telecom Argentina group in 2016.

Profit (loss) for the year

This item breaks down as follows:

(millions of euros)	2019	2019 comparable	2018
Profit (loss) for the year	**1,242**	**1,304**	**(1,152)**
Attributable to:			
Owners of the Parent:			
Profit (loss) from continuing operations	900	946	(1,411)
Profit (loss) from Discontinued operations/Non-current assets held for sale	16	16	–
Profit (loss) for the year attributable to Owners of the Parent	**916**	**962**	**(1,411)**
Non-controlling interests:			
Profit (loss) from continuing operations	326	342	259
Profit (loss) from Discontinued operations/Non-current assets held for sale	–	–	–
Profit (loss) for the year attributable to Non-controlling interests	**326**	**342**	**259**

2019 Net profit for the year attributable to Owners of the Parent amounted to 916 million euros (while a net loss of 1,411 million euros was posted in 2018).

In comparable terms, excluding the impact of non-recurring events as well as the effects of applying IFRS 16, Net profit for the year attributable to Owners of the Parent for 2019 would have amounted to around 1.2 billion euros (around 1.4 billion euros in 2018).

2019

Business Unit

Key operating and financial data (comparable data)

DOMESTIC

REVENUES

14,081 Millions of Euros

EBITDA

5,345 Millions of Euros

EBITDA MARGIN

42.9%

organic excluding non recurrent

FIXED

PHISICAL ACCESSES
TIM Retail - Wholesale

end of period

17,136 thousands

BROADBAND ACCESSES
TIM Retail active

end of period

7,592 thousands

MOBILE

LINES

end of period

30,895 thousands

ARPU REPORTED

month

8.7 Euros

BRAZIL

REVENUES

3,937 Millions of Euros

LINES

54,447 thousands

EBITDA

2,153 Millions of Euros

EBITDA MARGIN

38.8%

organic excluding non recurrent

FINANCIAL AND OPERATING HIGHLIGHTS OF THE BUSINESS UNITS OF THE TIM GROUP

DOMESTIC

(millions of euros)	2019	2019 comparable (a)	2018 (b)	Change (a-b) amount	%	% organic excluding non-recurring
Revenues	14,078	14,081	15,031	(950)	(6.3)	(6.7)
EBITDA	5,708	5,345	5,955	(610)	(10.2)	(5.0)
% of Revenues	*40.5*	*38.0*	*39.6*		*(1.6) pp*	*0.8 pp*
EBIT	1,887	1,852	16	1,836	-	(14.8)
% of Revenues	*13.4*	*13.2*	*0.1*		*13.1 pp*	*(1.8) pp*
Headcount at year end (number) (°)	45,496		48,200	(2,704)	(5.6)	

(°) Includes employees with temp work contracts: 5 units at December 31, 2019 (0 units at December 31, 2018)

(millions of euros)	4th Quarter 2019	4th Quarter 2019 comparable (a)	4th Quarter 2018 (b)	Change (a-b) amount	%	% organic excluding non-recurring
Revenues	3,555	3,558	3,849	(291)	(7.6)	(8.9)
EBITDA	1,154	1,060	1,216	(156)	(12.8)	(4.7)
% of Revenues	*32.5*	*29.8*	*31.6*		*(1.8) pp*	*1.8 pp*
EBIT	193	162	(235)	397	-	(14.3)
% of Revenues	*5.4*	*4.6*	*(6.1)*		*10.7 pp*	*(1.0) pp*

Fixed

	12/31/2019	12/31/2018	12/31/2017
Physical accesses of TIM Retail (thousands)	9,085	10,149	11,044
of which NGN (1)	*3,588*	*3,166*	*2,150*
Physical accesses of TIM Wholesale (thousands)	8,051	8,063	7,951
of which NGN	*3,309*	*2,262*	*986*
Active Broadband accesses of TIM Retail (thousands)	7,592	7,483	7,510
Consumer ARPU (€/month) (2) (4)	34.9	34.0	33.1
Broadband ARPU (€/month) (3) (4)	27.7	26.3	24.3

(1) UltraBroadband access in FTTx and FWA mode
(2) Revenues from retail Consumer services in proportion to the average Consumer physical accesses
(3) Revenues from broadband services in proportion to the average active TIM retail accesses
(4) The 2017 data is determined on the basis of the accounting standards and methodology adopted at that date

Mobile

	12/31/2019	12/31/2018	12/31/2017
Lines at period end (thousands)	30,895	31,818	30,755
of which Human	21,003	22,448	23,331
Churn rate (%) [(5)]	20.4	26.3	26.2
Broadband users (thousands) [(6)]	12,823	13,015	13,176
Reported ARPU (€/month) [(7) (9)]	8.7	9.8	12.5
Human ARPU (€/month) [(8) (9)]	12.6	13.4	16.1

(5) The data refer to total lines. The churn rate represents the number of mobile customers who discontinued service during the period expressed as a percentage of the average number of customers
(6) Mobile lines using data services
(7) Revenues from retail services (visitors and MVNO not included) in proportion to the average total lines
(8) Revenues from retail services (visitors and MVNO not included) in proportion to the average human total lines
(9) The 2017 data is determined on the basis of the accounting standards and methodology adopted at that date

The Telecom Italia Sparkle group underwent market repositioning in 2019, which at the end of the year made it possible to achieve progressive and significant integration of the Sparkle group's business with the Core Domestic business. This integration is linked to the transformation of the Sparkle group, aimed at innovating the traditional business by focusing on more innovative areas that can meet the challenges of the new Gigabit Society. Therefore, starting from the end of 2019, the distinction between Core Domestic and International Wholesale no longer applies, with information provided solely for the Domestic Business Unit.
As a result, the data for the year was restated in order to provide a homogeneous representation.

Revenues

In order to bear in mind the changed market context and types of offer, starting from 2019 the breakdown of revenues and the itemization of some commercial indicators have been revised; as a result, also the comparative 2018 figures have been updated in order to provide a homogeneous representation. In detail, Revenues are represented by distinguishing between those deriving from offers of only Services or packages of Services (Revenues from stand alone Services) and those deriving from so-called “bundle” offers that include the customer signing a contract providing for the purchase of devices/products jointly with the rendering of a service along a certain time span (Handset and Bundle & Handset revenues).

Domestic Business Unit revenues amounted to 14,081 million euros, down 950 million euros (-6.3%) compared to 2018.

Revenues from Stand alone services amounted to 12,588 million euros (-764 million euros compared to 2018, equal to -5.7%) and were affected by the effects of the changed regulatory and competitive scenario. Not including the revenues of the international wholesale component, down compared to 2018 following the review of the Sparkle group in the voice business, with better focused contracts having higher margins, revenues from services amounted to 11,879 million euros in organic terms (-493 million euros compared to 2018, equal to -4.0%).

In detail:

- **revenues from Fixed market Stand alone services** amounted to 9,364 million euros, down 511 million euros (-5.2%) compared to 2018. Not including the revenues of the international wholesale component, down compared to the same period of 2018 following the review of the Sparkle group in the Voice Business, revenues from fixed services fell by 2.0%, in a challenging competitive and market context. The increased retail ARPU, growth in revenues from ICT solutions (+107 million euros compared to the previous year, +14.1%) and from broadband services (+89 million euros, +3.8%), only partly offset the natural decline in revenues from voice services resulting from the decreased accesses;
- **Stand alone revenues from services in the Mobile business** came to 3,775 million euros (-332 million euros, -8.1% compared to 2018) and were affected by the impact of the changed regulatory environment and competitive, with a fall in the ARPU, but a progressive recovery during the quarters of 2019 (-11.4% in the first quarter, -9.6% in the second, -7.2% in the third, -3.8% in the fourth).

Revenues from Handsets and Bundles & Handsets, including the change in work in progress, amounted to 1,493 million euros in 2019 (-186 million euros on the previous year).

Domestic Business Unit revenues in the fourth quarter of 2019 amounted to 3,558 million euros, down 291 million euros (-7.6%) compared to same period of the previous year.

Key results for 2019 for the Domestic Business Unit are presented in the following table, broken down by market/business segment and compared to 2018.

(millions of euros)	2019	2019 comparable (a)	2018 (b)	Change (a-b) amount	%	% organic excluding non-recurring
Revenues	**14,078**	**14,081**	**15,031**	**(950)**	**(6.3)**	**(6.7)**
Consumer	6,594	6,594	7,380	(786)	(10.7)	(10.7)
Business	4,624	4,627	4,678	(51)	(1.1)	(1.1)
National Wholesale Market	1,843	1,843	1,775	68	3.8	3.8
International Wholesale Market	947	947	1,272	(325)	(25.6)	(26.4)
Other	70	70	(74)	144	–	–

As regards the market segments of the Domestic Business Unit, please note the following changes compared to 2018:

- **Consumer**: the segment consists of all Fixed and Mobile voice and Internet services and products managed and developed for individuals and families and of public telephony; customer care, operating credit support, loyalty and retention activities, sales within its remit, and administrative management of customers; includes the company TIM Retail, which coordinates the activities of flagship stores. Revenues of the Consumer segment 2019 totaled 6,594 million euros and decreased by 786 million euros (-10.7%) compared to 2018, also due to the different competitive and regulatory context. The trend seen in total revenues also applied to revenues from stand alone services, which amounted to 5,800 million euros, down by 7.7% compared to the previous year (-481 million euros). In particular:
  - **revenues from Stand alone Mobile services** amounted to 2,569 million euros and posted a decrease of 246 million euros (-8.7%) compared to 2018, mainly due to the changed regulatory and competitive dynamics which increased the churn rate and put pressure on ARPU levels; moreover, in the fourth quarter there was an improvement in the trend over the same period of the previous year;
  - **revenues from Fixed market Stand alone services** amounted to 3,253 million euros, down compared to 2018 (-244 million euros, equal to –7.0%); this trend reflected a decrease in accesses, only partly offset by higher ARPU levels. The growth of Broadband customers is highlighted, in particular Ultra Broadband.

  Revenues for Handsets and Bundles & handsets in the Consumer segment amounted to 794 million euros, down 305 million euros compared to 2018 (-27.8%), concentrated on the mobile sector following the change in the product sales strategy, focused on protecting margins.

- **Business**: the segment consists of voice, data, and Internet services and products, and ICT solutions managed and developed for small and medium-size enterprises (SMEs), Small Offices/Home Offices (SOHOs), Top customers, the Public Sector, Large Accounts, and Enterprises in the Fixed and Mobile telecommunications markets. The segment includes the companies Olivetti, TI Trust Technologies and Telsy. Revenues for the Business segment amounted to 4,627 million euros, down by 51 million euros on 2018 (-1.1%, of which -2.9% for revenues from the stand alone services component). In particular:
  - **mobile revenues** show a negative performance compared to the previous year (-9.9%), driven mainly by lower revenues from stand alone services (-9.8%) from the reduction in ARPU levels;
  - **Fixed-line revenues** grew by 62 million euros compared to 2018 (+1.7%) while revenues from services remained substantially the same: lower prices and revenues from traditional services (also connected with the technological shift towards VoIP systems and solutions) were almost completely offset by steady growth in revenues from ICT services.

- **National Wholesale Market:** the segment consists of the management and development of the portfolio of regulated and unregulated wholesale services for Fixed-line and Mobile telecommunications operators in the domestic market. The segment includes the companies TN Fiber, TI San Marino and Telefonia Mobile Sammarinese. The National Wholesale Market segment revenues in 2019 came to 1,843 million euros, up by 68 million euros (+3.8%) compared to 2018, with a positive performance mainly driven by the growth in accesses in the Ultra Broadband segment.

- **International Wholesale Market:** includes the activities of the Telecom Italia Sparkle group, which operates in the market for international voice, data and Internet services for fixed and mobile telecommunications operators, ISPs/ASPs (Wholesale market) and multinational companies through its own networks in the European, Mediterranean and South American markets. Revenues for the International Wholesale Market segment for 2019 totaled 947 million euros, showing a drop of 325 million euros (-25.6%) on the 2018 figure. This trend is mainly connected to the new positioning of Telecom Italia Sparkle in the Voice business, with better focused contracts having higher margins, also in a perspective of simplifying and streamlining operating processes.
- **Other:** includes:
  - **INWIT S.p.A.:** from April 2015, the company has been operating within the Operations area in the electronic communications infrastructure sector, specifically relating to infrastructure for housing radio transmission equipment for mobile telephone networks, both for TIM and other operators. As previously indicated, at December 31, 2019, Inwit is presented as an "Asset held for sale" and the income data and cash flows of the Domestic Business Unit for 2019 include the data for the entire year of Inwit S.p.A.;
  - **Other Operations units:** covering technological innovation and development, engineering, construction and operating processes for network infrastructures, IT, real estate properties and plant engineering; the Flash Fiber company and Open Access operations connected with delivery and assurance of customer services are also included, until September 2019 included in the Wholesale segment and now reclassified following the change in organizational structure;
  - **Staff & Other**: services carried out by Staff functions and other support activities performed by minor companies, including Persidera, included in income and cash flows until the date of disposal (December 2, 2019).

EBITDA

Reported EBITDA of the Domestic Business Unit **for 2019** amounted to 5,708 **million euros** as it benefited from the application of IFRS 16 by the amount of 363 million euros.
Comparable EBITDA in 2019 amounted to 5,345 million euros, down 610 million euros (-10.2%) compared to 2018.
Organic EBITDA, net of the non-recurring component, amounted to 6,041 million euros, down 321 million euros (-5.0%) compared to 2018. In particular, EBITDA in 2019 was negatively impacted by 696 million euros, referring to non-recurring charges mainly related to provisions for regulatory disputes and related liabilities, to liabilities with customers and/or suppliers and to charges related to corporate reorganization/restructuring as well as to cited adjustments to revenues from previous years.

Organic EBITDA, net of the non-recurring component, is calculated as follows:

(millions of euros)	2019 comparable	2018	Change	
			amount	%
EBITDA	**5,345**	**5,955**	**(610)**	**(10.2)**
Foreign currency financial statements translation effect	–	2	(2)	
Changes in the scope of consolidation	–	(3)	3	
Non-recurring expenses (Income)	696	408	288	
ORGANIC EBITDA - excluding Non-recurring items	**6,041**	**6,362**	**(321)**	**(5.0)**

EBITDA for the fourth quarter of 2019 amounted to 1,154 million euros.
Comparable EBITDA in the fourth quarter of 2019 amounted to 1,060 million euros, down 156 million euros (-12.8%) compared to the fourth quarter of 2018.

The changes in the main items, on the same accounting basis, are shown below:

(millions of euros)	2019 change	2018	Change
Acquisition of goods and services	5,408	6,360	(952)
Employee benefits expenses	2,753	2,781	(28)
Other operating expenses	1,099	763	336

In particular:

- **Other operating income (225 million euros; 225 million euros on comparable basis; 273 million euros in 2018):**

(millions of euros)	2019 comparable	2018	Change
Late payment fees charged for telephone services	48	49	(1)
Recovery of employee benefit expenses, purchases and services rendered	50	27	23
Capital and operating grants	29	33	(4)
Damages, penalties and recoveries connected with litigation	20	28	(8)
Partnership agreements and other arrangements with suppliers	–	22	(22)
Estimate revisions and other adjustments	36	75	(39)
Other income	42	39	3
Total	**225**	**273**	**(48)**

- **Acquisition of goods and services (5,042 million euros; 5,408 million euros on comparable basis; 6,360 million euros in 2018):**

(millions of euros)	2019 comparable	2018	Change
Acquisition of goods	1,175	1,732	(557)
Revenues due to other TLC operators and interconnection costs	1,192	1,561	(369)
Commercial and advertising costs	878	838	40
Professional and consulting services	114	140	(26)
Power, maintenance and outsourced services	884	877	7
Lease and rental costs	631	647	(16)
Other	534	565	(31)
Total acquisition of goods and services	**5,408**	**6,360**	**(952)**
% of Revenues	*38.4*	*42.3*	*(3.9)*

This item fell by 952 million euros compared to 2018. In particular, there was a reduction in purchases for resale, linked to the drop in the volumes of mobile handsets sold, in line with the repositioning of the current commercial strategies, a reduction in the revenue shares to be transferred to other operators and costs for access to telecommunications networks, partially offset by an increase in commercial and advertising costs.

- **Employee benefits expenses 2,753 million euros; 2,753 million euros on comparable basis; 2,781 million euros 2018)**: went down by 28 million euros, driven chiefly by the same factors affecting the Italian employee benefits expenses component at Group level, to which readers are referred.

- **Other operating expenses (1,009 million euros; 1,009 million euros on comparable basis; 763 million euros in 2018):**

(millions of euros)	2019 comparable	2018	Change
Write-downs and expenses in connection with credit management	407	392	15
Provision charges	418	109	309
TLC operating fees and charges	49	49	–
Indirect duties and taxes	89	94	(5)
Penalties, settlement compensation and administrative fines	58	73	(15)
Association dues and fees, donations, scholarships and traineeships	11	11	–
Sundry expenses	67	35	32
Total	**1,099**	**763**	**336**

Other operating expenses included non-recurring component of 416 million euros (108 million euros in 2018) mainly related to regulatory disputes and liabilities related to them, as well as expenses related to disputes with former employees and liabilities with customers and suppliers.

EBIT

Reported EBIT for the Domestic Business Unit for 2019 amounted to 1,887 million euros.
Comparable EBIT for 2019 totaled 1,852 million euros (16 million euros in 2018), showing an increase of 1,836 million euros, with the EBIT margin at 13.2% (0.1% in 2018). In 2019, amortization and depreciation and losses from the sale of non-current assets amounted to 3,391 million euros (3,327 million euros in 2018) with an increase mainly related to the amortization of the 5G spectrum.
It should be remembered that EBIT in 2018 discounted the goodwill impairment changes attributed to Core Domestic and International Wholesale for a total amount of 2,590 million euros.

Organic EBIT, net of the non-recurring component, amounted to 2,566 million euros (3,013 million euros in 2018), with an EBIT margin of 18.2% (20.0% in 2018).

Organic EBIT, net of the non-recurring component, is calculated as follows:

(millions of euros)	2019 comparable	2018	Change	
			amount	%
EBIT	**1,852**	**16**	**1,836**	**-**
Changes in the scope of consolidation	–	(1)	1	
Non-recurring expenses (Income)	714	2,998	(2,284)	
ORGANIC EBIT, excluding Non-recurring items	**2,566**	**3,013**	**(447)**	**(14.8)**

Consolidated EBIT for the fourth quarter of 2019 amounted to 193 million euros.
Comparable EBITDA in the fourth quarter of 2019 amounted to 162 million euros, up 397 million euros compared to the fourth quarter of 2018.

BRAZIL

	(millions of euros)			(millions of reais)					
	2019	2019 comparable (a)	2018 (b)	2019	2019 comparable (c)	2018 (d)	Change assolute (c-d)	% (c-d)/d	% organic excluding non-recurring
Revenues	3,937	3,937	3,943	17,377	17,377	16,981	396	2.3	2.3
EBITDA	2,451	2,153	1,467	10,820	9,505	6,316	3,189	50.5	6.8
% of Revenues	*62.3*	*54.7*	*37.2*	*62.3*	*54.7*	*37.2*		*17.5 pp*	*1.6 pp*
EBIT	1,297	1,215	564	5,726	5,365	2,428	2,937		7.4
% of Revenues	*33.0*	*30.9*	*14.3*	*33.0*	*30.9*	*14.3*		*16.6 pp*	*0.7 pp*
Headcount at year end (number)				9,689		9,658	31	0.3	

The average exchange rates used for the translation into euro (expressed in terms of units of Real per 1 euro) were 4.41422 for 2019 and 4.30628 for 2018.

	(millions of euros)			(millions of reais)					
	4th Quarter 2019	4th Quarter 2019 comparable (a)	4th Quarter 2018 (b)	4th Quarter 2019	4th Quarter 2019 comparable (c)	4th Quarter 2018 (d)	Change assolute (c-d)	% (c-d)/d	% organic excluding non-recurring
Revenues	1,007	1,007	1,025	4,586	4,586	4,457	129	2.9	2.9
EBITDA	499	423	417	2,298	1,955	1,807	148	8.2	8.3
% of Revenues	*50.1*	*42.6*	*40.5*	*50.1*	*42.6*	*40.5*		*2.1 pp*	*2.1 pp*
EBIT	272	181	186	1,250	850	807	43	5.3	5.6
% of Revenues	*27.3*	*18.5*	*18.1*	*27.3*	*18.5*	*18.1*		*0.4 pp*	*0.4 pp*

	2019	2018
Lines at period end (thousands) (*)	54,447	55,923
MOU (minutes/month) (**)	123.6	123.4
ARPU (reais)	23.7	22.5

(*) Includes corporate lines.
(**) Net of visitors.

Revenues

Revenues for 2019 for the TIM Brasil group amounted to 17,377 million reais, up by 396 million reais compared to 2018 (+2.3%).

Revenues from services totaled 16,597 million reais, an increase of 391 million reais compared to 16,206 million reais for 2018 (+2.4%).

Revenues from product sales totaled 780 million reais (775 million reais in 2018). The increase reflects the change in the sales policy, which is now focused more on value than on increasing sales volumes. The main goals of the new strategy are to increase purchases of new connected devices giving TIM customers access to broadband services on 3G/4G networks and to support new retention offerings for higher-value postpaid customers.

Revenues of the fourth quarter of 2019 were equal to 4,586 million reais, an increase of 2.9% compared to the same period of the previous year (4,457 million reais).

Mobile Average Revenue Per User (ARPU) was 23.7 reais in 2019, up on the 22.5 reais recorded in 2018, thanks to the global repositioning towards the postpaid segment and new commercial initiatives aimed at promoting data use and the average spend per customer.

Total lines in place at December 31, 2019 amounted to 54.4 million, a decline of 1.5 million compared to December 31, 2018 (55.9 million). The lower figure was driven entirely by the prepaid segment (-2.7 million), only partially offset by growth in the postpaid segment (+1.2 million), in part due to the consolidation underway in the market for second SIM cards. Postpaid customers accounted for 39.4% of the customer base at December 31, 2019, an increase of 3.2 percentage points on December 2018 (36.2%).

EBITDA

Reported EBITDA for 2019 amounted to 10,820 million reais.
Comparable EBITDA in 2019 amounted to 9,505 million reais, an increase of 3,189 million reais (+50.5%).
EBITDA in 2019 includes 2,760 million reais of net non-recurring income (2 million reais in 2018) attributable to the recognition of tax receivables for an amount equal to 3,024 million reais (following recognition by the Brazilian Federal Supreme Court ("STF") that the inclusion of ICMS in the basis for calculating the PIS/COFINS contributions was unconstitutional), offset by charges for non-recurring expenses for an amount equal to 264 million reais, mainly consisting of provisions for regulatory disputes and potential related liabilities, liabilities with customers and/or suppliers and charges for corporate reorganization/restructuring.

EBITDA, net of the non-recurring component, was equal to 6,745 million reais and calculated as follows:

(millions of reais)	2019 comparable	2018	Change	
			amount	%
EBITDA	**9,505**	**6,316**	**3,189**	**50.5**
Non-recurring expenses (Income)	(2,760)	(2)	(2,758)	-
ORGANIC EBITDA - excluding Non-recurring items	**6,745**	**6,314**	**431**	**6.8**

Excluding the aforementioned non-recurring items, EBITDA grew by 6.8%, from both the positive performance of revenues and benefits from projects to improve the efficiency of the operating cost structure.

EBITDA for the fourth quarter of 2019 amounted to 2,298 million reais. On the same accounting basis, the figure came to 1,955 million reais, showing growth of 148 million reais on the fourth quarter of 2018 (1,807 million reais). The EBITDA margin for the fourth quarter of 2019 stood at 42.6%, up by 2.1 percentage points on the same period of the previous year (40.5%).

The changes in the main cost items are shown below:

	(millions of euros)		(millions of reais)		
	2019 comparable (a)	**2018** (b)	**2019 comparable** (c)	**2018** (d)	**Change** (c-d)
Acquisition of goods and services	1,748	1,846	7,721	7,950	(229)
Employee benefits expenses	323	317	1,425	1,364	61
Other operating expenses	523	491	2,301	2,117	184
Change in inventories	(5)	(14)	(20)	(59)	39

EBIT

Reported EBIT for 2019 amounted to 5,726 million reais.
Comparable EBIT for 2019 amounted to 5,365 million reais, an increase of 2,937 million reais compared to 2018 (2,428 million reais).

Net of the non-recurring component, organic EBIT was equal to 2,605 million reais, with a growth of 7.4%, and calculated as follows:

(millions of reais)	**2019 comparable**	**2018**	**Change**	
			amount	%
EBIT	**5,365**	**2,428**	**2,937**	
Non-recurring expenses (Income)	(2,760)	(2)	(2,758)	-
ORGANIC EBIT - excluding Non-recurring items	**2,605**	**2,426**	**179**	**7.4**

EBIT for the fourth quarter of 2019 amounted to 1,250 million reais. On the same accounting basis, the figure came to 850 million reais, showing growth of 43 million reais (+5.3%) on the fourth quarter of 2018 (807 million reais). The EBIT margin for the fourth quarter of 2019 stood at 18.5%, up by 0.4 percentage points on the same period of the previous year (18.1%).

MAIN COMMERCIAL DEVELOPMENTS

DOMESTIC

Consumer

TIM is driving the country's digital revolution, continuing to invest in innovation through the development of fixed and mobile Ultrabroadband networks, platforms and highly customized quality services based on customer needs. TIM is also committed to spreading a digital culture for leisure, offering **innovative, flexible and increasingly convergent products that boast the best multimedia content,** with films, TV series, music, video games, sports' news and major events, delivered through decoders, smart TVs, the Web and mobile apps.

In 2019, TIM continued to develop the fixed-line consumer market with its **new TIM Super deal,** aimed at providing families with a complete solution for all their needs: connectivity, security, entertainment, smart home. TIM Super launched in June and starts from € 35 per month, offering a Fiber connection of up to 1GB with Best Technology Available logic, a TIM modem, TIM Vision and the option to choose between security, smart home, unlimited voice calls and assistance.

To support new BroadBand and UltraBroadBand customer activation, the offer was further expanded during 2019, making the selling proposition easier, introducing more aggressive price points and targeted promotions to push direct debits and support churn reduction.

Throughout 2019, TIM continued to **support the adoption of new fiber technology** with offers for ADSL customers already covered by the FTTCab and FFTH service to upgrade to the new technology without additional costs and leveraging on new offer content different to that of the market. The Smart Home and Safe Web browsing security services in the TIM Super portfolio are examples of this, in addition to family SIM with a mobile sim linked to the Fiber offer or Giga benefits linked to fixed-line direct debit payments.
To support the net balance of the fixed-line market, the TIM Super offer was further expanded with a second home offer, TIM Flexy, a new connection concept with rechargeable FTTC technology for non-continuous home navigation use.

Close strategic partnerships with major players play a decisive role in supporting the **Fixed-line segment**, as does the significant content push and the launch of bundled offers for home use with the use of the TIM box decoder and Fiber quality. In August, the Kit Sport offer was launched, initially with NOW TV from SKY and subsequently with the complete Serie A and B football championship package and major sporting events, thanks also to the Dazn bundle. The package costs 29.99 euros per month with discounted or free promotions used to encourage take up during the various sporting seasons. Other content offers, including a wide range of films and TV series, such as that from Chili, together with TIM Vision, are important and unique levers to support the fixed-line segment, also with the ability to add the services to bills.

In October, the **TIM Internet FWA** family offer was launched, again to encourage greater spread in the fixed-line segment, at the very competitive price of 24.90 euros per month. With FWA technology and dedicated indoor or outdoor modems, it allows internet browsing at 30Mega download and 3Mega upload speeds even in those areas (e.g. White Areas) without Fiber coverage.

As regards the **Mobile** sector, TIM continued to support the **development of 4G and 4.5G ultrabroadband** during 2019, achieving important goals - and first and foremost its **download speed record** in Ookla tests.
At national level, 4G technology has now reached more than **7,600 municipalities**, **covering over 99%** of the population. The company continued the steady roll-out to Italy's major cities of **4.5G** services (LTE Advanced technology), which offer data connection speeds of up to **700 Megabits per second**.
TIM's technological leadership was confirmed with the **launch of 5G frequencies**, which are fundamental for the future development of mobile services that can revolutionize the lives of citizens, consumers and businesses alike, steering the country towards a dimension in which everything is smarter and more connected: from public safety to transport, from environmental monitoring to health, tourism and culture, and even applications for media, education and virtual reality.
TIM 5G is already available with services for citizens and businesses in Italy's main cities with speeds of up to 2 Gigabytes per second: Rome, Turin, Florence and Naples were the first cities covered, with Bologna, Genoa, Brescia and Monza added more recently, including the first 5G connected racetrack in Europe. By 2021, 120 cities will have cover, as will 200 tourist destinations, 245 industrial districts and 200 specific projects for large enterprises.
TIM is also continuing its 5G development path with a **number of live service trials** in the Smart City, healthcare, tourism and culture fields. The latest during the Monza Rally Show 2019, where spectators were able to experience and test the new 5G enabled services: self-driving cars, Smart City and Public Security, Cloud Gaming, Virtual Reality and 360° 4K Video for experiencing live events in an innovative and engaging way.
Technological leadership means a **competitive edge** for TIM, which is fundamental for making it mark in a highly competitive market. By making the most of the distinctive **quality of the network**, TIM has been able to continue its **"value" strategy** and focus on the quality of its offering, maintaining a **premium position** on the market.

Another essential aspect of its business strategy was customer **retention**, with the focus on reducing churn rates and stabilizing customer spending. With this in mind, offer portfolios were launched on the market with content benefits and discounted fees for customers who choose direct debit or credit card debit as their payment method.
Plus, to increase customer awareness and satisfaction, **TIM Party** was launched - the retention program for all TIM customers that can only be accessed online.
The program has three levels:

- extensive benefits for all customers joining the program;
- specific benefits for clusters selected based on how long customers have been with TIM and the presence of several TIM services (3Play, 4Play);
- competitions with prizes.

TIM Party, with its innovative, differentiated format, aims to increase customer retention, the penetration of services and the digital customer base.

Finally, and still with a view to improving customer loyalty, during February 2020 agreements between **TIM S.p.A.** and **Santander Consumer Bank S.p.A.** were signed, launching a partnership to offer a consumer credit platform dedicated to TIM's customers, as announced in November 2019.
Thanks to the partnership, instalment plan financing for product purchases will be progressively rolled out in all TIM stores. They will subsequently also offer personal loans, credit cards and insurance products designed to meet customers' needs, with a high degree of innovation and digitalisation, both of which have always been hallmarks of the two companies.
The launch of consumer credit services is the first step following the development of the new joint venture, will begin operating once the necessary authorization has been obtained. It will allow TIM to further reduce debt and optimize credit costs. TIM customers will also gain quick and easy access to customised and transparent financial and insurance solutions, strengthening and improving the continuity of customer relationships.

Business

TIM's work in the Business market during 2019 focused on four main areas:

- further strengthening Customer Base retention with structural action targeting offers as well as Customer Experience, through customer care activities and a "more for more policy" that makes the most of TIM's profile as an integrated operator;
- improving commercial monitoring of the market, above all by increasing the proximity of direct and indirect sales channels;
- expanding its footprint in the ICT market by increasing products targeting “over-the-network” services and data deals for the large customer segment and through “off-the-shelf” cloud based computing solutions for SMEs.

The main goals of 2019 were protecting the Customer Base and consolidating **TIM's position as a national player that can** meet the IT needs of SMEs, large companies and the public administration. These goals were pursued by maintaining a distinctive product offering and consolidating the **commercial front end**, which has also been functional in the gradual migration of the services mix used by customers towards more updated models based on the extensive adoption of fixed network Fiber/VoIP connectivity, mobile network LTE and Cloud solutions. Considerable effort has gone into developing the **ARPU**, through bundle deals and by leveraging professional services that are distinctive and highly visible.
For the **fixed-line network** in particular, on one hand, TIM has further simplified its offers for the SOHO-SME segment, focusing on Fiber and VoIP solutions and on the other, has expanded the Business market with the launch of Fixed Wireless Access solutions.
Loyalty and ARPU growth support activities saw the introduction of bundles including Mobile, with the **TIM 100%** offer, and with the creation of "More 4 More" Triple Protection offers.
For Unified Communication services (TIM Integrated Smart Communication offer), in convergence with mobile network services and IT services, focus continued on improving Time 2 Market.
Customer care management benefited from new customer segmentation that combines customer value with technological equipment and pre-retention activities leveraging predictive models were strengthened.
The proposition of cloud computing services was stepped up further, offering - alongside consolidated VoIP and advanced Collaboration service -the “cloud-on premise” deal with SIP trunking as part of the **TIM Comunicazione Integrata**, in synergy with the development of IT services.
Development of the Information Technology offer focused on expanding hybrid and public cloud solutions, through the definition of strategic partnerships with the main OTTs and the consolidation of IT offers delivered in bundles with fixed-line and mobile connectivity. Furthermore, work was done to consolidate the "Vertical" IoT offer, with the collaboration with partners and investee companies in specific areas (e.g. fleet management) and

M2M Narrowband IoT solutions. In parallel, the bouquet of Analytics-based services was further developed by integrating TIM and Olivetti platform solutions with third-party applications to expand the informative and strategic value of Big data solutions.
The integration of connectivity deals with public cloud services managed by TIM was exemplified by the launch of the TIM Safe Web secure DNS deal for all segments of the Business market. Protection with these security services reached over 600,000 customer accesses, blocking over a billion IT threats.
The TIM Multicloud project was launched, providing hybrid services which include TIM Cloud Business solutions, On Customer Premises components and the main OTTs' Public Clouds (Amazon, Microsoft, Google). The strength of the MultiCloud solution is the Cloud Management Platform (CMP) which allows the customer to monitor the entire architecture in terms of management, systems and cost control. The IT offering for SMEs (Small and Medium Enterprises) continued to be developed with the Digital Store Market Place featuring around 170 solutions for SMEs, also developed by partners in the TIM Open environment, using both a horizontal and vertical approach to new e-commerce, e-payment, security, and video control solutions, to give just a few examples. In addition, the portfolio has been expanded with a new range of offers for SMEs taking a consultancy approach to digital transformation, accompanying the customer in choosing the most suitable services for their needs.
TIM announced the signing of a Memorandum of Understanding with Google Cloud to define a strategic partnership.
In relation to **Mobile services** in 2019:

- the development of the **Ultra BroadBand Mobile service** continued, based on the spread of VoLTE boosted by the launch of 5G for the entire business customer base, and with enabled vertical applications (e.g. industry 4.0, smart city);
- the **fixed-mobile-ICT convergence** proposition was strengthened, with a dedicated "TIM 100%" product and the introduction of a single invoice and assistance service, giving customers the benefits of TIM's position as the only convergent operator;
- the **value-based purchasing strategy** continued with an offer based on flexible pricing that maximizes commercial effectiveness and profitability;
- the "more money for more value" approach continued with the offer portfolio being expanded to include VAS and IT bundle solutions; for example with TIM Safe WEB, which takes advantage of the TIM network, guaranteeing both mobile and fixed-line security.

During 2019, Olivetti focused on growing turnover generated by digital solution products (IoT and Data Monetization) and on the product (office and retail) efficiency recovery area; in particular, product marketing has been able to respond to the high demand created by the introduction of new legislation on electronic invoicing requirements (so-called "E-invoicing"). Olivetti's market skills and innovative technologies have allowed it to develop - mainly in the field of electronic payments, smart metering, tracking - new platforms and solutions, based on sensors that use Narrowband IoT technology.

BRAZIL

In 2019, TIM Brazil completed the renewal its range of offers to reposition the brand with high-value customers, leveraging its dominant position in the 4G network (cover and availability).
This new approach has had a profound impact on the customer base composition, mainly in the prepaid segment, leading to an intense and progressive migration from single-service daily tariff plans (voice and/or data) to weekly/monthly rolling plans that combine voice packages and data to other digital value-added services (music, e-reading, video streaming). The aim is to stabilize the flow of future revenues and proactively manage the current consolidation of the second SIM market.
The main sales initiatives included:

- greater simplification with a new prepaid segment concept, which combines top-up with a service package (TIM Pre TOP) able to offer complete and distinct solutions for voice and data services and unlimited social network packages for a specific period (two weeks);
- consolidation of high-end segment presence with entertainment hub concept. The TIM Controle offer includes unlimited social media network use (WhatsApp, Facebook messenger, Telegram and Waze) and other unlimited social media networks for three months (Instagram, Facebook and Twitter), a 5 GB data package and unlimited calls to anyone, at a cost of 49.99 reais per month;
- in June 2019, TIM introduced another innovation with TIM Black Família. The new portfolio introduces the entertainment hub concept with the launch of the first product in Brazil which includes a Netflix subscription. Customers will see shared benefits, in addition to Deezer's TIM Music, international roaming, data rollovers, unlimited social media network use and more autonomy in managing data limits. A device was also introduced as an important product selling aid and to avoid the price/GB war;
- 5G is already a worldwide target. It is not yet clear when and how the spectrum will be auctioned in Brazil. Nevertheless, TIM has taken a leading role, researching applications and creating the right context for the technology's launch, with tests on the real network that will affect all suppliers (Huawei, Ericsson, Nokia) and in-store tests involving customers with 5G technology;
- Fixed: The focus on investing in FTTH (Fiber To The Home) expansion continues, with higher speed offers and optimal connection stability. TIM began investing in this type of technology in the fourth quarter of 2017, closing the fourth

quarter of 2019 with a number of families with FTTH service equal to 28% of the TIM fixed broadband customer base;

- in the last 12 months TIM Live Internet, residential broadband via the mobile network (WTTX), has been launched in 43 new cities.

MAIN CHANGES IN THE REGULATORY FRAMEWORK

DOMESTIC

In this section we report the main changes in the regulatory framework in 2019 in the Domestic region.
As regards the Antitrust proceedings (A514, I799, I820, PS11379, IP312, PS11532 and IP327), as well as the proceedings regarding the 28-day invoicing, see the Note “Disputes and pending legal actions, other information, commitments and guarantees” in the TIM Group Consolidated Financial Statements at December 31, 2019.

New EU Electronic Communications Code

The (EU) 2018/1972 Directive, which establishes the new European Electronic Communications Code (Code), will be applicable in Member States after its transposition into national laws, which must take place by 21 December 2020.
The Code reviews and replaces the previous European regulatory framework made up of the Access Directive, Framework Directive, Authorization Directive and the Universal Service Directive.
The main changes concern the regulation of access/interconnection, spectrum management and Universal Service obligations.

Access and interconnection regulation

The new rules aim to stimulate investment in very high capacity networks while continuing to protect competition and the interests of end users.
The Code identifies two regulatory models, aimed at promoting efficient investment in access networks:

- the "wholesale-only" model, where the National Regulatory Authority (NRA) may exempt operators with Significant Market Power (SPM) who offer communication services from certain obligations, including cost orientation electronics exclusively in wholesale markets, imposing only the obligations of non-discrimination, access and fair and reasonable pricing on them;

- the co-investment model, where the National Regulatory Authority (NRA) will be able to exempt significant market power operators' Very High Capacity Networks - VHCNs from any obligation, on condition they are built on the basis of a co-investment offer open to anyone and access to the network is guaranteed with transparent and non-discriminatory conditions.

The Code also privileges the obligation of access to infrastructures over other ex ante obligations and extends the possibility of imposing symmetric access obligations on essential network infrastructures beyond the first distribution/concentration point. It introduces longer market review periods (five years instead of three) to offer operators greater certainty and provides for the European Commission to set EU price caps for mobile and fixed termination rates applicable to all operators active on termination markets.

Spectrum management

The Code introduces new rules for the development of mobile and 5G networks, including the minimum duration of rights to use of frequencies, equal to 15 years with an extension of an additional 5, and the right for operators to install small cells on public infrastructure, such as electric poles and traffic lights.

Universal Service obligations

The Code provides an obligation for all broadband internet access service and fixed location voice communication services providers to ensure "financial accessibility" for residential users (in particular those with a low-income or special social needs). However, Member States are free to impose universal service obligations (including coverage obligations where necessary) on designated companies (as is currently the case).
Each Member State must decide what is appropriate broadband internet access; the access speed must at least allow end users to use the services listed in Annex V of the Code.
A Member State can continue to impose obligations related to public telephony, provided that the need for this service to remain part of the universal service can be demonstrated on the basis of national circumstances and is limited to where this need exists (e.g. airports, stations, hospitals).
There are no longer specific QoS-Quality of Service obligations related to the provision of the universal service.
Member States can also choose the financing methods for costs relating to the universal service: public and/or sectoral.

BEREC Regulation

The 2018/1971 Regulation revises the operating rules for the Body of European Regulators for Electronic Communications (BEREC) and the tasks assigned to it. In particular, these include:

- assisting and advising the Commission, at its request, in relation to drafting legislative proposals in the field of electronic communications, including any proposals to amend the Regulation or Code;
- preparing guidelines for the implementation of the Code (e.g. geographic mapping of access networks, Very High Capacity Networks – VHCN and co-investment, symmetric obligations);
- the BEREC and Commission double-lock veto on decisions relating to the imposition of symmetric obligations beyond the first distribution or concentration point and non-imposition of obligations in the presence of binding commitments on co-investment in VHCN (introduced in the Code).

The Regulation does not amend the governance of BEREC: with continued provision for BEREC and the BEREC Office, the latter being an EU agency with legal personality.

Intra-EU international communications regulation

The BEREC regulation also introduces caps for intra-EU international calls and SMSes only for fixed-line and mobile consumer customers.
The caps for intra-EU international calls and SMSes were applied from May 15, 2019, for a duration of 5 years, so until May 14, 2024:

- 19 euro cents/min (+VAT) for international intra-EU calls;
- 6 euro cents/SMS (+VAT) for intra-EU international SMSes.

Wholesale fixed-line markets

Fixed network access market analysis

The final provision published on August 8, 2019 defines the obligations and economic conditions for wholesale access services for the period 2018-2021.
The main decisions relate to:

- repeal of TIM's qualification as an operator with Significant Market Power (SPM) in the access market - and, consequently, repeal of all ex ante regulatory obligations - in the municipality of Milan and confirmation of SPM operator qualification for the rest of the National territory;
- repeal of the obligation to guide the cost of bitstream copper and fiber service prices in 26 municipalities considered "contestable" (list to be updated annually); the possibility to apply, in the same municipalities, different VULA prices from the national average value set by the Authority starting from 2021, if certain conditions to be defined by the Authority are met, through a specific procedure put in place with resolution no. 481/19/CONS published on February 4, 2020;
- Wholesale access rates for copper and fiber for 2018 equal to those of 2017, unless there is a limited reduction in the VULA FTTC fee;
- gradual increase in the full unbundling price (ULL) and bitstream price on copper in the 2019-2021 period;
- sub loop unbundling (SLU) price stability in the 2019-2021 period;
- gradual decrease in fiber access prices (VULA FTTC and FTTH) and price differentiation of the bandwidth, starting in 2021, depending on whether the access line is on a copper or NGA network;
- repeal of the current prior AGCom notification obligations and verification of ex ante "replicability" for flagship offers with speeds greater than or equal to 100 Mbit/s and, in other cases, reduction of prior notification period from 30 to 20 days;
- definition of the process and timing for the decommissioning of TIM exchanges;
- possibility of using vectoring in FTTC cabinets where alternative operators have not requested sub loop unbundling (SLU) lines;
- elimination of current asymmetries in procedures to change TIM network operator between processes to return to TIM and changing from TIM to alternative operators.

Infratel Tenders for the subsidizing of Ultra-broadband networks

At the end of December 2018, the third and final call for coverage of ultrabroadband "white areas" not covered by the private operator plans was also assigned to Open Fiber.
The related Concessions for the Calabria, Puglia and Sardinia regions was signed on April 2, 2019.
Infratel launched a new consultation on UltraBroadBand coverage plans to get an up-to-date picture of gray and black area coverage on January 18, 2019, following previous consultations.

The results of the consultation were published on May 15, 2019. Infratel held that further technical insight was necessary and will set up a technical working group with operators to investigate the technological evolution of FWA and VDSL solutions capable of reaching speeds in excess of 100 Mbit/s.
This monitoring activity will be used to allow the Italian government to assess the launch of public activities to promote a step change in the UltraBroadBand coverage of "gray" areas not covered at 100 Mbit/s.
To prevent any overlap with ongoing private activities and, at the same time, to guarantee the widest coverage across Italy, Infratel will ask operators to enter into a contract on the declared coverage commitments before each notification of public activities.
At the meeting of the Ultra-Broadband Committee (COBUL) of July 17, 2019, the Government approved the launch of the second phase of the Ultra-Wide Band Plan (BUL) to take action in Italy's gray areas and support the demand for ultra-fast services through special vouchers for consumer, business and public administration customer connectivity. The operating procedures for the planned activities will be defined by COBUL in consultation with MiSE/Infratel and submitted to the European Commission. On December 19, 2019, COBUL decided to revive the Government activity on the UBB plan and to convene once a month to monitor the progress of the process for defining measures for the infrastructure side and demand incentives.
At the COBUL meeting of January 23, 2020, a program document was approved which provides for the measures to be issued for the launch of a new tender for gray areas and the adoption of application vouchers by the end of summer 2020.

Wholesale mobile network markets

Mobile termination market analysis

On January 22, 2019, AGCom published its final decision on mobile network termination market analysis (resolution no. 599/18/CONS). In particular, AGCom established symmetric tariffs for all MNO and full MVNO operators for the period 2018-2021 (0.98 euro cents in 2018, 0.90 euro cents in 2019, 0.76 euro cents in 2020, 0.67 euro cents in 2021) and confirmed the absence of an obligation to check the termination prices for calls originating outside the European Economic Area (EEA); however, SMP operators cannot adopt termination rates that are higher than those applied to Italian operators by operators in non-EEA countries where rates are regulated.

Retail fixed-line markets

Universal Service

Net cost
Following ruling no. 4616/2015, published on October 2, 2015, in which the Council of State canceled decision no. 1/08/CIR of AGCom on the retroactive application of the new methodological criteria for calculating the net cost of the universal service (USO) relating to the 2004-2007 years, the Authority began the public consultation of the net cost of the total years 2004-2007 with resolution 89/18/CIR, published on July 3, 2018, and subsequent resolution no. 62/19/CIR, published on May 7, 2019. On September 11, 2019, the Authority published the final resolution concerning the Net Cost of Use for 2004-2007 (resolution no. 103/19/CIR) in which it recognized the existence of an unfair charge for TIM of a total of 113.4 million euros to be shared between all fixed-line and mobile operators. The share payable by the OAOs amounts to approximately 26.6 million euros, calculated net of installments already paid by the same operators, following the 2004 and 2005 procedures approved "illo tempore". In relation to past disputes, still “in progress” to date, following ruling no. 3388/15 of the Council of State, published on July 7, 2015, on September 11, 2019, the Authority launched the public consultation procedure (resolution no. 102/19/CIR) for an in-depth fixed-mobile substitutability analysis, in line with the path outlined for the 2004-2007 years. In this context, ruling no. 6881 of October 8, 2019, in which the Council of State authorized the return of the shares paid by Vodafone to TIM, for the contested years (1999-2000 and 2002-2003). In light of the above-mentioned Council of State ruling, which completely reversed the Lazio TAR rulings no. 6458, 6459, 6461 and 6463 of May 23, 2018, in execution of which the public consultation pursuant to resolution no. 102/19/CIR was started, the Authority revoked the aforementioned resolution with decision 190/19/CIR.
On December 4, 2019, AGCom began certification activities for the Net Cost 2010, to be carried out by the BDO S.p.A. company. The activities will be completed at the end of March of the current year. Activities will then begin to review the net cost annuities for 2011, 2012 and 2013.

In relation to the universal service quality objectives, in 2019, AGCom fined TIM twice, each time for an amount equal to 58,000 euros. Both fines were for the failure to reach, in different years, targets relating to the "Average operator response time to incoming calls". The first of the two fines relates to 2017 for a non-compliance of 17" (identified by AGCom with resolution 103/19/CONS: The actual figures 87" vs. target of 70"). The second fine relates to the following year (2018) and in this case the non-compliance was 24" (identified by AGCom with resolution 438/19/CONS: The actual figures 94" vs. target of 70").
For the resolution 103/19/CONS only, due to the failure to comply with some formal requirements, on June 18, 2019 TIM filed an appeal for cancellation before the Lazio TAR.

Guidelines for voluntary withdrawal

With resolution no. 487/18/CONS, the Authority regulated the ways operators must manage dissolution and transfer methods for user contracts.

TIM challenged the resolution regarding the provisions that limit the right to fully recover the costs in case of withdrawal (discounts from promotions, product installments). As of February 2020, proceedings are still pending.

Freedom to choose Modems

With resolution no. 348/18/CONS, the Authority ratified the principle of user freedom to choose modems for Internet access.
TIM challenged the resolution in relation to the transitional provisions for customers who have an internet offer combined with a modem for a fee (sale and rental) in the months preceding the entry into force of resolution no. 348/18/CONS (December 1, 2018). Following the Council of State order at the end of 2018, which suspended the transitional provisions pending a hearing being set in the Lazio TAR, and which asked for the hearing set for October to be brought forward, on January 29, 2019, the Lazio TAR confirmed the public hearing, already set for October 23, 2019. On January 28, 2020, the TAR rejected TIM's appeal. Assessments are underway of the effects of the ruling and any possible appeal.

Authority fees

AGCom contribution fee

In March 2019, TIM conditionally paid an amount of 18.3 million euros for the 2019 AGCom contribution fee. The amount was calculated by applying a rate of 1.3/1000 to the revenues posted in the Company's 2017 Financial Statements, as required by the guidelines set out in AGCom Decision no. 527/18/CONS.

Privacy and personal data protection

General Data Protection Regulation (GDPR) and Legislative Decree 101/2018

On May 25, 2018, the General Data Protection Regulation (Regulation (EU) no. 2016/679 – "GDPR") came into force.
Furthermore, on September 19, 2018, Legislative Decree no. 101 of August 10, 2018 entered into force, which brought the Code regarding the protection of personal data (Legislative Decree June 30, 2003, no. 196) in line with the provisions of the GDPR - EU Regulation 2016/679.
To ensure compliance of personal data processing with the GDPR within Group companies, TIM has carried out the activities provided in the adaptation plan.
Of the main changes, the following is noted:

- the appointment of a Data Protection Officer and establishment of related contact points for individuals with questions relating to the processing of their personal data;
- the review of the "System of rules for the application of legislation on personal data protection in the Telecom Italia Group" was completed in 2018 to bring TIM in line with the provisions of the GDPR, and revision of the same policy was completed for Group companies September 2019, as a consequence of the entry into force of Legislative Decree August 10, 2018, no. 101;
- the updating of the numerous policy notice texts on personal data processing, provided by TIM and the other Group companies to different types of Data Subjects (e.g. customers, employees, visitors).

A specific training project was put in place to raise awareness in the various company departments and illustrate the policies and procedures issued for applying the legislation on personal data processing. This training was provided during 2019.

Extension of the Golden Power rule to 5G technology services

Law Decree Law March 25, 2019, no. 22 and Law Decree July 11, 2019, no. 64

The Law Decree of March 25, 2019, no. 22 amends the Law Decree March 15, 2012, no. 21, converted, with amendments, by Law May 11, 2012, no. 56 and classifies 5G development as a strategic activity in relation to defence and national security, which requires stricter controls.
In particular, the following are subject to special powers:

a) the agreement of contracts or agreements for the purchase of goods or services relating to the design, construction, maintenance and management of 5G service networks;
b) the acquisition of high-tech components necessary for implementation or management;
c) factors indicating the existence of vulnerabilities that could compromise the integrity and security of networks and the data sent on them.

In particular, the agreement of contracts and acquisition of high intensity components from subjects outside the European Union, carry an obligation to notify the Prime Minister to allow a timely exercise of the veto power.
Failure to comply with this notification obligation carries a pecuniary administrative fine equal to twice the value of the transaction and in any event not less than 1 percent of the turnover of the last financial year.
The Law Decree also provides for the Prime Minister to adopt a decree (DPCM) to identify measures to simplify the notification methods.
In relation to this, on June 27, 2019, the Government launched a public consultation, for the eventual adoption of the Prime Ministerial Decree, to take contributions from interested parties on the following issues:

a) identification of simplified notification methods, possibly differentiated (for example, based on activity performed, services offered or type of infrastructure concerned);

b) definition of simplified procedures and terms for investigations, in relation to specific circumstances.
Contributions were submitted in July 2019.
On July 11, 2019, Law Decree no. 64, which introduced further changes to the provisions of Law Decree March 15, 2012 no. 21, was converted, with amendments, by the Law of May 11, 2012, no. 56.
In relation to 5G in particular, the new Decree introduces the obligation to notify the Prime Minister, making full disclosure within ten days of the finalization of a contract or agreement concerning the purchase of goods or services relating to the design, construction, maintenance and management of 5G networks or the acquisition of high-tech components for the aforementioned construction or management, when agreed with subjects outside the European Union, to allow the possible exercise of the veto power or the imposition of specific requirements or conditions.
The Prime Minister will communicate any possible veto or the imposition of specific requirements or conditions within forty-five days of notification.
Due to the failure to convert the aforementioned Law Decree no. 64 into law, the Golden Power regulations (both general and 5G specific) have been further integrated by the provisions of the Law Decree of September 21, 2019, no. 105, converted with the Law of November 18, 2019, no. 133, containing "Urgent provisions on the cybernetic national security perimeter". In particular, it provides that the obligations aimed at ensuring cyber security also apply to companies subject to 5G specific notification obligations. Furthermore, the terms for the assessment of the possible exercise of special powers by the Government have been extended.

BRAZIL

Revision of the model for the provision of telecommunications services

In April 2016, the working group composed of the Ministry of Science, Technology, Innovation and Communications (MCTIC) and Anatel published its final report with a “diagnosis” on the telecommunications industry and proposed guidelines for the revision of the Brazilian regulatory model. A bill (PLC 79/2016) was then presented to the National Congress of Brazil to propose amendments to the General Telecommunications Law.
Law 13.879 was approved in 2019 and entered into force on October 4, establishing a new regulatory environment for the regulation of telecommunications in Brazil. This is the most significant change in 20 years.
The new telecommunications framework allows fixed-line licensees to adapt their contracts from a concession scheme to an authorization scheme. This transition from concession to authorization must be requested by the licensee and requires the approval of the Brazilian National Telecommunications Agency (Anatel). In return, licensees must, among other conditions, make a commitment to investment in expanding fixed broadband telephony services to areas with no adequate competition for these services, in order to minimize inadequacies and inequalities between areas of Brazil.
The change also affects the roles for authorizing the use of radio frequencies, establishing subsequent renewals (currently limited to only one) and allows the exchange of radio frequencies between operators (secondary spectrum market). In the coming months, the procedures for adapting the concession to the authorization regime and defining the criteria for calculating investment commitments will continue to be regulated by the Federal Government and Anatel.
Another series of important rules was established by Decree 9612/2018 ("Connectivity Plan"), with a series of guidelines for the adaptation of conduct terms, the onerous concession of spectrum authorization and regulatory acts in general, including: (i) expansion of high capacity telecommunications transport networks; (ii) increased coverage of mobile broadband access networks; and (iii) broadening the coverage of fixed broadband access network in areas with no Internet access through this type of infrastructure. This Decree also establishes that the network resulting from the commitments must be shared from the moment it enters into service, except where there is adequate competition in the relative reference market.
In relation to the deadlines for the development of pipelines not compliant with current regulations, authorizations for user licenses to radio frequencies, and the introduction of other statutory provisions generally, planned investments (as identified by Anatel and approved by the MCTIC) will focus primarily on the expansion of mobile and fixed-line broadband networks and on specific areas of the country. TLC networks built under the investment plan will have shared access.

Revision of Competition Rules

In November 2012, the Brazilian regulator Anatel introduced instruments for the market analysis, the identification of operators with significant market power (SMP) and the consequent imposition of ex-ante obligations (Plano Geral de Metas de Competição – PGMC).
Anatel has established a number of asymmetrical obligations on all markets for operators with a Significant Market Power (SMP).
In July 2018, Anatel published the new PGMC revising some points and defining two new markets: (i) interconnection for mobile services; and (ii) high capacity data transmission.
TIM Brasil has been identified as the SMP operator for: (i) mobile network terminals; (ii) national roaming; and (iii) high capacity data transport (in five municipalities).

The measures applied to the SMP operator in these markets include the obligation for non-SMP operators to offer national roaming services. The obligation for access to the copper network has been maintained (e.g. leased lines, bitstream and full unbundling) was maintained.
Since 2016, fixed interconnection rates have been based on a cost-oriented approach. In December 2018, Anatel published the laws that establish the MTR that will be valid from 2020 to 2023.

Revision of the Service Quality Regulation

In December 2019, Anatel approved the new Telecommunication Services Quality Regulation (RQUAL), based on a reactive approach to standards. In this new model, quality is measured on the basis of three indicators - a Service Quality Index, a Perceived Quality Index and a User Complaints Index - and operators are classified into five categories (A to E). Based on the standards' responsive approach, Anatel will be able to take measures based on specific cases, including consumer compensation, the adoption of an action plan or the application of precautionary measures to ensure quality standard improvements.
The new regulation is scheduled to enter into force in 2021; until Anatel sets up the Working Group, operators and the support body for quality assurance (ESAQ) will define the objectives, criteria and reference values and Anatel will monitor the indicators that guarantee analogy with the new ones introduced in the new RQUAL. The criteria and reference values will be established in the next 12 months by the Working Group.

700 MHz and Analog TV switch off

In September 2014, TIM won the tender for the award of the 700 MHz (4G/LTE) band frequencies, for a price of 1.7 billion reais, and with additional commitments of 1.2 billion reais (in four annual installments, adjusted for inflation) as a contribution to the consortium established by the tender (“EAD”) for all the operators (TIM, Algar, Claro and Vivo) awarded the contract for managing the freeing up of the 700 MHz band through the switch off of analog TV, the redistribution of channels and the clean-up of interference. To that end, the first payment (370 million reais) was made in April 2015 and another two payments (for a total of 860 million reais) were both made in January 2017, while the final installment (142 million reais) was duly paid in January 2018.
The spectrum for mobile traffic was released in 2016, and in June 2019 the availability for all municipalities was guaranteed, meaning that the entire Brazilian population can be covered by 700 MHz LTE.

"Marco Civil da Internet" and Network Neutrality

The “Marco Civil da Internet” (MCI), approved in April 2014 by Brazilian Law no. 12,965/2014, defined network neutrality as the “duty to treat different data packages in the same way, without distinction based on content, origin and destination, service, terminal or application”. On May 11, 2016, Brazilian Presidential Decree no. 8,771/2016 was published, which regulates exceptions to the principle of net neutrality, set out in article 9 of the mentioned law.
In August 2017, the oversight board (“GS”) of the Administrative Council for Economic Defense (CADE) handed down a decision in favor of Brazil’s mobile TLC providers, which excluded the imposition of fines in relation to a preliminary investigation into alleged unfair competition in “zero rating” offers and promotions on Internet data consumption. The oversight board heard the depositions of various parties, including the Ministry of Science, Technology, Innovation and Communications (MCTIC) and Anatel, and concluded that Internet business models should not be banned ex-ante, but instead should be monitored comprehensively to prevent any cases of unfair competition.

Strategic Digital Transformation and the Internet of Things

In March 2018, the E-Digital Decree 9319/2018 was published, it identified about 100 strategic actions to encourage competition and the country's level of online productivity, as well as to increase connectivity and digital inclusion levels. These actions aim to address the digital economy's main strategic issues, including connectivity infrastructure, data use and protection, the Internet of Things and cybersecurity.
The Decree on the National Plan for the Internet of Things (Decree 9854/2019) was published in June 2019, to regulate and promote this technology in Brazil. The Decree describes the Internet of Things (IoT) as the "infrastructure integrating the value-added services offer with the ability to physically or virtually connect things with devices based on existing information and communication technology and their evolution, through interoperability". The Decree lists the following topics, defining them as necessary to further support the National Plan for the Internet of Things: (i) science, technology and innovation; (ii) international integration; (iii) education and professional training; (iv) connectivity and interoperability infrastructure; (v) regulation, security and privacy; (vi) economic feasibility.

Data protection

On August 14, 2018, the Brazilian President promulgated the General Data Protection Law (Law 13.709/2018). The new law, as promulgated by the President, is closer to the GDPR, including significant extra-territorial application and considerable fines of up to 2% of the Company's global turnover of the previous financial year.
In December 2018, Provisional Measure 869/2018 passed by the former President amended Law 13.709 to create the National Data Protection Authority (ANPD), within the structure of the Presidency of the Republic, which implies greater control by the State and, among other topics, extending the entry into force of the Law to 24 months (August 2020). By this date (August 2020) all legal entities will be required to adapt their data processing activities to the new rules.
In July 2019, the Provisional Measure 869/2018 was converted into Law 13.853, which provides for the ANPD as a body to remain part of the federal public administration in the executive branch.

COMPETITION

DOMESTIC

The market

During 2019, the Italian TLC market continued to contract in value due to strong competition.

The development of Broadband and UltraBroadBand was the main factor of market evolution. The greater availability of UltraBroadBand will allow operators to develop convergent offers that combine Media & Entertainment, IT and Digital services with TLC services. The offer of these services will further boost adoption by broadband customers.

The Italian telecommunications market remains highly competitive, with the greatest impact of market dynamics on voice and data connectivity services. Furthermore, in the new digital world, telecommunications operators have to deal with Over The Top - OTT and device manufacturers with completely different competitive assets and logic.

The traditional business models of the various market players are, therefore, changing over time to exploit new opportunities and meet the challenges posed by the new entrants:

- in the Media & Entertainment sector, with the growing importance of the internet as a complementary distribution platform. In 2019, the Italian television market saw the further development of OTT on demand video services (VOD and SVOD), combined with the growing diffusion of OTT services that include linear video content. The central role of the broadband network in these new use modes sees OTT players, telecommunications operators and Consumer Electronics manufacturers take on an increasingly important role;
- in the Information and Communication Technology market, where, although there was overall growth in 2019, the traditional fixed-line and mobile TLC component contracted, in favor of IT components related to digital transformation, especially for large companies, for example with the adoption of Cloud solutions for their technological infrastructures. This evolution and transformation is set to continue with the expansion of the country's 5G network coverage. In this sector, telecommunications operators have been strengthened, including through partnerships, to take advantage of the growth that, in the next few years, will be driven by the digitalization of SMEs and regulatory changes, such as the increasingly stringent rules relating to IT security;
- Consumer Electronics manufacturers are developing services that can be accessed through the Internet by leveraging handset ownership and user experience management, breaking the relationship between customers and TLC providers.

With regard to the current positioning of telecommunications providers in converging markets, on the other hand, as partially described above, the following is taking place with different levels of progress:

- development of new Media & Entertainment services (TV, Music, Gaming) and new Digital services (Smart Home, Digital Advertising, Mobile Payment-Digital Identity);
- development of Innovative Services in the IT market, particularly Cloud services.

After the frequencies were awarded in 2018, 2019 was characterized by the progressive deployment of the 5G network and service activation by TIM and Vodafone in main cities with the commercial launch of specific tariff plans.

After the initial launch, operators are moving to take advantage of the various opportunities in new vertical markets (e.g. energy & utilities, smart cities, smart manufacturing, automotive, eHealth) and provide new services, enable new production processes and increase efficiency in optimized product management.

Competition in Fixed-line Telecommunications

The fixed-line telecommunications market has continued to see a decline in access and voice revenues, while broadband and ultra-broadband revenues have shown growth. In recent years, service providers have concentrated mainly on expanding the penetration of broadband and ultra-broadband services and defending Voice revenues by introducing bundled voice, broadband and service deals in a highly competitive environment with consequent pricing pressure.

The market scenario involves significant infrastructural activities, by TIM and other parties, firstly Open Fiber (a company controlled by ENEL and CDP), Infratel (a company belonging to the Ministry of Economic Development) and Fastweb who have presented and are still working on extensive development plans for their fiber optic telecommunications networks in many areas of the country.

For major cities, Open Fiber announced a separate plan for the development of Fiber to the Home (FTTH) connections in 271 large Italian towns for the start of 2023, reaching around 9.6 million homes through an investment of 3.8 billion euros.
After obtaining 3.5 billion euros of funding in July 2018, the development of the Open Fiber network was stepped up considerably, opening up to 129 Italian towns (as of January 2020), including many major Italian cities, such as Milan, Turin and Bologna, previously cabled by "Metroweb" (acquired in December 2016) had previously expanded, besides other cities such as Bari, Cagliari, Catania, Naples, Padova, Perugia, Venice, Genoa, Palermo and Florence, and other smaller towns that are mainly satellite areas of Milan, Turin and Bologna. It also announced the marketing of its services in a district of Rome in August 2019.
According to press reports, Open Fiber has signed agreements with TIM's main competitors on the telecommunications retail market to provide its UltraBroadBand (UBB) services, where available.

In relation to market failure areas, the so-called white areas in the C and D clusters of the government's UltraBroadband Plan, Infratel took direct action in the development of the UBB network in a number of Italian municipalities ("Infratel direct intervention areas") and held three public calls for tenders over the last three years for the development of a UBB network to deliver services to around 7,500 municipalities across 19 regions:

- In the first call for tenders Open Fiber was awarded all five lots in the 6 regions involved (Lombardy, Emilia-Romagna, Veneto, Tuscany, Abruzzo and Molise) for around 3,000 municipalities;
- in the second call for tenders, Open Fiber won all six of the lots offered in the ten regions involved (Piedmont, Valle d'Aosta, Liguria, Friuli Venezia Giulia, Marche, Umbria, Lazio, Campania, Basilicata and Sicily) plus the Autonomous Province of Trento, covering around 3,700 municipalities;
- in the third call for tenders, Open Fiber won all three lots in the three regions involved (Apulia, Calabria and Sardinia) covering around 880 municipalities.

In December 2019, there were nearly 2,811 work sites open for the first two Infratel/Open Fiber contracts, of which 1,934 for FTTH fiber optic connections and 877 for wireless connections (FWA), however, there have been significant delays in the marketing of services in the areas where work has been carried out.

Fastweb is pursuing its relevant UBB development plan along two main lines: its partnership with TIM in Flash Fiber and the FTTH coverage of 29 main Italian cities and development of its own FTTC network including with the acquisition of infrastructure and services, such as the Sub Loop, from TIM. In May 2019, it announced that it had signed an agreement with Open Fiber to use OF-installed FTTH connections in areas not covered by proprietary infrastructure as well as white areas.

Therefore the development of alternative subject Plans – both in major Italian cities and market failure areas – will drive a significant shift in infrastructure competition, with the development of various competitive dynamics depending on the presence and reach of available ultrabroadband infrastructure:

- areas with FTTH networks possibly overlapping TIM FTTC networks or those of OLOs with the use of TIM infrastructural services (Sub Loop, etc.);
- areas with only one FTTH network overlapping TIM FTTC networks or those of OLOs with the use of TIM infrastructural services (Sub Loop, etc.);
- areas with FTTH networks overlapping ADSL networks belonging to TIM or OLOs using TIM services;
- areas with FTTC networks overlapping ADSL networks belonging to TIM or OLOs using TIM services;.

Competition in the Italian fixed-line telecommunications market is also characterized by the presence of other service providers besides TIM, such as Wind-Tre, Fastweb, Vodafone, and Tiscali, which have business models focused on different segments of the market.

At the end of 2019, fixed accesses in Italy were estimated to be around 19.5 million (including OLO Infrastructured and FWA-Fixed Wireless Accesses) down slightly on the previous year. Competition in the access market led to a gradual reduction in TIM's market share.

As concerns the broadband market, at December 31, 2019, the number of fixed-line broadband customers in Italy (including both broadband and Ultra-broadband customers) is estimated to have reached a penetration rate of approximately 90% of all fixed-line accesses. The spread of broadband continues to be driven by the penetration of enabled devices (such as Smart TVs, Smart Speaker, connected devices), but also by growing demand for fast connections and access to new over-IP services that are becoming increasingly widespread (Media & Entertainment, IT and Digital services).

Competition in Mobile Telecommunications

The mobile market has continued to see the rationalization of second and third SIM cards for human communications and growth of SIM cards for machine to machine (M2M) communications.

Alongside innovative services that have already caught on and are under full-scale development, as in the case of mobile apps, there are other market environments, associated with the development of mobile broadband, with major potential for growth in the medium term, such as the Internet of Things and mobile payment.

The competitive scenario of the Italian mobile telecommunications market in 2019 continues to be characterized by the particularly aggressive price and data volume offering of Illiad, which has continued to win over customers and consequently gained a market share to the detriment of other infrastructured operators, mainly WindTre and Vodafone, while TIM has shown a greater resilience, thanks also to the contribution from the second brand, Kena Mobile. MVOs (mobile virtual operators) also grew at the expense of infrastructure operators; among these, Poste Mobile is the most important player.

The foregoing has continued to lead to a drop in service spending, even though competitive pressure on tariffs is easing with the main mobile operators tending to increase the prices of bundle offers in the face of the increase in quality of services offered by the network performance.

BRAZIL

The macroeconomic trends of the last quarter of 2019 confirm the expected recovery scenario for 2020, although forecasts for 2019 were gradually reduced during the year up to the third quarter, mainly due to the political uncertainties generated by the pension reforms. Thus, the main scenario is still a slow economic recovery scenario, after a severe recession notably during 2015-16 period. Unemployment has been falling slowly, while inflation returned to a more contained level (below 4.5% for 2019).
Although there is still some political uncertainty, especially in relation the new government's ability to implement some liberal economic programs such as administrative and fiscal reform, the market has taken note of the initial results presented so far, considering them favorable for businesses, in the wake of the recent increases on the Brazilian stock market (Ibovespa +32% in 2019).
Despite the improvement in financial performance indicators, economic conditions are still difficult, with the budget deficit and increasing debts (for central governments, federal states and municipalities) carrying a risk that can only be managed with more structural reform, for which Congress's approval is needed. The current government has recognized the need to introduce reforms and considers them a top priority for 2020, in addition to the privatization of some companies (such as Eletrobras, Telebras, Poste, DataPrev) to allow constant growth of the economy in the coming years and to improve infrastructure investment.
The mobile telecommunications sector has seen some rationality prevail in the market and in competition, with service providers basing their offers on the characteristics and service range of their commercial offers, rather than pursuing aggressive pricing policies, especially for the first half of 2018.
In the **Prepaid segment**, the main objective of market players has been to raise the frequency percentage for the use of services by leveraging the ongoing SIM card consolidation process in the market, by encouraging migration to weekly (and monthly) plans or hybrid plans (Controle postpaid) by offering a range of bundled service packages on the basis of the different needs of customers (unlimited voice calls or data packages). This strategy aims to improve the customer base mix by ensuring greater stability (and a reduction in the leaving rate) and dynamic growth of ARPU. The prepaid base registered a drop of 7.6% compared to the previous year
In the **postpaid mobile segment,** growth in the customer base was driven primarily by the hybrid Controle segment (in particular by the migration of Prepaid customers), even though "pure" Postpaid lines also registered a certain growth based on offer segmentation strategies that introduce distinctions in the use of data services (for example the unlimited use of data for specific apps, such as WhatsApp, Facebook, Netflix, etc.), as part of a "More for More" sales policy that is bringing greater price stability and effectively repositioning the customer base towards higher value deals (voice +data +content). The postpaid base registered growth of 6.1% compared to the previous year.
Service quality is still an element of differentiation. Telecommunication providers that have invested more in the development of 4G networks (coverage and capacity) and in the improvement of processes shaping customers' experience will have a greater ability to apply premium prices, as customers raise their expectations and place growing importance on the quality of data services and higher value content. The three main operators already provide 4G coverage for over 90% of the Brazilian urban population (up to December 2019, latest data available) and guarantee a higher than 77% time availability of 4G (according to the Opensignal report of January 2020).

The fixed broadband market recorded a growth of 4.3% on an annual basis mainly driven by smaller market operators (+25.7% on an annual basis), which tend to offer higher download speeds and/or presence in areas where incumbent operators have infrastructure limitations. As a result, traditional incumbent operators are suffering heavy losses in their customer base. Penetration rates across the population are still quite low (approximately 47% of houses) when compared to several other countries, which means there are good opportunities for medium-term growth, underpinned by the improving macroeconomic situation.

In this context, since 2017, TIM adopted a business strategy for TIM Live to leverage its fiber network infrastructure, offering ultra broadband Internet services, through FTTC and notably FTTH, not only in some of the largest cities of Brazil, but also in cities where opportunities arise for such high-quality service. TIM Live therefore increased its coverage reaching 23 cities before the end of 2019, and plans to extend it further in the coming years. At the end of 2019, TIM Live had a customer base of 566,000 users (an increase of 21.1% on an annual basis). For smaller cities, TIM has launched its WTTx service, which delivers broadband services through the LTE mobile network, leveraging TIM's leading 4G coverage to address increasing demand for residential broadband, especially in areas with poor fixed infrastructure by local incumbent.

CONSOLIDATED FINANCIAL POSITION AND CASH FLOWS PERFORMANCE

NON-CURRENT ASSETS

- **Goodwill:** fell by 3,686 million euros, from 26,769 million euros at the end of 2018 to 23,083 million euros at December 31, 2019 due to:
  - reclassification of the Goodwill attributed to the company INWIT S.p.A. within "Discontinued operations/Non-current assets held for sale" (-3,600 million euros);
  - • sale of the company Persidera S.p.A.; As required by IAS 36 par. 86 the derecognition of the associated goodwill amounting to 68 million euros was carried out;
  - negative exchange rate difference relating to the goodwill of the Brazil Business Unit [21] (-18 million euros).

  Further details are provided in the Note "Goodwill" to the Consolidated Financial Statements at December 31, 2019 of the TIM Group.
- **Intangible assets with a finite useful life:** these fell by 1,222 million euros, from 8,889 million euros at the end of 2018 to 7,667 million euros at December 31, 2019, representing the balance of the following items:
  - capex (+1,064 million euros);
  - amortization charge for the year (-1,675 million euros);
  - reclassifications, following the adoption of IFRS 16 from 1/1/2019, of the Indefeasible Rights of Use - IRU and infrastructure rights of use in Brazil, from Intangible assets to the specific item Rights of use (445 million euros);
  - sale of Persidera S.p.A., with the consequent exit from the scope of consolidation of 98 million euros in intangible assets;
  - reclassification of the intangible assets relating to the company INWIT S.p.A. within "Discontinued operations/Non-current assets held for sale" (-11 million euros);
  - other disposals, exchange differences and other changes (for a net negative balance of 57 million euros).
- **Tangible assets:** these fell by 2,135 million euros, from 16,146 million euros at the end of 2018 to 14,011 million euros at December 31, 2019, representing the balance of the following items:
  - capex (+2,644 million euros);
  - amortization charge for the year (-2,469 million euros);
  - reclassifications, following the adoption of IFRS 16 from 1/1/2019, of Assets held under finance leases and of improvements in tangible assets in the specific item Rights of use (1,923 million euros);
  - reclassification of the tangible assets relating to the company INWIT S.p.A. within "Discontinued operations/Non-current assets held for sale" (-285 million euros);
  - sale of Persidera S.p.A., with the consequent exit from the scope of consolidation of 44 million euros in tangible assets;
  - other disposals, exchange differences and other changes (for a net negative balance of 58 million euros).
- **Rights-of-use assets**: After IFRS 16 (Leasing) was adopted, the TIM Group decided to classify rights to use third-party assets under a specific item of the statements of financial position. For further details, see the Note "Rights of use assets" of the Consolidated financial statements at December 31, 2019 of the TIM Group. This entailed the recognition at January 1, 2019 of rights of use amounting to 3,503 million euros in addition to the aforementioned reclassification of intangible and tangible fixed assets totaling 2,368 million euros. At January 1, 2019, rights of use assets totalled 5,871 million euros
  At December 31, 2019, Rights of use assets amounted to 5,494 million euros, down 377 million euros as a result of the below:
  - investments (76 million euros) and increases in lease contracts (+1,140 million euros);
  - amortization charge for the year (-783 million euros);
  - reclassification of the rights of use assets relating to the company INWIT S.p.A. within "Discontinued operations/Non-current assets held for sale" (-636 million euros);
  - disposals, exchange differences and other changes (for a net negative balance of 174 million euros).

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[1] The spot exchange rate used for the translation into euro of the Brazilian real (expressed in terms of units of local currency per 1 euro) was 4.52808 at December 31, 2019 and 4.43664 at December 31, 2018.

CONSOLIDATED EQUITY

Consolidated equity amounted to 22,626 million euros (21,747 million euros at December 31, 2018), of which 20,280 million euros attributable to Owners of the Parent (19,528 million euros at December 31, 2018) and 2,346 million euros attributable to non-controlling interests (2,219 million euros at December 31, 2018). In greater detail, the changes in consolidated equity were the following:

(millions of euros)	**12/31/2019**	**12/31/2018**
At the beginning of the year	**21,747**	**23,695**
IFRS 16 adoption effect	–	–
At the beginning of the year, restated	**21,747**	**23,695**
Total comprehensive income (loss) for the year	1,206	(1,694)
Dividends approved by:	(296)	(281)
TIM S.p.A.	*(166)*	*(166)*
Other Group companies	*(130)*	*(115)*
Change in the scope of consolidation	(44)	–
Issue of equity instruments	4	2
Other changes	9	25
At the end of the year	**22,626**	**21,747**

CASH FLOWS

Reported adjusted net financial debt amounted to 27,668 million euros.
On the same accounting basis, adjusted net financial debt stood at 23,839 million euros, down by 1,431 million euros compared to December 31, 2018 (25,270 million euros).
The table below summarizes the main transactions that had an impact on the change in adjusted net financial debt for 2019:

Change in adjusted net financial debt

(millions of euros)	2019	2019 comparable (a)	2018 (b)	Change (a-b)
EBITDA	8,151	7,489	7,403	86
Capital expenditures on an accrual basis	(3,784)	(3,784)	(4,009)	225
Investments for mobile licenses acquisition/spectrum	–	–	(2,399)	2,399
Change in net operating working capital:	(549)	(598)	1,194	(1,792)
Change in inventories	*129*	*129*	*(99)*	*228*
Change in trade receivables and net amounts due from customers on construction contracts	–	–	*(49)*	*49*
Change in trade payables	*(28)*	*(45)*	*(150)*	*105*
Changes of mobile licenses acquisition payable/spectrum	*(18)*	*(18)*	*1,886*	*(1,904)*
Other changes in operating receivables/payables	*(632)*	*(664)*	*(394)*	*(270)*
Change in provisions for employee benefits	(246)	(246)	(208)	(38)
Change in operating provisions and Other changes	235	235	96	139
Net operating free cash flow	**3,807**	**3,096**	**2,077**	**1,019**
Of which Operating Free Cash Flow related to the mobile licenses acquisition/spectrum	*(18)*	*(18)*	*(513)*	*495*
% of Revenues	*21.2*	*17.2*	*11.0*	*6.2 pp*
Sale of investments and other disposals flow	160	160	18	142
Share capital increases/reimbursements, including incidental expenses	10	10	22	(12)
Financial investments	(5)	(5)	(6)	1
Dividends payment	(279)	(279)	(256)	(23)
Increases in finance leasing contracts	(1,140)	(168)	(70)	(98)
Finance expenses, income taxes and other net non-operating requirements flow	(1,414)	(1,399)	(1,747)	348
Impact of the application of IFRS 16 at 1/1/2019	(3,553)			
Reduction/(Increase) in adjusted net financial debt from continuing operations	**(2,414)**	**1,415**	**38**	**1,377**
Reduction/(Increase) in net financial debt from Discontinued operations/Non-current assets held for sale	16	16	–	16
Reduction/(Increase) in adjusted net financial debt	**(2,398)**	**1,431**	**38**	**1,393**

In addition to what has already been described with reference to EBITDA, the change in adjusted net financial debt for 2019 was particularly impacted by the following:

Capital expenditures and for mobile telephone licenses/spectrum

Capex amounted to 3,784 million euros in 2019 (6,408 million euros in 2018).

Capital expenditures and for mobile telephone licenses/spectrum are broken down by operating segment as follows:

(millions of euros)	2019 comparable		2018		Change
		% of total		% of total	
Domestic	2,912	77.0	5,518	86.1	(2,606)
Brazil	872	23.0	890	13.9	(18)
Other Operations	–	–	–	–	–
Adjustments and eliminations	–	–	–	–	–
Consolidated Total	**3,784**	**100.0**	**6,408**	**100.0**	**(2,624)**
% of Revenues	*21.1*		*33.8*		*(12.7)pp*

In particular:

- the **Domestic Business Unit** reported expenditures equal to 2,912 million euros (5,518 million euros in 2018). In organic terms and net of the acquisition in 2018 of the rights of use for 5G frequencies in Italy (2,399 million euros) the reduction is equal to -206 million euros compared to the previous year owing to the continuous improvement of the spending conditions and terms and to the coverage levels already achieved on the fixed and mobile access components;
- in 2019, the **Brazil Business Unit** recorded Capex of 872 million euros, down 18 million euros compared to 2018 (890 million euros). Excluding the impact of changes in exchange rates (-22 million euros), capex grew by 4 million euros, mainly to strengthen the mobile ultrabroadband infrastructure and the development of the fixed broadband business of TIM Live.

Change in net operating working capital

In comparable terms, the change in Net operating working capital for 2019 reflects an absorption of 598 million euros (positive change of 1,194 million euros in 2018). In particular, "Other changes in operating receivables/payables" (-664 million euros) were mainly related to the Brazil Business Unit's higher operating receivables following the favorable outcome of tax disputes. The change in 2018 was mainly related to the higher operating payables (+1,922 million euros) following the acquisition of user rights for mobile phone frequencies (5G) in Italy.

Change in provisions for employee benefits

In the 2019, the change amounted to -246 million euro (-208 million euro in 2018) and mainly refers to uses for staff leaving the company related to the redundancy plans already allocated in previous years, as well as to the revised estimate and start date for staff leaving the Parent scheduled for the 2020 financial year (also in accordance with the application of article 4 of the Law of June 28, 2012, no. 92, as last defined in the union agreement of February 26, 2019) and the expenses recognized as a result of the agreements signed with the trade unions by Olivetti, H.R. Services and Telecom Italia Sparkle in accordance with article 4 of June 28, 2012, no. 92.

Sale of investments and other disposals flow

Was positive for 160 million euros and mainly refers to the sale of Persidera S.p.A., which took place on December 2, 2019, with a 142 million euros collection, as well as to other sales of equity investments (7 million euros) and to disposals of non-current assets taking place within the normal operating cycle (7 million euros).
In 2018, the overall flow was positive for 18 million euros.

Share capital increases/reimbursements, including incidental costs

These totaled 10 million euros in 2019 and essentially consisted of contributions from an external shareholder of the Group for new capital issued by a subsidiary (22 million euros in 2018).

Increase in finance leasing contracts

In 2019, this item amounted to 1,140 million euros.
On the same accounting basis, they amounted to 168 million euros (70 million euros in 2018) mainly attributable to TIM S.p.A. and the Brazil Business Unit and relate to renegotiations and adjustments of finance lease contracts already existing at December 31, 2018 valued according to IAS 17.
Increases in finance lease contracts include the higher value of user rights entered following new lease contracts payables, increase of lease payments and renegotiations of existing contracts.
For further details, see the Note "Rights of use assets" of the Consolidated financial statements at December 31, 2019 of the TIM Group.

Financial expenses, income taxes and other net non-operating requirements flow

The item, in comparable terms, shows a net requirement for a total of 1,399 million euros and mainly includes disbursements relating to the components of financial income and expense as well as the payment of income tax expenses and the change in non-operating receivables and payables.

Sales of receivables to factoring companies

It should be noted that sales without recourse of trade receivables to factoring companies completed during 2019 resulted in a positive effect on the adjusted net financial debt at December 31, 2019 amounting to 1,958 million euros (2,004 million euros at December 31, 2018).

Net financial debt

Net financial debt is composed as follows:

(millions of euros)	12/31/2019 (a)	12/31/2018 (b)	Change (a-b)
Non-current financial liabilities			
Bonds	19,773	18,579	1,194
Amounts due to banks, other financial payables and liabilities	5,832	4,740	1,092
Non-current financial liabilities for lease contracts	4,576	1,740	2,836
	30,181	**25,059**	**5,122**
Current financial liabilities (*)			
Bonds	1,958	2,918	(960)
Amounts due to banks, other financial payables and liabilities	1,224	2,787	(1,563)
Current financial liabilities for lease contracts	639	208	431
	3,821	**5,913**	**(2,092)**
Financial liabilities directly associated with Discontinued operations/Non-current assets held for sale	655	–	655
Total Gross financial debt	**34,657**	**30,972**	**3,685**
Non-current financial assets			
Securities other than investments	–	–	–
Non-current financial receivables arising from lease contracts	(51)	(54)	3
Financial receivables and other current financial assets	(2,100)	(1,540)	(560)
	(2,151)	**(1,594)**	**(557)**
Current financial assets			
Securities other than investments	(877)	(1,126)	249
Current financial receivables arising from lease contracts	(58)	(70)	12
Financial receivables and other current financial assets	(122)	(270)	148
Cash and cash equivalents	(3,138)	(1,917)	(1,221)
	(4,195)	**(3,383)**	**(812)**
Financial assets relating to Discontinued operations/Non-current assets held for sale	(65)	–	(65)
Total financial assets	**(6,411)**	**(4,977)**	**(1,434)**
Net financial debt carrying amount	**28,246**	**25,995**	**2,251**
Reversal of fair value measurement of derivatives and related financial liabilities/assets	*(578)*	*(725)*	*147*
Adjusted net financial debt	**27,668**	**25,270**	**2,398**
Breakdown as follows:			
Total adjusted gross financial debt	**32,782**	**29,432**	**3,350**
Total adjusted financial assets	**(5,114)**	**(4,162)**	**(952)**
(*) of which current portion of medium/long-term debt:			
Bonds	*1,958*	*2,918*	*(960)*
Amounts due to banks, other financial payables and liabilities	*446*	*1,477*	*(1,031)*
Current financial liabilities for lease contracts	*639*	*208*	*431*

The financial risk management policies of the TIM Group are aimed at minimizing market risks, fully hedging exchange rate risk, and optimizing interest rate exposure through appropriate diversification of the portfolio, which is also achieved by using carefully selected derivative financial instruments. Such instruments, it should be stressed, are not used for speculative purposes and all have an underlying, which is hedged.
In addition, to determine its exposure to interest rates, the Group sets an optimum composition for the fixed-rate and variable-rate debt structure and uses derivative financial instruments to achieve that composition. Taking into account the Group's operating activities, the optimum mix of medium/long-term non-current financial liabilities has been established, on the basis of the nominal amount, at a range of 65%–75% for the fixed-rate component and 25%–35% for the variable-rate component.
In managing market risks, the Group has adopted Guidelines for the "Management and control of financial risk" and mainly uses IRS and CCIRS derivative financial instruments.
To provide a better representation of the true performance of Net Financial Debt, in addition to the usual indicator (renamed "Net financial debt carrying amount"), the TIM Group reports a measure called "Adjusted net financial debt", which neutralizes the effects caused by the volatility of financial markets. Given that some

components of the fair value measurement of derivatives (contracts for setting the exchange and interest rate for contractual flows) and of derivatives embedded in other financial instruments do not result in actual monetary settlement, the Adjusted net financial debt excludes these purely accounting and non-monetary effects (including the effects of IFRS 13 – Fair Value Measurement) from the measurement of derivatives and related financial assets/liabilities.
For further details, see the "Alternative performance indicators" chapter.

Comparable adjusted net financial debt posted a **reduction of 1,431 million euros compared to year-end 2018**, and amounted to 23,839 million euros (25,270 million euros at December 31, 2018) and 892 million euros compared to June 30, 2019 (24,731 million euros). The solid generation of operating cash flows, achieved by continuously reducing costs and optimizing working capital, has allowed for a large debt reduction.

To better understand the report, following the application of the new IFRS 16 standard, the various methods of representing the Net Financial Debt are explained in the following table (as regards the figures at 1/1/2019 the values resulting from adoption of IFRS 16 were implemented on the accounting data at 12/31/2018):

(millions of euros)	12/31/2019 (a)	1/1/2019 (b)	Change (a-b)
Net financial debt carrying amount	**28,246**	**29,548**	**(1,302)**
Reversal of fair value measurement of derivatives and related financial liabilities/assets	*(578)*	*(725)*	*147*
Reported adjusted net financial debt	**27,668**	**28,823**	**(1,155)**
Net impact of applying IFRS 16 - Leases	*(3,258)*	*(3,553)*	*295*
Net impact of applying IFRS 16 - Leases discontinued operations/Non-current assets held for sale	*(571)*	–	*(571)*
Comparable adjusted net financial debt	**23,839**	**25,270**	**(1,431)**
Liabilities due to financial leasing pursuant to IAS 17	*(1,946)*	*(1,948)*	*2*
Adjusted net financial debt - After Lease	**21,893**	**23,322**	**(1,429)**

The net **financial debt carrying amount** at December 31, 2019 amounted to 28,246 million euros and reflects the impact of the application of the new accounting standard IFRS 16 (Leases).

Reported adjusted net financial debt (including IFRS 16) amounted to 27,668 million euros at December 31, 2019 and particularly reflects the 3,553 million euros increase emerging from the application of the new IFRS 16 (Leases) as of January 1, 2019 following which the lease payments are no longer recognized as costs for Acquisition of goods and services, but a financial liability must be recognized in the statement of financial position, represented by the current value of the future payments.

Adjusted Net Financial Debt - After Lease (net of all leases, as specified in the detailed section “After lease indicators”), a **metric adopted by the main European peers**, was 21,893 million euros at December 31, 2019.

Gross financial debt

Bonds
Bonds at December 31, 2019 totaled 21,731 million euros (21,497 million euros at December 31, 2018). Repayments totaled a nominal 21,162 million euros (21,021 million euros at December 31, 2018).

Changes in bonds over 2019 are shown below:

(millions of original currency)	Currency	Amount	Issue date
New issues			
Telecom Italia S.p.A. 1,250 million euros 4.000% maturing 4/11/2024	Euro	1,250	1/11/2019
TIM S.A. 1,000 million reais 104.10% CDI maturing 7/15/2020	BRL	1,000	1/25/2019
Telecom Italia S.p.A. 1,000 million euros 2.750% maturing 4/15/2025	Euro	1,000	4/15/2019

(millions of original currency)	Currency	Amount	Repayment date
Repayments			
Telecom Italia S.p.A. 832 million euros 5.375% (1)	Euro	832	1/29/2019
Telecom Italia Capital S.A. 760 million USD 7.175% (2)	USD	760	6/18/2019
Telecom Italia S.p.A. 850 million GBP 6.375%	GBP	850	6/24/2019

(1) Net of buy-backs totaling 418 million euros made by the company in 2015.

(2) Net of the securities bought back by TIM S.p.A. (240 million USD) on July 20, 2015.

With reference to Telecom Italia S.p.A. 2002–2022 bonds, reserved for subscription by employees of the Group, the nominal amount at December 31, 2019 was 205 million euros, up by 2 million euros compared to December 31, 2018 (203 million euros).

Revolving Credit Facility and Term Loan

The following table shows committed credit lines available at December 31, 2019.

(billions of euros)	12/31/2019		12/31/2018	
	Agreed	Drawn down	Agreed	Drawn down
Revolving Credit Facility – maturing January 2023	5.0	-	5.0	-
Total	**5.0**	**-**	**5.0**	**-**

At December 31, 2019, TIM had bilateral Term Loans for 1,750 million euros with various banking counterparties and overdraft facilities for 390 million euros, drawn down for the full amount.

On October 29, 2019, TIM entered into a Promissory Loan Agreement ("Schuldschein") for a total amount of 250 million euros, of which 229 million euros matures on October 29, 2023 and 21 million euros matures on October 29, 2025.

On 19 December 2019, INWIT signed a loan agreement with a pool of banks for a total amount of 3 billion euros, divided into three credit lines (bridge loan, term loan and revolving credit facility). This loan will be used to finance INWIT's acquisition of the minority stake in VOD Towers, the distribution of an extraordinary dividend, as well as to refinance part of INWIT's existing debt and meet its cash flow needs.

Maturities of financial liabilities and average cost of debt

The average maturity of non-current financial liabilities (including the current portion of medium/long-term financial liabilities due within 12 months) was 8.26 years.

The average cost of the Group's debt, considered as the cost for the year calculated on an annual basis and resulting from the ratio of debt-related expenses to average exposure, stood at approximately 3.9%, while it is equal to approximately 4.1% considering the application of IFRS 16.

For details on the maturities of financial liabilities in terms of expected nominal repayment amounts, as contractually agreed, see the Notes "Financial liabilities (non-current and current)" in the Consolidated Financial Statements at December 31, 2019 of the TIM Group.

Current financial assets and liquidity margin

The TIM Group's available liquidity margin amounted to 9,015 million euros, equal to the sum of:

- "Cash and cash equivalents" and "Current securities other than investments" for a total of 4,015 million euros (3,043 million euros at December 31, 2018);
- Revolving Credit Facility amounting to 5,000 million euros.

This margin is sufficient to cover Group financial liabilities falling due over the next 30 months.

In particular:

Cash and cash equivalents amounted to 3,138 million euros (1,917 million euros at December 31, 2018). The different technical forms of investing available cash can be analyzed as follows:

- maturities: investments have a maximum maturity of three months;

- counterparty risk: investments by the European companies are made with leading banking, financial and industrial institutions with high credit quality. Investments by the companies in South America are made with leading local counterparties;
- Country risk: deposits have been made mainly in major European financial markets.

Current securities other than investments amounted to 877 million euros (1,126 million euros at December 31, 2018): These forms of investment represent alternatives to the investment of liquidity with the aim of improving returns. They included a total of 333 million euros of Italian and European treasury bonds held by Telecom Italia Finance S.A., 395 million euros of bonds purchased by Telecom Italia Finance S.A. with different maturities, all with an active market and consequently readily convertible into cash, and 149 million euros of investments in monetary funds by the Brazil Business Unit. The purchases of the above government bonds, which, pursuant to Consob Communication no. DEM/11070007 of August 5, 2011, represent investments in "Sovereign debt securities", have been made in accordance with the Guidelines for the "Management and control of financial risk" adopted by the TIM Group.

In the fourth quarter of 2019, **reported adjusted net financial debt** decreased by 223 million euros compared to September 30, 2019 (27,891 million euros).

(millions of euros)	12/31/2019 (a)	9/30/2019 (b)	Change (a-b)
Net financial debt carrying amount	**28,246**	**28,447**	**(201)**
Reversal of fair value measurement of derivatives and related financial liabilities/assets	*(578)*	*(556)*	*(22)*
Adjusted net financial debt	**27,668**	**27,891**	**(223)**
Breakdown as follows:			
Total adjusted gross financial debt	**32,782**	**32,338**	**444**
Total adjusted financial assets	**(5,114)**	**(4,447)**	**(667)**

In the fourth quarter of 2019, **comparable adjusted net financial debt** amounted to 23,839 million euros, down by 473 million euros compared to September 30, 2019 (24,312 million euros) due to positive cash generation and the sale of the ownership in Persidera.

CONSOLIDATED DATA – TABLES OF DETAIL

To follow, the Separate Consolidated Income Statements, Consolidated Statements of Comprehensive Income, Consolidated Statements of Financial Position, Consolidated Statements of Cash Flows as well as Other Information of the TIM Group.

Separate Consolidated Income Statements

(millions of euros)	2019	2019 comparable (a)	2018 (b)	Change (a-b) amount	Change (a-b) %
Revenues	**17,974**	**17,977**	**18,940**	**(963)**	**(5.1)**
Other income	933	933	341	592	–
Total operating revenues and other income	**18,907**	**18,910**	**19,281**	**(371)**	**–**
Acquisition of goods and services	(6,463)	(7,128)	(8,186)	1,058	12.9
Employee benefits expenses	(3,077)	(3,077)	(3,105)	28	0.9
Other operating expenses	(1,625)	(1,625)	(1,259)	(366)	(29.1)
Change in inventories	(128)	(128)	102	(230)	–
Internally generated assets	537	537	570	(33)	(5.8)
Operating profit (loss) before depreciation and amortization, capital gains (losses) and impairment reversals (losses) on non-current assets (EBITDA)	**8,151**	**7,489**	**7,403**	**86**	**1.2**
Depreciation and amortization	(4,927)	(4,391)	(4,255)	(136)	(3.2)
Gains/(losses) on disposals of non-current assets	(49)	(40)	(1)	(39)	–
Impairment reversals (losses) on non-current assets	–	–	(2,586)	2,586	–
Operating profit (loss) (EBIT)	**3,175**	**3,058**	**561**	**2,497**	**–**
Share of profits (losses) of associates and joint ventures accounted for using the equity method	(3)	(3)	(1)	(2)	–
Other income (expenses) from investments	3	3	11	(8)	(72.7)
Finance income	946	946	1,056	(110)	(10.4)
Finance expenses	(2,382)	(2,183)	(2,404)	221	9.2
Profit (loss) before tax from continuing operations	**1,739**	**1,821**	**(777)**	**2,598**	**–**
Income tax expense	(513)	(533)	(375)	(158)	–
Profit (loss) from continuing operations	**1,226**	**1,288**	**(1,152)**	**2,440**	**–**
Profit (loss) from Discontinued operations/Non-current assets held for sale	**16**	**16**	**–**	**16**	**–**
Profit (loss) for the year	**1,242**	**1,304**	**(1,152)**	**2,456**	**–**
Attributable to:					
Owners of the Parent	**916**	**962**	**(1,411)**	**2,373**	**–**
Non-controlling interests	326	342	259	83	32.0

Consolidated Statements of Comprehensive Income

In accordance with IAS 1 (Presentation of Financial Statements), the following Consolidated Statements of Comprehensive Income include the Profit (loss) for the year as shown in the Separate Consolidated Income Statements and all non-owner changes in equity.

(millions of euros)		2019	2018
Profit (loss) for the year	**(a)**	**1,242**	**(1,152)**
Other components of the Consolidated Statement of Comprehensive Income			
Other components that will not be reclassified subsequently to Separate Consolidated Income Statement			
Financial assets measured at fair value through other comprehensive income:			
Profit (loss) from fair value adjustments		4	(5)
Income tax effect		–	–
	(b)	**4**	**(5)**
Remeasurements of employee defined benefit plans (IAS 19):			
Actuarial gains (losses)		(44)	19
Income tax effect		10	(5)
	(c)	**(34)**	**14**
Share of other comprehensive income (loss) of associates and joint ventures accounted for using the equity method			
Profit (loss)		–	–
Income tax effect		–	–
	(d)	**–**	**–**
Total other components that will not be reclassified subsequently to Separate Consolidated Income Statement	**(e=b+c+d)**	**(30)**	**9**
Other components that will be reclassified subsequently to Separate Consolidated Income Statement			
Financial assets measured at fair value through other comprehensive income:			
Profit (loss) from fair value adjustments		(19)	(14)
Loss (profit) transferred to Separate Consolidated Income Statement		(5)	(4)
Income tax effect		8	2
	(f)	**(16)**	**(16)**
Hedging instruments:			
Profit (loss) from fair value adjustments		367	362
Loss (profit) transferred to Separate Consolidated Income Statement		(227)	(336)
Income tax effect		(17)	(7)
	(g)	**123**	**19**
Exchange differences on translating foreign operations:			
Profit (loss) on translating foreign operations		(113)	(554)
Loss (profit) on translating foreign operations transferred to Separate Consolidated Income Statement		–	–
Income tax effect		–	–
	(h)	**(113)**	**(554)**
Share of other comprehensive income (loss) of associates and joint ventures accounted for using the equity method			
Profit (loss)		–	–
Loss (profit) transferred to Separate Consolidated Income Statement		–	–
Income tax effect		–	–
	(i)	**–**	**–**
Total other components that will be reclassified subsequently to Separate Consolidated Income Statement	**(k=f+g+h+i)**	**(6)**	**(551)**
Total other components of the Consolidated Statement of Comprehensive Income	**(m=e+k)**	**(36)**	**(542)**
Total comprehensive income (loss) for the year	**(a+m)**	**1,206**	**(1,694)**
Attributable to:			
Owners of the Parent		**916**	**(1,784)**
Non-controlling interests		290	90

Consolidated Statements of Financial Position

(millions of euros)		12/31/2019 (a)	12/31/2018 (b)	Change (a-b)
Assets				
Non-current assets				
Intangible assets				
Goodwill		23,083	26,769	(3,686)
Intangible assets with a finite useful life		7,667	8,889	(1,222)
		30,750	**35,658**	**(4,908)**
Tangible assets				
Property, plant and equipment owned		14,011	14,251	(240)
Assets held under finance leases		–	1,895	(1,895)
		14,011	**16,146**	**(2,135)**
Rights of use assets		**5,494**	**–**	**5,494**
Other non-current assets				
Investments in associates and joint ventures accounted for using the equity method		11	16	(5)
Other investments		52	49	3
Non-current financial receivables arising from lease contracts		51	54	(3)
Other non-current financial assets		2,100	1,540	560
Miscellaneous receivables and other non-current assets		2,585	2,291	294
Deferred tax assets		942	1,136	(194)
		5,741	**5,086**	**655**
Total Non-current assets	**(a)**	**55,996**	**56,890**	**(894)**
Current assets				
Inventories		260	389	(129)
Trade and miscellaneous receivables and other current assets		4,857	4,706	151
Current income tax receivables		149	251	(102)
Current financial assets				
Current financial receivables arising from lease contracts		*58*	*70*	*(12)*
Securities other than investments, other financial receivables and other current financial assets		*999*	*1,396*	*(397)*
Cash and cash equivalents		*3,138*	*1,917*	*1,221*
		4,195	**3,383**	**812**
Current assets sub-total		**9,461**	**8,729**	**732**
Discontinued operations /Non-current assets held for sale				
of a financial nature		65	–	65
of a non-financial nature		4,582	–	4,582
		4,647	**–**	**4,647**
Total Current assets	**(b)**	**14,108**	**8,729**	**5,379**
Total Assets	**(a+b)**	**70,104**	**65,619**	**4,485**

(millions of euros)		12/31/2019 (a)	12/31/2018 (b)	Change (a-b)
Equity and Liabilities				
Equity				
Equity attributable to owners of the Parent		20,280	19,528	752
Non-controlling interests		2,346	2,219	127
Total Equity	**(c)**	**22,626**	**21,747**	**879**
Non-current liabilities				
Non-current financial liabilities for financing contracts and others		25,605	23,319	2,286
Non-current financial liabilities for lease contracts		4,576	1,740	2,836
Employee benefits		1,182	1,567	(385)
Deferred tax liabilities		248	192	56
Provisions		725	876	(151)
Miscellaneous payables and other non-current liabilities		3,214	3,297	(83)
Total Non-current liabilities	**(d)**	**35,550**	**30,991**	**4,559**
Current liabilities				
Current financial liabilities for financing contracts and others		3,182	5,705	(2,523)
Current financial liabilities for lease contracts		639	208	431
Trade and miscellaneous payables and other current liabilities		7,218	6,901	317
Income tax payables		84	67	17
Current liabilities sub-total		**11,123**	**12,881**	**(1,758)**
Liabilities directly associated with Discontinued operations/Non-current assets held for sale				
of a financial nature		655	–	655
of a non-financial nature		150	–	150
		805	**–**	**805**
Total Current Liabilities	**(e)**	**11,928**	**12,881**	**(953)**
Total Liabilities	**(f=d+e)**	**47,478**	**43,872**	**3,606**
Total Equity and Liabilities	**(c+f)**	**70,104**	**65,619**	**4,485**

Consolidated Statements of Cash Flows

(millions of euros)		2019	2018
Cash flows from operating activities:			
Profit (loss) from continuing operations		1,226	(1,152)
Adjustments for:			
Depreciation and amortization		4,927	4,255
Impairment losses (reversals) on non-current assets (including investments)		31	2,589
Net change in deferred tax assets and liabilities		271	(195)
Losses (gains) realized on disposals of non-current assets (including investments)		47	1
Share of profits (losses) of associates and joint ventures accounted for using the equity method		3	1
Change in provisions for employee benefits		(246)	(208)
Change in inventories		129	(99)
Change in trade receivables and net amounts due from customers on construction contracts		–	(49)
Change in trade payables		(181)	(163)
Net change in income tax receivables/payables		114	(210)
Net change in miscellaneous receivables/payables and other assets/liabilities		(387)	(178)
Cash flows from (used in) operating activities	**(a)**	**5,934**	**4,592**
Cash flows from investing activities:			
Purchases of intangible, tangible and rights of use assets on a cash basis		(3,649)	(4,531)
Capital grants received		28	108
Acquisition of control of companies or other businesses, net of cash acquired		–	–
Acquisitions/disposals of other investments		(4)	(3)
Change in financial receivables and other financial assets (excluding hedging and non-hedging derivatives under financial assets)		231	96
Proceeds from sale that result in a loss of control of subsidiaries or other businesses, net of cash disposed of		125	–
Proceeds from sale/repayments of intangible, tangible and other non-current assets		14	16
Cash flows from (used in) investing activities	**(b)**	**(3,255)**	**(4,314)**
Cash flows from financing activities:			
Change in current financial liabilities and other		(545)	394
Proceeds from non-current financial liabilities (including current portion)		4,527	2,546
Repayments of non-current financial liabilities (including current portion)		(4,412)	(4,426)
Changes in hedging and non-hedging derivatives		(415)	(110)
Share capital proceeds/reimbursements (including subsidiaries)		10	22
Dividends paid		(279)	(256)
Changes in ownership interests in consolidated subsidiaries		–	–
Cash flows from (used in) financing activities	**(c)**	**(1,114)**	**(1,830)**
Cash flows from (used in) Discontinued operations/Non-current assets held for sale	**(d)**	**16**	**–**
Aggregate cash flows	**(e=a+b+c+d)**	**1,581**	**(1,552)**
Net cash and cash equivalents at beginning of the year:	**(f)**	**1,631**	**3,246**
Net foreign exchange differences on net cash and cash equivalents	(g)	(10)	(63)
Net cash and cash equivalents at end of the year:	**(h=e+f+g)**	**3,202**	**1,631**

Purchases of intangible, tangible and rights of use assets

(millions of euros)	2019	2018
Purchase of intangible assets	(1,064)	(3,647)
Purchase of tangible assets (1)	(2,644)	(2,831)
Purchase of rights of use assets	(1,216)	–
Total purchase of intangible, tangible and rights of use assets on an accrual basis	(4,924)	(6,478)
Change in payables arising from purchase of intangible, tangible and rights of use assets	1,275	1,947
Total purchases of intangible, tangible and rights of use assets on a cash basis	(3,649)	(4,531)

(1) For 2018, includes purchases of assets held under finance leases.

Additional Cash Flow information

(millions of euros)	2019	2018
Income taxes (paid) received	(118)	(739)
Interest expense paid	(1,750)	(1,978)
Interest income received	589	871
Dividends received	1	2

Analysis of Net Cash and Cash Equivalents

(millions of euros)	2019	2018
Net cash and cash equivalents at beginning of the year:		
Cash and cash equivalents - from continuing operations	1,917	3,575
Bank overdrafts repayable on demand – from continuing operations	(286)	(329)
Cash and cash equivalents - from Discontinued operations/Non-current assets held for sale	–	–
Bank overdrafts repayable on demand – from Discontinued operations/Non-current assets held for sale	–	–
	1,631	**3,246**
Net cash and cash equivalents at end of the year:		
Cash and cash equivalents - from continuing operations	3,138	1,917
Bank overdrafts repayable on demand – from continuing operations	(1)	(286)
Cash and cash equivalents - from Discontinued operations/Non-current assets held for sale	65	–
Bank overdrafts repayable on demand – from Discontinued operations/Non-current assets held for sale	–	–
	3,202	**1,631**

The additional disclosures required by IAS 7 are provided in the Note “Net Financial Debt” to the TIM Group Consolidated Financial Statements at December 31, 2019.

OTHER INFORMATION

Average salaried workforce

(equivalent number)	2019	2018	Change
Average salaried workforce – Italy	42,630	45,058	(2,428)
Average salaried workforce – Outside Italy	9,287	9,365	(78)
Total average salaried workforce (1)	**51,917**	**54,423**	**(2,506)**

(1) Includes employees with temp work contracts: 5 average employees in Italy in 2019; no average employees in 2018.

Headcount at year end

(number)	12/31/2019	12/31/2018	Change
Headcount – Italy	45,266	48,005	(2,739)
Headcount – Outside Italy	9,932	9,896	36
Total headcount at year end (1)	**55,198**	**57,901**	**(2,703)**

(1) Includes employees with temp work contracts: 5 employees at 12/31/2019; no employees at 12/31/2018.

Headcount at year end – Breakdown by Business Unit

(number)	12/31/2019	12/31/2018	Change
Domestic	45,496	48,200	(2,704)
Brazil	9,689	9,658	31
Other Operations	13	43	(30)
Total	**55,198**	**57,901**	**(2,703)**

AFTER LEASE INDICATORS

TIM Group, in addition to the conventional financial performance measures established by the IFRS, uses certain alternative performance measures in order to present a better understanding of the trend of operations and financial condition. Specifically, following the adoption of IFRS 16, the TIM Group presents the following additional alternative performance indicators:

EBITDA ADJUSTED AFTER LEASE - TIM GROUP

(millions of euros)	2019 comparable	2018	Change amount	Change %
ORGANIC EBITDA - excluding Non-recurring items	**7,560**	**7,774**	**(214)**	**(2.8)**
Depreciation of finance lease assets	(187)	(215)	28	13.0
Interest expenses on lease liabilities	(157)	(184)	27	14.7
Exchange rate effect on amortization expense and finance expenses for lease liabilities		2	(2)	-
EBITDA adjusted After Lease (EBITDA-AL)	**7,216**	**7,377**	**(161)**	**(2.2)**

EBITDA ADJUSTED AFTER LEASE - DOMESTIC

(millions of euros)	2019 comparable	2018	Change amount	Change %
ORGANIC EBITDA - excluding Non-recurring items	**6,041**	**6,362**	**(321)**	**(5.0)**
Depreciation of finance lease assets	(169)	(200)	31	15.5
Interest expenses on lease liabilities	(105)	(129)	24	18.6
EBITDA adjusted After Lease (EBITDA-AL)	**5,767**	**6,033**	**(266)**	**(4.4)**

EBITDA ADJUSTED AFTER LEASE - BRAZIL

(millions of reais)	2019 comparable	2018	Change amount	Change %
ORGANIC EBITDA - excluding Non-recurring items	**6,745**	**6,314**	**431**	**6.8**
Depreciation of finance lease assets	(79)	(68)	(11)	(16.2)
Interest expenses on lease liabilities	(229)	(228)	(1)	(0.4)
EBITDA adjusted After Lease (EBITDA-AL)	**6,437**	**6,018**	**419**	**7.0**

ADJUSTED NET FINANCIAL DEBT AFTER LEASE - TIM GROUP

(millions of euros)	12/31/2019	12/31/2018	Change
Comparable adjusted net financial debt	**23,839**	**25,270**	**(1,431)**
Finance lease liabilities (IAS 17)	(1,946)	(1,948)	2
Adjusted net financial debt - After Lease	**21,893**	**23,322**	**(1,429)**

SOCIAL AND ENVIRONMENTAL IMPACT OF OPERATIONS AND THEIR ECONOMIC ASPECTS

Environmental and social changes underway pose economic risks, but also business opportunities for TIM, that has a leading role in the economy of the main countries where it operates; in a digital world, it is a strategic necessity to find a sustainable balance between new business models, new classes of services, new working methods and new professional skills that contribute to achieving the 17 Sustainable Development Goals of the UN's 2030 Agenda.

The analysis process conducted in 2019, in order to identify stakeholder interests relative to the social, environmental and economic impacts business activities have both in and outside the Company, showed that opportunities related to the digital transformation of companies and citizens' services are material issues for the Group.

The analysis also showed how essential it was for TIM to play a lead role in developing digital expertise and knowledge in its own dimension and in a capacity as enabler for a new digital society. The strong stakeholder focus on the role of the Company as a facilitator for the development of an inclusive digital society was also revealed by the analysis.

There is also great interest in the environmental approach and measures taken to combat climate change and its consequences. To this end, TIM contributes with products and services that allow businesses and families to reduce their energy consumption and cities to lower their emissions; electromagnetism also emerged as an issue.

The following are a few cases in which social and environmental elements have direct economic impacts on TIM and, lastly, a description is provided of the materiality analysis, the details of which are provided in the Group's Sustainability Report/Disclosure of non-financial information.

RATIONAL ENERGY CONSUMPTION MANAGEMENT

TIM is one of the biggest electricity users nationally, consuming around 1.87[3] TWh of energy per year.

In recent years, TIM has intensified its energy efficiency activities, implementing significant efficiency measures that in the last three years have led to around 123 GWh of energy efficiency (cumulative value of the three years).

During 2019, other possible levers were also assessed and identified to exploit TIM's energy potential, aimed at:

- increasing efficiency at industrial/multi-use sites;
- increasing distributed generation for self-consumption also with the construction of 6 new trigeneration plants (testing scheduled for the beginning of 2021) with a total installed power of 9.4 MWh and an estimated electricity saving regime of about 85 GWh/year (about 13 million euros in annual savings);
- increasing the amount of energy from renewable sources both through the purchase of guarantees of origin (at the end of 2019 guarantees of origin were purchased to cover approximately 23% of total withdrawals) and with the construction of new photovoltaic systems (expected installed power about 10 MWp[4] - with an expected production of 3 GWh in 2020 and about 13 GWh/year when fully operational).

The savings related to these initiatives will be fully operational in the 2020-2022 plan period.

During 2019, network compaction activities continued and savings related to the already begun space rationalization and site disposal plan, including data centers, took effect. These activities led to a total net reduction of energy consumption of the Domestic BU in 2019 of approximately 75 GWh compared to 2018.

In economic terms, despite the significant reduction in consumption, there was an increase in spending linked to the increase in energy prices in 2018, the year that forward purchases were made for energy delivered in 2019. During 2018, the value of the emission certificates went from 7 euros/ton to more than 25 euros/ton, thus significantly increasing the variable cost of marginal technology on the spot market, which led to a strong upward movement in the reference prices for forward market transactions. The spot market, which then turned bearish in 2019, due to the wide availability of gas in Europe and high hydraulicity, only partially offset the outlay, which therefore stood at higher levels than the previous year.

In addition, communication campaigns to support efficiency projects were launched in 2019, aimed at informing and raising the awareness of all TIM staff and promoting virtuous and conscious behavior to make the system more efficient. This will continue during 2020, and was recognized as part of the initiatives relating to the energy efficiency month, promoted by the Ministry of Economic Development and ENEA, following which TIM received the "Italy in Class A" stamp.

[3] This does not include the electricity used by OLOs.

[4] Mega Watt peak unit of power rating related to solar energy.

TIM areas with a potentially significant environmental impact have adopted an Environmental Management System (EMS) certified in accordance with ISO 14001 to manage their operating processes in a sustainable way. In some cases, the EMS is integrated with the Quality Management System based on the ISO 9001 standard, for which the relative certification has been obtained.
At some particularly important sites, an Energy Management System has been developed. In continuity with previous years, TIM, through the Energy & Utilities Management department, also achieved ISO 50001 certification this year for offices where this System was operational. The certification perimeter includes the "historical" headquarters in Bologna via Stendhal, the Piacenza Centro exchange, the Rozzano 1, 2 and 3 Data Centers, and the Padua and Bologna Roveri Data Centers.

EFFICIENCY PLANS AND STAFF DEVELOPMENT - ENGAGEMENT WITH WORKERS' REPRESENTATIVES

TIM pays much attention to listening and involving workers' representatives in many areas of work, including reorganization processes.
The search for constant dialog and discussion with union representatives led to major agreements being reached, aimed at reconciling the needs of the business with those of the people who work in the company. This has allowed agreements to be reached for the implementation of efficiency improvement plans that can mediate between the needs of the workers and those of the company. In particular, the accelerated technological transformation that the telecommunications sector is undergoing has determined the need to tackle company level integrated activities of organizational review, digitization of processes and adaptation of the entire staff's skills and capabilities.

In this context, and after the application of the “defensive solidarity” agreements for the period 2016-2017, extended until June 2019, in 2019 as part of the negotiation for the renewal of the second level contract, a set of agreements was defined between the Company Parties aimed at combining the achievement of the objectives set out in the Business Plan with the safeguarding of the needs of workers, including the Expansion Agreement (hereinafter the Contract), introduced by Law no. 58/2019 with the aim of supporting the technological development processes of companies with more than 1,000 employees.

The Contract (signed in August 2019 by the government) is an innovative tool that combines efficiency and development needs, allowing companies to adapt the skills of their staff and acquire new ones from the external market.
TIM and trade union representatives recognized the need and urgency to jointly face, in a framework of certain and shared rules, the effects of the ongoing digital revolution, implementing all useful actions both to protect employment and for the evolution of professional skills.
The Contract provides for 600 new permanent employees to enter the Company, during the two-year period 2019-2021, with backgrounds related to the ICT world and different levels of professional seniority.
Another important part of the Contract is related to professional retraining and follow-on training for TIM staff in line with corporate objectives, enhancing existing skills, replacing those that are obsolete and developing new ones.
The expected reduction in working hours is 6% or 1.9%, depending on the various sectors involved. It is a vertical reduction, that is, on whole days.

GROWTH OPPORTUNITIES

ICT services for environmental protection and improving citizens' quality of life are seeing positive growth rates. TIM customers already have a range of solutions available to them to cut energy consumption, reduce red tape, and increase security for citizens.
TIM's services for the environment (described on timbusiness.it) include:

- TIM ENERGREEN, the energy management service platform which allows businesses and public organizations to monitor their consumption and manage it efficiently and effectively through locally placed sensors. Energy savings are estimated to be around 10% in relation to the implementation of only metering & reporting functions. Sales for TIM ENERGREEN alone amounted to around 1.5 million euros in 2019, an increase of 50% compared to 2018;
- the market for videoconferencing solutions recorded a turnover of around 5 million euros in 2019. Available in different commercial formulations, suitable for the requirements of small, medium and large companies, with service levels and quality standards ranging from High Definition to telepresence, videoconferencing services reduce the amount of travel, and therefore CO_2. Web-based solutions in particular are increasing both the availability of videoconferencing services among SMEs and their penetration among larger companies, contributing to reducing emissions;
- vertical solutions - from telemedicine to smart agriculture - are also available on the market, directly or indirectly contributing to reducing consumption and emissions by optimizing and improving the efficiency of activities.

MATERIALITY ANALYSIS

As required by Legislative Decree 254/2016 and according to the requirements of the Global Reporting Initiative Standards, TIM carried out the materiality analysis process again in 2019, to identify the socio-environmental and governance priorities against which to report business activity, its results and its impact internally and externally of the Company.

Process to identify the material topics

In keeping with the methodology started in 2017, TIM assessed the validity of the material issues identified the previous year, validating or reviewing their titles and descriptions, to make them increasingly specific, adopting evolved semantic analysis techniques, to analyze a larger number of information sources and also continued its analysis of big data, in order to collect external points of view.

The taxonomy[5] to adopt in the semantic engine was updated, using the same sustainability and digital references as those in 2017, in more recent versions and expanding the number. In particular:

- Global Reporting Initiative Standard, ISO 26000, Sustainable Development Goals and specialist assessments[6];
- Italian Digital Agenda, Objectives of the European Digital Single Market and dedicated indexes,[7] besides regulatory references which are relevant for TIM and its stakeholders.

The semantic engine analyzed all the national and international sources of information, public and non-public sources, internal and external to TIM[8] with different interactions leading to the definition of a list of topics based on the occurrences[9] found in the various documents and establishing hierarchies between the topics. The material topics of the sector were identified through the occurrences, which were compared with the topics that emerged from the 2018 'tree' and validated in meetings between the main Group functions and the Sustainability Reporting, Monitoring and Relationship (SRMR) department.

In order to obtain the significance of the material topics for the company, an internal questionnaire was given to a significant sample of representative contact people from all the company's departments.
As stated, collecting external points of view was facilitated by the use of innovative tools such as semantics and big data analysis, [10]as well as a collaboration platform[11].
At the end of this initial screening, the company was able to draw up a list of topics representing the following macro areas:

- correctness of corporate conduct
- stakeholder engagement
- integrating social and environmental and governance aspects into corporate strategies
- management of employment relationships;
- developing the Company's human resources;
- managing the health and safety of workers
- correct management of customer relationships;
- safeguarding privacy and personal data protection and security;
- investing in the development of 5G and UBB infrastructure and in R&D;
- safeguarding diversity and promoting equal opportunities in the Company;
- stimulating the spread of digital technologies and skills;
- integrating social and environmental aspects in the supply chain;
- protecting vulnerable categories (cyberbullying, child pornography, gambling);

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[5] Each taxonomy is made up of interrelated concepts and keywords with different correlation and significance levels. Each taxonomy was constructed using both Italian and English terms.

[6] For example RobecoSam (Dow Jones Sustainability Index), FTSE4good and Sustainalytics questionnaires.

[7] For example, the Digital Economy Society Index which monitors different aspects of the digitization level of the individual European countries.

[8] For example: The "Piano Nazionale italiano per l'Agenda 2030" (Italian National Plan for the 2030 agenda) of the Italian government, the "Ernst & Young Megatrends report 2018", the "Fair and Sustainable Well-Being in Italy 2018" (BES) report promoted by the National Council for Economy and Labor (CNEL) and the National Institute for Statistics (ISTAT).

[9] The occurrences identify the number of times that a concept (or a specific term) is detected within the document by the semantic engine and provide an indication of the significance of the topic detected in the context of the document.

[10] In keeping with activities of the previous years, stakeholders involved in engagement activities were surveyed, in addition to many other entities, for a total of approximately 500, concerning 8 categories of TIM stakeholders. Three types of sources were identified for the analysis:

- documents issued by stakeholders (in particular sustainability reports);
- statements issued on company websites;
- discussions on social networks concerning the themes identified thanks to TIM Data Room activities.

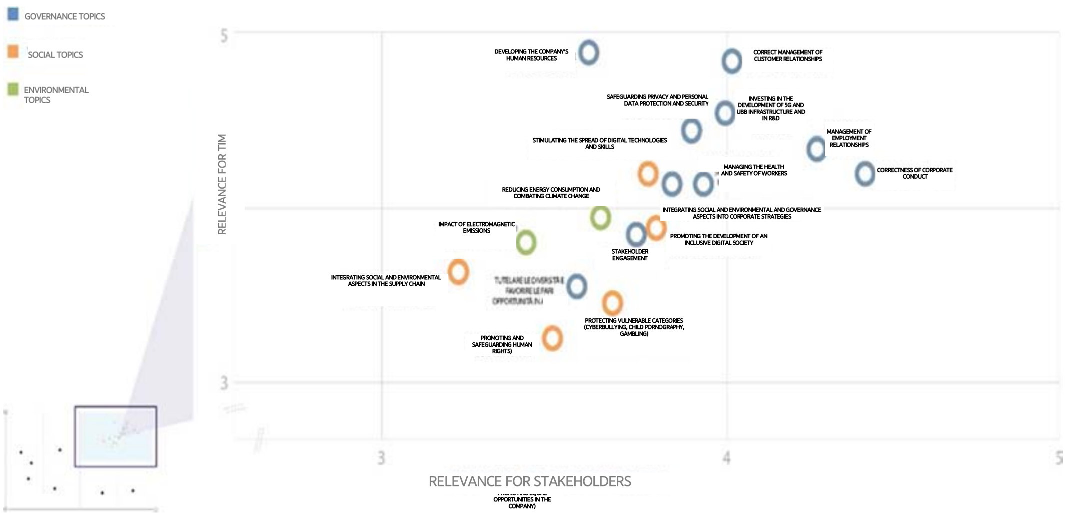
[11] a questionnaire was provided to engage and consult stakeholders, via the platform, from the categories: customers, suppliers, competitors, institutions, environment, community, persons, also collecting suggestions and feedback.

- promoting and safeguarding human rights;
- reducing energy consumption and combating climate change;
- impact of electromagnetic emissions;
- promoting the development of an inclusive digital society.

This approach has enabled TIM to expand stakeholder engagement and dynamically observe topics in order to measure their trends over time.

Results at a glance

At the end of the analysis, TIM attributed a relevance score based on the occurrence of the topics[12]. The activity resulted in the following materiality matrix:



The key issues for the Group and its stakeholders reflect the Sustainable Development Goals which TIM believes it can help achieve to a greater extent through its own personnel, technologies and services, adopting business policies that promote and safeguard human rights and the environment.
Specifically, the relevant Goals are:

- No. 4: Quality education
- No. 5: Gender equality
- No. 7: Affordable and clean energy
- No. 8: Decent work and economic growth
- No. 9: Industry, innovation and infrastructure
- No. 10: Reduced inequalities
- No. 11: Sustainable cities and communities
- No. 12: Responsible consumption and production
- No. 13: Take urgent steps to combat climate change and its consequences;
- No. 16: Peace, justice and strong institutions.

Two new topics entered the matrix as priorities in 2019, the "Impact of electromagnetic emissions" and "Promoting the development of an inclusive digital society".
For both for stakeholders and TIM, the following topics grew in importance compared to 2018: "Management of employment relationships", "Safeguarding privacy and personal data protection and security", "Stimulating the spread of digital technologies and skills" (also in relation to the contribution TIM can make to research and development and start-ups) and "Reducing energy consumption and combating climate change" in relation to the important contribution TIM can make both with its ICT solutions and by adopting strategies and policies for containing its energy consumption and climate-changing emissions. Finally, the topics that stakeholders

[12] Scores ranged from 1 to 5, where 1 is the minimum frequency, 5 the maximum frequency, 3 the average frequency (calculated from the average occurrence of the topics taken into consideration). 2 and 4 are attributed in proportion to the minimum, average and maximum scores. Finally, the final score was calculated, weighted by the significance attributed to each source according to the different time periods covered in the analysis.

particularly considered increasingly important were: "Integrating social and environmental and governance aspects into corporate strategies" and the "Correct management of customer relationships" while the "Correctness of corporate conduct" grew in importance from an internal point of view.

Validation and Review

The validation of the topics and of the entire materiality analysis process was carried out by the Sustainability Reporting, Monitoring and Relationship (SRMR) division, with the support of RE2N, a company that develops innovative tools for sustainability and Shared Value, and TIM Data Room[13]. The review phase is due to take place as a preparatory stage prior to the next reporting cycle, with the aim of submitting the results of the analyses carried out, updated in the following year, to specific stakeholder engagement activities.

[13] Tim Data Room is the group structure that analyzes digital data from the network through listening, reporting and benchmarking activities (https://www.linkedin.com/showcase/10989548/admin/).

RESEARCH AND DEVELOPMENT

Approach to innovation, choice of topics, innovation governance process

Innovation, understood as a research and development activity for technologies and services, processes and innovative business models, represents a key factor in the company's ability to keep up with the profound transformations of ICT as an asset acting as a driving force in this evolution in terms of benefits for customers and the national system, helping to overcome the socio-cultural barriers that limit the opportunity to participate in the information society and enjoyment of the relative benefits.
TIM has always considered innovation to be a strategic asset and takes great care in governing individual aspects, from its strategic role to its responsibility, objectives and policy.
In terms of role, both technological and business-based innovation are also confirmed in 2019 as the central element to the response to change in the technological, market and competitive context. In line with this, the Group has taken action in several ways:

- by continuing the action, underway for several years now, to strengthen internal innovation lines, focusing laboratory activities and research groups on key aspects of the development of the fixed and mobile network towards future **5G standards and ultrabroadband**, and issues concerning service platforms and new operations systems;
- by confirming the drive towards the "**Open Innovation**" principle with the aim of maximizing the benefits deriving from the integration of innovative contributions generated internally with external sources of innovative ideas;
- by focusing on the innovation capacity of startups with the TIM Wcap acceleration program and investment in risk capital (equity) made by **TIM Ventures**, TIM's corporate venture capital;
- by implementing initiatives which allow for the growth of co-creation ecosystems like the **IoT Open Lab**, a laboratory dedicated to the development of IoT solutions based on key technologies for the Telco Operator with a view to open innovation.

More specifically, innovation management is overseen, with different missions, by the **Technology Architectures & Innovation Department** and by engineers, but involves various internal and external stakeholders of the company:

- **other areas of the company** involved from time to time, both as internal customers for the innovation output solution and as centers of expertise on the topic;
- traditional and digital **partners**, for the joint go2market of digital services;
- **research centers and universities**, for cooperation and joint projects. In 2019, 9 research contracts were started;
- **Standardization Bodies and Associations**: in 2019, TIM joined two new international bodies: the 5GAA (5G Automotive Association), for the acceleration and promotion of the industrialization of connected mobility services, and the O-RAN[14] Alliance (Open RAN Alliance), an initiative with the world's leading carriers promoting greater degrees of openness and programmability of radiomobile access systems. Therefore, both closely connected with the digital transformation process that the Company is undertaking in the context of 5G. With these last two, TIM now has membership with 29 bodies, for a commitment of about one million euros;
- **Ministries** (Ministry of Economic Development and Ministry of Education, Universities and Research), the **European Union and public authorities** (CNR and local authorities) for projects funded through participation in competitive tenders, and partnership initiatives. In particular, 2019 saw TIM contribute, in the context of the Competence Industry Manufacturing 4.0 (CIM 4.0) established at the end of 2018, to the design proposal and creation of production lines based on the new Industry 4.0 technology, to encourage the transfer of technological skills and innovation in production processes, products and business models;
- TIM has built a "joint innovation and shared success" path with Huawei and Cisco, while it has signed a strategic agreement with Microsoft for the development of artificial intelligence, which adds to the numerous collaborations between the two companies, both in Italy and Brazil. Artificial intelligence, with Data Analytics and Big Data Advanced Analytics equipment, is now an indispensable lever for digital transformation.

TIM's technological evolution is based on the CTO Technology Strategy, which identifies technology strategy in terms of guidelines, specific technologies and roadmaps to adopt in the long term. The three-year technological plan is the reference policy for the Group and includes the technological evolution plans of subsidiaries. The plan sets out the main external factors that may affect company strategies (regulation, standards, suppliers, other market operators) and establishes the company entities involved, the applicable technological architecture and evolution of specific technologies, along with relative roadmaps for deployment or assessment. The qualitative

[14] RAN – Ragio Access Network.

and/or quantitative goals address the long term and have been given an annual framework. They are defined so that they can be objectively measured in compliance with quality standards (ISO 9001) and environmental standards (ISO 14001), and operational innovation processes; in the same way as TIM processes, in general, are based on Telemanagement Forum's reference standard E-Tom.
Overall, in 2019 TIM committed around 1,300 people to working on technological innovation and engineering in Italy, for an overall investment for the Company of 1,113 million euros, which is equivalent to around 8% of domestic revenues.

Activities for the future of mobility and networks: initiatives for 5G

In February 2019, TIM turned on the new 5G network in Sanremo, as the main sponsor of the 69th Italian Song Festival. It also brought the new mobile network to the stadiums of Rome and Udine, doubling the 4.5G mobile network performance and laying the foundations for fans to be able to experience the new 5G digital football match.
In the same month TIM presented ten startups - grown in TIMWCAP (the Group's open innovation incubator) - at the Mobile World Congress 2019 in Barcelona. The ten projects embrace different areas of application, such as entertainment and new e-sports, personal finance, digital commerce, mobile payment solutions and IoT solutions based on artificial intelligence.
Again in February 2019, TIM's partnership began with Vodafone for 5G infrastructures, to optimize investment in fifth generation networks.
In May, in Genoa, the first tests of innovative 5G services for territory control and monitoring began, with the use of drones and rover-type vehicles, remotely controlled over the mobile network. The initiative was part of the agreement signed between the Liguria Region, the Municipality of Genoa, Liguria Digitale, Ericsson and TIM for the "Digital Lab 5G".
in Rome, In July, TIM officially launched 5G and announced the cities already covered (Naples, Rome and Turin) and the development plans, together with the commercial offers and the first services available right away for consumer and business customers.
At the end of July, TIM brought 5G to Naples and, in early August, signed a memorandum of understanding with the Municipality of Turin which strengthened the collaboration to make the Piedmontese capital an cutting edge "digital city" model with 5G.
In August 2019, TIM switched on 5G at the 40th Rimini Meeting and presented the digital services of the future in an area entirely dedicated to 5G solutions and innovative startups: from smart benches for the smart city model to virtual reality sightseeing.
In November 2019, in Turin, TIM and the Municipality of Turin presented the first live 5G Edge Cloud network with connected drones in Europe. By enabling the integrated processing of big data collected by IoT platforms and analyzed by Artificial Intelligence systems, the 5G Edge Cloud is the key to the development and diffusion of digital services for the Smart City: public safety and self-driving cars, environmental monitoring and Industry 4.0.

The 5G Edge Cloud network guarantees very wide bandwidth and low latency and allows a very large quantity of data to be aggregated and processed, ensuring digital services with extremely secure high quality levels that respect customer privacy, as well as greater agility and flexibility for service and application configuration according to the typical logic of the cloud. In Turin, 5G was also the star at the 5GAA world event, where TIM presented exclusive "live demos" of connected roads. The road demos were carried out in collaboration with the Municipality of Turin and other partners and are part of the Smart Roads project: cameras and sensors on pedestrian crossings (Road Site Units) connected to the 5G network, warn surrounding vehicles of pedestrians crossing; on-board units (OBU) placed on a bicycle and a vehicle, capable of sending messages to the cyclist's smartwatch and the car's display to warn of their mutual positions and increase attention levels.
In real traffic conditions, TIM then presented the Urban Georeferenced Alert service, developed in collaboration with the Municipality of Turin, FCA, Links Foundation, Turin Polytechnic, SWARCO and 5T, and capable of providing useful information for traffic, such as notifying of works, queues and speed reduction signs; this data is sent to TIM's 5G Digital Business Platform which, via the 5G network, sends it to the car, allowing the driver to make any necessary decisions.
2019 ended with two impressive demonstrations of TIM's 5G potential. The first was a live surgery procedure with immersive 5G reality, watched by over 30,000 specialists and surgeons from all over the world in live multistreaming mode; the second took place at the Monza racetrack, in December 2019, during the Monza Rally Show 2019, with live demos of the new TIM 5G enabled services: automotive, industry 4.0, digital tourism, smart cities and drones.

Research with Universities

The Open Innovation activities (understood as R&D participatory behavior) for 2019 were largely concentrated on the new Innovation model pursued at TIM. Research and development activities were consequently focused on infrastructure issues and application solutions with a particular emphasis on opportunities afforded by 5G.
In particular:

- collaboration with the Polytechnic of Turin on twenty research projects on issues of both technological innovation linked to 5G and the UltraBroadBand, cognitive computing and artificial intelligence with application scenarios in numerous contexts (for example IoT and drone use). In one of the projects, the ethical and privacy issues that may emerge with the use of artificial intelligence solutions was addressed;

- research projects defined within the MiSE (Ministry for Economic Development) Bari Matera 5G project, which sees TIM collaborate with six academic bodies: the National Research Center (CNR), the Superiore Sant'Anna School of Pisa (SSSA), the Polytechnic of Bari, the University of Bari, the University of Basilicata and the University of Salento. In 2019, the research projects focused on 5G and the development of new use scenarios in the numerous application areas developed during trials (such as Healthcare 5.0, Public Safety, Smart Agriculture, Environmental Monitoring and Smart City). One of the projects was dedicated to assessing the socio-economic impact linked to 5G trials;
- collaboration with the State University of Milan: financing for two research doctorates (PhDs), under a three-year agreement, within which a research project began in 2019 to create a "family activity recognition" module, using data acquired by sensors to provide service and content suggestions to family members through the digital family assistant. The collaboration is part of the Innovation Joint "Open Lab" (JOL) initiatives of Innovation TIM in Milan;
- the agreement with the University of Turin, within which a study and research project was launched on "intelligent conversational systems" aimed at better and more effective human-machine interaction;
- collaboration with the University of Catania, within the "Joint Open Lab (JoL)" of Catania framework, an instrument which TIM's innovation works with to accelerate the finalization of the whole IoT ecosystem and its market activities for development of 5G.

Funded research activities

TIM has always been active in innovative and research initiatives funded by the European Commission and by national public administrations. This has allowed TIM to take part in international projects on high innovative content issues that it is working on, and through which it has been possible to both extend and consolidate its know-how in sectors with extremely fast technological evolution and to collaborate with the most significant research centers, academic bodies and industries both in the main European countries and in Taiwan and Japan; participation in the projects made it possible to attract financing of around 16 million euros in the 2017-2019 three-year period. In this area, it has been involved in activities carried out as part of funded projects concerning 5G, virtualization and intelligent mobility services, on one hand, furthering its own expertise and on the other, gaining a prominent position in the international sphere.

Patents and Intellectual Property Rights

In 2019, the Group's patent portfolio was consistent with that of previous years; indeed, there was a slight increase in assessment activities for patenting and a slight contraction in new filings. In addition, the rationalization of the patent portfolio has led to some patents being abandoned which, with technological evolution, are no longer of any value The Group's patent areas relate to the entire ICT sector, with specific excellence in the mobile sector, in particular in radio access, where TIM is among the leading TLC operators in the world.
At December 31, 2019, the portfolio included over 3,300 patents, of which 88% were patents (granted by 38 offices) relating to approximately 600 patented inventions.
It is significant that a high number of patents -12% of inventions - come out from collaborations with universities and research institutes.
Participation in a Patent Pool[15] for LTE (Long Term Evolution), with a patent invention essential for the relative standard should also be noted. The Patent Pool acquired new participants over the course of the year (bringing the current total to 25 license-holders) and granted several licenses to 48 companies.

RESEARCH AND DEVELOPMENT IN BRAZIL

The Architecture & Innovation Technology department[16] is responsible for TIM Participações' Research and Development (R&D) activities; its main responsibilities are to define technological innovation for the network and information technology, determine evolutionary needs for new technologies and devices and link architectural guidelines and strategic partnerships, to use the new business models and ensure the network infrastructure evolution is in line with the corporate strategy.
In December 2019, the Architecture & Innovation Technology department was made up of 52 people, including telecommunications, electrical and electronic, IT and other engineers with professional skills and experience, which cover all areas of network knowledge, meeting the need to innovative and supporting research and development activities.

[15] A consortium of at least two companies that agree to exchange patent licenses for a given technology.
[16] Architecture and Innovation Technology, within the Chief Technology and Information Office (CTIO).

The creation of TIM Lab was an important step. It is a multi functional environment focused on innovation, capable of evaluating innovative technologies, products and services, certifying their functional efficiency and performance, developing new models and configurations, to consolidate the innovation flow. TIM Lab plays a strategic role in supporting Credibility Tests and trials, collaborating with the main suppliers and technology partners through knowledge sharing, technological infrastructure for interoperability tests, staff assessment and the definition of technical requirements; in synergy with the R&D department, it facilitates innovation activities and promotes partnerships with universities and research institutes.
In 2019, over 140 validation processes were performed relating to new software, features, solutions, technologies, services and devices. TIM Participações has invested more than 2.7 million reais in instruments, infrastructures and services and - in the 2020-2022 period - further investments are planned for over 10 million reais.
The Architecture & Innovation Technology department continued to work on projects and initiatives for the evolution of the business of TIM Participações through the recommendation of sustainable and efficient network platforms, as well as "disruptive" models, including anticipating the availability of new services. These projects can be divided into the following macro groups:

- next generation network;
- with positive impact on the environment and society;
- future internet applications;
- Open Lab Initiatives.

Next generation network projects

The reassignment of the 1,800 MHz, 850 MHz and 2,100 MHz bands from 2G/3G to 4G, with a multilayer distribution configuration gives TIM Participações three important competitive advantages:

- a reduction in costs for the LTE implementation[17];
- the increase in the LTE coverage area and the enabling of the Carrier Aggregation strategy, improving the customer experience;
- the best indoor coverage. In addition to the expansion of coverage, use of the 850/1,800/2,100 MHz bandwidths could increase the capacity in cities already covered by the LTE bandwidth at 2.6 GHz, at limited additional cost.

In this scenario, over 96% of current LTE terminals are compatible with the 1,800 MHz, 2,600 MHz bands and other available bands. Therefore, the implementation of the multilayer LTE continues to be an excellent strategy that benefits from the spread of devices.
The implementation of the 700 MHz LTE layer continued to significantly improve coverage expansion and indoor penetration. The actual implementation will comply with the rules of the EAD[18], so as to manage spectrum cleaning and avoid problems of interference with TV broadcasting services. 86% of TIM Participações' current user base of LTE devices is 700 MHz enabled (December 2019).
At the end of December 2019, 2,313 cities had 700 MHz LTE coverage equivalent to over 93% of the urban population; spectrum cleaning was completed in June 2019 in all cities of Brazil; it is expected that by 2021 more than 3,300 covered cities will be covered by TIM Participações in the 700 MHz band.
In 2017, TIM, as part of the IP Multimedia Network Evolution, launched VoLTE (voice over LTE) high definition voice call services onto the market. These call services do not need to go through the switching technology of "legacy" circuits, and can be used by 100 approved smartphone models. In December 2019, this service was enabled in 3,401 cities (data from the Geomarketing report).

Projects with positive environmental and social impacts

The expansion of "RAN Sharing 4G", in partnership with other mobile operators in Brazil, aims to define the architectural requirements, technical assumptions and specifications for the "LTE RAN sharing[19]" solution, optimizing network resources and costs. The RAN sharing agreement allows TIM to promote the evolution of the spread of LTE in the Brazilian campaign, effectively sharing access and backhaul[20]. Currently, 4G RAN Sharing is based on three national partners, expanding the benefits and efficiency of this technical model. Following tests and the consequent activation of energy saving functions and solutions, according to the access technology (2G, 3G and 4G) and coverage conditions, it showed a reduction of up to 10%.

IoT - In 2018, TIM Participações launched the first NB-IoT commercial network[21] in South America, in the city of Santa Rita do Sapucai, to develop innovative services together with the INATEL University (Telecommunication

[17] Long Term Evolution.
[18] Entidade Administradora do Process de Redistribuição and Digitalização de Canais de TV and RTV, (Entity managing the process of redistribution and digitization of TV and RTV channels).
[19] Sharing the Radio Access Network
[20] Portion of a hierarchical network that includes intermediate connections between the central network and subnets at the "margins" of the same hierarchical network.
[21] Radio technology standard developed to allow communication with a wide range of cellular devices and services.

National Institut). Again in 2018, TIM activated NB-IoT coverage in the cities of Itajubá, in collaboration with UNIFEI (Federal University of Itajuba), and Rio de Janeiro.
Two important milestones were achieved in 2019: the activation of an E-SIM (Embedded SIM) platform and the acquisition of an IoT/M2M platform. These two infrastructures will allow TIM Participações to implement an E2E M2M/IoT system, allowing it to promote important innovations and new products, aimed at using the potential of IoT in different vertical sectors.

Agrobusiness - Since 2018, together with Nokia and BR Digital, TIM Participações has been focusing on agro-food potential in Brazil, offering connections in rural areas (not only for business applications but also for the digital inclusion of agrobusiness employees and residents of small towns). One of the projects delivered in April 2018 for Jalles Machado, an energy group in the city of Goianésia, replaced manual reporting with mobile, improving communication between office and field; moreover, it allowed computers on board agricultural machinery to manage information in real time. 812 smartphones and 1,006 company lines were integrated in this project, with 650 smartphones for field work. TIM strengthened its position in relation to vertical agriculture[22] in 2019, with the creation of the ConnectarAgro ecosystem (https://conectaragro.com.br/) which brings together TIM, solution providers for the agro segment and telecommunication solution providers.

5G - In April 2018, the "Architecture & Innovation Technology" department completed its research and interference tests in the city of Guaratiba (State of Rio de Janeiro) in the 3.5 GHz band, considered to be the cutting edge 5G band. The aim was to demonstrate that fixed satellite service reception can coexist, without limits, with the use of the 3.5 GHz band.
In June 2019, TIM Participações chose three cities, Florianópolis, Santa Rita do Sapucaí and Campina Grande to test 5G technology. In September, TIM set up its Casa TIM 5G office, in particular for HackTown 2019, the innovation festival sponsored by TIM Participações for the first time. Casa TIM 5G, with a specific ANATEL license, has shown that it can interactively provide accessible solutions (with the arrival of 5G) for health, education, safety, entertainment and games, directly to where people live and work; some demonstrations were developed in collaboration with Ericsson, Qualcomm, Cisco and Inatel, as well as ABB, Intel and LG.

Open Lab initiatives

TIM Participações joined the Telecom Infra Project (TIP) in 2017, an initiative founded by Facebook, SK Telecom, Deutsche Telekom, Nokia, Intel and other companies, which aims to create a new approach to building and implementing the telecommunications network infrastructure. TIM Participações transformed TIM Lab into the first TIP Community Lab in Latin America, available to TIP members to create universal standards for solutions (initially transport networks, Open Optical Packet Transport working group), to overcome the challenges related to interoperability of different supplier products.
In 2018, TIM Participações also joined a new working group within the TIP, together with Vodafone and Telefonica, called DCSG (Disaggregated Cell Site Gateway[23]). This project is an opportunity to define a common set of operator requirements and coordinate with companies that manufacture devices, which have wider and more flexible capacities and are cheaper.
In June 2019, with Facebook support, TIM Participações organized a Proof of Concepts of IPInfusion's DCSG solution and Core EDGE suppliers and TIP members, to demonstrate the solution's main features.

[22] Above ground crops in closed large system greenhouses, which are on several height levels, air-conditioned and automated. These systems are 75% more productive than traditional field agriculture and consume about 95% less water. Furthermore, they have no geographical constraints, they can also be used in urban areas and offer fresh and zero-km products.
[23] Based on an open and unbundled architecture, it is designed for the economic backhaul of cellular site traffic on existing mobile networks and emerging 5G infrastructures.

CONSOLIDATED NON-FINANCIAL STATEMENT

TIM, as a Relevant Public Interest Entity (PIE), has prepared and presented a "Consolidated non-financial statement" as a "separate report", as provided for by article 5 *Statement positioning and disclosure regime* of Legislative Decree 254/2016, on the disclosure of non-financial information and diversity information by some companies and some large groups. Moreover, a report (statement) issued by the appointed external auditor pursuant to article 3, subsection 10 of Legislative Decree 254/2016 is annexed to the "Consolidated non-financial statement"; the assignment was given to EY S.p.A..
The Consolidated Non-Financial Statement is available in the sustainability section of the website www.telecomitalia.com.

EVENTS SUBSEQUENT TO DECEMBER 31, 2019

For details of subsequent events, see the specific Note "Events Subsequent to December 31, 2019" in the Consolidated and Separate Financial Statements as at December 31, 2019 of the TIM Group and TIM S.p.A., respectively.

BUSINESS OUTLOOK FOR THE YEAR 2020

We are going through an extraordinary and unprecedented period of health emergency across the worldwide. The impact on global and Italian GDP trends is not quantifiable at the moment and will depend on the duration, intensity and effectiveness of the containment.

For 2020 TIM confirms its strategy of strong discontinuity with the past, already started in 2019, focusing on execution as a key element of TIM's organic transformation.

In the Domestic market, the Consumer segment aims to enhance its uniqueness as a convergent operator through targeted offers for the family and by expanding the range of services to customers, including through new partnerships with specialized players. The joint venture between TIM and Santander Consumer Bank, through which TIM customers will gradually be offered consumer credit services, financial products and insurance products, is also in this perspective. The Business segment will continue to offer itself as a benchmark provider and top ICT quality partner for SMEs and as a full ICT provider for large customers, enriching its portfolio with cloud services. The National Wholesale segment will defend its access market share and confirm its leadership in ultra-broadband coverage. The common objective of all segments is the improvement of customer satisfaction through the efficiency of customer care, provisioning and pre and after-sales service to the end customer.

The Telecom Italia Sparkle group will expand its infrastructure and grow enterprise networking and the cloud; partnerships to accelerate growth and expand strategic options will also be assessed.

In Brazil, the growth of ARPU and the management of Churn in the post-paid and prepaid segment will be the levers for revenue growth. The Network infrastructure development program will also continue, with the objective of covering the growth in data consumption using new access technologies and spectrum efficiency techniques, preparing the Network for 5G, including the expansion of the dedicated infrastructure for IoT Services and Fixed UltraBroadBand.

TIM's strategy to reduce debt by increasing operating cash generation, especially in the domestic market, is also continuing in 2020, achieved through stabilization of revenues, a streamlined cost structure, and the optimization of working capital and invested capital.

The technological approach outlined in the new TIM plan puts modernization, simplification and artificial intelligence at the heart of future capital expenditure. TIM has started the development of a completely new and automated 5G network on a national scale, starting from the main metropolitan areas, industrial districts and areas with high tourist density, while continuing with the divestment and consolidation of redundant assets or obsolete technology. TIM is the first telecommunications operator in Europe to use live network quantum computing algorithms in the planning of its next generation mobile networks.

For the main financial targets, please refer to the Investors section of the website www.telecomitalia.com.

MAIN RISKS AND UNCERTAINTIES

Risk governance is a strategic tool for value creation. The TIM Group has adopted an Enterprise Risk Management Model based on the methodology of the Committee of Sponsoring Organizations of the Treadway Commission (ERM CoSO Report), which enables the identification and management of risk in a uniform manner across the Group companies, highlighting potential synergies among the actors involved in the assessment of the Internal Control and Risk Management System. The ERM process is designed to identify potential events that may affect the business, to manage risk within acceptable limits and to provide reasonable assurance regarding the achievement of corporate objectives.
Moreover, the business outlook for 2020 could be affected by risks and uncertainties caused by a multitude of factors, the majority of which are beyond the Group's control.
In this context we highlight the health emergency due to the recent spread of the COVID-19 virus and qualified, as a pandemic by the World Health Organization (WHO). In addition to the worsening of the global macroeconomic scenario and the risk of deterioration of the credit profile of certain customer segments, this pandemic could lead to slowdowns in business activities, resulting from measures issued by national and foreign authorities, the consequent reorganization of the internal work organization with remote control of most activities and limitation of certain types of technical and commercial interventions, difficulties encountered by customers and discontinuity in the supply chain, with negative impacts on the overall results of the Group. The management of this emergency phenomenon requires, also in consideration of the public service provided, the implementation of all activities relating to the operational continuity of business processes with the aim of ensuring the functionality of the services provided and the protection of employees' health.
In addition, non-exhaustively, the following additional factors are mentioned: a change in market context, entry of new potential competitors in the fixed-line and mobile sphere, the initiation of procedures by Authorities and consequent delays in the implementation of new strategies, any constraints connected to the exercise of the Golden Power by the Government with effects - currently not foreseeable - in terms of strategic choices and progress of the already announced three-year objectives which may entail, for some, different timing than that initially scheduled or relative achievement with new and more joined-up paths.
The main risks affecting the business activities of the TIM Group, which may impact, even significantly, the ability to achieve the objectives of the Group are presented below in an analytical way.

STRATEGIC RISKS

Risks related to macro-economic factors

The TIM Group's economic and financial situation depends on the influence of numerous macroeconomic factors such as economic growth, consumer confidence, interest rates and exchange rates in the markets where it operates. In 2018, the Eurozone economy experienced an unexpected slowdown, which continued throughout 2019. The slowdown in the Italian economy was more evident than in other European countries: after the growth recorded in the fourth quarter of 2017, the Italian economy remained substantially stable, with minimal changes in the order of 0.1%.
In 2019, GDP grew by 0.3% compared to +0.8% in 2018.
The slowdown in the Italian economy reflects the deceleration in world trade (due to negative shocks from the persistent protectionist policies of the United States and the trade war between the United States and China) and the uncertainties relating to Europe's automotive sector. On the domestic front, mention should be made of the slowdown in the family services sector, influenced in their spending decisions by the crisis in confidence resulting from the climate of uncertainty that is also affecting businesses. Despite the growth in disposable income, the increase in the propensity to save has had a negative impact on consumption. On the business front, inventories have decreased as a result of the trend to meet domestic demand, albeit on the rise, without increasing production.
In Brazil, the expected results may be significantly affected by the macroeconomic and political situation. After two years of falling GDP, which marked one of the deepest crises in Italy's history, growth returned in 2017 (+1%) and 2018 closed with a growth of 1.1% compared to the previous year. According to the latest 2019 Focus Report from Brazil's Central Bank, the expected GDP growth for 2019 is slightly below 1.2%, unchanged when compared with the previous year. Although the government has successfully approved the Social Security Reform, the market is still waiting for some structural changes to improve the Brazilian government's investment capacity for a more significant recovery. In addition, turmoil in the external market, such as the trade war between the United States and China and Brexit, will have further effects on the Brazilian economy's recovery.

Risks related to competition

The telecommunications market is characterized by strong competition that may reduce market share in the geographical areas where the TIM Group is engaged as well as erode prices and margins. Competition is focused

on innovative products and services and on the capacity to move towards higher levels of convergence in service and expand it to the content offering, but also on the price competition in both traditional and other services. The use of new technologies (IoT) and new knowledge and customer management tools (Big Data) represent enabling factors in the mitigation of competition risks, however failure to exploit these opportunities could become an additional element of risk.
In the area of infrastructure competition, the growth of alternative operators could represent a threat for TIM, also beyond the Plan period.
Iliad launched its new mobile service at the end of May 2018, with the objective of capturing 10–15% of the market, adopting the same strategies it currently employs on the French market. In addition, Open Fiber and Infratel started up plans for the development of an UltraBroadBand telecommunications network as an alternative to the TIM network, respectively in major Italian cities and in areas of market failure, opening up the possibility of a new wave of competition in those areas, with impacts for both the Wholesale and Retail segments.
Furthermore, SKY Italia has recently confirmed the launch of a fixed-line offer as a telephone operator as a key strategic priority in the first half of 2020.
Competitive risks in the Brazilian market lie in the rapid transition of the business model tied to traditional services and the potential consolidation of the sector. As the consumption patterns of consumers change (migration from voice to data services), service providers need to act swiftly in upgrading their infrastructure and modernizing their portfolios of products and services. In this context, the Tim Brasil group could be impacted by the need to upgrade its technologies and infrastructure rapidly and by greater competition, in the form of aggressive sales strategies and potential business combinations in the sector. At the same time, the slow recovery from the country's deep economic crisis and the delay in the necessary structural reforms have directly affected consumption, in particular in the prepaid segment.

OPERATIONAL RISKS

Operational risks inherent in our business relate, on the one hand, to failures in systems and/or network platforms, loss of critical or commercially sensitive data, possible inadequacies in internal processes, external factors, frauds, employee errors and errors in properly documenting transactions; and on the other, to the possibility of implementing strategies for value creation through the optimization of costs and capital expenditure, which in part could depend on factors beyond the control of the Company, such as the cooperation of external counterparties (suppliers, trade unions, industry associations) and laws and regulations.

Risks related to the development of fixed and mobile networks

To maintain and expand our customer portfolio in each of the markets in which the TIM Group operates, it is necessary to maintain, update and improve existing networks in a timely manner. A reliable and high quality network is necessary to maintain the customer base and minimize terminations to protect the Company's revenues from erosion.
The maintenance and improvement of existing installations depend on the Group's ability to:

- deliver network development plans within the time-frames contemplated by business development plans and with the necessary level of effectiveness/efficiency;
- upgrade the capabilities of the networks to provide customers with services that are closer to their needs;
- increase the geographical coverage of innovative services;
- upgrade the structure of the systems and the networks to adapt it to new technologies;
- sustaining the necessary level of capital expenditure in the long term.

Risks related to business continuity

The TIM Group's success depends heavily on the ability to ensure the continuous and uninterrupted delivery of the products and services we provide through the availability of processes and the relating supporting assets, which are sensitive to various internal and external threats. TIM has adopted a “Business Continuity Model System” framework in line with international standards, to analyze and prevent these risks.
TIM considers Business Continuity a fundamental factor for the protection of the Group's Value and Reputation, in the provision of its services and in full compliance with what is defined in customer contracts, in sector regulations and, more generally, in consistency with reference methodologies and best practice.
Within the TIM Group, Business Continuity is defined as "the organization's ability to guarantee *continuity in the provision of services in relation to predefined and acceptable levels following a disruptive incident*".
The operational scope of any technological, organizational, logistical and commercial process connected directly or indirectly to the main national and regional telecommunication network infrastructure and TIM's National Data Centers infrastructure are included in the scope of application of this policy, as well as the infrastructure itself.
TIM implements an ongoing management and governance process which, supported by the Company Management, ensures that the necessary steps are taken to identify the impact of potential losses, that recovery

plans and strategies are practical and that continuity of services is guaranteed through training programs, tests, exercises and periodic updating and revision activities.
The prevention model adopted to ensure Business Continuity, even in crisis situations, is the Business Continuity Management System (BCMS), defined in the specific Organizational Procedures in accordance with the ISO 22301 international standard. The model identifies specific roles and responsibilities.
The Business Continuity Department works within the TIM Security Department and is responsible for the governance of the corporate risk prevention process, which may lead to interruptions or unacceptable degradation of TIM business and supporting the corporate functions to identify, quantify and implement security initiatives aimed at reducing identified risks.
To guarantee an operational link between the aforementioned Department and the other corporate Departments, Business Continuity Contacts are identified in Departments and specific operational relationships are outlined.
Company departments are responsible for Business Continuity activities on the processes and services they are responsible for, which they do by identifying the most relevant ones and the ways in which to guarantee their continuous operation, even in situations of interruption or severe degradation.
The most relevant issues concerning Business Continuity are brought to the attention of Top Management in the specific Steering Committee.

Risks related to disputes and litigation

The TIM Group has to deal with disputes and litigation with tax authorities and government agencies, regulators, competition authorities, other telecommunications operators and other entities. The possible impacts of such proceedings are generally uncertain. In the event of settlement unfavorable to the Group, these issues may, individually or as whole, have an adverse effect, which may even be significant, on its operating results, financial position and cash flows.

Risks of internal/external fraud

Technological progress means that increasingly sophisticated tools and techniques, which are quick acting and have a considerable economic impact are available for fraudulent activity.
“Conventional” phenomena such as subscription, interconnection, and commercial fraud currently generate the highest part of revenue loss and will continue to be significant in the near future, however new types of Internet-style fraud will gradually gain more ground (Internet spamming/phishing, service reselling, VoIP bypass, etc.).
Furthermore, some specific types of provided services (e.g. wholesale interconnection, voice or data services) are potentially at risk of third party use for the construction of fictitious transaction schemes, tax avoidance offenses and/or international money laundering.
By way of example only, Fraud Management covers:

- traffic or marketing-related fraud;
- fraud connected with procurement processes and the supply of goods and services;
- computer fraud;
- fraud related to the use and disclosure of confidential information;
- tax and/or financial fraud;

which are:

- identified by specific controls during routine working activities, or reported from sources inside/outside the company;
- committed by entities outside the company, or by or with the assistance of employees (internal fraud).

The TIM Group has an established organizational model based on the governance of fraud and a separate operational governance system for managing and combating fraud.
The procedure to combat external fraud, drawing on company processes at risk of the offenses contemplated in Italian Legislative Decree no. 231/2001 being committed, sets out internal control mechanisms, including instructions on how employees and Company staff/partners (including suppliers) must behave (Prevention). In the Detection stage, potential cases of fraud are identified and after a preliminary check of the possible grounds the cases may be subject to Investigation and Tackling. To complete the fraud management end-to-end cycle, the results of actions taken are assessed with monitoring and any actions to improve the fraud management process are identified.
The fight against internal fraud, implemented in compliance with the limits imposed by the recently updated trade union agreements prohibiting distance monitoring of staff at work, is carried out through the detection of information relating to the concentration of anomalous operations that flag-up possible cases of serious wrongdoing. The control is automated and provides access to pseudonymised data. Only when suspicion of illegal conduct is confirmed does the Security Fraud Management department ask the system administrator

concerned to make the information on the anomalous event intelligible, to allow for the consequent activities to protect the company. However, the data is not used to check work performance.

Golden Power

The "Golden Power" Decrees that give the government special powers over corporate structures in the defense and national security sectors, as well as for activities of strategic importance in the telecommunications sector, affect the public-private relationship, in addition, adding value to the technological assets and services included in the Golden Power perimeter, with content derived from the pursued institutional purpose.
In summary, the Prime Minister established that the Company is subject to the obligations pursuant to Legislative Decree no. 21/2012 (*special powers rules*) on September 28, 2017, as a business that:

- carries out "activities of strategic importance for the defense and national security system" (as per article 1 of the Legislative Decree) and
- possesses networks and systems "necessary to ensure the minimum supply and operation of essential public services" and goods and relationships "of strategic importance for the national interest" in the communications sector (as per article 2 of the same Decree Law).

The regulatory architecture relating to TIM, consequently, involved a first phase in 2017 on the issue of the Prime Ministerial Decrees of October 16 and November 2.
The government's ruling was subsequently integrated with the Law of May 20, 2019, no. 41 which included measures relating to electronic broadband communication services based on 5G technology within a wider framework of urgent measures".
With the aforementioned ruling of October 16, 2017, the Prime Minister exercised the special powers provided for in article 1 of the Golden Power Decree by imposing specific provisions and conditions on TIM and the Sparkle and Telsy subsidiaries. The measures concern corporate and organizational governance; in particular, the Prime Minister requires the presence on the respective Boards of Directors of a Security Chief Executive Officer - currently coinciding with the Chief Executive Officer - (who has Italian citizenship and security authorization) and the establishment of a Security Organization unit.
This organizational unit is responsible for activities relevant to national security and the regulations also require that it is involved in all decision-making processes relating to strategic activities and the network and is assigned to a Security Officer chosen from a list of names proposed by the Department of Information Security in the Prime Minister's Office.
TIM, Sparkle and Telsy must also provide prior information on any decision that may, among other things, reduce or yield technological, operational and industrial capabilities in strategic activities.
These measures also relate to the prior communication obligation of corporate decisions (appointments, sales, etc.) as well as information on network and exchange development, investment and maintenance plans, to preserve their functionality and integrity, as well as the obligation to notify of any corporate action that may have an impact on their security, availability and functioning.
With a ruling on November 2, 2017, the Prime Minister's Office also exercised the special powers provided for in article 2 of the Golden Power Decree, through the imposition of further requirements and conditions.
With the 2019 Ruling, the Legislator imposed the exercise of special powers in relation to the supply of 5G technology produced outside the EU, stating that these communication services constitute activities of strategic importance for the National Defense and Security system.

FINANCIAL RISKS

The TIM Group may be exposed to financial risks, such as risks arising from fluctuations in interest rates and exchange rates, credit risk, liquidity risk and risks related to the performance of the equity markets in general, and – more specifically – risks related to the performance of the share price of the TIM Group companies. These risks may adversely impact the earnings and the financial structure of the Group. Accordingly, to manage those risks, the TIM Group has established guidelines, at central level, which must be followed for operational management, identification of the most suitable financial instruments to meet set goals, and monitoring the results achieved. In particular, in order to mitigate the liquidity risk, the TIM Group aims to maintain an "adequate level of financial flexibility", in terms of cash and syndicated committed credit lines, enabling it to cover refinancing requirements at least for the next 12-18 months.
The potential impact of Brexit will depend on the result of negotiations on the future relationship with the EU, especially that of a commercial nature, which will follow the separation on January 31, 2020.
Brexit and possible future scenarios connected to the outcomes of negotiations could cause further instability on global financial markets in an international context that is already affected by the trade dispute between the US and China.
The potential effects of Brexit on financial risks (interest rates, exchange rate and counterparty) are not considered significant for TIM and the Group, but could be significant for the business of some subsidiaries.
In addition, the TIM Group's financial risk management policies provide for the full hedging of exchange rate risk and the minimization of exposure to interest rate and counterparty risk and are also effective in the Brexit context.

REGULATORY AND COMPLIANCE RISKS

Regulatory risks

The electronic communications industry is highly regulated. As such, new decisions by the Communications Authority (AGCom) may lead to changes in the regulatory framework that may affect the expected results of the Group and the guidance announced to the market. In addition, the position of significant market power held by TIM In the fixed-line access markets and the structure of the mobile markets results in high levels of scrutiny from the Italian Antitrust Authority (AGCM) over competition in the sector.
The main elements that introduce uncertainty are:

- lack of predictability in start-up timing and consequent final decisions in new proceedings by AGCom and AGCM;
- AGCom decisions with retroactive effect (for example, the revision of prices applicable to past years and the effectiveness and actual implementation of repricing policies, also following administrative rulings);
- AGCom decisions that can influence the technological choices, with potential impact on the timing of return on infrastructure investment;
- any AGCM decisions that can limit TIM's competitive capacity (for example, in terms of minimum retail prices to guarantee replicability);
- any inadequacy in the implementation of processes and systems for the management of regulated services, identified by AGCom or AGCM.
- any AGCom or AGCM decisions that impose constraints on the pricing of fixed-line and mobile offers on the basis of consumer protection legislation.

Compliance risks

The TIM Group may be exposed to risks of non-compliance due to non-observance/breach of internal (self-regulation, such as, for example, bylaws, code of ethics) and external rules (laws, regulations, new accounting standards and Authority orders), with consequent judicial or administrative penalties, financial losses or reputational damage.
The TIM Group aims to ensure that processes, and, therefore, the procedures and systems governing them, and corporate conduct comply with legal requirements. The risk is associated with potential time lags in making the processes compliant with regulatory changes or whenever non-conformities are identified and is monitored by the dedicated internal control system.
Compliance with Commission Regulation (EU) 2016/679 (General Data Protection Regulation, GDPR), directly applicable as from May 25, 2018 and enacted in Italy by Legislative Decree no. 101/2018 is particularly important. This Regulation has increased administrative fines considerably compared to the Data Protection Act previously in effect, and in some cases fines of up to 20 million euros may be administered, or in the case of companies, of up to 4% of their global annual turnover of the previous year, if this amount is higher than 20 million euros. Starting from the operating model already in use with pre-existing privacy regulations, the TIM Group has taken necessary action to comply with the GDPR.

INFORMATION FOR INVESTORS

TIM S.p.A. SHARE CAPITAL AT DECEMBER 31, 2019

Share capital	11,677,002,855.10 euros
Number of ordinary shares (without nominal value)	15,203,122,583
Number of savings shares (without nominal value)	6,027,791,699
Number of TIM S.p.A. ordinary treasury shares	37,672,014
Number of TIM S.p.A. ordinary shares held by Telecom Italia Finance S.A.	126,082,374
Percentage of ordinary treasury shares held by the Group to total share capital	0.77%
Market capitalization (based on December 2019 average prices)	11,762 million euros

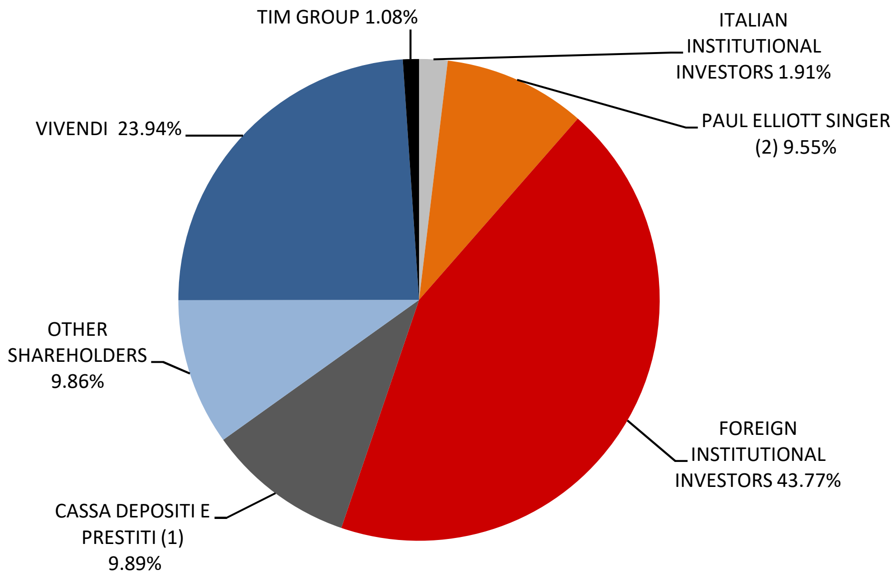
On May 25, 2016, the Shareholders' Meeting approved amendments to the company name, introducing the name "TIM S.p.A." as an alternative to "Telecom Italia S.p.A.".
TIM S.p.A. ordinary and savings shares, as well as the ordinary shares of INWIT S.p.A. are listed on the Italian stock exchange (FTSE index), whereas the ordinary shares of Tim Participações S.A. are listed in Brazil (BOVESPA index).

	TIM-Telecom Italia		**INWIT**	**Tim Participações**
code	ordinary shares	savings shares		
Stock exchange	IT0003497168	IT0003497176	IT0005090300	BRTIMPACNOR1
Bloomberg	TIT IM	TITR IM	INW IM	TIMP3 BZ
Reuters	TLIT.MI	TLITn.MI	INWT.MI	TIMP3.SA

As of December 31, 2019, ordinary shares of Tim Participações S.A. were also listed on the NYSE (New York Stock Exchange); share prices are set through ADS (American Depositary Shares) representing 5 ordinary shares of Tim Participações S.A..
On June 14, 2019, TIM S.p.A. notified of its intention to begin the procedure to cancel the listing of its ordinary and saving American Depositary Shares with the NYSE.
Consequently, on June 25, 2019, TIM filed the required documentation (Form 25) with the U.S. Securities and Exchange Commission (SEC), with consequent delisting taking effect after 10 days; therefore, with effect from July 6, 2019, TIM S.p.A. ordinary and savings shares were no longer listed on the NYSE.
On July 9, 2019, TIM filed Form 15F to request the SEC deregister all classes of its financial instruments registered to date, including the bonds registered in the USA issued by the wholly owned subsidiary Telecom Italia Capital S.A. and guaranteed by TIM. On deregistration (which took effect on October 8, 2019), TIM's disclosure obligations pursuant to the U.S. Securities Exchange Act of 1934 ceased.
The had no consequences for the listing and trading of TIM's ordinary and savings shares on the Borsa Italiana.
The decision to delist from the NYSE was made with the aim of simplification and cost saving, without prejudice to the high standards of corporate governance, a solid internal control system and transparent economic and financial information (including the publication on the www.telecomitalia.com website of the English translations of financial statements, press releases and other regulated information material).

SHAREHOLDERS

Shareholder composition according to the Shareholders Book at December 31, 2019, supplemented by communications received and other available sources of information (ordinary shares):



(1) Evidence of the ownership interests disclosed for the TIM shareholders' meeting on March 29, 2019.
(2) Paul E. Singer is General Partner of Elliott Capital Advisors LP. This ownership interest is held indirectly through the subsidiaries Elliott International LP, Elliott Associates LP and The Liverpool Limited Partnership. From the notification made pursuant with the law at January 7, 2020, the percentage of the indirect ownership interest of Paul E. Singer is 9.72%.

MAJOR HOLDINGS IN SHARE CAPITAL

Taking into account the entries in the Shareholders Book, communications sent to Consob and to the Company pursuant to Italian Legislative Decree 58 of February 24, 1998, Article 120, and other available sources of information, the relevant holdings of TIM S.p.A.'s ordinary share capital are as follows:

1) Outcomes at December 31, 2019 of communications as per Article 120 of Legislative Decree 58 of February 24, 1998

Holder	Type of ownership	Percentage of ownership
Vivendi S.A.	Direct	23.94%
Paul E. Singer (*)	Indirect	9.55%
Cassa Depositi e Prestiti S.p.A.(**)	Direct	5.03%
Canada Pension Plan Investment Board (***)	Direct/Indirect	3.13%

(*) Paul E. Singer is General Partner of Elliott Capital Advisors LP. His ownership interest at January 31, 2019, is held indirectly through the subsidiaries Elliott International LP, Elliott Associates LP and The Liverpool Limited Partnership. From the notification made pursuant with the law at January 7, 2020, the percentage of the indirect ownership interest of Paul E. Singer is 9.72%.

(**) Ownership interest at February 18, 2019.

(***) From the notification made pursuant to the law, at January 21, 2019, the indirect ownership interest is 0.03%, held through the subsidiary CPPIB Map Cayman SPC.

2) Other available sources of information

- From the evidence of the ownership interests disclosed for the TIM shareholders' meeting of March 29, 2019, the ownership interest of Cassa Depositi e Prestiti S.p.A. increased to 9.89% of ordinary share capital;
- Elliott International LP, Elliott Associates LP and The Liverpool Limited Partnership participated at the TIM Shareholders' Meeting of March 29, 2019, with a total number of shares equal to 8.81% of the ordinary share capital;
- Canada Pension Plan Investment Board participated at the TIM Shareholders' Meeting on March 29, 2019 with a direct ownership interest of a number of shares equal to 3.21% of the ordinary share capital; together with the indirect ownership interest notified pursuant to the law, the total direct and indirect ownership interest is equal to 3.24% of the ordinary share capital.

COMMON REPRESENTATIVES

- The special meeting of the savings shareholders held on May 24, 2019 renewed the appointment of Dario Trevisan as the common representative for three financial years, up to the approval of the financial statements for the year ended December 31, 2021.
- By decree of June 9, 2017, the Milan Court confirmed the appointment of Enrico Cotta Ramusino (already appointed by the decrees of April 11, 2014 and March 7, 2011) as the common representative of the bondholders for the "Telecom Italia S.p.A. 2002-2022 bonds at variable rates, open special series, reserved for subscription by employees of the TIM Group, in service or retired", with a mandate for the three-year period 2017-2019.

RATING AT DECEMBER 31, 2019

At December 31, 2019, the three rating agencies – Standard & Poor's, Moody's and Fitch Ratings – rated TIM as follows:

	Rating	Outlook
STANDARD & POOR'S	BB+	Stable
MOODY'S	Ba1	Negative
FITCH RATINGS	BB+	Stable

WAIVER OF THE OBLIGATION TO PUBLISH DISCLOSURE DOCUMENTS FOR EXTRAORDINARY OPERATIONS

On January 17, 2013, the Board of Directors of TIM S.p.A. resolved to exercise the option, as per article 70 paragraph 8 and article 71 paragraph 1-bis of the Consob Regulation 11971/99, to waive the obligations to publish disclosure documents in the event of significant operations such as mergers, demergers, capital increases by means of the transfer of assets in kind, acquisitions and disposals.

CONDITIONS FOR THE LISTING OF SHARES OF PARENT COMPANIES ESTABLISHED AND REGULATED BY THE LAW OF STATES OUTSIDE THE EUROPEAN UNION

TIM S.p.A. confirms the existence as at December 31, 2019 of the conditions referred to in article 15, paragraph 1, letter a), b) and c), point i) of Consob Regulation no. 20249/2017 as amended, for the listing of their shares on regulated markets.

RELATED-PARTY TRANSACTIONS

In accordance with Article 5, paragraph 8 of Consob Regulation 17221 of March 12, 2010 concerning “Related-party transactions” and the subsequent Consob Resolution 19974 of April 27, 2017, no significant transactions were conducted in 2019, as defined by Article 4, paragraph 1a of the aforementioned regulation, that had a material impact on the financial position or the performance of the TIM Group and TIM S.p.A. in 2019.

In addition, there were no changes or developments with respect to the related party transactions described in the 2018 Report on Operations which had a significant effect on the financial position or on the performance of the TIM Group and TIM S.p.A. in 2019.

Related-party transactions, when not dictated by specific laws, were conducted at arm's length. They were performed in compliance with the internal procedure, which sets forth rules designed to ensure the transparency and fairness of the transactions in accordance with Consob Regulation 17221/2010. The current procedure is available on the website www.telecomitalia.com, under the Group section/Governance System channel.

For information on relationships with related parties, see the Financial Statement Statements and the "Related party transactions" Notes of Consolidated Financial Statements and the Separate Financial Statements.

ALTERNATIVE PERFORMANCE MEASURES

In this Report on Operations, in the TIM Group Consolidated Financial Statements and in the Separate Financial Statements of the Parent, TIM S.p.A., for the year ended December 31, 2019, in addition to the conventional financial performance measures established by IFRS, certain alternative performance measures are presented for a better understanding of the performance of operations and financial position. Such measures, which are presented in the periodical financial reports (annual and interim), should, however, not be considered as a substitute for those required by IFRS.

In particular, following the adoption of IFRS 16, the TIM Group also presents the following additional alternative performance indicators:

- **EBITDA adjusted After Lease ("EBITDA-AL"),** calculated by adjusting the Organic EBITDA net of the non-recurring items, amounts connected with the accounting treatment of the finance leasing contracts according to IAS 17 (applied until year-end 2018) and according to IFRS 16 (applied starting from 2019). This financial measure is used by TIM as the financial target in internal presentations (business plans) and in external presentations (to analysts and investors). It represents a useful unit of measurement for the evaluation of the operating performance of the Group (as a whole and at the Business Unit level) and of the Parent, TIM S.p.A., in addition to EBIT;

- **Adjusted net financial debt After Leases**, calculated by excluding from the adjusted net financial debt the liabilities related to the accounting treatment of the finance lease contracts in accordance with IAS 17 (applied until year-end 2018) and according to IFRS 16 (applied starting from 2019). TIM believes that the Adjusted net financial debt After Lease represents an indicator of the ability to meet its financial obligations.

The other alternative performance measures used are described below:

- **EBITDA:** this financial measure is used by TIM as the financial target in internal presentations (business plans) and in external presentations (to analysts and investors). It represents a useful unit of measurement for assessing the operating performance of the Group (as a whole and at Business Unit level) and of the Parent, TIM S.p.A., in addition to **EBIT**. These measures are calculated as follows:

Profit (loss) before tax from continuing operations	
+	Finance expenses
-	Finance income
+/-	Other expenses (income) from investments (1)
+/-	Share of profits (losses) of associates and joint ventures accounted for using the equity method (2)
EBIT – Operating profit (loss)	
+/-	Impairment losses (reversals) on non-current assets
+/-	Losses (gains) on disposals of non-current assets
+	Depreciation and amortization
EBITDA – Operating profit before depreciation and amortization, capital gains (losses) and impairment reversals (losses) on non-current assets	

(1)"Expenses (income) from investments" for TIM S.p.A..
(2) Line item in Group consolidated financial statements only.

- **Organic change and impact of the non-recurring items on revenues, EBITDA and EBIT:** these measures express changes (amount and/or percentage) in Revenues, EBITDA and EBIT, excluding, where applicable, the effects of the change in the scope of consolidation, the exchange differences and the non-recurring events and transactions. TIM believes that this method of presentation provides a more complete and effective interpretation of the Group's operating performance (as a whole and with reference to the Business Units) and of the Parent; it is therefore also used in the presentations to analysts and investors. This Report on Operations provides a reconciliation between the "reported figure" and the "organic excluding the non-recurring component" figure.

- **EBITDA margin and EBIT margin:** TIM believes that these margins represent useful indicators of the ability of the Group, as a whole and at Business Unit level, and of the Parent to generate profits from its revenues. In fact, EBITDA margin and EBIT margin measure the operating performance of an entity by analyzing the percentage of revenues that are converted into EBITDA and EBIT, respectively. Such indicators are used by TIM in internal presentations (business plans) and in external presentations (to analysts and investors) in order to illustrate the results from operations also through the comparison of the operating results of the financial year being reported with those of the previous years.

- **Net Financial Debt:** TIM believes that the Net Financial Debt represents an accurate indicator of its ability to meet its financial obligations. It is represented by Gross Financial Debt less Cash and Cash Equivalents and

other Financial Assets. The Report on Operations includes two tables showing the amounts taken from the statements of financial position and used to calculate the Net Financial Debt of the Group and Parent.
To provide a better representation of the true performance of Net Financial Debt, in addition to the usual indicator (renamed "Net financial debt carrying amount"), the TIM Group reports a measure called "Adjusted net financial debt", which neutralizes the effects caused by the volatility of financial markets. Given that some components of the fair value measurement of derivatives (contracts for setting the exchange and interest rate for contractual flows) and of derivatives embedded in other financial instruments do not result in actual monetary settlement, the Adjusted net financial debt excludes these purely accounting and non-monetary effects (including the effects of IFRS 13 – Fair Value Measurement) from the measurement of derivatives and related financial assets/liabilities.

Net financial debt is calculated as follows:

+	Non-current financial liabilities
+	Current financial liabilities
+	Financial liabilities directly associated with Discontinued operations/Non-current assets held for sale
A)	**Gross financial debt**
+	Non-current financial assets
+	Current financial assets
+	Financial assets relating to Discontinued operations/Non-current assets held for sale
B)	**Financial assets**
C=(A - B)	**Net financial debt carrying amount**
D)	**Reversal of fair value measurement of derivatives and related financial liabilities/assets**
E=(C +D)	**Adjusted net financial debt**

2019

TIM S.p.A.

Key operating and financial data (comparable data)

REVENUES 13,140 Millions of Euros

EBITDA

4,929 Millions of Euros

EBITDA MARGIN

organic excluding non recurrent

42.5%

NET FINANCIAL DEBT CARRYING AMOUNT

28,218 Millions of Euros

CAPITAL EXPENDITURES & LICENSES

2,537 Millions of Euros

HEADCOUNT AT YEAR END

40,237 numbers

REVIEW OF KEY OPERATING AND FINANCIAL DATA - TIM S.p.A.

The main changes in the corporate structure

The main changes in the corporate structure during 2019 are highlighted.

Merger by incorporation of the Noverca S.r.l. company, which took place on November 1, 2019, with retroactive income tax and accounting effects from January 1, 2019.
The effects on the statements of financial position at January 1, 2019 following the merger are shown in the following table:

(millions of euros)	TIM S.p.A. 1/1/2019 (prior to IFRS 16 application)	Noverca S.r.l. 1/1/2019	Merger adjustments	TIM S.p.A. post merger 1/1/2019 (prior to IFRS 16 application)	Impact of application of IFRS 16	TIM S.p.A. post merger 1/1/2019 and post IFRS 16 application
Assets						
Non-current assets	**55,205**	**27**	**(29)**	**55,203**	**2,914**	**58,117**
Intangible assets	30,680	6	-	30,686	(120)	30,566
Tangible assets	12,476	2	-	12,478	(1,719)	(10,759)
Right of use assets	-	-	-	-	4,748	4,748
Other non-current assets	12,049	19	(29)	12,039	5	12,044
Current assets	**5,956**	**35**	**(45)**	**5,946**	**(11)**	**5,935**
Total assets	**61,161**	**62**	**(74)**	**61,149**	**2,903**	**64,052**
Liabilities						
Equity	**18,138**	**19**	**(19)**	**18,138**	**-**	**18,138**
Non-current liabilities	**29,868**	**1**	**(10)**	**29,859**	**2,434**	**32,293**
Current liabilities	**13,155**	**42**	**(45)**	**13,152**	**469**	**13,621**
Total Liabilities and Equity	**61,161**	**62**	**(74)**	**61,149**	**2,903**	**64,052**

Sale of ownership interest in Persidera
On December 2, 2019, the sale of TIM S.p.A.'s ownership interest in Persidera S.p.A. (equal to 70%) to F2i TLC 2 S.p.A. and EI Towers S.p.A. was finalized, for an amount net of incidental costs equal to 141 million euros. As required by the agreements, Persidera was split into two separate entities: the first (Persidera S.p.A.), is the holder of the five digital terrestrial agreement frequencies and the related asset and employee contracts, was sold entirely to F2i TLC 2 S.p.A. and the second (NetCo S.p.A.), with the entire network infrastructure and its employees, was sold it its entirety to EI Towers S.p.A..

TIM-Vodafone-INWIT Operation
On December 31, 2019, following the outcome of the Company's Shareholders' Meeting which approved the merger by incorporation of Vodafone Towers S.r.l. into INWIT, a preparatory activity to create the leading Italian Tower Operator with the consequent sale by the TIM Group of the controlling stake in INWIT, TIM S.p.A.'s ownership interest in the company has been reclassified among the "Discontinued operations/held for sale", with completion of the transaction by the end of 2020 considered highly likely. Further details are provided in the Note “Events Subsequent to December 31, 2019” in the separated financial statements of TIM S.p.A. at December 31, 2019.

Non-recurring events

In 2019 and 2018, TIM S.p.A. recognized **net non-recurring operating expenses** connected with events and transactions that by their nature do not recur as part of continuing operations, which are reported when their amount is material. Non-recurring charges include, among others, any goodwill impairment changes, provisions for regulatory disputes and potential liabilities related to them, liabilities with customers and/or suppliers, and charges associated with corporate reorganization/restructuring and prior-year adjustments.

In detail:

(millions of euros) **Non-recurring expenses (income)**	**2019**	**2018**
Revenues	**15**	**62**
Revenue adjustments of previous years	15	62
Other income	**(21)**	**-**
Recovery of operating expenses	(21)	-
Acquisition of goods and services and Change in inventories	**14**	**13**
Expenses related to agreements and the development of non-recurring projects	14	13
Employee benefits expenses	**248**	**221**
Charges related to corporate reorganization/restructuring and other charges	248	221
Sundry expenses and provisions	**412**	**108**
Expenses related to disputes and regulatory sanctions and potential liabilities related to them, and expenses related to disputes with former employees and liabilities with customers and/or suppliers	412	108
Impact on EBITDA	**668**	**404**
Impairment loss on Goodwill	-	2,686
Impact on EBIT	**668**	**3,090**

Non-recurring events for the year 2019 included:

- the adjustment of some contractual liabilities in order to align them with their estimated period end value. Specifically, liabilities relative to "prepaid" contracts were adjusted by a total of 15 million euros, wholly attributable to previous financial years;
- other income for 21 million euros, related to the recognition of the receivable for the reimbursement of the fine relating to the Antitrust proceeding I761, following the related Council of State ruling of December 2019;
- expenses related to company restructuring processes (248 million euros);
- sundry expenses of 412 million euros mainly including provisions for litigation and disputes.

Non-recurring charges for 2018 mainly included goodwill impairment changes of 2,686 million euros, expenses connected with corporate restructuring processes and sundry expenses, including the provision for the financial penalty imposed for the alleged breach of article 2 of Decree Law 15/3/2012 no. 21 ("Golden Power").

OPERATING PERFORMANCE

(millions of euros)		2019	2019 comparable (a)	2018 (b)	% Change (a-b)	organic excluding non-recurring
Revenues		**13,137**	**13,140**	**13,902**	(5.5)	(5.8)
EBITDA	(1)	**5,482**	**4,929**	**5,608**	(12.1)	(6.9)
EBITDA Margin		*41.7%*	*37.5%*	*40.3%*	*(2.8) pp*	
Organic EBITDA Margin excluding non-recurring		*46.8%*	*42.5%*	*43.1%*		*(0.6) pp*
EBIT BEFORE GOODWILL IMPAIRMENT LOSS		**1,722**	**1,665**	**2,445**	(31.9)	(18.1)
Goodwill Impairment Changes		**–**	**–**	**(2,686)**		
EBIT	(1)	**1,722**	**1,665**	**(241)**	–	(18.1)
EBIT Margin		*13.1%*	*12.7%*	*(1.7)%*	*14.4 pp*	
Organic EBIT Margin excluding non-recurring		*18.2%*	*17.7%*	*20.4%*		*(2.7) pp*
Profit (loss) for the year		**382**	**386**	**(1,854)**	–	–
Capital expenditures		**2,537**	**2,537**	**5,043**	(49.7)	
		12/31/2019	**12/31/2019 comparable (a)**	**12/31/2018 (b)**	**Change Amount (a-b)**	
Net financial debt		**31,283**	**28,218**	**29,360**	(1,142)	
Headcount at year end (number)		**40,237**		**42,656**	(2,419)	

(1) Details are provided under “Alternative Performance Measures”.

Revenues

Revenues amounted to 13,137 million euros, down 765 million euros (-5.5%) compared to 2018. The application of the new IFRS 16 standard resulted in the recognition of lower revenues by 3 million euros.
Excluding those effects, revenues for 2019 amounted to 13,140 million euros, down by 762 million euros (-5.5%) on 2018.
Revenues for 2019 include a non-recurring adjustment of -15 million euros relating to previous financial years.

It should also be noted that the aforementioned merger by incorporation of Noverca S.r.l. into TIM S.p.A. determined a net contribution to the revenue component of 27 million euros.

Revenues from Stand alone services amounted to 11,677 million euros (-454 million euros compared to 2018, equal to –3.7%) and were affected by the effects of the changed regulatory and competitive scenario. In particular, revenues from Fixed market Stand alone services fell (-186 million euros, -2.1% compared to the previous year), as did revenues from Mobile market Stand alone services (-341 million euros, -8.4% compared to previous year).

Revenues from Handsets and Bundles & Handsets, including the change in work in progress, amounted to 1,463 million euros in 2019 (-308 million euros compared to 2018).

The sales segments show the following changes compared to 2018:

(millions of euros)	2019 comparable	2018	Change
Revenues	**13,140**	**13,902**	**(762)**
Consumer	6,574	7,361	(787)
Business	4,458	4,534	(76)
Wholesale	1,836	1,775	61
Other	272	232	40

In particular:

- **Consumer**: Revenues of the Consumer segment 2019 totaled 6,574 million euros and decreased by 787 million euros (-10.7%) compared to 2018, also due to the different competitive and regulatory context. The trend seen in total revenues also applied to revenues from stand alone services, which amounted to 5,800 million euros, down by 475 million euros (-7.6% compared to the previous year). In particular:
  - **Revenues for Mobile segment Stand alone services** were equal to 2,569 million euros, down 240 million euros (-8.5%) compared to 2018, mainly due to the changed regulatory and competitive scenario, which had a negative impact on churn rate and the standard ARPU;
  - **Revenues for Fixed-line segment Stand alone services** amounted to 3,253 million euros, (-244 million euros compared to 2018, –7.0%), and discounted the effects of negative access dynamics, only partially offset by an improvement in ARPU levels.

  Revenues for Handsets and Bundles & Handsets in the Consumer segment amounted to 774 million euros, down 312 million euros compared to 2018 (-28.7%), and reflected – especially in the mobile sector – the change in business strategy on products to protect marginality.

- **Business**: revenues for the Business segment amounted to 4,458 million euros, down by 76 million euros on 2018 (-1.7%, of which -3.0% for revenues from the stand alone services component). In particular:
  - **Mobile revenues** in 2019 amounted to 1,062 million euros with a decrease (-121 million euros compared to 2018, -10.2%) which in particular reflects the lower revenues from stand alone services following a reduction in ARPU levels;
  - **Fixed-line revenues** in 2019 amounted to 3,456 million euros, an increase compared to the previous year (+38 million euros, +1.1%), due to the growth in innovative services which offset the natural decline in revenues from traditional services.

- **Wholesale Market**: National Wholesale segment revenues in 2019 came to 1,836 million euros, up by 61 million euros (+3.4%) compared to 2018, driven mainly by the growth in accesses in the Ultra Broadband segment.

EBITDA

Reported EBITDA for 2019 was 5,482 million euros, and benefited, for the amount of 553 million euros, from the application of IFRS 16 following which, with reference to lease liabilities covered by the standard, the lease payments are no longer recognized as costs for acquisition of goods and services, but a financial liability must be recognized in the statements of financial position, represented by the current value of future payments, and the right of use under assets, amortized along the probable term of the contact with the relevant finance expenses posted to the income statement.

Comparable EBITDA for the year 2019 - prepared on the basis of accounting standards consistent with those adopted in 2018 - amounted to 4,929 million euros (5,608 million euros in 2018, -12.1%), with an EBITDA margin of 37.5% (40.3% in 2018, down 2.8 percentage points).

Organic EBITDA - net of the non-recurring items amounted to **5,597 million euros**; the EBITDA margin was 42.5% (6,012 million euros in 2018, with an EBITDA margin of 43.1%). In detail, in 2019, TIM S.p.A. recognized non-recurring charges of the Domestic and Brazil Business Units, totaling 668 million euros, mainly relating to provisions for regulatory disputes and potential related liabilities, to liabilities with customers and/or suppliers and to charges related to corporate reorganization/restructuring as well as to the aforementioned adjustments to revenues from previous years;

In 2018, net non-recurring operating expenses referring to EBITDA amounted to 404 million euros mainly made up of expenses connected to corporate reorganization/restructuring processes and to sundry expenses, including the provision for the financial penalty imposed for the alleged breach of article 2 of Decree Law 15/3/2012 no. 21 ("Golden Power").

Further details on non-recurring items are provided in the Note "Significant non-recurring events and transactions" of the Separate Financial Statements at December 31, 2019 of TIM S.p.A..

Organic EBITDA, net of the non-recurring component, is calculated as follows:

(millions of euros)	2019 comparable	2018	Change amount	Change %
EBITDA	**4,929**	**5,608**	**(679)**	**(12.1)**
Non-recurring expenses (Income)	668	404	264	
ORGANIC EBITDA - excluding Non-recurring items	**5,597**	**6,012**	**(415)**	**(6.9)**

The following elements also affected EBITDA:

- **Other operating income (198 million euros; 198 million euros on comparable basis; 252 million euros in 2018)**

(millions of euros)	2019 comparable	2018	Change
Late payment fees charged for telephone services	48	49	(1)
Recovery of employee benefit expenses, purchases and services rendered	37	27	10
Capital and operating grants	27	33	(6)
Damages, penalties and recoveries connected with litigation	17	23	(6)
Partnership agreements and other arrangements with suppliers	–	22	(22)
Estimate revisions and other adjustments	36	73	(37)
Other	33	25	8
Total	**198**	**252**	**(54)**

Other income includes a non-recurring component of 21 million euros related to the recognition of the receivable for the reimbursement of the fine relating to the Antitrust proceeding I761, following the related Council of State ruling of December 2019;

- **Acquisition of goods and services (4,596 million euros; 5,152 million euros on comparable basis; 5,801 million euros in 2018)**

(millions of euros)	2019 comparable	2018	Change
Acquisition of goods	1,076	1,643	(567)
Revenues due to other TLC operators and costs for telecommunications network access services	693	762	(69)
Commercial and advertising costs	926	851	75
Professional and consulting services	86	115	(29)
Power, maintenance and outsourced services	1,060	1,108	(48)
Lease and rental costs	814	803	11
Other	497	519	(22)
Total acquisition of goods and services	**5,152**	**5,801**	**(649)**
% of Revenues	*39.2*	*41.7*	*(2.5)pp*

In comparable terms, down by 649 million euros compared to 2018, mainly as a result of the decrease in purchase costs of goods for resale, linked to the drop in the volumes of mobile handsets sold, in line with the repositioning of the current commercial strategies.

As a result of the introduction of IFRS 16, which provides for the recognition in the statement of financial position of a financial liability, represented by the present value of future payments, and in the assets of the user rights of the leased asset, in place of the recognition of operating costs for lease payments, the item amounts to 4,596 million euros, down by 1,205 million euros.

- **Employee benefits expenses (2,492 million euros; 2,492 million euros on comparable basis; 2,541 million euros in 2018)**

(millions of euros)	2019 comparable	2018	Change
Ordinary employee expenses and costs	2,244	2,320	(76)
Restructuring expenses and allocations to employee and other provisions	248	221	27
Total employee benefits expenses	**2,492**	**2,541**	**(49)**

Employee benefits expenses decreased by 49 million euros compared to 2018. The main factors that drove this change were:

- the decrease of 76 million euros of ordinary employee expenses in the Italian component, mainly due to the benefits related to the reduction in the average salaried workforce amounting to a total of -2,333 average employees, of which -319 average employees related to the "Solidarity Agreement", which expired in June 2019 and the subsequent expansion contract applied with effect from August 2019;
- 27 million euros increase in restructuring expenses and allocations to employee funds, mainly as a result of higher company restructuring expenses, related to the revised estimate and start date for staff leaving the Company scheduled for the 2020 financial year (also in accordance with the application of article 4 of the Law of June 28, 2012, no. 92, as last defined in the union agreement of February 26, 2019). In 2018, provisions were made for expenses totaling 221 million euros following the updated actuarial measurements for provisions related to the application of Article 4, of Law no. 92 of June 28, 2012;

The headcount at December 31, 2019 amounted to 40,237 employees, a decrease of 2,419 compared to December 31, 2018 (42,656).

- **Other operating expenses (1,061 million euros; 1,061million euros on comparable basis; 722 million euros in 2018)**

(millions of euros)	2019 comparable	2018	Change
Write-downs and expenses in connection with credit management	402	370	32
Provision charges	414	112	302
TLC operating fees and charges	43	41	2
Indirect duties and taxes	63	66	(3)
Penalties, settlement compensation and administrative fines	64	73	(9)
Association dues and fees, donations, scholarships and traineeships	10	10	–
Other	65	50	15
Total	**1,061**	**722**	**339**

Other operating expenses included non-recurring component of 412 million euros (108 million euros in 2018) mainly related to regulatory disputes and potential liabilities related to them and liabilities with customers and/or suppliers.
The item increased by 339 million euros, mainly as a result of higher allocations for provisions as well as write-downs and expenses in connection with credit management.

Depreciation, amortization and capital expenditures

Depreciation and amortization in 2019 amounted to 3,719 million euros. The application of IFRS 16 had an impact of 487 million euros.
On the same accounting basis as 2018, depreciation and amortization amounted to 3,232 million euros, breaking down as follows:

(millions of euros)	2019 comparable	2018	Change
Amortization of intangible assets with a finite useful life	1,222	1,146	76
Depreciation of tangible assets and rights of use assets	2,010	2,009	1
Total	**3,232**	**3,155**	**77**

Specifically, amortization of intangible assets increased by approximately 76 million euros mainly following the start of the amortization process for 5G licenses due to the transfer of user rights for the frequencies in the 3600-3800 MHz and 26.5-27.5 GHz bands, partially offset by a decrease of 5 million euros for lower shares allocated to software.

Capex totaled 2,537 million euros (equal to 5,043 million euros in 2018), with a decrease of 2,506 million euros. Details are as follows:

(millions of euros)	2019 comparable	2018	Change
Investments in intangible assets with a finite useful life	819	3,310	(2,491)
Investments in tangible assets and rights of use assets	1,718	1,733	(15)
Total	**2,537**	**5,043**	**(2,506)**

Specifically, investments in intangible assets fell by 2,491 million euros mainly as a result of the investment made in 2018 for the aforementioned acquisition of the user rights of the frequencies in the 694-790 MHz, 3600-3800 MHz and 26.5-27.5 GHz bands, which will be reserved for 5G mobile telecommunications services,

Gains/(losses) on disposals of non-current assets

The item shows losses of 41 million euros and includes the effects deriving from the termination of finance lease agreements.
On the same accounting basis, it was showed losses of 32 million euros (losses of 11 million euros in 2018), mainly as a result of disposals of Mobile equipment for 10 million euros, Cabinet sales for 3 million euros, disposals for the abandonment of BTSs-Base Transceiver Station sites for 3 million euros and early releases of properties under financial leases (with cancellation of related improvements) for 16 million euros.

Impairment reversals (losses) on non-current assets

The item Impairment reversals (losses) on non-current assets was absent in 2019 (negative by 2,683 million euros in 2018, following the goodwill impairment loss of 2,686 million euros).
In preparing the Annual Report for 2019, TIM S.p.A. carried out an impairment test on the goodwill. The results of that testing, carried out in accordance with the specific procedure adopted by the TIM Group, confirmed the amounts of Goodwill. Further details are provided in the Note "Goodwill" in the Separate Financial Statements of TIM S.p.A. at December 31, 2019.

EBIT

Reported EBIT amounted to **1,722 million euros** for 2019.

Comparable EBIT for 2019, net of the IFRS 16 of 57 million euros, totaled 1,665 million euros (-241 million euros for 2018), in increase of 1,906 million euros compared to 2018, the EBIT margin stood at 12.7% (-1.7% in 2018). It should be remembered that EBIT of 2018 suffered not only the above-mentioned goodwill impairment changes, but also the negative impact of non-recurring charges referring to EBITDA (404 million euros).

Organic EBIT, net of the non-recurring component, amounted to 2,333 million euros (2,849 million euros in 2018), with an EBIT margin of 17.7% (20.4% in 2018). In detail, in 2019, TIM S.p.A. recognized non-recurring charges of the Domestic and Brazil Business Units, totaling 668 million euros, mainly relating to provisions for regulatory disputes and potential related liabilities, to liabilities with customers and/or suppliers and to charges related to corporate reorganization/restructuring as well as to the adjustments to revenues from previous years;
In 2018, net non-recurring operating expenses attributable to EBIT amounted to 3,090 million euros, including the abovementioned goodwill write-down. Further details on non-recurring items are provided in the Note "Significant non-recurring events and transactions" of the Separate Financial Statements at December 31, 2019 of TIM S.p.A..

Organic EBIT, net of the non-recurring component, is calculated as follows:

(millions of euros)	2019 comparable	2018	Change	
			amount	%
EBIT	**1,665**	**(241)**	**1,906**	**-**
Non-recurring expenses (Income)	668	3,090	(2,422)	
ORGANIC EBIT - excluding Non-recurring items	**2,333**	**2,849**	**(516)**	**(18.1)**

Income (expenses) from investments

This item, amounting to 117 million euros (71 million euros in 2018), is broken down as follows:

(millions of euros)	2019 comparable	2018	Change
Dividends	141	125	16
Other income and gains on disposals of investments	35	–	35
Losses on disposals of investments	(26)	–	(26)
Impairment losses on financial assets	(28)	(54)	26
Sundry expenses from investments	(5)	–	(5)
Total	**117**	**71**	**46**

In particular, we report:

- Dividends mainly related to the subsidiaries INWIT S.p.A. (76 million euros), TI Finance (53 million euros) and Persidera (10 million euros). In 2018, dividends mainly referred to the subsidiaries INWIT S.p.A. (68 million euros), TI Finance (37 million euros) and Persidera (8 million euros), as well as the company Emittenti Titoli (10 million euros).
- the said proceeds of 141 million euros, net of additional charges, from the sale of the equity investment of TIM S.p.A. in Persidera S.p.A. (equal to 70%) to F2i TLC 2 S.p.A. and EI Towers S.p.A., preceded by the split of Persidera into two entities (NetCo S.p.A. and Persidera), led to a net capital gain of 8 million euros. This amount represents the balance between the capital gain, net of ancillary charges, of 34 million euros following the sale of NetCo S.p.A. to EI Towers, and the loss of 26 million euros following the sale of Persidera to F2i TLC 2 S.p.A.;
- in addition to the above-mentioned capital gain on the sale of NetCo S.p.A., in 2019 a capital gain of 1 million euros was recognized following the sale of the investment in Alfiere S.p.A. to CDP Immobiliare S.r.l.;
- impairment losses mainly referred to the write-down of the investments held in the subsidiary Olivetti (18 million euros), Tim Tank (3 million euros), Timvision (2 million euros), Tn Fiber (1 million euros), as well as in the associate Tiglio I (4 million euros). In 2018, impairment losses mainly referred to the write-down of the investments held in the subsidiary Noverca (42 million euros), Persidera (4 million euros), and Olivetti (5 million euros), as well as in the associate Tiglio I (2 million euros).

Finance income (expenses), net

Finance income (expenses) was negative and amounted to 1,267 million euros.
In comparable terms, the balance was negative for 1,208 million euros (negative for 1,250 million euros in 2018) and is broken down as follows:

(millions of euros)	2019 comparable	2018	Change
Finance income	1,195	1,177	18
Finance expenses	(2,403)	(2,427)	24
Total net financial income (expenses)	**(1,208)**	**(1,250)**	**42**

The positive change compared to 2018, mainly derives from the lower finance expenses connected to the reduction in interest rate levels, partially offset by the negative effects of the change of some non-monetary items, of a currency and accounting nature, relating to the measurement of derivative instruments at fair value.

Income tax expense

Amounted to 190 million euros.
The adoption of IFRS 16 resulted in taxes of 2 million euros. Excluding this effect, income tax expenses for 2019 amounted to 188 million euros (434 million euros in 2018).
This change is attributable to the reduction in the tax base.

Profit (loss) for the year

The **profit for 2019** amounted to 382 million euros (loss of 1,854 euros in 2018). The figure was adversely affected by the adoption of IFRS 16 for 4 million euros, as well as by non-recurring net expenses for 515 million euros.
On comparable basis, profit for 2019 would have amounted to around 900 million euros, a drop of approximately 300 million euros over 2018.

Financial Position and Cash Flows Performance

Financial position structure

(millions of euros)	12/31/2019 (a)	12/31/2018 (b)	Change (a-b)
Assets			
Non-current assets	57,494	55,205	2,289
Goodwill	*24,341*	*24,341*	–
Other intangible assets	*5,818*	*6,339*	*(521)*
Tangible assets	*10,591*	*12,476*	*(1,885)*
Right of use assets	*4,906*	–	*4,906*
Other non-current assets	*10,956*	*11,167*	*(211)*
Deferred tax assets	*882*	*882*	–
Current assets	5,786	5,956	(170)
Inventories, Trade and miscellaneous receivables and other current assets	*3,886*	*4,112*	*(226)*
Current income tax receivables	*67*	*166*	*(99)*
Current financial assets	*1,005*	*1,678*	*(673)*
	63,280	**61,161**	**2,119**
Equity and liabilities			
Equity	18,174	18,138	36
Non-current liabilities	34,793	29,868	4,925
Current liabilities	10,313	13,155	(2,842)
	63,280	**61,161**	**2,119**

Non-current assets

- **Goodwill**: unchanged compared to December 31, 2018;
- **Other intangible assets**: these fell by 521 million euros, from 6,339 million euros at the end of 2018 to 5,818 million euros at December 31, 2019, representing the balance of the following items:
  - reclassifications, following the adoption of IFRS 16 from 1/1/2019, of the Indefeasible Rights of Use - IRU from Intangible assets to the specific item Right-of-use (120 million euros);
  - capex (+819 million euros);
  - amortization charge for the year (-1,222 million euros);
  - disposals, reclassifications and other changes (2 million euros).
- **Tangible assets:** decreased by 1,885 million euros, representing the sum of the following**:**
  - reclassifications, following the adoption of IFRS 16 from 1/1/2019, of Assets held under finance leases and of improvements in tangible assets of the specific item Rights of use (1,719 million euros);
  - capex (+1,658 million euros);
  - amortization charge for the year (-1,818 million euros);
  - disposals, reclassifications and other changes (-6 million euros).

- **Rights of use assets:** following the adoption of IFRS 16 (Leases) TIM S.p.A. chose to classify rights of use assets as a specific item in the Statement of Financial Position. For further details, see the Note "Rights of use assets" in the Separate Financial Statements of TIM S.p.A. at December 31, 2019. This entailed the recognition at January 1, 2019 of rights of use amounting to 2,909 million euros in addition to the aforementioned reclassification of intangible and tangible assets totaling 1,839 million euros. At January 1, 2019, rights of use assets totalled 4,748 million euros. At December 31, 2019, rights of use assets amounted to 4,906 million euros, up 158 million euros as a result of the below:
  - investments and increases in lease contracts (+921 million euros)
  - amortization charge for the year (-679 million euros);
  - disposals, reclassifications and other changes (-84 million euros).

Equity

Equity amounted to 18,174 million euros, up by 36 million euros compared to December 31, 2018 (18,138 million euros). The changes in equity over 2019 and 2018 are detailed in the following table:

(millions of euros)	12/31/2019	12/31/2018
At the beginning of the year	**18,138**	**20,075**
Profit (loss) for the year	382	(1,854)
Dividends approved	(166)	(166)
Merger of Noverca S.r.l. into TIM S.p.A.	1	–
Issue of equity instruments and other changes	3	3
Movements in the reserve for financial assets measured at fair value through other comprehensive income and derivative hedging instruments	(154)	65
Movements in the reserve for remeasurements of employee defined benefit plans (IAS 19)	(30)	15
At the end of the year	**18,174**	**18,138**

Cash flows

Change in net financial debt

(millions of euros)	2019	2019 comparable (a)	2018 (b)	Change (a-b)
EBITDA	5,482	4,929	5,608	(679)
Capital expenditures on an accrual basis	(2,537)	(2,537)	(2,644)	107
Expenditures for mobile telephone licenses	–	–	(2,399)	2,399
Change in net operating working capital:	337	303	1,154	(851)
Change in inventories	107	107	(84)	191
Change in trade receivables and net amounts due from customers on construction contracts	107	107	(65)	172
Change in trade payables	128	109	(196)	305
Change in payables for mobile telephone licenses	(18)	(18)	1,922	(1,940)
Other changes in operating receivables/payables	13	(2)	(423)	421
Change in provisions for employee benefits	(260)	(260)	(194)	(66)
Change in operating provisions and Other changes	183	183	49	134
Net operating free cash flow	**3,205**	**2,618**	**1,574**	**1,044**
of which operating free cash flow connected with the purchase of mobile telephone licenses	*(18)*	*(18)*	*(477)*	*459*
% of Revenues	*24.4*	*19.9*	*11.3*	*8.6 pp*
Sale of investments and other disposals flow	154	154	24	130
Financial investments	(43)	(43)	(130)	87
Dividends flow	(26)	(26)	(51)	25
Increases in finance leasing contracts	(861)	(153)	(58)	(95)
Share capital increases/reimbursements			–	–
Finance expenses, income taxes and other net non-operating requirements flow	(1,412)	(1,408)	(1,509)	101
Net impact of the application of IFRS 16 at 1/1/2019	(2,940)	–	–	–
Reduction /(Increase) in net financial debt	**(1,923)**	**1,142**	**(150)**	**1,292**

The increase in net operating free cash flow in 2019 compared to the 2018 (+1,044 million euro) is mainly connected to lower payments for the acquisition of mobile telephone licenses (+459 million euro) and from the performance of operating receivables/payables (+421 million euros), mainly determined by the impact in 2018 of the introduction of Split Payment in July 2017.

In addition to what has already been described with reference to EBITDA, the change in net financial debt in 2019 was particularly impacted by the following:

Flow of expenditures for mobile telephone licenses/spectrum

Capex amounted to a total of 2,537 million euros (equal to 5,043 million euros in 2018), with a decrease of 2,506 million euros, mainly due to lower investments in Intangible assets (-2,491 million euros), following the 2018 investment for the aforementioned acquisition of user rights for the 5G frequencies.

Sale of investments and other disposals flow

Positive for 154 million euros and refers for 142 million euros to the collection from the sale of ownership interest in the subsidiary Persidera S.p.A..
Positive 24 million euros in 2018, referring to the sale of tangible assets.

Financial investments flow

Amounted to 43 million euros and referred primarily to investment account payments to cover subscriptions of new share capital issued by the subsidiaries Flash Fiber (39 million euros) and Tim Tank (3 million euros). In 2018, amounted to 130 million euros and referred primarily to investment account payments to cover subscriptions of new share capital issued by the subsidiaries Noverca (40 million euros), Flash Fiber (86 million euros) and Timvision (2 million euros).

Increases in finance leasing contracts

The item amounted to 861 million euros.
On the same accounting basis, amounted to 153 million euros (58 million euros in 2018) and includes the higher value of user rights and related higher financial payables, recorded following increases in lease payments and renegotiations of existing contracts relating to buildings used for offices and industrial use and motor vehicles, recognized as finance leases based on the provisions of IAS 17.
For further details, see the Note "Rights of use assets" of the Separate Financial Statements of TIM S.p.A. at December 31, 2019.

Share capital increases/reimbursements, including incidental costs

No increases or reimbursements of share capital were made in 2019 and in 2018.

Finance expenses, income taxes and other net non-operating requirements flow

Finance expenses, income taxes and other net non-operating requirements flow mainly includes the payment of income taxes, net finance expenses, and the change in non-operating receivables and payables.

Sales of receivables to factoring companies

It should be noted that sales without recourse of trade receivables to factoring companies completed during 2019 resulted in a positive effect on the adjusted net financial debt at December 31, 2019 amounting to 1,818 million euros (1,960 million euros at December 31, 2018).

Net financial debt

Net financial debt is composed as follows:

(millions of euros)	12/31/2019	12/31/2018	Change
Non-current financial liabilities			
Bonds	15,118	13,984	1,134
Amounts due to banks, other financial payables and liabilities	11,064	9,348	1,716
Finance lease liabilities	4,002	1,445	2,557
	30,184	**24,777**	**5,407**
Current financial liabilities (1)			
Bonds	1,603	2,126	(523)
Amounts due to banks, other financial payables and liabilities	2,184	5,618	(3,434)
Finance lease liabilities	666	159	507
	4,453	**7,903**	**(3,450)**
Total Gross financial debt	**34,637**	**32,680**	**1,957**
Non-current financial assets			
Non-current financial receivables arising from lease contracts	(16)	(15)	(1)
Financial receivables and other current financial assets	(2,333)	(1,627)	(706)
	(2,349)	**(1,642)**	**(707)**
Current financial assets			
Securities other than investments	–	(466)	466
Current financial receivables arising from lease contracts	(54)	(64)	10
Financial receivables and other current financial assets	(122)	(263)	141
Cash and cash equivalents	(829)	(885)	56
	(1,005)	**(1,678)**	**673**
Total financial assets	**(3,354)**	**(3,320)**	**(34)**
Net financial debt carrying amount	**31,283**	**29,360**	**1,923**
Reversal of fair value measurement of derivatives and related financial liabilities/assets	(1,543)	(1,307)	(236)
Adjusted net financial debt	**29,740**	**28,053**	**1,687**
Breakdown as follows:			
Total adjusted gross financial debt	**31,992**	**30,712**	**1,280**
Total adjusted financial assets	**(2,252)**	**(2,659)**	**407**
(1) of which current portion of medium/long-term debt:			
Bonds	*1,603*	*2,126*	*(523)*
Amounts due to banks, other financial payables and liabilities	*905*	*3,372*	*(2,467)*
Finance lease liabilities	*666*	*159*	*507*

The non-current portion of gross financial debt amounted to 30,184 million euros (24,777 million euros at the end of 2018) and represented 87% of total gross financial debt.
In line with the Group's objectives in terms of debt composition and in accordance Guidelines adopted for the "Management and control of financial risk", TIM S.p.A., in securing both third-party and intercompany loans, uses IRS and CCIRS derivative financial instruments to hedge its liabilities.
Derivative financial instruments are designated as fair value hedges for managing exchange rate risk on financial instruments denominated in currencies other than euro and for managing interest rate risk on fixed-rate loans. Derivative financial instruments are designated as cash flow hedges when the objective is to fix the exchange rate and interest rate of future variable contractual flows.

To better understand the report, following the application of the new IFRS 16 standard, the various methods of representing the Net Financial Debt are explained in the following table (as regards the figures at 1/1/2019 the values resulting from adoption of IFRS 16 were implemented on the accounting data at 12/31/2018):

(millions of euros)	12/31/2019 (a)	1/1/2019 (b)	Change (a-b)
Net financial debt carrying amount	**31,283**	**32,300**	**(1,017)**
Reversal of fair value measurement of derivatives and related financial liabilities/assets	*(1,543)*	*(1,307)*	*(236)*
Reported adjusted net financial debt	**29,740**	**30,993**	**(1,253)**
Net impact of applying IFRS 16 - Leases	*(3,065)*	*(2,940)*	*(125)*
Adjusted net financial debt Comparable	**26,675**	**28,053**	**(1,378)**
Liabilities for finance leasing (IAS 17)	*(1,591)*	*(1,604)*	*13*
Adjusted net financial debt - After Lease	**25,084**	**26,449**	**(1,365)**

The net **financial debt carrying amount** at December 31, 2019 amounted to 31,283 million euros and reflects the impact of the application of the new accounting standard IFRS 16 (Leases).

Reported adjusted net financial debt (including IFRS 16) amounted to 29,740 million euros at December 31, 2019 and particularly reflects the 2,940 million euros increase emerging from the application of the new IFRS 16 (Leases) as of January 1, 2019 following which the lease payments are no longer recognized as costs for Acquisition of goods and services, but a financial liability must be recognized in the statement of financial position, represented by the current value of the future payments.
Reported adjusted net financial debt is determined by sterilizing the effects caused by the volatility of the financial markets: given that some components of the fair value measurement of derivatives (contracts for setting exchange and interest rates for contractual flows) and derivatives embedded in other financial instruments do not result in actual monetary settlement, the adjusted net financial debt excludes these purely accounting and non-monetary effects from the measurement of derivatives and related financial assets/liabilities.

Comparable Adjusted Net Financial Debt recorded a decrease of 1,378 million euros compared to the end of 2018, reaching 26,675 million euros (28,053 million euros at December 31, 2018).

Adjusted Net Financial Debt - After Lease (net of all leases, as specified in the detailed section "After lease indicators"), a **metric adopted by the main European peers**, was 25,084 million euros at December 31, 2019.

Gross financial debt

Bonds
Bonds at December 31, 2019 totaled 16,721 million euros (16,110 million euros at December 31, 2018). Their nominal repayment amount was 16,365 million euros, an increase of 516 million euros compared to December 31, 2018 (15,849 million euros).
Changes in bonds over 2019 are shown below:

(millions of original currency)	Currency	Amount	Issue date
New issues			
Telecom Italia S.p.A. 1,250 million euros 4.000% maturing 4/11/2024	Euro	1,250	1/11/2019
Telecom Italia S.p.A. 1,000 million euros 2.750% maturing 4/15/2025	Euro	1,000	4/15/2019

(millions of original currency)	Currency	Amount	Repayment date
Repayments			
Telecom Italia S.p.A. 832 million euros 5.375% (1)	Euro	832	1/29/2019
Telecom Italia S.p.A. 850 million GBP 6.375%	GBP	850	6/24/2019

(1) Net of buy-backs totaling 418 million euros made by the company in 2015.

With reference to Telecom Italia S.p.A. 2002–2022 bonds, reserved for subscription by employees of the Group, the nominal amount at December 31, 2019 was 205 million euros, up by 2 million euros compared to December 31, 2018 (203 million euros).

Revolving Credit Facility and Term Loan
The following table shows committed credit lines available at December 31, 2019.

(billions of euros)	12/31/2019		12/31/2018	
	Agreed	Drawn down	Agreed	Drawn down
Revolving Credit Facility – maturing January 2023	5.0	-	5.0	-
Total	**5.0**	**-**	**5.0**	**-**

At December 31, 2019, TIM had bilateral Term Loans for 1,750 million euros with various banking counterparties and overdraft facilities for 390 million euros, drawn down for the full amount.

On October 29, 2019, TIM entered into a Promissory Loan Agreement ("Schuldschein") for a total amount of 250 million euros, of which 229 million euros matures on October 29, 2023 and 21 million euros matures on October 29, 2025.

Maturities of financial liabilities
The average maturity of non-current financial liabilities (including the current portion of medium/long-term financial liabilities due within 12 months) was 6.81 years.
Details of the maturities of financial liabilities in terms of expected nominal repayment amounts, as contractually agreed, are provided in the Note “Financial Liabilities (non-current and current)” of the Separate Financial Statements of TIM S.p.A. at December 31, 2019.

Financial assets and liquidity margin
Financial assets totaled 3,354 million euros (3,320 million euros at December 31, 2018), of which 659 million euros relating to financial receivables from Group companies.
Of that total, 1,005 million euros (1,678 million euros at December 31, 2018) was classified as current financial assets.
The available liquidity margin of TIM S.p.A. amounted to 5,829 million euros, equal to the sum of:

- “Cash and cash equivalents” and “Current securities other than investments” for a total of 829 million euros (1,351 million euros at December 31, 2018);
- new Revolving Credit Facility amounting to 5,000 million euros.

This margin is amply sufficient to cover the financial liabilities due.

In particular:
Cash and cash equivalents amounted to 829 million euros (885 million euros at December 31, 2018). The different technical forms of investing available cash can be analyzed as follows:

- Maturities: investments have a maximum maturity of three months;
- Counterparty risk: investments are made with leading banking and financial institutions with high-credit-quality;
- Country risk: deposits have been made mainly in major European financial markets.

FINANCIAL STATEMENTS – TIM S.p.A.

Separate Income Statements

(millions of euros)	2019	2019 comparable (a)	2018 (b)	Change (a/b) amount	%
Revenues	**13,137**	**13,140**	**13,902**	**(762)**	**(5.5)**
Other income	198	198	252	(54)	(21.4)
Total operating revenues and other income	**13,335**	**13,338**	**14,154**	**(816)**	**(5.8)**
Acquisition of goods and services	(4,596)	(5,152)	(5,801)	649	11.2
Employee benefits expenses	(2,492)	(2,492)	(2,541)	49	1.9
Other operating expenses	(1,061)	(1,061)	(722)	(339)	(47.0)
Change in inventories	(107)	(107)	84	(191)	-
Internally generated assets	403	403	434	(31)	(7.1)
Operating profit (loss) before depreciation and amortization, capital gains (losses) and impairment reversals (losses) on non-current assets (EBITDA)	**5,482**	**4,929**	**5,608**	**(679)**	**(12.1)**
Depreciation and amortization	(3,719)	(3,232)	(3,155)	(77)	(2.4)
Gains/(losses) on disposals of non-current assets	(41)	(32)	(11)	(21)	-
Impairment reversals (losses) on non-current assets	–	–	(2,683)	2,683	-
Operating profit (loss) (EBIT)	**1,722**	**1,665**	**(241)**	**1,906**	**-**
Income (expenses) from investments	117	117	71	46	64.8
Finance income	1,195	1,195	1,177	18	1.5
Finance expenses	(2,462)	(2,403)	(2,427)	24	1.0
Profit (loss) before tax	**572**	**574**	**(1,420)**	**1,994**	**-**
Income tax expense	(190)	(188)	(434)	246	56.7
Profit (loss) for the year	**382**	**386**	**(1,854)**	**2,240**	**-**

Statements of Comprehensive Income

In accordance with IAS 1 (Presentation of Financial Statements), the following Statements of Comprehensive Income include the Profit (loss) for the year as shown in the Separate Income Statements and all non-owner changes in equity.

(millions of euros)		2019	2018
Profit (loss) for the year	**(a)**	**382**	**(1,854)**
Other components of the Statements of Comprehensive Income			
Other components that will not be reclassified subsequently to Separate Income Statements			
Financial assets measured at fair value through other comprehensive income:			
Profit (loss) from fair value adjustments		3	(4)
Income tax effect		–	–
	(b)	**3**	**(4)**
Remeasurements of employee defined benefit plans (IAS 19):			
Actuarial gains (losses)		(40)	20
Income tax effect		10	(5)
	(c)	**(30)**	**15**
Share of other comprehensive income (loss) of associates and joint ventures accounted for using the equity method			
Profit (loss)		–	–
Income tax effect		–	–
	(d)	**–**	**–**
Total other components that will not be reclassified subsequently to Separate Income Statements	**(e=b+c+d)**	**(27)**	**11**
Other components that will be reclassified subsequently to Separate Income Statements			
Financial assets measured at fair value through other comprehensive income:			
Profit (loss) from fair value adjustments		(36)	11
Loss (profit) transferred to Separate Income Statements		25	–
Income tax effect		1	(3)
	(f)	**(10)**	**8**
Hedging instruments:			
Profit (loss) from fair value adjustments		(202)	70
Loss (profit) transferred to Separate Income Statements		8	10
Income tax effect		47	(19)
	(g)	**(147)**	**61**
Share of other comprehensive income (loss) of associates and joint ventures accounted for using the equity method			
Profit (loss)		–	–
Loss (profit) transferred to the Separate Income Statement		–	–
Income tax effect		–	–
	(h)	**–**	**–**
Total other components that will be reclassified subsequently to Separate Income Statements	**(i= f+g+h)**	**(157)**	**69**
Total other components of the Statements of Comprehensive Income	**(k= e+i)**	**(184)**	**80**
Total comprehensive income (loss) for the year	**(a+k)**	**198**	**(1,774)**

Statements of Financial Position

(millions of euros)		12/31/2019 (a)	12/31/2018 (b)	Change (a-b)
Assets				
Non-current assets				
Intangible assets				
Goodwill		24,341	24,341	–
Intangible assets with a finite useful life		5,818	6,339	(521)
		30,159	**30,680**	**(521)**
Tangible assets				
Property, plant and equipment owned		10,591	10,782	(191)
Assets held under finance leases		–	1,694	(1,694)
		10,591	**12,476**	**(1,885)**
Rights of use assets		**4,906**	**–**	**4,906**
Other non-current assets				
Investments		6,861	7,821	(960)
Non-current financial receivables arising from lease contracts		16	15	1
Other non-current financial assets		2,333	1,627	706
Miscellaneous receivables and other non-current assets		1,746	1,704	42
Deferred tax assets		882	882	–
		11,838	**12,049**	**(211)**
Total Non-current assets	**(a)**	**57,494**	**55,205**	**2,289**
Current assets				
Inventories		155	262	(107)
Trade and miscellaneous receivables and other current assets		3,731	3,850	(119)
Current income tax receivables		67	166	(99)
Current financial assets				
Current financial receivables arising from lease contracts		*54*	*64*	*(10)*
Securities other than investments, other financial receivables and other current financial assets		*122*	*729*	*(607)*
Cash and cash equivalents		*829*	*885*	*(56)*
		1,005	1,678	(673)
Current assets sub-total		**4,958**	**5,956**	**(998)**
Discontinued operations /Non-current assets held for sale		**828**	**–**	**828**
Total Current assets	**(b)**	**5,786**	**5,956**	**(170)**
Total Assets	**(a+b)**	**63,280**	**61,161**	**2,119**

		12/31/2019	12/31/2018	Change
		(a)	(b)	(a-b)
Equity and liabilities				
Equity				
Share capital issued		11,677	11,677	–
less: Treasury shares		(21)	(21)	–
Share capital		**11,656**	**11,656**	**–**
Additional paid-in capital		**2,094**	**2,094**	**–**
Other reserves and retained earnings (accumulated losses), including profit (loss) for the year		**4,424**	**4,388**	**36**
Total Equity	**(c)**	**18,174**	**18,138**	**36**
Non-current liabilities				
Non-current financial liabilities for financing contracts and others		26,182	23,332	2,850
Non-current financial liabilities for lease contracts		4,002	1,445	2,557
Employee benefits		1,106	1,503	(397)
Deferred tax liabilities		2	3	(1)
Provisions		528	579	(51)
Miscellaneous payables and other non-current liabilities		2,973	3,006	(33)
Total Non-current liabilities	**(d)**	**34,793**	**29,868**	**4,925**
Current liabilities				
Current financial liabilities for financing contracts and others		3,787	7,744	(3,957)
Current financial liabilities for lease contracts		666	159	507
Trade and miscellaneous payables and other current liabilities		5,843	5,238	605
Income tax payables		17	14	3
Total Current Liabilities	**(e)**	**10,313**	**13,155**	**(2,842)**
Total Liabilities	**(f=d+e)**	**45,106**	**43,023**	**2,083**
Total Equity and Liabilities	**(c+f)**	**63,280**	**61,161**	**2,119**

Statements of Cash Flows

(millions of euros)		2019	2018
Cash flows from operating activities:			
Profit (loss) for the year		382	(1,854)
Adjustments for:			
Depreciation and amortization		3,719	3,155
Impairment losses (reversals) on non-current assets (including investments)		57	2,739
Net change in deferred tax assets and liabilities		55	(14)
Losses (gains) realized on disposals of non-current assets (including investments)		32	11
Change in provisions for employee benefits		(260)	(194)
Change in inventories		107	(84)
Change in trade receivables and net amounts due from customers on construction contracts		107	(65)
Change in trade payables		(121)	(174)
Net change in income tax receivables/payables		100	(205)
Net change in miscellaneous receivables/payables and other assets/liabilities		217	(434)
Cash flows from (used in) operating activities	**(a)**	**4,395**	**2,881**
Cash flows from investing activities:			
Purchases of intangible, tangible and rights of use assets on a cash basis		(2,307)	(3,144)
Contributions for plants received		28	108
Cash arising from corporate actions		14	–
Acquisitions/disposals of other investments		(43)	(130)
Change in financial receivables and other financial assets (excluding hedging and non-hedging derivatives under financial assets)		241	265
Proceeds received from the sale of investments in subsidiaries		142	–
Proceeds from sale/repayments of intangible, tangible, right-of-use assets and other non-current assets		12	24
Cash flows from (used in) investing activities	**(b)**	**(1,913)**	**(2,877)**
Cash flows from financing activities:			
Change in current financial liabilities and other		(886)	682
Proceeds from non-current financial liabilities (including current portion)		3,814	2,723
Repayments of non-current financial liabilities (including current portion)		(4,796)	(3,534)
Changes in hedging and non-hedging derivatives		(187)	(224)
Share capital proceeds/reimbursements		–	–
Dividends paid		(166)	(166)
Cash flows from (used in) financing activities	**(c)**	**(2,221)**	**(519)**
Aggregate cash flows	**(d=a+b+c)**	**261**	**(515)**
Net cash and cash equivalents at beginning of the year	**(e)**	**(216)**	**299**
Net cash and cash equivalents at end of the year	**(f=d+e)**	**45**	**(216)**

Purchases of intangible, tangible and rights of use assets

(millions of euros)	2019	2018
Purchase of intangible assets	(819)	(3,310)
Purchase of tangible assets [1]	(1,658)	(1,791)
Purchase of rights of use assets	(921)	–
Total purchase of intangible, tangible and rights of use assets on an accrual basis	**(3,398)**	**(5,101)**
Change in payables arising from purchase of intangible, tangible and rights of use assets	1,091	1,957
Total purchase of intangible, tangible and rights of use assets on a cash basis	**(2,307)**	**(3,144)**

(1) In 2018, includes purchases of assets held under finance leases.

Additional Cash Flow Information

(millions of euros)	2019	2018
Income taxes (paid) received	(28)	(632)
Interest expense paid	(1,689)	(2,034)
Interest income received	654	953
Dividends received	140	115

Analysis of Net Cash and Cash Equivalents

(millions of euros)	2019	2018
Net cash and cash equivalents at beginning of the year:		
Cash and cash equivalents	885	771
Bank overdrafts repayable on demand	(1,101)	(472)
	(216)	**299**
Net cash and cash equivalents at end of the year:		
Cash and cash equivalents	829	885
Bank overdrafts repayable on demand	(784)	(1,101)
	45	**(216)**

The additional disclosures required by IAS 7 are provided in the Note “Net Financial Debt” in the Separate Financial Statements of TIM S.p.A. as at December 31, 2019.

AFTER LEASE INDICATORS

The Company, in addition to the conventional financial performance measures established by the IFRS, uses certain alternative performance measures in order to present a better understanding of the trend of operations and financial condition. In particular, following the adoption of IFRS 16, TIM presents the following additional alternative performance indicators:

EBITDA ADJUSTED AFTER LEASE

(millions of euros)	2019 comparable	2018	Change	
			amount	%
ORGANIC EBITDA - excluding Non-recurring items	**5,597**	**6,012**	**(415)**	**(6.9)**
Depreciation of assets held under finance lease	(167)	(199)	32	16.1
Finance expenses on finance lease liabilities	(104)	(129)	25	19.4
EBITDA adjusted After Lease (EBITDA-AL)	**5,326**	**5,684**	**(358)**	**(6.3)**

ADJUSTED NET FINANCIAL DEBT AFTER LEASE

(millions of euros)	12/31/2019	12/31/2018	Change
Adjusted net financial debt Comparable	**26,675**	**28,053**	**(1,378)**
Finance lease liabilities (IAS 17)	(1,591)	(1,604)	13
Adjusted net financial debt - After Lease	**25,084**	**26,449**	**(1,365)**

RECONCILIATION OF CONSOLIDATED EQUITY

(millions of euros)	Profit (loss) for the year		Equity at 12/31	
	2019	2018	2019	2018
Equity and Profit (Loss) for the year of TIM S.p.A.	**382**	**(1,854)**	**18,174**	**18,138**
Equity and Profit (Loss) for the year of consolidated companies, net of the share attributable to Non-controlling interests	946	707	14.634	14,782
Consolidation adjustments on the Equity and Profit (Loss) for the year attributable to Owners of the Parent:				
elimination of carrying amount of consolidated investments	–	–	(27,257)	(28,051)
impairment losses of consolidated companies included in the results of parent companies	27	59	12,628	12,659
elimination of goodwill recognized in Parent financial statements	–	2,686	(24,341)	(24,341)
recognition of positive differences arising from purchase of investments, of which:				
- goodwill	–	(2,590)	22,944	26,057
- goodwill attributed to Inwit (Asset held for sale)	–	–	3,036	–
- allocation of the purchase price to the net assets acquired and the liabilities assumed in the business combinations	(1)	(2)	(2)	27
measurement of hedging derivatives at Group level	46	2	755	488
effect of elimination of carrying amount of Parent's shares held by Telecom Italia Finance	–	–	(70)	(61)
intra-group dividends	(426)	(379)	–	–
change in share of losses (profits) from sale of investments	(26)	–	–	–
other adjustments	(32)	(40)	(221)	(170)
Equity and Profit (Loss) for the year attributable to Owners of the Parent	**916**	**(1,411)**	**20,280**	**19,528**
Equity and Profit (Loss) for the year attributable to Non-controlling interests	326	259	2,346	2,219
Equity and Profit (Loss) for the year in the Consolidated Financial Statements	**1,242**	**(1,152)**	**22,626**	**21,747**

CORPORATE BOARDS AT DECEMBER 31, 2019

BOARD OF DIRECTORS

The Ordinary Shareholders' meeting of TIM, held on May 4, 2018, appointed a new Board of 15 Directors for a three-year term of office (up to the approval of the financial statements at December 31, 2020). At its first meeting on May 7, 2018, the Board of Directors appointed Fulvio Conti as its Chairman, and Amos Genish as Chief Executive Officer of the Company.
At the Board of Directors' meeting held on July 24, 2018, the director Dante Roscini was appointed Lead Independent Director, tasked with supporting the chairman (an independent) in coordinating the board's work, and with the powers and responsibilities identified in the Borsa Italiana Corporate Governance Code.
In the meeting of November 13, 2018, the Board of Directors revoked all the powers granted to the director Amos Genish, provisionally assigning them to the Chairman of the Board of Directors, Fulvio Conti; on November 18, 2018, the Board of Directors appointed Luigi Gubitosi as Chief Executive Officer and General Manager, granting him executive powers.
On February 21, 2019, the Board of Directors resolved to override the exclusion of the powers already assigned in November 2018 to the Head of Security from the perimeter of powers of the Chief Executive Officer, Luigi Gubitosi, as Security Chief Executive Officer pursuant to the regulations Golden Power.
On June 27, 2019, the Board of Directors took note of the resignation of Amos Genish as Director, unanimously co-opting director Franck Cadoret in his place.
On September 26, 2019, the Board of Directors took note of the resignation of Fulvio Conti as Chairman and Director and at the meeting of October 21, 2019 co-opted Salvatore Rossi, appointing him Chairman.

The current power structure of the Company provides:

- to the Chairman, the powers and responsibilities contemplated by law, the Articles of Association and corporate governance arrangements;
- to the Chief Executive Officer, all powers necessary to perform acts pertinent to the Company's business, except for the powers reserved by law and the Articles of Association to the Board of Directors.

The composition of the Company's Board of Directors at December 31, 2019 was therefore:

Chairman	Salvatore Rossi (independent)
Chief Executive Officer and General Manager	Luigi Gubitosi
Directors	Alfredo Altavilla (independent) Paola Bonomo (independent) Franck Cadoret Giuseppina Capaldo (independent) Maria Elena Cappello (independent) Massimo Ferrari (independent) Paola Giannotti de Ponti (independent) Marella Moretti (independent) Lucia Morselli (independent) Dante Roscini (Lead Independent Director) Arnaud Roy de Puyfontaine Rocco Sabelli (independent) Michele Valensise (independent)
Secretary to the Board	Agostino Nuzzolo

The following board committees were in place at December 31, 2019:

- **Control and Risk Committee:** composed of the Directors: Paola Giannotti de Ponti (Chairman), Massimo Ferrari, Marella Moretti, Lucia Morselli and Michele Valensise;
- **Nomination and Remuneration Committee**: composed of the Directors: Alfredo Altavilla (Chairman), Paola Bonomo, Giuseppina Capaldo, Rocco Sabelli, and Michele Valensise;
- **Related Parties Committee:** composed of the Directors: Lucia Morselli (Chairwoman), Giuseppina Capaldo, Maria Elena Cappello, Marella Moretti, and Dante Roscini;
- **Strategy Committee:** composed of the Chairman of the Board of Directors Salvatore Rossi, the CEO Luigi Gubitosi, and the Board Directors Franck Cadoret (from August 1, 2019), Arnaud Roy de Puyfontaine, Massimo Ferrari, and Rocco Sabelli.

BOARD OF STATUTORY AUDITORS

The Ordinary Shareholders' Meeting of April 24, 2018 appointed the Company's Board of Statutory Auditors for a term of office that will end with the approval of the 2020 financial statements.

The Board of Statutory Auditors of the Company is now composed as follows:

Chairman	Roberto Capone
Acting Auditors	Giulia De Martino
	Anna Doro
	Marco Fazzini
	Francesco Schiavone Panni
Alternate Auditors	Andrea Balelli
	Antonia Coppola
	Franco Dalla Sega
	Laura Fiordelisi

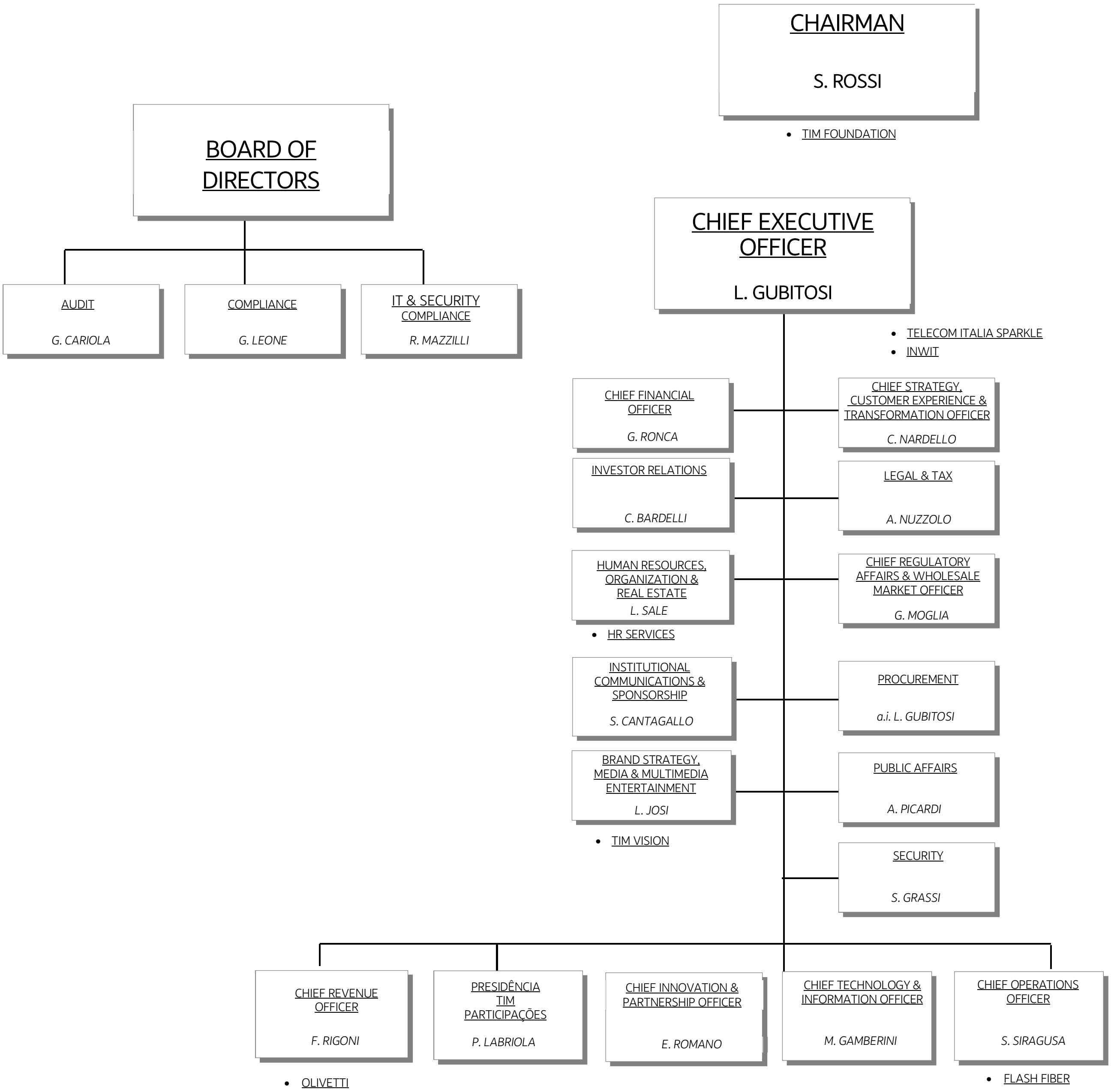
INDEPENDENT AUDITORS

The engagement for the independent auditing of the financial statements of TIM S.p.A. for the nine-year period 2019-2027 was awarded to EY S.p.A. by the shareholders' meeting of March 29, 2019.

MANAGER RESPONSIBLE FOR PREPARING THE CORPORATE FINANCIAL REPORTS

At the meeting of May 20, 2019, the Board of Directors appointed Giovanni Ronca (Head of the Group Administration, Finance and Control Function) as the manager responsible for preparing the financial reports of TIM S.p.A..

MACRO-ORGANIZATION CHART



With effect from February 4, 2020, the Chief Revenue Office department was assigned to Federico Rigoni and at the same time the Procurement Department was assigned on an interim basis to the C.E.O.

TIM Group Consolidated Financial Statements

CONTENTS

TIM GROUP 2019 CONSOLIDATED FINANCIAL STATEMENTS

CONSOLIDATED STATEMENTS OF FINANCIAL POSITION

Assets

(millions of euros)	note	12/31/2019	of which related parties	12/31/2018	of which related parties
Non-current assets					
Intangible assets					
Goodwill	4)	23,083		26,769	
Intangible assets with a finite useful life	5)	7,667		8,889	
		30,750		**35,658**	
Tangible assets	6)				
Property, plant and equipment owned		14,011		14,251	
Assets held under finance leases	2)	–		1,895	
		14,011		**16,146**	
Rights of use assets	2) 7)	**5,494**			
Other non-current assets					
Investments in associates and joint ventures accounted for using the equity method	8)	11		16	
Other investments	8)	52		49	
Non-current financial receivables arising from lease contracts	9)	51		54	
Other non-current financial assets	9)	2,100		1,540	
Miscellaneous receivables and other non-current assets	10)	2,585		2,291	
Deferred tax assets	11)	942		1,136	
		5,741		**5,086**	
Total Non-current assets	**(a)**	**55,996**		**56,890**	
Current assets					
Inventories	12)	260		389	
Trade and miscellaneous receivables and other current assets	13)	4,857	8	4,706	22
Current income tax receivables	11)	149		251	
Current financial assets	9)				
Current financial receivables arising from lease contracts		58	–	70	–
Securities other than investments, other financial receivables and other current financial assets		999	–	1,396	–
Cash and cash equivalents		3,138		1,917	
		4,195	–	3,383	–
Current assets sub-total		**9,461**		**8,729**	
Discontinued operations /Non-current assets held for sale	14)			**–**	
of a financial nature		65	–	–	
of a non-financial nature		4,582	–	–	–
		4,647			
Total Current assets	**(b)**	**14,108**		**8,729**	
Total Assets	**(a+b)**	**70,104**		**65,619**	

Equity and Liabilities

(millions of euros)	note	12/31/2019	*of which related parties*	12/31/2018	*of which related parties*
Equity	15)				
Share capital issued		11,677		11,677	
less: Treasury shares		(90)		(90)	
Share capital		**11,587**		**11,587**	
Additional paid-in capital		2,094		2,094	
Other reserves and retained earnings (accumulated losses), including profit (loss) for the year		6,599		5,847	
Equity attributable to owners of the Parent		**20,280**		**19,528**	
Non-controlling interests		2,346		2,219	
Total Equity	**(c)**	**22,626**		**21,747**	
Non-current liabilities					
Non-current financial liabilities for financing contracts and others	16)	25,605		23,319	
Non-current financial liabilities for lease contracts	16)	4,576	*1*	1,740	
Employee benefits	21)	1,182		1,567	
Deferred tax liabilities	11)	248		192	
Provisions	22)	725		876	
Miscellaneous payables and other non-current liabilities	23)	3,214	*1*	3,297	*1*
Total Non-current liabilities	**(d)**	**35,550**		**30,991**	
Current liabilities					
Current financial liabilities for financing contracts and others	16)	3,182		5,705	
Current financial liabilities for lease contracts	16)	639	–	208	
Trade and miscellaneous payables and other current liabilities	24)	7,218	*61*	6,901	*73*
Income tax payables	11)	84		67	
Current liabilities sub-total		**11,123**		**12,881**	
Liabilities directly associated with Discontinued operations/Non-current assets held for sale	14)				
of a financial nature		655	–	–	
of a non-financial nature		150	–	–	–
		805		**–**	
Total Current Liabilities	**(e)**	**11,928**		**12,881**	
Total Liabilities	**(f=d+e)**	**47,478**		**43,872**	
Total Equity and Liabilities	**(c+f)**	**70,104**		**65,619**	

SEPARATE CONSOLIDATED INCOME STATEMENTS

(millions of euros)	note	Year 2019	*of which: with related parties*	Year 2018	*of which: with related parties*
Revenues	26)	**17,974**	*4*	**18,940**	*5*
Other income	27)	933	–	341	–
Total operating revenues and other income		**18,907**		**19,281**	
Acquisition of goods and services	28)	(6,463)	*(147)*	(8,186)	*(162)*
Employee benefits expenses	29)	(3,077)	*(96)*	(3,105)	*(92)*
Other operating expenses	30)	(1,625)		(1,259)	
Change in inventories		(128)		102	
Internally generated assets	31)	537		570	
Operating profit (loss) before depreciation and amortization, capital gains (losses) and impairment reversals (losses) on non-current assets (EBITDA)		**8,151**		**7,403**	
of which: impact of non-recurring items	42)	*(71)*		*(408)*	
Depreciation and amortization	32)	(4,927)		(4,255)	
Gains/(losses) on disposals of non-current assets	33)	(49)		(1)	
Impairment reversals (losses) on non-current assets	34)			(2,586)	
Operating profit (loss) (EBIT)		**3,175**		**561**	
of which: impact of non-recurring items	42)	*(89)*		*(2,998)*	
Share of profits (losses) of associates and joint ventures accounted for using the equity method	8)	(3)		(1)	
Other income (expenses) from investments	35)	3		11	
Finance income	36)	946	–	1,056	*8*
Finance expenses	36)	(2,382)	–	(2,404)	*(9)*
Profit (loss) before tax from continuing operations		**1,739**		**(777)**	
of which: impact of non-recurring items	42)	*(122)*		*(2,991)*	
Income tax expense	11)	(513)		(375)	
Profit (loss) from continuing operations		**1,226**		**(1,152)**	
Profit (loss) from Discontinued operations/Non-current assets held for sale	14)	**16**		**–**	
Profit (loss) for the year	37)	**1,242**		**(1,152)**	
of which: impact of non-recurring items	42)	*(146)*		*(2,920)*	
Attributable to:					
Owners of the Parent		**916**		**(1,411)**	
Non-controlling interests		326		259	

(euros)		Year 2019	Year 2018
Earnings per share:	**38)**		
Basic and Diluted Earnings Per Share (EPS)			
Ordinary Share		0.04	(0.07)
Savings Share		0.05	(0.07)
of which:			
from Continuing operations attributable to Owners of the Parent			
Ordinary Share		0.04	(0.07)
Savings Share		0.05	(0.07)
Diluted earnings per share			
Ordinary Share		0.04	(0.06)
Savings Share		0.05	(0.06)
of which:			
from Continuing operations attributable to Owners of the Parent			
Ordinary Share		0.04	(0.06)
Savings Share		0.05	(0.06)

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

Note 15

(millions of euros)		Year 2019	Year 2018
Profit (loss) for the year	**(a)**	**1,242**	**(1,152)**
Other components of the Consolidated Statement of Comprehensive Income			
Other components that will not be reclassified subsequently to Separate Consolidated Income Statement			
Financial assets measured at fair value through other comprehensive income:			
Profit (loss) from fair value adjustments		4	(5)
Income tax effect		–	–
	(b)	**4**	**(5)**
Remeasurements of employee defined benefit plans (IAS 19):			
Actuarial gains (losses)		(44)	19
Income tax effect		10	(5)
	(c)	**(34)**	**14**
Share of other comprehensive income (loss) of associates and joint ventures accounted for using the equity method			
Profit (loss)		–	–
Income tax effect		–	–
	(d)	**–**	**–**
Total other components that will not be reclassified subsequently to Separate Consolidated Income Statement	**(e=b+c+d)**	**(30)**	**9**
Other components that will be reclassified subsequently to Separate Consolidated Income Statement			
Financial assets measured at fair value through other comprehensive income:			
Profit (loss) from fair value adjustments		(19)	(14)
Loss (profit) transferred to Separate Consolidated Income Statement		(5)	(4)
Income tax effect		8	2
	(f)	**(16)**	**(16)**
Hedging instruments:			
Profit (loss) from fair value adjustments		367	362
Loss (profit) transferred to Separate Consolidated Income Statement		(227)	(336)
Income tax effect		(17)	(7)
	(g)	**123**	**19**
Exchange differences on translating foreign operations:			
Profit (loss) on translating foreign operations		(113)	(554)
Loss (profit) on translating foreign operations transferred to Separate Consolidated Income Statement		–	–
Income tax effect		–	–
	(h)	**(113)**	**(554)**
Share of other comprehensive income (loss) of associates and joint ventures accounted for using the equity method			
Profit (loss)		–	–
Loss (profit) transferred to Separate Consolidated Income Statement		–	–
Income tax effect		–	–
	(i)	**–**	**–**
Total other components that will be reclassified subsequently to Separate Consolidated Income Statement	**(k=f+g+h+i)**	**(6)**	**(551)**
Total other components of the Consolidated Statement of Comprehensive Income	**(m=e+k)**	**(36)**	**(542)**
Total comprehensive income (loss) for the year	**(a+m)**	**1,206**	**(1,694)**
Attributable to:			
Owners of the Parent		**916**	**(1,784)**
Non-controlling interests		290	90

CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY

Changes from January 1, 2018 to December 31, 2018

(millions of euros)	Equity attributable to owners of the Parent										
	Share capital	Additional paid-in capital	Reserve for financial assets measured at fair value through other comprehensive income	Reserve for hedging instruments	Reserve for exchange differences on translating foreign operations	Reserve for remeasurements of employee defined benefit plans (IAS 19)	Share of other profits (losses) of associates and joint ventures accounted for using the equity method	Other reserves and retained earnings (accumulated losses), including profit (loss) for the year	**Total**	**Non-controlling interests**	**Total equity**
Balance at December 31, 2017	**11,587**	**2,094**	**51**	**(582)**	**(955)**	**(104)**	**–**	**9,383**	**21,474**	**2,221**	**23,695**
Changes in equity during the year:											
Dividends approved								(166)	**(166)**	(115)	**(281)**
Total comprehensive income (loss) for the year			(21)	19	(385)	14		(1,411)	**(1,784)**	90	**(1,694)**
Issue of equity instruments								2	**2**		**2**
Other changes								2	**2**	23	**25**
Balance at December 31, 2018	**11,587**	**2,094**	**30**	**(563)**	**(1,340)**	**(90)**	**–**	**7,810**	**19,528**	**2,219**	**21,747**

Changes from January 1, 2019 to December 31, 2019 Note 15

(millions of euros)	Equity attributable to owners of the Parent										
	Share capital	Additional paid-in capital	Reserve for financial assets measured at fair value through other comprehensive income	Reserve for hedging instruments	Reserve for exchange differences on translating foreign operations	Reserve for remeasurements of employee defined benefit plans (IAS 19) (*)	Share of other profits (losses) of associates and joint ventures accounted for using the equity method	Other reserves and retained earnings (accumulated losses), including profit (loss) for the year	**Total**	**Non-controlling interests**	**Total equity**
Balance at December 31, 2018	**11,587**	**2,094**	**30**	**(563)**	**(1,340)**	**(90)**	**–**	**7,810**	**19,528**	**2,219**	**21,747**
Adoption of IFRS 16								–	**–**	–	**–**
Adjusted Balance at December 31, 2018	**11,587**	**2,094**	**30**	**(563)**	**(1,340)**	**(90)**	**–**	**7,810**	**19,528**	**2,219**	**21,747**
Changes in equity during the year:											
Dividends approved								(166)	**(166)**	(130)	**(296)**
Total comprehensive income (loss) for the year			(12)	123	(77)	(34)		916	**916**	290	**1,206**
Issue of equity instruments								4	**4**		**4**
Change in the scope of consolidation									**–**	(44)	**(44)**
Other changes			1					(3)	**(2)**	11	**9**
Balance at December 31, 2019	**11,587**	**2,094**	**19**	**(440)**	**(1,417)**	**(124)**	**–**	**8,561**	**20,280**	**2,346**	**22,626**

(*) The "Reserve for remeasurement of employee defined-benefit plans (IAS 19)" includes -74 thousand euros of INWIT presented as "held for sale".

CONSOLIDATED STATEMENTS OF CASH FLOWS

(millions of euros)	note	Year 2019	Year 2018
Cash flows from operating activities:			
Profit (loss) from continuing operations		1,226	(1,152)
Adjustments for:			
Depreciation and amortization		4,927	4,255
Impairment losses (reversals) on non-current assets (including investments)		31	2,589
Net change in deferred tax assets and liabilities		271	(195)
Losses (gains) realized on disposals of non-current assets (including investments)		47	1
Share of profits (losses) of associates and joint ventures accounted for using the equity method		3	1
Change in provisions for employee benefits		(246)	(208)
Change in inventories		129	(99)
Change in trade receivables and net amounts due from customers on construction contracts		–	(49)
Change in trade payables		(181)	(163)
Net change in income tax receivables/payables		114	(210)
Net change in miscellaneous receivables/payables and other assets/liabilities		(387)	(178)
Cash flows from (used in) operating activities	**(a)**	**5,934**	**4,592**
Cash flows from investing activities:			
Purchases of intangible, tangible and rights of use assets on a cash basis		(3,649)	(4,531)
Capital grants received		28	108
Acquisition of control of companies or other businesses, net of cash acquired		–	–
Acquisitions/disposals of other investments		(4)	(3)
Change in financial receivables and other financial assets (excluding hedging and non-hedging derivatives under financial assets)		231	96
Proceeds from sale that result in a loss of control of subsidiaries or other businesses, net of cash disposed of		125	–
Proceeds from sale/repayments of intangible, tangible and other non-current assets		14	16
Cash flows from (used in) investing activities	**(b)**	**(3,255)**	**(4,314)**
Cash flows from financing activities:			
Change in current financial liabilities and other		(545)	394
Proceeds from non-current financial liabilities (including current portion)		4,527	2,546
Repayments of non-current financial liabilities (including current portion)		(4,412)	(4,426)
Changes in hedging and non-hedging derivatives		(415)	(110)
Share capital proceeds/reimbursements (including subsidiaries)		10	22
Dividends paid		(279)	(256)
Changes in ownership interests in consolidated subsidiaries		–	–
Cash flows from (used in) financing activities	**(c)**	**(1,114)**	**(1,830)**
Cash flows from (used in) Discontinued operations/Non-current assets held for sale	**(d)**	**16**	**–**
Aggregate cash flows	**(e=a+b+c+d)**	**1,581**	**(1,552)**
Net cash and cash equivalents at beginning of the year:	**(f)**	**1,631**	**3,246**
Net foreign exchange differences on net cash and cash equivalents	(g)	(10)	(63)
Net cash and cash equivalents at end of the year:	**(h=e+f+g)**	**3,202**	**1,631**

Purchases of intangible, tangible and rights of use assets

(millions of euros)		Year 2019	Year 2018
Purchase of intangible assets (1)	5)	(1,064)	(3,647)
Purchase of tangible assets (1) (2)	6)	(2,644)	(2,831)
Purchase of rights of use assets (1)	7)	(1,216)	–
Total purchase of intangible, tangible and rights of use assets on an accrual basis		(4,924)	(6,478)
Change in payables arising from purchase of intangible, tangible and rights of use assets		1,275	1,947
Total purchases of intangible, tangible and rights of use assets on a cash basis		(3,649)	(4,531)
(1) of which related parties:			
Purchase of intangible assets, tangible assets and rights of use assets on an accrual basis		–	–

(1) For 2018, includes purchases of assets held under finance leases.

Additional Cash Flow information

(millions of euros)	Year 2019	Year 2018
Income taxes (paid) received	(118)	(739)
Interest expense paid	(1,750)	(1,978)
Interest income received	589	871
Dividends received	1	2

Analysis of Net Cash and Cash Equivalents

(millions of euros)	Year 2019	Year 2018
Net cash and cash equivalents at beginning of the year:		
Cash and cash equivalents - from continuing operations	1,917	3,575
Bank overdrafts repayable on demand – from continuing operations	(286)	(329)
Cash and cash equivalents - from Discontinued operations/Non-current assets held for sale	–	–
Bank overdrafts repayable on demand – from Discontinued operations/Non-current assets held for sale	–	–
	1,631	**3,246**
Net cash and cash equivalents at end of the year:		
Cash and cash equivalents - from continuing operations	3,138	1,917
Bank overdrafts repayable on demand – from continuing operations	(1)	(286)
Cash and cash equivalents - from Discontinued operations/Non-current assets held for sale	65	–
Bank overdrafts repayable on demand – from Discontinued operations/Non-current assets held for sale	–	–
	3,202	**1,631**

The additional disclosures required by IAS 7 are provided in the Note “Net financial debt” to these consolidated financial statements.

NOTE 1
FORM, CONTENT AND OTHER GENERAL INFORMATION

FORM AND CONTENT

Telecom Italia S.p.A. (the "**Parent**"), also known in short as "TIM S.p.A.", and its subsidiaries form the "**TIM Group**" or the "**Group**".
TIM is a joint-stock company (S.p.A.) organized under the laws of the Republic of Italy.
The registered offices of the Parent, TIM, are located in Milan, Italy at Via Gaetano Negri 1.
The duration of TIM S.p.A., as stated in the company's bylaws, extends until December 31, 2100.
The TIM Group operates mainly in Europe, the Mediterranean Basin and South America.
The Group is engaged principally in the communications sector and, particularly, the fixed and mobile national and international telecommunications sector.
The TIM Group Consolidated Financial Statements at December 31, 2019 have been prepared on a going concern basis (further details are provided in the Note "Accounting Policies") and in accordance with the International Financial Reporting Standards issued by the International Accounting Standards Board and endorsed by the European Union (designated as "***IFRS***"), as well as laws and regulations in force in Italy.
In 2019, the Group applied accounting policies consistent with those of last year, except for the new standards/interpretations adopted starting from 1.1.2019 and described below.
The consolidated financial statements have been prepared under the historical cost convention except for financial assets measured at fair value through other comprehensive income, financial assets measured at fair value through profit or loss and derivative financial instruments which have been measured at fair value. The carrying amounts of hedged assets and liabilities have been adjusted to reflect the changes in fair value of the hedged risks (fair value hedge).
In accordance with IAS 1 (Presentation of Financial Statements) comparative information included in the consolidated financial statements is, unless otherwise indicated, that of the preceding years.
The TIM Group consolidated financial statements as at December 31, 2019 are expressed in euro (rounded to the nearest million unless otherwise indicated).
The publication of the consolidated financial statements for the year ended December 31, 2019 of the TIM Group was approved by resolution of the Board of Directors on March 10, 2020.

FINANCIAL STATEMENT FORMATS

The financial statement formats adopted are consistent with those indicated in IAS 1. In particular:

- the **Consolidated statements of financial position** have been prepared by classifying assets and liabilities according to the "current and non-current" criterion;
- the **Separate consolidated income statements** have been prepared by classifying operating expenses by nature of expense as this form of presentation is considered more appropriate and representative of the specific business of the Group, conforms to internal reporting and is in line with the TIM Group's industrial sector.
  In addition to EBIT or Operating profit (loss), the separate consolidated income statements include the alternative performance measure of EBITDA or Operating profit (loss) before depreciation and amortization, Capital gains (losses) and Impairment reversals (losses) on non-current assets.

  In particular, besides EBIT, EBITDA is used by TIM as the financial target in internal presentations (business plans) and in external presentations (to analysts and investors). It represents a useful unit of measurement for the evaluation of the operating performance of the Group (as a whole and at the Business Unit level).
  EBIT and EBITDA are calculated as follows:

Profit (loss) before tax from continuing operations	
+	Finance expenses
-	Finance income
+/-	Other expenses (income) from investments
+/-	Share of profits (losses) of associates and joint ventures accounted for using the equity method
EBIT – Operating profit (loss)	
+/-	Impairment losses (reversals) on non-current assets
+/-	Losses (gains) on disposals of non-current assets
+	Depreciation and amortization
EBITDA – Operating profit before depreciation and amortization, capital gains (losses) and impairment reversals (losses) on non-current assets	

- the **Consolidated statements of comprehensive income** include the profit or loss for the year as shown in the separate consolidated income statements and all other non-owner changes in equity;
- the **Consolidated statements of cash flows** have been prepared by presenting cash flows from operating activities according to the "indirect method", as permitted by IAS 7 (Statement of Cash Flows).

Furthermore, as required by Consob Resolution 15519 of July 27, 2006, in the separate consolidated income statements, income and expenses relating to transactions which by nature do not occur during normal operation (non-recurring transactions) have been specifically identified and their impacts on the main intermediate levels have been shown separately, when they are significant. Specifically, non-recurring income/(expenses) include, for instance: income/expenses arising from the sale of properties, plant and equipment, business segments and investments; expenses stemming from company reorganization and streamlining processes and projects, also in connection with corporate transactions (mergers, spin-offs, etc.); expenses resulting from litigation and regulatory fines and related liabilities; other provisions and related reversals; costs for the settlement of disputes; items connected to prior-year adjustments; impairment losses on goodwill and/or other intangible and tangible assets.
Also in reference to the above Consob Resolution, the amounts relating to balances or transactions with related parties have been shown separately in the consolidated financial statements.

SEGMENT REPORTING

An operating segment is a component of an entity:

- that engages in business activities from which it may earn revenues and incur expenses (including revenues and expenses relating to transactions with other components of the same entity);
- whose operating results are regularly reviewed by the entity's chief operating decision maker to make decisions about resources (for the TIM Group, the Board of Directors of the Parent) to be allocated to the segment and assess its performance; and
- for which separate financial information is available.

In particular, the operating segments of the TIM Group are organized according to geographic location (Domestic and Brazil) for the telecommunications business.

The term "operating segment" is considered synonymous with "Business Unit".

The operating segments of the TIM Group are as follows:

- **Domestic**: includes operations in Italy for voice and data services on fixed and mobile networks for end customers (retail) and other operators (wholesale), the operations of the Telecom Italia Sparkle group, which, at international level (Europe, the Mediterranean and South America), develops fiber optic networks for wholesale customers, the operations of Olivetti (products and services for Information Technology), as well as INWIT S.p.A. (a company operating in the electronic communications infrastructure sector, and in particular the infrastructure for hosting radio transmission equipment for mobile telephone networks, both for TIM and other operators) and the units supporting the Domestic sector.
  See the section “Financial and Operating Highlights of the Business Units of the TIM Group – Domestic Business Unit” of the Report on Operations for more details;
- **Brazil**: includes mobile and fixed telecommunications operations in Brazil (TIM S.A.);
- **Other Operations**: include the financial companies (Telecom Italia Capital S.A. and Telecom Italia Finance S.A.) and other minor companies not strictly related to the TIM Group's core business.

NOTE 2
ACCOUNTING POLICIES

GOING CONCERN

The consolidated financial statements for 2019 have been prepared on a going concern basis as there is the reasonable expectation that TIM will continue its operational activities in the foreseeable future (and in any event over a period of at least twelve months).
In particular, the following factors have been taken into consideration:

- the main risks and uncertainties (that are for the most part of an external nature) to which the Group and the various activities of the TIM Group are exposed:
  - changes in the general macroeconomic situation in the Italian, European and Brazilian markets, as well as the volatility of financial markets in the Eurozone also as a result of “Brexit” in the UK;
  - variations in business conditions, also related to competition;
  - changes to laws and regulations (price and rate variations);
  - outcomes of legal disputes and proceedings with regulatory authorities, competitors and other parties;
  - financial risks (interest rate and/or exchange rate trends, changes in the Group's credit rating by rating agencies);
- the optimal mix between risk capital and debt capital as well as the policy for the remuneration of risk capital, as described in the paragraph "Share capital information" under the Note "Equity";
- the policy for financial risk management (market risk, credit risk and liquidity risk), as described in the Note "Financial risk management".

Based on these factors, the Management believes that, at the present time, there are no elements of uncertainty regarding the Group’s ability to continue as a going concern.

PRINCIPLES OF CONSOLIDATION

The consolidated financial statements include the financial statements of all subsidiaries from the date on which control over such subsidiaries commences until the date on which control ceases.
The date of all the subsidiaries' financial statements coincides with that of the Parent TIM.
Control exists when the Parent TIM S.p.A. has all the following:

- power over the investee, which includes the ability to direct the relevant activities of the investee, i.e. the activities that significantly affect the investee's returns;
- exposure, or rights, to variable returns from its involvement with the investee;
- the ability to use its power over the investee to affect the amount of the investor's returns.

TIM assesses whether it controls an investee if facts and circumstances indicate that there are changes in one or more of the three control elements.
In the preparation of the consolidated financial statements, assets, liabilities, revenues and expenses of the consolidated companies are consolidated on a line-by-line basis and non-controlling interests in equity and in the profit (loss) for the year are disclosed separately under appropriate items, respectively, in the consolidated statements of financial position, in the separate consolidated income statements and in the consolidated statements of comprehensive income.
Under IFRS 10 (Consolidated financial statements), the total comprehensive loss (including the profit or loss for the year) is attributed to the owners of the parent and to the non-controlling interests even if this results in the non-controlling interests having a deficit balance.
All intragroup balances and transactions and any gains and losses arising from intragroup transactions are eliminated in consolidation.
The carrying amount of the investment in each subsidiary is eliminated against the corresponding share of equity in each subsidiary, after adjustment, if any, to fair value at the date of acquisition of control. At that date, goodwill is recorded as an intangible asset, as described below, whereas any gain from a bargain purchase or negative goodwill is recognized in the separate consolidated income statements.
Assets and liabilities of foreign consolidated subsidiaries expressed in currencies other than euro are translated using the exchange rates in effect at the statement of financial position date (the current method); income and expenses are translated at the average exchange rates for the year. Exchange differences resulting from the application of this method are classified as equity until the entire disposal of the investment or upon loss of control of the foreign subsidiary. Upon partial disposal, without losing control, the proportionate share of the cumulative amount of exchange differences related to the disposed interest is recognized in non-controlling interests. The cash flows of foreign consolidated subsidiaries expressed in currencies other than euro included

in the consolidated statements of cash flows are translated into euro at the average exchange rates for the year.
Goodwill and fair value adjustments arising from the allocation of the purchase price of a foreign entity are recorded in the relevant foreign currency and are translated using the year-end exchange rate.

Under IFRS 10, changes in a parent's ownership interest in a subsidiary that do not result in a loss of control are accounted for as equity transactions. In such circumstances the carrying amounts of the controlling and non-controlling interests shall be adjusted to reflect the changes in their relative interests in the subsidiary. Any difference between the amount by which the non-controlling interests are adjusted and the fair value of the consideration paid or received shall be recognized directly in equity and attributed to the owners of the Parent.

Under IFRS 10, the parent company in case of loss of control of a subsidiary:

- derecognizes:
  - the assets (including any goodwill) and the liabilities;
  - the carrying amount of any non-controlling interests;
- recognizes:
  - the fair value of the consideration received, if any, from the transaction;
  - any investment retained in the former subsidiary at its fair value at the date when control is lost;
  - any gain or loss, resulting from the transaction, in the separate consolidated income statements;
  - the reclassification to the separate consolidated income statements, of the amounts previously recognized in other comprehensive income in relation to the subsidiary.

In the consolidated financial statements, investments in associates and joint ventures are accounted for using the equity method, as provided, respectively, by IAS 28 (Investments in Associates and Joint Ventures) and IFRS 11 (Joint Arrangements).
Associates are enterprises in which the Group holds at least 20% of the voting rights or exercises significant influence, but no control or joint control over the financial and operating policies.
A joint venture is a joint arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the arrangement.
Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require the unanimous consent of the parties sharing control.
Associates and joint ventures are included in the consolidated financial statements from the date on which significant influence or joint control commences until the date on which significant influence or joint control ceases.
Under the equity method, on initial recognition the investment in an associate or a joint venture is recognized at cost, and the carrying amount is increased or decreased to recognize the investor's share of the profit or loss of the investee after the date of acquisition. The investor's share of the investee's profit or loss is recognized in the investor's income statements. Dividends received from an investee reduce the carrying amount of the investment.
Adjustments to the carrying amount may also be necessary for changes in the investee's other comprehensive income (i.e. those arising from foreign exchange translation differences). The investor's share of those changes is recognized in the investor's other comprehensive income.
If an investor's share of losses of an associate or a joint venture equals or exceeds its interest in the associate or joint venture, the investor discontinues recognizing its share of further losses. After the investor's interest is reduced to zero, additional losses are provided for, and a liability is recognized, only to the extent that the investor has incurred legal or constructive obligations or made payments on behalf of the associate or joint venture. If the associate or joint venture subsequently reports profits, the investor resumes recognizing its share of those profits only after its share of the profits equals the share of losses not recognized.
Any other long-term interests (some types of preference shares and long-term loans) in an associate or joint venture are measured in accordance with IFRS 9.
Gains and losses resulting from "upstream" and "downstream" transactions between an investor (including its consolidated subsidiaries) and its associate or joint venture are recognized in the investor's financial statements only to the extent of unrelated investors' interests in the associate or joint venture.
Gains and losses arising from transactions with associates or joint ventures are eliminated to the extent of the Group's interest in those entities.

INTANGIBLE ASSETS

Goodwill

In accordance with IFRS 3 (Business Combinations), goodwill is recognized in the financial statements at the date of acquisition of control of a business and is determined as the excess of (a) over (b), as follows:

a) the aggregate of:

- the consideration transferred (measured in accordance with IFRS 3; it is generally recognized on the basis of the fair value at the acquisition date);
- the amount of any non-controlling interest in the acquiree measured proportionately at the non-controlling interest share of the acquiree's identifiable net assets at fair value at the acquisition date;
- in a business combination achieved in stages, the acquisition date fair value of the acquirer's previously held equity interest in the acquiree;

b) the fair value of the identifiable assets acquired net of the identifiable liabilities assumed, measured at the date of acquisition of control.

IFRS 3 requires, inter alia, the following:

- incidental costs incurred in connection with a business combination are charged to the separate income statements;
- in a business combination achieved in stages, the acquirer shall remeasure its previously held equity interest in the acquiree at its fair value at the date of acquisition of control and recognize the resulting gain or loss, if any, in the separate income statements.

Goodwill is classified in the statement of financial position as an intangible asset with an indefinite useful life.
Goodwill initially recognized is subsequently reduced only by cumulative impairment losses (for more details, see the section "Impairment of intangible assets, tangible assets and rights of use assets - Goodwill", below).
In case of loss of control of a subsidiary, the relative amount of goodwill is taken into account in calculating the gain or loss on disposal.

Development costs

Costs incurred internally for the development of new products and services represent either intangible assets (mainly costs for software development) or tangible assets. These costs are capitalized only when all the following conditions are satisfied: i) the cost attributable to the development phase of the asset can be measured reliably, ii) there is the intention, the availability of financial resources and the technical ability to complete the asset and make it available for use or sale and iii) it can be demonstrated that the asset will be able to generate future economic benefits. Capitalized development costs comprise only expenditures that can be attributed directly to the development process for new products and services.
Capitalized development costs are amortized systematically over the estimated product or service life so that the amortization method reflects the way which the asset's future economic benefits are expected to be consumed by the entity.

Other intangible assets with a finite useful life

Other purchased or internally-generated intangible assets with a finite useful life are recognized as assets, in accordance with IAS 38 (Intangible Assets), where it is probable that the use of the asset will generate future economic benefits and where the cost of the asset can be reliably measured.
Such assets are recorded at purchase or production cost and amortized on a straight-line basis over their estimated useful lives; the amortization rates are reviewed annually and revised if the current estimated useful life is different from that estimated previously. The effect of such changes is recognized prospectively in the separate consolidated income statements.

TANGIBLE ASSETS

Property, plant and equipment

Property, plant and equipment is recognized at purchase or production cost. Subsequent expenditures are capitalized only if they increase the future economic benefits embodied in the related item of property, plant and equipment. All other expenditures are expensed as incurred.

Cost also includes the expected costs of dismantling the asset and restoring the site if a legal or constructive obligation exists. The corresponding liability is recognized at its present value as a provision in the statement of financial position. These capitalized costs are depreciated and charged to the separate consolidated income statements over the useful life of the related tangible assets.
The recalculation of estimates for dismantling costs, discount rates and the dates in which such costs are expected to be incurred is reviewed annually, at each financial year-end. Changes in the above liability must be recognized as an increase or decrease of the cost of the relative asset; the amount deducted from the cost of the asset must not exceed its carrying amount. The excess if any, should be recorded immediately in the separate consolidated income statements, conventionally under the line item "Depreciation".
Depreciation of property, plant and equipment owned is calculated on a straight-line basis over the estimated useful life of the assets.
The depreciation rates are reviewed annually and revised if the current estimated useful life is different from that estimated previously. The effect of such changes is recognized prospectively in the separate consolidated income statements.
Land, including land pertaining to buildings, is not depreciated.

RIGHTS OF USE ASSETS

In accordance with IFRS 16, lease liabilities are presented through the recognition of a financial liability in the statement of financial position at the present value of future lease payments, against the recognition of a rights-of-use asset of the leased asset.
On the commencement date of the lease, the right-of-use asset is recognized at cost, including: the amount of the initial measurement of the lease liability, any lease payments made at or before the commencement date, initial direct costs incurred in negotiating the lease and the present value of the estimated restoration or dismantling costs set out in the lease, less any incentives.
Subsequently, the right-of-use is amortized over the term of the lease (or the useful life of the asset, if lower), subject to impairment and adjusted for any remeasurement of the lease liability.

CAPITALIZED BORROWING COSTS

Under IAS 23 (*Borrowing Costs*), the Group capitalizes borrowing costs only if they are directly attributable to the acquisition, construction or production of an asset that takes a substantial period of time (conventionally more than 12 months) to get ready for its intended use or sale.
Capitalized borrowing costs are recorded in the separate consolidated income statements and deducted directly from the "finance expense" line item to which they relate.

IMPAIRMENT OF INTANGIBLE, TANGIBLE AND RIGHT-OF-USE ASSETS

Goodwill

Goodwill is tested for impairment at least annually or more frequently whenever events or changes in circumstances indicate that goodwill may be impaired, as set forth in IAS 36 (*Impairment of Assets*); however, when the conditions that gave rise to an impairment loss no longer exist, the original amount of goodwill is not reinstated.
The test is generally conducted at the end of every year so the date of testing is the year-end closing date of the financial statements. Goodwill acquired and allocated during the year is tested for impairment at the end of the year in which the acquisition and allocation took place.
For the purpose of verifying its recoverability, goodwill is allocated, from the acquisition date, to each of the cash-generating units, or groups of cash-generating units, that is expected to benefit from the combination.
If the carrying amount of the cash-generating unit (or group of cash-generating units) exceeds the recoverable amount, an impairment loss is recognized in the separate consolidated income statements. The impairment loss is first recognized as a deduction of the carrying amount of goodwill allocated to the cash-generating unit (or group of cash-generating units) and then only applied to the other assets of the cash-generating unit in proportion to their carrying amount, up to the recoverable amount of the assets with a finite useful life. The recoverable amount of a cash-generating unit (or group of cash-generating units) to which goodwill is allocated is the higher between the fair value less costs to sell and its value in use.
In calculating the value in use, the estimated future cash flows are discounted to present value using a discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. The future cash flows are those arising from an explicit time horizon between three and five years as well as those extrapolated to estimate the terminal value. The long-term growth rate used to estimate the terminal value of the cash-generating unit (or group of cash-generating units) is assumed not to be higher than

the average long-term growth rate of the segment, country or market in which the cash-generating unit (or group of cash-generating units) operates.
The value in use of cash-generating units denominated in foreign currency is estimated in the local currency by discounting cash flows to present value on the basis of an appropriate rate for that currency. The present value obtained is translated to euro at the spot rate on the date of the impairment test (in the case of the TIM Group, the date of the financial statements).
Future cash flows are estimated by referring to the current operating conditions of the cash-generating unit (or group of cash-generating units) and, therefore, do not include either benefits originating from future restructuring for which the entity is not yet committed, or future investments for the improvement or optimization of the cash-generating unit.
For the purpose of calculating impairment, the carrying amount of the cash-generating unit is established based on the same criteria used to determine the recoverable amount of the cash-generating unit, excluding surplus assets (that is, financial assets, deferred tax assets and net non-current assets held for sale) and includes the goodwill attributable to non-controlling interests.
After conducting the goodwill impairment test for the cash-generating unit (or groups of cash-generating units), a second level of impairment testing is carried out which includes the corporate assets which do not generate positive cash flows and which cannot be allocated by a reasonable and consistent criterion to the single units. At this second level, the total recoverable amount of all cash-generating units (or groups of cash-generating units) is compared to the carrying amount of all cash-generating units (or groups of cash-generating units), including also those cash-generating units to which no goodwill was allocated, and the corporate assets.

Tangible and intangible assets with finite useful lives and right-of-use assets

At the end of each reporting period, the Group assesses whether there is any indication that an asset – whether intangible or tangible with finite useful lives or a right-of-use – may be impaired. Both internal and external sources of information are used for this purpose. Internal sources include obsolescence or physical damage, and significant changes in the use of the asset and the economic performance of the asset compared to estimated performance. External sources include the market value of the asset, changes in technology, markets or laws, trend in market interest rates and the cost of capital used to evaluate investments, and an excess of the carrying amount of the net assets of the Group over market capitalization.
If there is any indication that an asset – whether intangible or tangible with finite useful lives or a right-of-use – may be impaired, then its carrying amount is reduced to its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs to sell, and its value in use. In calculating the value in use, the estimated future cash flows are discounted to present value using a discount rate that reflects current market assessments of the time value of money and the risks specific to the asset or right. If it is not possible to estimate the recoverable amount, the Group estimates the recoverable amount of the cash-generating unit to which the asset belongs. Impairment losses are recognized in the separate consolidated income statements.
When the reasons for the impairment subsequently cease to exist, the carrying value of the asset/right-of-use or of the cash generating unit is increased up to the new estimate of the recoverable amount which, however, cannot exceed the amount that would have been determined had no impairment loss been recognized. The reversal of an impairment loss is recognized as income in the separate consolidated income statements.

FINANCIAL INSTRUMENTS

Business models for financial assets management

For the management of trade receivables, TIM Group Management has identified different business models based on the specific nature of the receivables, the type of counterparty and collection times; this is
in order to optimize the management of working capital through the constant monitoring of the payment performance of customers, the steering of credit collection policies, and the management of programs for the disposal and factoring of receivables,
activation of factoring consistent with financial planning requirements.

The business models adopted are:

- *Hold to Collect*: receivables usually held to maturity, such as trade receivables due from large customers and the OLOs for the Domestic Business Unit, and all receivables for the Brazil Business Unit; these instruments fall within IFRS 9 category “Assets measured at amortized cost”;
- *Hold to Collect and Sell:* receivables usually traded massively and on a recurring basis, such as, for the Domestic Business Unit, receivables due from active consumer, small and business customers held for sale; these instruments fall under IFRS 9 category "Financial assets measured at fair value through other comprehensive income". As required by IFRS 9, the related reserve is reversed to the separate consolidated income statements when disposed of or impaired.

As part of managing financial assets other than trade receivables, TIM Group Management has identified its business models on the basis of how the financial instruments are managed and how their cash flows are used. this is done to ensure an adequate level of financial flexibility and to best manage, in terms of risks and returns, the financial resources immediately available through the treasuries of Group companies and in accordance with the strategies set forth by the Parent TIM.

The business models adopted are:

- *Hold to Collect:* financial instruments used to absorb temporary cash surpluses; such instruments are low risk and mostly held to maturity; they are measured at amortized cost;

- *Hold to Collect and Sell*: monetary or debt instruments used to absorb short/medium-term cash surpluses; such instruments are low risk and generally held to maturity, or otherwise sold to cover specific cash requirements; they are measured at fair value through other consolidated comprehensive income;

- *Hold to Sell*: monetary, debt and equity trading instruments used to dynamically manage cash surpluses not managed under the business models identified above; such instruments are higher risk and traded repeatedly over time; they are measured at fair value through consolidated profit or loss.

Other investments

Other investments (other than those in subsidiaries, associates and joint ventures) are classified as non-current or current assets if they will be kept in the Group's portfolio for a period of more or not more than 12 months, respectively.

Other investments are classified as “financial assets measured at fair value through consolidated profit or loss” (FVTPL), as current assets.
At the purchase time of each investment, IFRS 9 provides for the irrevocable option to recognize these investments in "financial assets measured at fair value through other consolidated comprehensive income" (FVTOCI) as non-current or current assets.

The other investments classified as “financial assets measured at fair value through other comprehensive income” are measured at fair value; changes in the fair value of these investments are recognized in a special equity reserve under the other components of the statements of comprehensive income (Reserve for financial assets measured at fair value through other comprehensive income), without reclassification to the separate income statement when the financial asset is disposed of or impaired. Dividends, on the other hand, are recognized in the separate consolidated income statements.

Changes in the value of other investments classified as "financial assets at fair value through profit or loss" are recognized directly in the separate consolidated income statements.

Securities other than investments

Securities other than investments included among non-current or current assets, depending on the business model adopted and the contractual flows envisaged, fall among financial assets measured at amortized cost, or measured at fair value through other comprehensive income or at fair value though profit or loss.

Securities other than investments classified as current assets are those that, by decision of the directors, are intended to be kept in the Group's portfolio for a period of not more than 12 months, and are classified:

- as "financial assets measured at amortized cost" (AC) when held to maturity (originally more than 3 months but less than 12 months, or, with an original maturity of more than 12 months but the remaining maturity at the date of purchase is more than 3 months but less than 12 months);
- as "financial assets measured at fair value through other consolidated comprehensive income" (FVTOCI) when held in the scope of a business model whose objective is to sell the financial asset and/or collect the contractual flows. The consolidated "Reserve for financial assets measured at fair value through other comprehensive income" is reversed to the separate consolidated income statements when the financial asset is disposed of or impaired;
- as “financial assets measured at fair value through consolidated profit or loss" (FVTPL) in the other cases.

Cash and cash equivalents

Cash and cash equivalents are recorded, according to their nature, at nominal value or amortized cost.
Cash equivalents are short-term and highly liquid investments that are readily convertible to known amounts of cash, subject to an insignificant risk of change in value and their original maturity or the remaining maturity at the date of purchase does not exceed 3 months.

Impairment of financial assets

At every closing date, assessments are made as to whether there is any objective evidence that a financial asset or a group of financial assets may be impaired.
The impairment of financial assets is based on the expected credit loss model.
In particular:

- impairment on trade receivables and on contract assets is carried out using the simplified approach that involves estimating the loss expected over the life of the receivable at the time of initial recognition and on subsequent measurements. For each customer segment, the estimate is principally made by calculating the average expected uncollectibility, based on historical and statistical indicators, possibly adjusted using forward-looking elements. For some categories of receivables characterized by specific risk elements, specific measurements are made on individual credit positions;
- impairment on financial assets other than trade receivables is carried out on the basis of a general model which estimates expected credit losses over the following 12 months, or over the residual life of the asset in the event of a substantial increase in its credit risk.

Derivatives

As allowed by 'IFRS 9, the TIM Group decided to continue to apply the hedge accounting provisions contained in IAS 39 instead of those of IFRS 9.

Derivatives are used by the TIM Group to manage its exposure to exchange rate and interest rate risks and to diversify the parameters of debt so that costs and volatility can be reduced to within pre-established operational limits.

In accordance with IAS 39, derivative financial instruments qualify for hedge accounting only when:

- at the inception of the hedge, the hedging relationship is formally designated and documented;
- the hedge is expected to be highly effective;
- its effectiveness can be reliably measured;
- the hedge is highly effective throughout the financial reporting periods for which it is designated.

All derivative financial instruments are measured at fair value in accordance with IAS 39.
When derivative financial instruments qualify for hedge accounting, the following accounting treatment applies:

- Fair value hedge – Where a derivative financial instrument is designated as a hedge of the exposure to changes in fair value of an asset or liability due to a particular risk, the gain or loss from re-measuring the hedging instrument at fair value is recognized in the separate consolidated income statements. The gain or loss on the hedged item attributable to the hedged risk adjusts the carrying amount of the hedged item and is recognized in the separate consolidated income statements.
- Cash flow hedge – Where a derivative financial instrument is designated as a hedge of the exposure to variability in cash flows of an asset or liability or a highly probable expected transaction, the effective portion of any gain or loss on the derivative financial instrument is recognized directly in a specific equity reserve (Reserve for hedging instruments). The cumulative gain or loss is removed from equity and recognized in the separate consolidated income statements at the same time the hedged transaction affects the separate consolidated income statements. The gain or loss associated with the ineffective portion of a hedge is recognized in the separate consolidated income statements immediately. If the hedged transaction is no longer probable, the cumulative gains or losses included in the equity reserve are immediately recognized in the separate consolidated income statements.

For derivatives for which a hedging relationship has not been designated, changes in value compared to initial recognition are recognized directly in the separate consolidated income statement.

Financial liabilities

Financial liabilities include financial payables, including payables for advances on assignments of receivables where the assignment does not transfer substantially all the risks and rewards, as well as other financial liabilities, including derivative financial instruments and liabilities in respect of assets recognized under finance leases recognized in accordance with IFRS 16.
In accordance with IFRS 9, they also include trade and other payables.
Reverse factoring transactions are also classified under trade payables. The TIM Group has reverse factoring agreements in place through which TIM gives its bank partners a mandate to pay its suppliers as invoices become due. Suppliers participating in these programmes have the rights to sell (without any cost for the TIM Group) receivables due from the Group. They can exercise this rights at their total discretion and incurring all the costs to benefit from collection before the contractual due date.

Financial liabilities other than derivatives are initially recognized at fair value and subsequently measured at amortized cost.

Financial liabilities hedged by derivative instruments designed to manage exposure to changes in fair value of the liabilities (fair value hedge derivatives) are measured at fair value in accordance with the hedge accounting principles of IAS 39. Gains and losses arising from re-measurement at fair value, to the extent of the hedged component, are recognized in the separate consolidated income statements and are offset by the effective portion of the gain or loss arising from re-measurement at fair value of the hedging instrument.
Financial liabilities hedged by derivative instruments designed to manage exposure to variability in cash flows (cash flow hedge derivatives) are measured at amortized cost in accordance with the hedge accounting principles of IAS 39.

SALES OF RECEIVABLES

The TIM Group carries out sales of receivables under factoring contracts. These sales, in the majority of cases, are characterized by the transfer of substantially all the risks and rewards of ownership of the receivables to third parties, therefore meeting the requirements of IFRS 9 for derecognition. Special service contracts, under which the purchasers grant TIM S.p.A. a mandate to oversee the collection and management of the receivables, have been entered into to maintain the relationship between the Company and its customers.

AMOUNTS DUE FROM CUSTOMERS ON CONSTRUCTION CONTRACTS

Amounts due from customers on construction contracts, regardless of the duration of the contracts, are recognized in accordance with the percentage of completion method and classified under current assets.

INVENTORIES

Inventories are measured at the lower of purchase and production cost and estimated realizable value; the cost is determined using the weighted average cost formula for each movement, while the estimated realizable value is determined by observing general prices at the end of the year. Provision is made for obsolete and slow-moving inventories based on their expected future use and estimated realizable value.

NON-CURRENT ASSETS HELD FOR SALE/DISCONTINUED OPERATIONS

Non-current assets held for sale or disposal groups whose carrying amount will mainly be recovered through sale, rather than through ongoing use, are classified as held for sale and shown separately from other assets and liabilities in the consolidated statements of financial position. The corresponding amounts for the previous year are not reclassified in the consolidated statements of financial position but are instead shown separately in a specific column in the changes in assets and liabilities in the year in which the non-current assets held for sale or the disposal groups are classified as such.
An operating asset sold (*Discontinued Operations*) is a component of an entity that has been disposed of or classified as held for sale and:

- represents a major line of business or geographical area of operations; or
- is part of a single coordinated plan to dispose of a separate major line of business or geographical area of operations; or
- is a subsidiary acquired exclusively with a view to resale.

The results arising from Discontinued Operations – whether disposed of or classified as held for sale – are shown separately in the separate consolidated income statements, net of tax effects. The corresponding values for the previous periods, where present, are reclassified and reported separately in the separate consolidated income statements, net of tax effects, for comparative purposes.
Non-current assets held for sale or disposal groups classified as held for sale are first recognized in compliance with the appropriate IFRS applicable to the specific assets and liabilities and subsequently measured at the lower of the carrying amount and fair value, less costs to sell.
Any subsequent impairment losses are recognized as a direct adjustment to the non-current assets (or disposal groups) classified as held for sale and expensed in the separate consolidated income statements.

An entity shall recognize a gain for any subsequent increase in fair value less costs to sell of an asset, but not in excess of the cumulative impairment loss that has been recognized.
As required by IFRS 5 (*Non-current assets held for sale and discontinued operations*), an entity shall not depreciate (or amortize) a non-current asset while it is classified as held for sale or while it is part of a disposal group classified as held for sale.
The finance expenses and other expenses attributable to the liabilities of a disposal group classified as held for sale must continue to be recognized.

EMPLOYEE BENEFITS

Provision for employee severance indemnity

Employee severance indemnity, mandatory for Italian companies pursuant to Article 2120 of the Italian Civil Code, is deferred compensation and is based on the employees' years of service and the compensation earned by the employee during the service period.
Under IAS 19 (*Employee Benefits*), the employee severance indemnity as calculated is considered a "Defined benefit plan" and the related liability recognized in the statement of financial position (Provision for employee severance indemnities) is determined by actuarial calculations.
The remeasurements of actuarial gains and losses are recognized in other components of the Consolidated Statements of Comprehensive income. Service cost of Italian companies that employ less than 50 employees, as well as interest expenses related to the "time value" component of the actuarial calculations (the latter classified as Finance expenses), are recognized in the separate consolidated income statements.
Starting from January 1, 2007, Italian Law gave employees the choice to direct their accruing indemnity either to supplementary pension funds or leave the indemnity as an obligation of the Company. Companies that employ at least 50 employees should transfer the employee severance indemnity to the "Treasury fund" managed by INPS, the Italian Social Security Institute. Consequently, the Group's obligation to INPS and the contributions to supplementary pension funds take the form, under IAS 19, of a "Defined contribution plan".

Equity compensation plans

The companies of the Group provide additional benefits to certain managers of the Group through equity compensation plans (for example stock options and long-term incentive plans). The above plans are recognized in accordance with IFRS 2 (*Share-Based Payment*).
In accordance with IFRS 2, such plans represent a component of the beneficiaries' compensation. Therefore, for the plans that provide for compensation in equity instruments, the cost is represented by the fair value of such instruments at the grant date, and is recognized in the separate consolidated income statements in "Employee benefits expenses" over the period between the grant date and vesting date with a contra-entry to an equity reserve denominated "Other equity instruments". Changes in the fair value subsequent to the grant date do not affect the initial measurement. At the end of each year, adjustments are made to the estimate of the number of rights that will vest up to expiry. The impact of the change in estimate is recorded as an adjustment to "Other equity instruments" with a contra-entry to "Employee benefits expenses".
For the portion of the plans that provide for the payment of compensation in cash, the amount is recognized in liabilities as a contra-entry to "Employee benefits expenses"; at the end of each year such liability is measured at fair value.

PROVISIONS

The Group records provisions for risks and charges when it has a present obligation, legal or constructive, to a third party, as a result of a past event, when it is probable that an outflow of Group resources will be required to satisfy the obligation and when the amount of the obligation can be estimated reliably.
If the effect of the time value is material, and the payment date of the obligations can be reasonably estimated, provisions to be accrued are the present value of the expected cash flows, taking into account the risks associated with the obligation. The increase in the provision due to the passage of time is recognized in the separate consolidated income statements as "Finance expenses".

GOVERNMENT GRANTS

Government grants are recognized when there is a reasonable certainty that they will be received and that the Group will satisfy all the conditions established for their granting by the government, government entities and equivalent local, national or international entities.
Government grants are recognized in the separate income statement, on a straight-line basis, over the periods in which the Group recognizes the expenses that the grants are intended to offset as costs.

Government grants related to assets received for the acquisition and/or construction of non-current tangible assets are recorded as deferred income in the statement of financial position and credited to the separate income statement on a straight-line basis over the useful life of the plants that the grants relate to.

TREASURY SHARES

Treasury shares are recognized as a deduction from equity. In particular, the treasury shares are reported as a deduction from the share capital issued in the amount corresponding to the "accounting par value", that is the ratio of total share capital and the number of issued shares, while the excess cost of acquisition over the accounting par value is presented as a deduction from "Other reserves and retained earnings (accumulated losses), including profit (loss) for the year".

FOREIGN CURRENCY TRANSACTIONS

Transactions in foreign currencies are recorded at the foreign exchange rate prevailing at the date of the transaction. Monetary assets and liabilities denominated in foreign currencies are translated at the foreign exchange rate prevailing at the statement of financial position date. Exchange differences arising from the settlement of monetary items or from their conversion at rates different from those at which they were initially recorded during the year or at the end of the prior year, are recognized in the separate consolidated income statements.

REVENUES

Revenues are the gross inflows of economic benefits during the period arising in the course of the ordinary activities of an entity. Amounts collected on behalf of third parties such as sales taxes, goods and services taxes and value added taxes are not economic benefits which flow to the entity and do not result in increases in equity. Therefore, they are excluded from revenues.

The process underlying recognition of revenues follows the steps set out in IFRS 15:

- **identification of the contract:** takes place when the parties approve the contract (with commercial substance), and identify the respective rights and obligations: in other terms, the contract must be legally binding, the rights to receive goods and/or services and the terms of payment can be clearly identified and the Group considers receipt of payment as probable;
- **identification of the** performance obligations: the main *performance obligations* identified, i.e. promises to transfer goods and services that are distinct, are services rendered (including voice and data traffic and ICT solutions) to retail customers, services rendered to wholesale customers and sale of products;
- **determination of the transaction price:** is the total amount contracted with the other party regarding the entire contractual term; the Group has determined that the contractual term is the one arising from the contractual obligations between the parties or, in lack of these obligations, it is by convention one month;
- **allocation of the** transaction price **to the** performance obligations**:** the allocation is made proportionately to the respective *stand alone selling prices* calculated based on the list prices (if present) or estimated by applying an appropriate margin to the cost of purchase/production of the good/service.

  Revenues from activating the connectivity service are not a performance obligation; they are therefore allocated to the contractual performance obligations (typically to services).
  For offerings which include the sale of devices and service contracts (bundle offerings), the Group allocates the contractual transaction price to the performance obligations of the contract, proportionately to the stand alone selling prices of the single performance obligations;

- **recognition of revenues:** revenues are stated net of discounts, allowances, and returns in connection with the characteristics of the type of revenue:

  - **Revenues from services rendered**

    Revenues from services rendered are recognized in the separate income statements according to the stage of completion of the service, that is based on actual consumption.
    Traffic revenues from interconnection and roaming are reported gross of the amounts due to other TLC operators.
    Revenues for delivering information or other content are recognized on the basis of the amount invoiced to the customer, when the service is rendered directly by the Group. In the event that the Group is acting as agent (for example non-geographic numbers) only the commission received from the content provider is recognized as revenue.

Revenues from prepaid traffic are recorded on the basis of effective consumption. Deferred revenues for traffic already collected but not yet consumed are recorded in “Trade and miscellaneous payables and other current liabilities” in the consolidated statements of financial position.
Revenues on construction contracts are recognized based on the stage of completion (percentage of completion method).
Revenues for services rendered are generally invoiced and collected monthly (for Retail customers) or in 40-60 days (for wholesale customers).

- **Revenues from sales**
  Revenues from sales (telephone and other equipment) are recognized upon delivery when control of the assets is transferred to the customers.
  The devices sold separately from the services are invoiced at the time of delivery; collection takes place on demand or based on installment plans (up to 48 monthly installments). The devices sold as part of bundle offerings are invoiced at the time of delivery and usually collected in 24 monthly installments.

The recognition of revenues can generate the recognition of an asset or liability deriving from contracts. In particular:

- **Contract assets** are the rights to a consideration in exchange for goods or services that have been transferred to the customer, when the rights is conditioned on something other than the passage of time.
- **Contract liabilities** are the obligation to transfer goods or services to the customer for which the Group has received (or for which it is due) a consideration from the customer.

Contract costs (incremental costs of obtaining a contract and costs to fulfill a contract; mainly technical activation costs and costs for sales network commissions) are deferred and recognized through separate consolidated profit or loss depending on the expected term of the contractual relationship with the customers. The TIM Group avails of the practical expedient, permitted under IFRS 15, of recognizing the incremental costs of obtaining a contract in the consolidated income statement if the amortization period is one year or less.

The recoverability of contract assets and deferred costs is periodically assessed.

RESEARCH COSTS AND ADVERTISING EXPENSES

Research costs and advertising expenses are charged directly to the separate consolidated income statements in the year in which they are incurred.

FINANCE INCOME AND EXPENSES

Finance income and expenses are recognized on an accrual basis and include: interest accrued on the related financial assets and liabilities using the effective interest rate method, the changes in fair value of derivatives and other financial instruments measured at fair value through profit or loss, gains and losses on foreign exchange and financial instruments (including derivatives).

DIVIDENDS

Dividends received from companies other than subsidiaries, associates and joint ventures are recognized in the separate consolidated income statements in the year in which they become receivable following the resolution by the shareholders' meeting for the distribution of dividends of the investee companies.
Dividends payable to third parties are reported as a change in equity in the year in which they are approved by the shareholders' meeting.

INCOME TAX EXPENSE (CURRENT AND DEFERRED)

Income tax expense includes all taxes calculated on the basis of the taxable income of the companies of the Group.
Current and deferred income tax expense is calculated using all the elements and information available at the reporting date, taking into account current laws and considering all the elements that could give rise to uncertainties in the determination of the amounts due to the tax authorities, as provided for in IFRIC 23.

The income tax expense is recognized in the separate consolidated income statements, except to the extent that they relate to items directly charged or credited to equity, in which case the related tax effect is recognized in the relevant equity reserves. In the Statement of comprehensive income, the amount of income tax expense relating to each item included as "Other components of the Consolidated Statements of Comprehensive income" is indicated.
The income tax expense that could arise on the remittance of a subsidiary's undistributed earnings is only recognized where there is the actual intention to remit such earnings.
Deferred tax liabilities / assets are recognized using the "Balance sheet liability method". They are calculated on all temporary differences that arise between the tax base of an asset or liability and the carrying amounts in the consolidated financial statements, except for non tax-deductible goodwill and for those differences related to investments in subsidiaries which will not reverse in the foreseeable future. Deferred tax assets relating to unused tax loss carryforwards are recognized to the extent that it is probable that future taxable income will be available against which they can be utilized. Current and deferred tax assets and liabilities are offset when the income taxes are levied by the same tax authority and there is a legally enforceable rights of offset. Deferred tax assets and liabilities are determined based on enacted tax rates in the respective jurisdictions in which the Group operates that are expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled.
Taxes, other than income taxes, are included in "Other operating expenses".

EARNINGS PER SHARE

Basic earnings per ordinary share is calculated by dividing the Group's profit attributable to ordinary shares by the weighted average number of ordinary shares outstanding during the year, and excluding treasury shares. Similarly, basic earnings per savings share is calculated by dividing the Group's profit attributable to savings shares by the weighted average number of savings shares outstanding during the year.
For diluted earnings per ordinary share, the weighted average number of shares outstanding during the year is adjusted by all dilutive potential shares (for example, the exercise of rights on shares with dilutive effects). The Group profit is also adjusted to reflect the impact of these transactions net of the related tax effects.

USE OF ESTIMATES

The preparation of consolidated financial statements and related disclosure in conformity with IFRS requires management to make estimates and assumptions based also on subjective judgments, past experience and assumptions considered reasonable and realistic in relation to the information known at the time of the estimate. Such estimates have an effect on the reported amount of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements, as well as the amount of revenues and costs during the year. Actual results could differ, even significantly, from those estimates owing to possible changes in the factors considered in the determination of such estimates. Estimates are reviewed periodically.
The most significant accounting estimates that involve a high level of subjective assumptions and judgements by directors are set out below.

Financial statement area	Accounting estimates
Goodwill impairment	The impairment test on goodwill is carried out by comparing the carrying amount of cash-generating units and their recoverable amount. The recoverable amount of a cash-generating unit is the higher of fair value, less costs to sell, and its value in use. This complex valuation process entails the use of methods such as the discounted cash flow method which uses assumptions to estimate cash flows. The recoverable amount depends significantly on the discount rate used in the discounted cash flow model as well as the expected future cash flows and the growth rate used for the extrapolation. The key assumptions used to determine the recoverable amount for the different cash-generating units, including a sensitivity analysis, are detailed in the Note "Goodwill".
Impairment of tangible and intangible assets with finite useful lives and right-of-use assets	At the end of each reporting period, the Group assesses whether there is any indication that an asset – whether tangible or intangible with finite useful lives or a right-of-use – may be impaired. Both internal and external sources of information are used for this purpose. Identifying the impairment indicators, estimating the future cash flows and calculating the fair value of each asset requires Management to make significant estimates and assumptions in calculating the discount rate to be used, and the useful life and residual value of the assets. These estimates can have a significant impact on the fair value of the assets and on the amount of any impairment write-downs.
Business combinations	The recognition of business combinations requires that assets and liabilities of the acquiree be recorded at their fair value at the acquisition date of control, as

	well as the possible recognition of goodwill, through the use of a complex process in determining such values.
Lease liabilities and right-of-use assets	The value of lease liabilities and corresponding rights-of-use is determined by calculating the present value of the lease payments, also bearing in mind whether the renewal of the lease is reasonably certain.
Capitalization/deferment of costs	The capitalization/deferment of internal and external costs is a process that entails elements of estimation and valuation. Specifically, it involves the valuation of: i) the likelihood that capitalized costs will be recovered through correlated future revenues; and ii) the effective increase in the future economic benefits embodied in the related asset.
Provision for bad debts	Impairment on trade receivables and on the contract assets is carried out using the simplified approach that involves estimating the loss expected over the life of the receivable at the time of initial recognition and on subsequent measurements. For each customer segment, the estimate is principally made by calculating the average expected uncollectibility, based on historical and statistical indicators, possibly adjusted using forward-looking elements. For some categories of receivables characterized by specific risk elements, specific measurements are made on individual credit positions.
Depreciation and amortization	Changes in the economic conditions of the markets, technology and competitive forces could significantly affect the estimated useful lives of tangible and intangible non-current assets and may lead to a difference in the timing, and thus on the amount of depreciation and amortization expense.
Accruals, contingent liabilities and employee benefits	As regards the provisions for restoration costs the estimate of future costs to dismantle tangible assets and restore the site is a complex process that requires an assessment of the liability arising from such obligations which seldom are entirely defined by law, administrative regulations or contract clauses and which normally are to be complied with after an interval of several years. The accruals related to legal, arbitration and fiscal disputes as well as regulatory proceedings are the result of a complex estimation process based upon the probability of an unfavorable outcome. Employee benefits, especially the provision for employee severance indemnities, are calculated using actuarial assumptions; changes in such assumptions could have a material impact on such liabilities.
Revenues	The recognition of revenues is influenced by estimates of the amount of discounts, rebates and returns to be reported as a direct adjustment to revenues, as well as the methods for defining individual product or service stand alone selling prices and for determining the duration of the contract when there are renewal options.
Contract costs (IFRS 15)	The recognition of the costs of obtaining and fulfilling contracts is influenced by the estimated expected duration of the relationship with the customer, calculated on the basis of the historical turnover indexes and future forecasts. However, this estimate is subject to fluctuations and could only represent customers' future behavior in a limited way, especially if there are new commercial offers or changes in the competitive environment.
Income tax expense (current and deferred)	Income taxes (current and deferred) are calculated in each country in which the Group operates according to a prudent interpretation of the tax laws in effect. This process sometimes involves complex estimates to determine taxable income and deductible and taxable temporary differences between the carrying amounts and the taxable amounts. In particular, deferred tax assets are recognized to the extent that future taxable income will be available against which they can be utilized. The measurement of the recoverability of deferred tax assets, recognized based on both unused tax loss carry-forwards to future years and deductible differences, takes into account the estimate of future taxable income and is based on conservative tax planning.
Derivative instruments and equity instruments	The fair value of derivative instruments and equity instruments is determined both using valuation models which also take into account subjective measurements such as, for example, cash flow estimates, expected volatility of prices, etc., or on the basis of either prices in regulated markets or quoted prices provided by financial counterparts. For further details, please also see the Note "Supplementary disclosures on financial instruments".

As per IAS 8 (Accounting policies, changes in accounting estimates and errors) paragraph 10, in the absence of a Standard or Interpretation that specifically applies to a transaction, management shall use its judgement in developing and applying an accounting policy that results in consolidated financial statements that represent faithfully the financial position, financial performance and cash flows of the Group, reflect the economic substance of transactions, and are neutral, prudential and complete in all material aspects.

NEW STANDARDS AND INTERPRETATIONS ENDORSED BY THE EU AND IN FORCE FROM JANUARY 1, 2019

As required by IAS 8 (Accounting Policies, Changes in Accounting Estimates and Errors), the following is a brief description of the IFRS in force commencing as of January 1, 2019.
The impacts arising from the application, as of January 1, 2019, of IFRS 16 (Leases) are instead set out in the subsequent paragraph "Adoption of the new IFRS 16 (Leases) standard".

Amendments to IFRS 9 (Financial Instruments): Prepayment Features with Negative Compensation

On March 22, 2018, Regulation EU 2018/498 was issued, endorsing some limited amendments to IFRS 9 (Financial Instruments) at EU level.
The amendments allow the entity to measure financial assets that are "prepayable with negative compensation" (e.g. debt instruments where the borrower is allowed to repay early for an amount that may be less than the residual debt including interest due) at amortized cost or at fair value through other comprehensive income instead of at fair value through profit or loss.
The adoption of these amendments had no effect on the consolidated financial statements at December 31, 2019.

IFRIC 23 – Uncertainty over income tax treatments

IFRS 23 (Uncertainty over income tax treatments) was endorsed by the European Union on October 23, 2018 with Regulation (EU) 2018/1595. This interpretation governs how to deal with uncertainty in the accounting of income taxes. Indeed, IAS 12 Income Taxes specifies how to account for current and deferred tax assets and liabilities, but not how to represent the effects of uncertainty.
For example, there may be doubts:

- on how tax law applies to a particular transaction or circumstance, or
- whether the tax authorities will accept the treatment chosen/applied by the entity. If an entity concludes it is not probable that the taxation authority will accept the tax treatment, the entity must use estimates (most likely or expected value) to determine the tax treatment (taxable profits, tax base, unused tax losses, unused tax credits, tax rates, etc.). The decision must be based on the method that best enables the outcome of the uncertainty to be assessed.

The adoption of these amendments had no effect on the consolidated financial statements at December 31, 2019, notwithstanding the reclassification of income tax provisions to payables.

Amendments to IAS 28 (Investments in Associates and Joint Ventures): long-term interests in associates and joint ventures

On February 8, 2019, Regulation EU 2019/237 was issued, endorsing some limited amendments to IAS 28 (Investments in Associates and Joint Ventures) at EU level.
IFRS 9 excludes investments in associates and joint ventures accounted for in accordance with IAS 28. Accordingly, an entity applies IFRS 9 to other financial instruments held in associates and joint ventures, including long-term interests (e.g. financial receivables) not subject to the equity but which, in substance, are part of the net investment in those associates and joint ventures.
The adoption of these amendments had no effect on the consolidated financial statements at December 31, 2019.

Amendments to IAS 19 – Employee benefits: plan amendment, curtailment or settlement

On March 13, 2019, Regulation EU 2019/402 was issued, endorsing some limited amendments to IAS 19 (Employee Benefits) at EU level. These changes relate to amendments, curtailments or settlements of defined benefit plans.
The amendments require an entity, in the event of plan amendment, curtailment or settlement, to use the actuarial assumptions of this remeasurement to determine the current service cost and net interest for the remaining reporting period after the plan amendment.
The adoption of these amendments had no effect on the consolidated financial statements at December 31, 2019.

Improvements to the IFRS (2015–2017 cycle)

On March 14, 2019, Regulation EU 2019/412 was issued, endorsing some improvements to the IFRS for the 2015-2017 cycle at EU level. In particular these included:

- Amendments to IFRS 3 *Business Combinations* and IFRS 11 *Joint Arrangements*: the amendments to IFRS 3 clarify that when an entity, which is already part of a joint operation, obtains control of that operation that constitutes a business, the entity shall remeasure its previously held interest in the joint operation. The amendments to IFRS 11 clarify that when an entity in a joint operation obtains joint control of that operation that constitutes a business, the entity does not remeasure the interests previously held in that joint operation.

- Amendments to IAS 12 *Income taxes*: the amendments clarify that an entity must recognize taxes on dividends in the separate income statement, or in other comprehensive income or equity, depending on how the transaction/event that resulted in the distributable profits that generated the dividends was accounted for.
- Amendments to IAS 23 Borrowing costs: the amendments clarify that if any specific financing remains outstanding after the associated asset is ready for its intended use or sale, that financing becomes part of the funds that an entity uses when calculating the capitalization rate on general financing.

The adoption of these amendments had no effect on the consolidated financial statements at December 31, 2019.

ADOPTION OF THE NEW IFRS 16 (LEASES) STANDARD

This section provides an overview of IFRS 16 (Leases) main disclosure elements and of the impacts arising from the application of the standard starting from January 1, 2019.
IFRS 16 (Leases) was endorsed by the European Union on October 31, 2017 with the Commission Regulation (EU) 2017/1986. IFRS 16 has replaced IAS 17 (Leases) and the relative interpretations (IFRIC 4 Determining Whether an Arrangement Contains a Lease; SIC 15 Operating Leases – Incentives; SIC 27 Evaluating the Substance of Transactions Involving the Legal Form of a Lease). During 2019, the IFRIC also expressed an opinion on the duration of leasing contracts, leasehold improvements, the incremental rate of financing and subsoil exploitation rights; the application of the standard also took account of these interpretations.
As allowed by the new standard, the TIM Group has applied the modified retrospective method with the recognition of the cumulative effect of the standard first-time adoption as an adjustment to the opening balance of equity at the data of the first application, without restating prior comparative periods.
In accordance with IFRS 16, lease liabilities are presented through the recognition of a financial liability in the statement of financial position at the present value of future lease payments, against the recognition of a right-of-use asset of the leased asset. This liability is subsequently adjusted over the lease contract term in order to reflect the payment of interest on the debt and the repayment of the principal; the right-of-use of the leased asset is amortized over the contract term. The application of IFRS 16 determines lower operating costs and higher amortization/depreciation and financial charges in comparison with IAS 17 which required the recognition of operating costs for non-financial leases; moreover, according to IFRS 16 for the lessees the distinction between financial and operating leases doesn't exist any longer.
As of January 1, 2019 (transition date), the TIM Group has applied a modified retrospective method by recognizing, for leases previously classified as operating leases (under IAS 17), a financial liability and a corresponding rights of use, measured on the basis of the remaining lease payments at the transition date.

In the TIM Group the agreements that fall within the scope of IFRS 16 mainly refer to:

- land and buildings for office and industrial use,
- infrastructure sites for the mobile network and
- network infrastructure (when not services).

With reference to the options and exemptions provided for by IFRS 16, the TIM Group has adopted the following choices:

- IFRS 16 is not usually applied to intangible assets or to short-term (i.e. less than 12 months) contracts with low unit value;
- rights of use and financial liabilities relating to lease agreements have been classified on specific line items in the statement of financial position;
- any service contract component included in the lease payments have been generally excluded from the IFRS 16 scope;
- contracts with similar characteristics have been assessed using a single discount rate;
- leases previously recognized as finance leases in accordance with IAS 17 have retained their previous measurements.

The impacts during transition are not indicative of future developments since the choices of capital allocation might change with resulting economic and financial effects in the financial statements.

IMPACTS ARISING FROM THE ADOPTION OF IFRS 16

Impacts on the consolidated statements of financial position at 1/1/2019 (transition date)

For the TIM Group, adoption of IFRS 16 entailed higher non-current assets due to the recognition of the “Rights of Use” as a balancing entry to the higher financial liabilities recognized. In detail, the impacts of the transition on the main line items of the consolidated statements of financial position are shown below.

(millions of euros)	12/31/2018	Reclassification (*)	IFRS 16 impacts (**)	1/1/2019 Restated
Assets				
Non-current assets				
Intangible assets	35,658	(445)	–	35,213
Tangible assets	16,146	(1,923)	–	14,223
Rights of use assets	–	2,368	3,503	5,871
Other non-current assets				
Non-current financial receivables arising from lease contracts	54	–	6	60
Miscellaneous receivables and other non-current assets	2,291	–	–	2,291
Deferred tax assets	1,136	–	–	1,136
Current assets				
Trade and miscellaneous receivables and other current assets	4,706	–	(29)	4,677
Current financial receivables arising from lease contracts	70	–	4	74
Total Assets	**65,619**	**–**	**3,484**	**69,103**
Equity and Liabilities				
Equity				
Equity attributable to Owners of the Parent	19,528	–	–	19,528
Non-controlling interests	2,219	–	–	2,219
Total Equity	**21,747**	**–**	**–**	**21,747**
Non-current liabilities				
Non-current financial liabilities for lease contracts	1,740	–	3,021	4,761
Deferred tax liabilities	192	–	–	192
Current liabilities				
Current financial liabilities for lease contracts	208	–	542	750
Trade and miscellaneous payables and other current liabilities	6,901	–	(79)	6,822
Total Equity and Liabilities	**65,619**	**–**	**3,484**	**69,103**

(*) The column includes reclassification of rights of use assets (2,368 million euros) of: a) Indefeasible Rights of Use – IRU (412 million euros) previously recognized as intangible assets; b) Rights of use on infrastructure in Brazil – “LT Amazonas” (33 million euros) previously recognized as intangible assets; c) assets held under finance leases (1,895 million euros), previously recognized as tangible assets; d) improvements to third-party assets (28 million euros) previously recognized as tangible assets.

(**) The column includes recognition of the rights of use assets, the related financial debt and related items consequent to IFRS 16.

The amount of net financial Liabilities (Assets) recognized for Leases at January 1, 2019 is the following:

(millions of euros)	
Financial liabilities for lease contracts payable, non-current and current, at December 31, 2018 (2018 financial statements)	1,948
Other financial liabilities recognized for leases at January 1, 2019	3,563
Total financial liabilities at January 1, 2019	**5,511**
Financial assets for lease contracts receivable, non-current and current, at December 31, 2018 (2018 financial statements)	(124)
Other financial assets recognized for leases at January 1, 2019	(10)
Total financial assets at January 1, 2019	**(134)**
Net financial Liabilities (Assets) for leases at January 1, 2019	**5,377**

Adjusted net financial debt

(millions of euros)

Adjusted net financial debt at December 31, 2018	**25,270**
Other financial liabilities recognized for leases at January 1, 2019	3,563
Other financial asset recognized for leases at January 1, 2019	(10)
Adjusted net financial debt at January 1, 2019	**28,823**

Below is a reconciliation of the differences between the commitments existing at December 31, 2018 arising from operating leases (in application of IAS 17) and the lease liabilities recognized in the statement of financial position at January 1, 2019 (in application of IFRS 16).

(millions of euros)

Non-cancellable operating leases at December 31, 2018 (nominal value)	(a)	**495**
Non-cancellable operating leases not subject to IFRS 16 (nominal value)	(b)	137
Non-cancellable operating leases subject to IFRS 16 (nominal value)	(c) = (a) - (b)	**358**
Non-cancellable leases - impact of discounting	(d)	19
Present value of non-cancellable operating leases	(e) = (c) - (d)	**339**
Land component on finance lease IAS 17 (present value)	(f)	667
Real estate contracts (including renewal option effects) (present value)	(g)	1,058
Co-siting contracts (including renewal option effects) (present value)	(h)	1,047
Other contracts (present value)	(i)	452
Other lease liabilities at January 1, 2019	(l) = (e) + (f) + (g) + (h) + (i)	**3,563**

The average discount rate applied to the lease liabilities recognized in the statements of financial position, at the date of initial application (January 1, 2019), was 5.6%.

Impact on the main separate consolidated income statement line items and on the consolidated statements of financial position for the year 2019

The breakdown of the impact of IFRS 16 on key consolidated income statement figures for the year 2019 compared with the comparable year 2019 is shown below.

(millions of euros)		Year 2019 comparable (*) (a)	IFRS 16 impact (b)	Year 2019 (a+b)
Revenues	(1)	**17,977**	**(3)**	**17,974**
Operating expenses	(2)	(11,421)	665	(10,756)
EBITDA		**7,489**	**662**	**8,151**
Depreciation of finance lease assets	(3)	(187)	(535)	(722)
Gains/(losses) on disposals of non-current assets	(4)	(40)	(9)	(49)
EBIT		**3,058**	**117**	**3,175**
Interest expenses on lease liabilities	(5)	(157)	(199)	(356)
Profit (loss) before tax from continuing operations		**1,821**	**(82)**	**1,739**
Income tax expense	(6)	(533)	20	(513)
Profit (loss) for the year		**1,304**	**(62)**	**1,242**
Attributable to:				
Owners of the Parent		**962**	**(46)**	**916**
Non-controlling interests		342	(16)	326

(*) In the comparable year 2019, the signed lease contracts starting from January 1, 2019 are always classified as operating leases for IAS 17 purposes

The different nature, qualification and classification of the expenses, with recognition of the "Amortization of rights of use assets" and of "Financial expense for interest relating to rights of use " instead of "Lease and rental costs - payments for operating leases" according to IAS 17, has determined a positive impact on EBITDA equal to 662 million euros.

Application of **IFRS 16** to lease contracts particularly has determined:

(1) reduction of **Revenues** due to the different accounting treatment of the payments relating to the subleasing of commercial products;

(2) reduction of **Operating expenses** for the different accounting treatment of the payments relating to the lease contracts of land, building for office and industrial use, infrastructure sites for the mobile telephony network and network infrastructure (when not classifiable as services);

(3) the increase in **Amortization** of rights of use assets consequent to recognition of higher non-current assets ("Rights of Use asset") amortized for the term of the contract;

(4) the increase in **Losses on disposals of non-current assets** due to the early termination of contracts already classified as finance leases;

(5) the increase in **Finance expenses** for interest due to the recognition of higher financial liabilities connected to the rights of use assets;

(6) the change in **Income tax expense** that shows the income tax effect of the changes illustrated above.

The impact of the adoption of the new accounting standard (IFRS 16) on the **Basic and diluted Earnings per ordinary share and savings shares** for the year 2019 is nil.

The impact on the main economic indicators resulting from the application of IFRS 16 on individual operating segments was as follows:

(millions of euros)	Year 2019				
	Domestic	Brazil	Other Operations	Adjustments and eliminations	Consolidated Total
Revenues	**(3)**	**–**	**–**	**–**	**(3)**
EBITDA	**363**	**298**	**1**	**–**	**662**
EBIT	**35**	**82**	**–**	**–**	**117**

The breakdown of the impact of IFRS 16 on the main consolidated statements of financial position figures at December 31, 2019 is shown below.

(millions of euros)	12/31/2019 comparable (a)	IFRS 16 impact (b)	12/31/2019 (c=a+b)
Assets			
Non-current assets			
Intangible assets	30,750	–	30,750
Tangible assets	14,011	–	14,011
Rights of use assets	2,334	3,160	5,494
Other non-current assets	5,734	7	5,741
Total Non-current assets	**52,829**	**3,167**	**55,996**
Current assets	**9,484**	**(23)**	**9,461**
Discontinued operations /Non-current assets held for sale	**4,084**	**563**	**4,647**
Total Assets	**66,397**	**3,707**	**70,104**
Equity and Liabilities			
Equity			
Equity attributable to owners of the Parent	20,322	(42)	20,280
Non-controlling interests	2,359	(13)	2,346
Total Equity	**22,681**	**(55)**	**22,626**
Non-current liabilities	**32,770**	**2,780**	**35,550**
Current liabilities	**10,710**	**413**	**11,123**
Liabilities directly associated with Discontinued operations/Non-current assets held for sale	**236**	**569**	**805**
Total Liabilities	**43,716**	**3,762**	**47,478**
Total Equity and Liabilities	**66,397**	**3,707**	**70,104**

The breakdown of the impact of IFRS 16 on consolidated net financial debt is shown below.

Adjusted net financial debt

(millions of euros)	12/31/2019
Comparable adjusted net financial debt	**23,839**
Additional financial liabilities recognized in application of IFRS 16	3,270
Additional financial assets recognized in application of IFRS 16	(12)
Other financial liabilities recognized in application of IFRS 16 Discontinued operations/Non-current assets held for sale	571
Adjusted net financial debt	**27,668**

NEW STANDARDS AND INTERPRETATIONS ISSUED BY IASB BUT NOT YET APPLICABLE

At the date of preparation of these consolidated financial statements, the IASB had issued the following new standards / interpretations which have not yet come into force:

	Mandatory application starting from
New Standards and Interpretations not yet endorsed by the EU	
Amendments to IFRS 3 (Business Combinations)	1/1/2020
Amendments to IAS 1 and IAS 8 (Definition of Material)	1/1/2020
Amendments to References to the Conceptual Framework in IFRS Standards	1/1/2020
Interest-rate benchmark reform: Amendments to IFRS 9 (Financial Instruments), IAS 39 (Financial Instruments: Recognition and Measurement) and IFRS 7 (Financial Instruments: disclosures)	1/1/2020

The potential impacts on the Group consolidated financial statements from application of these standards and interpretations are currently being assessed.

In particular, with regard to the process of reforming benchmark interest rates, no impact on the hedges documented in Hedge Accounting is expected in 2020 because of:

(i) Regulation 2020/34 published on 15 January 2020 by the EU, which introduces a series of amendments to IAS 39, IFRS 9 and IFRS 7 on benchmark parameters for interest rates, aimed at allowing financial and accounting management of hedges in full alignment with the past, at least until the replacement of the IBOR parameters becomes effective in 2022;

(ii) the nature of the Group's hedges; mainly fixed-rate bonds hedged by derivatives not subject to clearing mechanisms. However, more in-depth analysis will be devoted to the hedging of loans with banks and Group companies.

In particular, the process of replacing IBOR parameters in all markets in which the Group operates will be closely monitored, with simultaneous checks on contracts and fallback clauses of the financial instruments affected by the reform – in line with the developments provided in this area by ISDA and similar bodies – as well as on the related risk exposures, so as to ensure an adequate and timely response to the changes induced by the reform, both at the management and accounting levels.

NOTE 3
SCOPE OF CONSOLIDATION

INVESTMENTS IN CONSOLIDATED SUBSIDIARIES

Composition of the Group

TIM holds a majority of the voting rights in all the subsidiaries included in the scope of consolidation.
A complete list of consolidated subsidiaries is provided in the Note "List of companies of the TIM Group".

SCOPE OF CONSOLIDATION

The changes in the scope of consolidation at December 31, 2019 compared to December 31, 2018 are listed below.

Entry/exit/merger of subsidiaries into/out of the scope of consolidation:

Company		**Business Unit**	**Month**
Entry:			
TIS LAGOS Limited	New acquisition	Domestic	July 2019
Exit:			
PERSIDERA S.p.A.	Disposal	Domestic	December 2019
TIMB 2 S.r.l.	Disposal	Domestic	December 2019
Mergers:			
A.C.C. S.r.l.	Merged into Telecontact Center S.p.A.	Domestic	January 2019
Olivetti Scuola Digitale S.r.l.	Merged into Olivetti S.p.A.	Domestic	June 2019
NOVERCA S.r.l.	Merged into TIM S.p.A.	Domestic	November 2019

The breakdown by number of subsidiaries and associates of the TIM Group is as follows:

	12/31/2019		
Companies:	**Italy**	**Outside Italy**	**Total**
subsidiaries consolidated line-by-line	16	43	59
joint ventures accounted for using the equity method	-	-	-
associates accounted for using the equity method	12	-	12
Total companies	**28**	**43**	**71**

	12/31/2018		
Companies:	**Italy**	**Outside Italy**	**Total**
subsidiaries consolidated line-by-line	21	42	63
joint ventures accounted for using the equity method	1	-	1
associates accounted for using the equity method	16	-	16
Total companies	**38**	**42**	**80**

Further details are provided in the Note "List of companies of the TIM Group".

SUBSIDIARIES WITH SIGNIFICANT NON-CONTROLLING INTERESTS

At December 31, 2019, the TIM Group held investments in subsidiaries, with significant non-controlling interests, in relation to the TIM Brasil group.

The figures provided below, stated before the netting and elimination of intragroup accounts, have been prepared in accordance with IFRS and reflect adjustments made at the acquisition date to align the assets and liabilities acquired to their fair value.

Tim Brasil group – Brazil Business Unit

Non-controlling interests accounted at December 31, 2019 for 33.4% of the capital of Tim Participações, which in turn holds 100% of the capital of the operating company Tim S.A., coinciding with their corresponding voting rights.

Financial Position Data Tim Brasil group

(millions of euros)	12/31/2019	12/31/2018
Non-current assets	7,538	6,257
Current assets	1,896	1,387
Total Assets	**9,434**	**7,644**
Non-current liabilities	2,104	959
Current liabilities	1,847	1,678
Total Liabilities	**3,951**	**2,637**
Equity	**5,483**	**5,007**
of which Non-controlling interests	*1,681*	*1,518*

Income statement Data Tim Brasil group

(millions of euros)	2019	2018
Revenues	3,937	3,943
Profit (loss) for the year	**799**	**586**
of which Non-controlling interests	*272*	*200*

Financial Data Tim Brasil group

Aggregate cash flows generated a positive amount in 2019 of 262 million euros, with a negative exchange rate effect of 12 million euros, without which cash flow would have generated a positive amount of 274 million euros.
In 2018, aggregate cash flows generated a negative amount of 512 million euros, essentially due to a negative exchange rate effect of 67 million euros, without which cash flow would have generated a negative 445 million euros.

Lastly, again with reference to the TIM Brasil group and in accordance with the amount shown in the Report on Operations - “Main risks and uncertainties” section, the main risk factors that could lead, even significantly, to restrictions on the operations of the TIM Brasil group are listed below:

- strategic risks (risks related to macroeconomic and political factors, as well as risks associated with foreign exchange restrictions and competition);
- operational risks (risks related to business continuity and development of the fixed and mobile networks, as well as risks associated with litigation and disputes);
- financial risks;
- Regulatory and Compliance risks.

NOTE 4
GOODWILL

Goodwill shows the following breakdown and changes for 2018 and 2019:

(millions of euros)	12/31/2017	Reclassifications	Increase	Decrease	Impairments	Exchange differences	12/31/2018
Domestic	28,489				(2,590)		25,899
Core Domestic	28,077				(2,450)		25,627
International Wholesale	412				(140)		272
Brazil	973					(103)	870
Other Operations	–						–
Total	**29,462**	**–**	**–**	**–**	**(2,590)**	**(103)**	**26,769**

(millions of euros)	12/31/2018	Increase	Decrease	Impairments	Exchange differences	Held for sale Inwit	12/31/2019
Domestic	25,899	–	(68)	–	–	(3,600)	22,231
Brazil	870				(18)		852
Other Operations	–						–
Total	**26,769**	**–**	**(68)**	**–**	**(18)**	**(3,600)**	**23,083**

In accordance with IAS 36, goodwill is not subject to amortization, but is tested for impairment on at least an annual basis, when preparing the company's consolidated financial statements.

In 2019, Goodwill fell by 3,686 million euros, from 26,769 million euros at the end of 2018 to 23,083 million euros at December 31, 2019, broken down as follows:

- a fall of 3,600 million euros within the Domestic Business Unit, due to the allocation of goodwill to Inwit presented as an "Asset held for sale"; the amount of the allocation has been determined in accordance with the provisions of IAS 36 and according to the relative fair value method. As known, on December 19, 2019 the Shareholders' Meeting of Infrastrutture Wireless Italiane S.p.A. (Inwit) approved the merger by incorporation of Vodafone Towers S.r.l. into Inwit. The transaction, preparatory to the creation of Italy's leading Tower Operator, entails the sale by the TIM Group of a stake such as to determine the loss of its controlling interest in Inwit. Therefore, as at December 31, 2019, Inwit is presented as an "Asset held for sale";
- there was a further fall of 68 million euros in goodwill allocated to the Domestic Business Unit due to the sale of Persidera S.p.A., after the demerger into two separate entities. The first entity (Persidera S.p.A.), is the holder of the five digital terrestrial agreement frequencies and the related revenue-generating and employee contracts, was sold entirely to F2i TLC 2 S.p.A.; the second entity (NetCo S.p.A.), with the entire network infrastructure and its employees, was sold it its entirety to EI Towers S.p.A.; the amount of the allocation has been determined in accordance with the provisions of IAS 36 and according to the relative fair value method;
- the figure also fell by 18 million euros due to exchange differences on goodwill allocated to the Brazil CGU.

In addition, the Telecom Italia Sparkle group underwent market repositioning in 2019, which at the end of the year made it possible to achieve progressive and significant integration of the Sparkle group's business with the Core Domestic business. This integration is linked to the transformation of the Sparkle group, aimed at innovating the traditional business by focusing on more innovative areas that can meet the challenges of the new Gigabit Society. Therefore, starting from the end of 2019, within the Domestic Business Unit the distinction between Core Domestic and International Wholesale CGUs no longer applies.

The gross carrying amounts of goodwill and the relative accumulated impairment losses from January 1, 2004 (date of allocation to the Cash-Generating Units – CGUs) to December 31, 2019 and 2018 can be summarized as follows:

(millions of euros)	12/31/2019			12/31/2018		
	Gross carrying amount	**Accumulated impairment losses**	**Net carrying amount**	**Gross carrying amount**	**Accumulated impairment losses**	**Net carrying amount**
Domestic	38,676	(16,445)	**22,231**	42,457	(16,558)	**25,899**
Brazil	1,055	(203)	**852**	1,077	(207)	**870**
Other Operations	–	–	**–**		–	
Total	**39,731**	**(16,648)**	**23,083**	**43,534**	**(16,765)**	**26,769**

The figures for the Brazil CGU are stated in euros, converted at the spot exchange rate at the closing date of the financial statements; the carrying amount of goodwill for the CGU corresponds to 3,854 million reais.

The impairment test was carried out in two phases: in the first phase, the recoverable amount of the assets attributed to the individual CGUs to which goodwill is allocated was estimated; in the second phase, analyses were carried out considering the Group's activities as a whole, which did not show any impairment.

As regards the checks referred to in the first phase, the cash generating units (or groups of units) to which goodwill is allocated are as follows:

Segment	**Cash-Generating Units (or groups of units)**
Domestic	Domestic
Brazil	Brazil

According to the applicable accounting rules, the "recoverable value" of the CGUs was equal to the higher of "fair value net of disposal costs" and "value in use".
The value configurations used to determine the recoverable value at 31 December 2019 of the CGUs in question were for Domestic the value in use and for Brazil the fair value. Specifically, for Brazil the *fair value* was determined on the basis of the market capitalization at the end of the year.
The values are expressed in local currency, and hence in EUR for the Domestic CGUs and BRL for the Brazil CGU. For the Brazil CGU, the recoverable amount of the assets was denominated in the functional currency and subsequently translated at the spot exchange rate at the reporting date.

For the Domestic CGU, the value in use estimate was made – in accordance with IAS 36 and with valuation principles and best practices – based on the expected cash flows in different scenarios. The various expected cash flows were then summarized into an average normal cash flow, determined with the aid of Experts (expert appraisers and industry experts) and based on the data from the 2020-2022 Industrial Plan approved by the Board of Directors. In particular, expected average cash flows were measured for the three years of the 2020-2022 Industrial Plan, plus an additional two years on the basis of extrapolated data, for which future cash flows were explicitly forecast for a period of five years (2020-2024). The extrapolation of data for 2023-2024 enabled market and competition trends that will become manifest beyond the time horizon of the Industrial Plan to be captured.
As regards the estimate of the terminal value, the sustainable long-term cash flow was assumed to be the extrapolation of the estimated cash flow at 2024, adjusted as necessary to take into consideration a suitable level of long-term capital expenditure. Furthermore, with specific reference to the incremental share of the value deriving from 5G license use and therefore from the development of new and innovative business areas, a measurement model has been adopted that takes into account the net incremental flows for a defined period of time which is based on the duration of the license. This approach is consistent with the need to include in the configuration of value, on one hand the outflows deriving from the payment of the license (2019 - 2022) and the capex to support its development (as per the Industrial Plan), and on the other the positive net flows from the incremental business component of the license acquisition that will develop over a broad period of time and over the 5 years of explicit forecast.

The Industrial Plan (2020-2022) incorporates valuations of potential risk factors and the actions adopted to mitigate them. In order to define the average normal cash flow for the impairment test, the management, with the aid of Experts, identified additional risk factors, making changes to the amounts and/or in the time distribution of future cash flows, giving greater weight to the external evidence available.

The cost of capital used to discount the future cash flows in the estimates of value in use:

- was estimated using the Capital Asset Pricing Model (CAPM), which is one of the generally accepted application criteria referred to in IAS 36;
- reflects the current market estimates of the time value of money and the specific risks of the groups of assets; includes appropriate yield premiums for country risk and the risk associated with the depreciation of the currency of denomination of the cash flows;
- was calculated using comparative market parameters to estimate the "*Beta coefficient*" and the weighting coefficient of the equity and debt capital components.
- takes into account the impact of the application of the new accounting standard IFRS 16.

For the Domestic CGU it was as follows:

- the weighted average cost of capital (WACC rate) used to discount the future cash flows and the equivalent rate before tax;
- details are also provided of the growth rate used to estimate the residual value after the explicit forecast period (the G-Rate), expressed in nominal terms and related to the cash flows in their functional currency;
- details are provided of the implicit capitalization rates resulting from the difference between the cost of capital, after tax, and the G-Rate.

PRINCIPAL PARAMETERS FOR THE ESTIMATES OF VALUE IN USE

	Domestic
WACC	4.89%
WACC before tax	6.47%
Growth rate beyond the explicit period (g)	0.5%
Capitalization rate after tax (WACC-g)	4.39%
Capitalization rate before tax (WACC-g)	5.97%
Capex/Revenues, perpetual	19.9%

The growth rate of the terminal value "g" of the Domestic CGU was estimated taking into account the expected outlook during the explicit forecast period and is consistent with the range of growth rates applied by analysts who monitor TIM shares.

The phase of capital expenditure, competitive positioning and the technological infrastructure operated was taken into account in estimating the level of investment needed to sustain the perpetual development of cash flows after the explicit forecast period.

In addition to average normal cash flows, to take into account the market operator's perspective, sensitivity analyses were conducted on the risk factors identified with the Experts to determine the value in use of the Domestic CGU.

The difference between the recoverable amounts and the net carrying amounts of the CGUs considered totaled:

(millions of euros)	**Domestic**	**Brazil**	
Difference between recoverable and net carrying amounts	+19,940	+2,676	

Therefore, given all the above elements, no impairment losses were recorded in 2019; the goodwill values recognized in the financial statements are therefore confirmed.

In estimating the recoverable amounts, simulations were conducted on the results with respect to changes in the relevant parameters. Below are the parameters that, if considered individually and on a consistent basis, make the recoverable value equal to the net carrying amount.

PARAMETERS THAT MAKE THE VALUE IN USE EQUAL TO THE CARRYING AMOUNT

	Domestic
WACC before tax	9.29%
Capitalization rate before tax (WACC-g)	8.79%
Capex/Revenues, perpetual	31.66%

With regard to the Brazilian CGU, the change in the price per share, compared to the reference quotation considered for the purposes of the financial statements, which would make the recoverable value equal to the carrying amount is equal to -32%.

In addition to average normal cash flows, to take into account the market operator's perspective, sensitivity analyses were conducted on the main risk factors identified with the Experts and to determine the value in use of the Domestic CGU. As a result of these analyses, the recoverable value is in any case higher than the net carrying amount.

NOTE 5
INTANGIBLE ASSETS WITH A FINITE USEFUL LIFE

The item fell by 1,222 million euros compared to December 31, 2018, with the following breakdown and movementsL

(millions of euros)	12/31/2017	Adoption IFRS 15	Capital expenditures	Depreciation and amortization	Impairment (losses) / reversals	Disposals	Exchange differences	Capitalized borrowing costs	Other changes	12/31/2018
Industrial patents and intellectual property rights	**2,193**		703	(1,171)			(98)		468	**2,095**
Concessions, licenses, trademarks and similar rights	**2,750**		103	(422)			(64)		894	**3,261**
Other intangible assets	**134**	(110)	11	(6)			(1)		5	**33**
Work in progress and advance payments	**2,115**		2,830		4	(1)	(88)	37	(1,397)	**3,500**
Total	**7,192**	**(110)**	**3,647**	**(1,599)**	**4**	**(1)**	**(251)**	**37**	**(30)**	**8,889**

(millions of euros)	12/31/2018	Reclassifications IFRS 16	Capital expenditures	Depreciation and amortization	Impairment (losses) / reversals	Disposals	Exchange differences	Capitalized borrowing costs	Other changes	Held for sale Inwit	12/31/2019
Industrial patents and intellectual property rights	**2,095**		726	(1,187)			(14)		481	(1)	**2,100**
Concessions, licenses, trademarks and similar rights	**3,261**	(445)	15	(486)			(23)		2,076		**4,398**
Other intangible assets	**33**		2	(2)					(30)		**3**
Work in progress and advance payments	**3,500**		346			(1)	2	9	(2,680)	(10)	**1,166**
Total	**8,889**	**(445)**	**1,089**	**(1,675)**	**–**	**(1)**	**(35)**	**9**	**(153)**	**(11)**	**7,667**

The "IFRS 16 Reclassifications" refer to the Indefeasible Rights of Use - IRU relating to the companies of the Telecom Italia Sparkle group - International Wholesale, to TIM S.p.A. and to the Brazil Business Unit (412 million euros) as well as infrastructure use rights in Brazil - “LT Amazonas” (33 million euros).
Following the adoption of IFRS 16, these rights of use have been reclassified under the item "Rights of use assets".

Investments in 2019 amounted to 1,089 million euros (3,647 million euros in 2018) and included 238 million euros in internally generated assets (248 million euros in 2018). Further details are provided in the Note “Internally generated assets”.
Investments in 2018 included in particular impacts deriving from the acquisitions of the rights of use for mobile telephone frequencies in Italy (2,399 million euros).

Other changes in 2019 include, among other things, the effects of the change in the scope of consolidation resulting from the sale of Persidera on December 2, 2019 (-98 million euros).

Industrial patents and intellectual property rights at December 31, 2019 essentially consist of applications software purchased outright and user license rights acquired, amortized over a period between 2 and 5 years, relating to TIM S.p.A. (1,349 million euros) and the Brazil Business Unit (690 million euros).

Concessions, licenses, trademarks and similar rights at December 31, 2019 mainly refer to the residual cost of telephone licenses and similar rights (3,379 million euros for TIM S.p.A., 955 million euros for the Brazil Business Unit). The other changes mainly include:

- The entry into force of the user licenses for the frequencies in the 3600-3800 MHz and 26.5-27.5 GHz bands, purchased in 2018 by TIM S.p.A. (1,719 million euros). It should be noted that in 2018, as a result of participation in the tender for the allocation of rights to use the frequencies in the 694-790 MHz, 3600-3800 MHz and 26.5-27.5 GHz bands, to be allocated to 5G mobile communications services in Italy, TIM acquired the rights for a total amount of €2,399 million (net of the €8 million discount applied at the time of the award in proportion to the population of the areas affected by the experiment). The user rights were formally awarded on October 9, 2018, with the rights to 3600–3800 MHz and 26.5–27.5 GHz frequencies made available on a definitive basis in January 2019; the user rights to 694–790 MHz frequencies will be made available in July 2022. The payment of the rights awarded will take place in annual installments, the first six of which have already been unpaid, for an amount of 495 million euros;

- The entry into force of the user licenses for the 700 MHz frequencies in Brazil (472 million euros), and the remeasurement of the value of certain licenses in Brazil, as a result of the Anatel Resolution 695/18 (-25 million euros);
- The change in the scope of consolidation related to Persidera's TV frequencies (-97 million euros).

The residual amount of telephone licenses and similar rights in operation at December 31, 2019 (4,334 million euros) and their useful lives are detailed below:

Type	Residual amount at 12/31/2019 (millions of euros)	Useful life (years)	Maturity	Amortization expense for 2019 (millions of euros)
TIM S.p.A.:				
UMTS	269	18	12/31/2021	134
UMTS 2100 MHz	15	12	12/31/2021	7
WiMax	3	15	05/31/2023	1
LTE 1800 MHz	86	18	12/31/2029	9
LTE 800 MHz	600	17	12/31/2029	60
LTE 2600 MHz	66	17	12/31/2029	6
1452-1492 MHz band	165	14	12/31/2029	16
900 and 1800 MHz band	547	11	12/31/2029	55
3600-3800 MHz band (5G)	1,597	19	12/31/2037	89
26.5-27.5 GHz band (5G)	31	19	31/12/2037	2
Tim Brasil group:				
GSM and 3G (UMTS)	90	15	From 2023 to 2031	19
4G (LTE - 700 MHz)	865	15	2030	73

Intangible assets in progress and advance payments amount to 1,166 million euros (3,500 euros million at December 31, 2018) and decreased by 2,334 million euros, due mainly to the abovementioned reclassifications to licenses in use of rights to use the frequencies in the 3600-3800 MHz and 26.5-27.5 GHz (5G) bands in Italy and rights to use the 700 MHz frequencies in Brazil.
The balance at December 31, 2019 is mainly attributable to the Parent (1,089 million euros, including 680 million euros for rights to frequencies in the 694-790 MHz bands that are not yet operational and work in progress related mainly to software developments).
Capitalized borrowing costs are directly attributable to the acquisition, in 2014, by the Tim Brasil group of the user rights for the 700 MHz frequencies. In 2019 they amounted to around 9 million euros at an annual interest rate of 6.9%; expenses capitalized were deducted directly in the income statement from "Finance expenses".

Depreciation and impairment losses have been recorded in the income statement as components of EBIT.
The gross carrying amount, accumulated impairment losses and accumulated depreciation at December 31, 2019 and 2018 can be summarized as follows:

(millions of euros)	12/31/2018 Gross carrying amount	Accumulated impairment losses	Accumulated depreciation	Net carrying amount
Industrial patents and intellectual property rights	10,832		(8,737)	2,095
Concessions, licenses, trademarks and similar rights	7,839	(277)	(4,301)	3,261
Other intangible assets	241		(208)	33
Work in progress and advance payments	3,526	(26)		3,500
Total intangible assets with a finite useful life	**22,438**	**(303)**	**(13,246)**	**8,889**

(millions of euros)	12/31/2019 Gross carrying amount	Accumulated impairment losses	Accumulated depreciation	Net carrying amount
Industrial patents and intellectual property rights	11,312		(9,212)	2,100
Concessions, licenses, trademarks and similar rights	8,726		(4,328)	4,398
Other intangible assets	612		(609)	3
Work in progress and advance payments	1,166			1,166
Total intangible assets with a finite useful life	**21,816**	**–**	**(14,149)**	**7,667**

Impairment losses on “Concessions, licenses, trademarks and similar rights” at December 31, 2018, mainly refer to prior financial years, attributable to the Indefeasible Rights of *Use (* IRU) for the transmission capacity and cables for international connections acquired by the Telecom Italia Sparkle group now reclassified in the item “Rights of use assets”.
With regard to the gross carrying amounts of intangible assets with a finite useful life, in 2019 disposals of 636 million euros were made by the Parent, fully amortized, relating to intellectual property rights, which mainly concerned obsolete releases of system software; the work in progress relating to DBSS, already written down for the amount of 26 million euros, was also disposed of, with consequent use of the dedicated write-down provision.

NOTE 6
TANGIBLE ASSETS

PROPERTY, PLANT AND EQUIPMENT OWNED

This item decreased by 240 million euros compared to December 31, 2018. The breakdown and movements are as follows.

(millions of euros)	12/31/2017	Capital expenditures	Depreciation and amortization	Impairment (losses) / reversals	Disposals	Exchange differences	Other changes	12/31/2018
Land	**213**	6				(1)	32	**250**
Buildings (civil and industrial)	**488**	79	(36)			(2)	59	**588**
Plant and equipment	**12,049**	2,013	(2,229)		(7)	(217)	487	**12,096**
Manufacturing and distribution equipment	**36**	8	(14)				1	**31**
Other	**376**	94	(162)		(2)	(13)	65	**358**
Construction in progress and advance payments	**1,054**	488			(4)	(21)	(589)	**928**
Total	**14,216**	**2,688**	**(2,441)**	**–**	**(13)**	**(254)**	**55**	**14,251**

(millions of euros)	12/31/2018	IFRS 16 reclassifications	Capital expenditures	Depreciation and amortization	Impairment (losses) / reversals	Disposals	Exchange differences	Other changes	Held for sale Inwit	12/31/2019
Land	**250**		3					3	(30)	**226**
Buildings (civil and industrial)	**588**		6	(38)				21		**577**
Plant and equipment	**12,096**	(1)	1,792	(2,272)		(21)	(43)	633	(210)	**11,974**
Manufacturing and distribution equipment	**31**		5	(12)				2		**26**
Other	**358**	(27)	118	(147)		(3)	(3)	54		**350**
Construction in progress and advance payments	**928**		720			(4)	(2)	(739)	(45)	**858**
Total	**14,251**	**(28)**	**2,644**	**(2,469)**	**–**	**(28)**	**(48)**	**(26)**	**(285)**	**14,011**

"IFRS 16 reclassifications" relate to improvements on rental which, following the adoption of IFRS 16, have been reclassified in the item "Rights of use assets".

Land comprises both built-up land and available land and is not subject to depreciation. The figure for December 31, 2019 refers primarily to TIM S.p.A. (211 million euros).

Buildings (civil and industrial) almost exclusively includes buildings for industrial use hosting telephone exchanges, or for office use and light constructions. The figure for December 31, 2019 referred primarily to TIM S.p.A. (546 million euros).

Plant and equipment includes the technological infrastructure used for the functioning of voice and data telephone traffic. The figure at December 31, 2019 was mainly attributable to TIM S.p.A. (8,934 million euros) and to companies of the Brazil Business Unit (2,105 million euros).

Manufacturing and distribution equipment consists of instruments and equipment used for the operation and maintenance of plant and equipment and refers mainly to TIM S.p.A..

The item **Other** mainly consists of hardware for the functioning of the Data Center and for work stations, furniture and fixtures and, to a minimal extent, transport vehicles and office machines.

Construction in progress and advance payments refer to the internal and external costs incurred for the acquisition and internal production of tangible assets, which are not yet in use.

Other changes in 2019 include, among others, the effects of the change in the scope of consolidation from the sale of Persidera, after splitting it into two different entities, on December 2, 2019 (-44 million euros).

Capital expenditures in 2019 decreased by 44 million euros compared to the previous year, driven mainly by a greater selectivity in capex dedicated to network infrastructure, and include 299 million euros of internally generated assets (322 million euros in 2018); Further details are provided in the Note "Internally generated assets".

Depreciation, impairment losses and reversals have been recorded in the income statement as components of EBIT.

Depreciation for the years 2019 and 2018 was calculated on a straight-line basis over the estimated useful lives of the assets according to the following minimum and maximum rates:

Buildings (civil and industrial)	2% - 5.55%
Plant and equipment	3% - 50%
Manufacturing and distribution equipment	20%
Other	10% - 50%

The gross carrying amount, accumulated impairment losses and accumulated depreciation at December 31, 2019 and December 31, 2018 can be summarized as follows:

(millions of euros)	12/31/2018			
	Gross carrying amount	Accumulated impairment losses	Accumulated depreciation	Net carrying amount
Land	253	(3)		250
Buildings (civil and industrial)	1,862	–	(1,274)	588
Plant and equipment	70,525	(62)	(58,367)	12,096
Manufacturing and distribution equipment	318	(1)	(286)	31
Other	3,885	(2)	(3,525)	358
Construction in progress and advance payments	928			928
Total	**77,771**	**(68)**	**(63,452)**	**14,251**

(millions of euros)	12/31/2019			
	Gross carrying amount	Accumulated impairment losses	Accumulated depreciation	Net carrying amount
Land	229	(3)		226
Buildings (civil and industrial)	1,890	–	(1,313)	577
Plant and equipment	70,293	(12)	(58,307)	11,974
Manufacturing and distribution equipment	317	(1)	(290)	26
Other	3,323	(2)	(2,971)	350
Construction in progress and advance payments	858			858
Total	**76,910**	**(18)**	**(62,881)**	**14,011**

With regard to the gross carrying amounts of tangible assets, it is worth mentioning that in 2019, TIM S.p.A. carried out disposals for a total value of 1,708 million euros, mainly in relation to fully depreciated assets. The assets most affected were: centralized and peripheral hardware equipment (488 million euros), switching systems (498 million euros), Mobile access and core (221 million euros), rented equipment (142 million euros), subscriber connections for renewal (121 million euros), poles (116 million euros), underground and aerial network (60 million euros) and FTTC and ADSL (29 million euros).

ASSETS HELD UNDER FINANCE LEASES

These amounted to 1,895 million euros at December 31, 2018.
Following the adoption of IFRS 16, as of January 1, 2019 this amount was reclassified in the new item "Rights-of-use on leased assets".
For further details please refer to the applicable Note.
At December 31, 2018, assets held under finance leases had the following composition and changes:

(millions of euros)	12/31/2017	Capital expenditures	Increases in finance leasing contracts	Depreciation and amortization	Exchange differences	Other changes	12/31/2018
Land under lease	**16**						**16**
Buildings (civil and industrial)	**1,768**	32	12	(159)	–	(288)	**1,365**
Plant and equipment	**353**	9	6	(18)	(26)	(22)	**302**
Other	**138**		52	(38)	(1)	(3)	**148**
Construction in progress and advance payments	**56**	32				(24)	**64**
Total	**2,331**	**73**	**70**	**(215)**	**(27)**	**(337)**	**1,895**

Depreciation and impairment losses have been recorded in the income statement as components of EBIT.

The gross carrying amount, accumulated impairment losses and accumulated depreciation at December 31, 2018 were summarized as follows:

	12/31/2018			
(millions of euros)	Gross carrying amount	Accumulated impairment losses	Accumulated depreciation	Net carrying amount
Land under lease	16			16
Buildings (civil and industrial)	2,792	(13)	(1,414)	1,365
Plant and equipment	370		(68)	302
Other	243		(95)	148
Construction in progress and advance payments	64			64
Total	**3,485**	**(13)**	**(1,577)**	**1,895**

NOTE 7
RIGHTS OF USE ASSETS

After IFRS 16 (Leasing) was adopted, the TIM Group decided to classify rights of use assets under a specific item of the statements of financial position.

At December 31, 2019 they amounted to 5,494 million euros. Changes in the rights of use of third party assets during 2019 are shown below:

(millions of euros)	12/31/2018	IFRS 16 reclassifications	Adoption of IFRS 16	Capital expenditures	Increases in finance leasing contracts	Depreciation and amortization	Disposals	Exchange differences	Other changes	Held for sale Inwit	12/31/2019
Property	–	1,408	2,388	39	797	(475)	(56)	(9)	(61)	(633)	**3,398**
Plant and equipment	–	747	1,082	20	322	(264)	(1)	(23)	20	(2)	**1,901**
Other	–	149	33		21	(44)	(3)		(4)	(1)	**151**
Construction in progress and advance payments	–	64	–	17					(37)		**44**
Total	–	**2,368**	**3,503**	**76**	**1,140**	**(783)**	**(60)**	**(32)**	**(82)**	**(636)**	**5,494**

“Reclassifications IFRS 16” relate to:

- Indefeasible Rights of Use - IRU (412 million euros) relating to the companies of the Telecom Italia Sparkle group - International Wholesale, to TIM S.p.A. and to the Brazil Business Unit previously registered in intangible assets;
- other rights of use on infrastructure in Brazil – “LT Amazonas” (33 million euros) previously recognized as intangible assets;
- assets held under finance leases (1,895 million euros), previously recognized as tangible assets;
- improvements to third-party assets (28 million euros), previously recognized as tangible assets.

The "Adoption of IFRS 16" column includes the effects of first-time adoption of IFRS 16.

Investments mainly refer to TIM S.p.A. (58 million euros), the Telecom Italia Sparkle Group (12 million euros) and INWIT (6 million euros) and mainly relate to improvements and incremental expenses incurred on leased third-party movable or immovable property, the acquisition of IRU transmission capacity and incremental changes in the provision for restoration costs.
Investments in work in progress and advance payments mainly relate to improvements in progress.

Increases in finance lease contracts include the higher value of user rights entered following new lease contracts payables, increase of lease payments and renegotiations of existing contracts. In this regard, it should be noted that the adoption of the new IFRS16 (Leases) on January 1, 2019 lease agreements are represented in accounting by recognizing a financial liability in the statements of financial position, represented by the current value of future rent charges, against the recognition of a right-of-use asset of the leased asset.
These increases, totaling 1,140 million euros and mainly related to the Domestic Business Unit (723 million euros) and the Brazil Business Unit (417 million euros) consisting of around 972 million euros for higher user rights for the leases in IFRS16 and for the remaining 168 million euros for higher user rights for agreements already in place at December 31, 2018 and previously measured as financial leases in accordance with IAS 17.

Depreciation and impairment losses have been recorded in the income statement as components of EBIT.

Disposals, amounting to 60 million euros, mainly of the carrying amount of real estate assets by lease (and related improvements) issued in advance by the Domestic Business Unit.

Other changes included, inter alia, transfers to operating activities and the lower value of the rights of use recorded as a result of contractual changes during the year, mainly for the Domestic Business Unit's IFRS16 lease liabilities.

The item **Property** includes buildings under finance leases and the related building adaptations and was essentially attributable to the Parent (2,923 million euros) and the Brazil Business Unit (446 million euros).

The item **Plant and equipment** mainly includes rights of use on infrastructures for telecommunications services. These refer to the Brazil Business Unit (1,118 million euros), the Parent (531 million euros) and the Telecom Italia Sparkle group (253 million euros). This includes, inter alia, the recognition of the value of the telecommunications towers sold by the Tim Brasil group to American Tower do Brasil and subsequently repurchased in the form of a finance lease.

The item **Other** mainly comprises the finance leases on autovehicles.

The gross carrying amount, accumulated impairment losses and accumulated depreciation at December 31, 2019 can be summarized as follows:

	12/31/2019			
(millions of euros)	Gross carrying amount	Accumulated impairment losses	Accumulated depreciation	Net carrying amount
Property	5,332	(13)	(1,921)	3,398
Plant and equipment	2,832	(278)	(653)	1,901
Other	276		(125)	151
Construction in progress and advance payments	44			44
Total	**8,484**	**(291)**	**(2,699)**	**5,494**

Impairment losses on “Plant and equipment”, mainly relating to prior years, attributable to the Indefeasible Rights of *Use* (IRU) for the transmission capacity and cables for international connections acquired by the Telecom Italia Sparkle group.

NOTE 8
INVESTMENTS

INVESTMENTS IN ASSOCIATES AND JOINT VENTURES ACCOUNTED FOR USING THE EQUITY METHOD

Investments in associates and joint ventures accounted for using the equity method are reported below in detail.

(millions of euros)	12/31/2019	12/31/2018
Tiglio I	1	5
NordCom	5	5
W.A.Y.	3	3
Other	2	3
Total Associates	**11**	**16**
Alfiere	–	–
Total Joint Ventures	**–**	**–**
Total investments accounted for using the equity method	**11**	**16**

The changes in this item are broken down as follows:

(millions of euros)	12/31/2017	Capital expenditures	Disposals and reimbursements of capital	Valuation using equity method	12/31/2018
Tiglio I	**7**			(2)	**5**
Nordcom	**5**				**5**
W.A.Y.	**3**				**3**
Other	**2**			1	**3**
Total Associates	**17**	**–**	**–**	**(1)**	**16**
Alfiere	**–**				**–**
Total Joint Ventures	**–**	**–**	**–**	**–**	**–**
Total investments accounted for using the equity method	**17**	**–**	**–**	**(1)**	**16**

(millions of euros)	12/31/2018	Capital expenditures	Disposals and reimbursements of capital	Valuation using equity method	Other changes	12/31/2019
Tiglio I	**5**			(4)		**1**
Nordcom	**5**					**5**
W.A.Y.	**3**					**3**
Other	**3**		(1)	1	(1)	**2**
Total Associates	**16**	**–**	**(1)**	**(3)**	**(1)**	**11**
Alfiere	–	1	(1)			–
Total Joint Ventures	**–**	**1**	**(1)**			**–**
Total investments accounted for using the equity method	**16**	**1**	**(2)**	**(3)**	**(1)**	**11**

It is reported that the sale of 4,625 ordinary shares to CDP Immobiliare S.r.L. of Alfiere S.p.A. held by TIM S.p.A., equal to 50% of the share capital, was finalised on June 24, 2019.

The list of **investments accounted for using the equity method** is presented in the Note "List of companies of the TIM Group".
Investments in associates accounted for using the equity method of the TIM Group are not material either individually or in aggregate form.

INVESTMENTS IN STRUCTURED ENTITIES

The TIM Group does not hold investments in structured entities.

OTHER INVESTMENTS

Other investments refer to the following:

(millions of euros)	12/31/2017	IFRS 9 adoption	Capital expenditures	Disposals and reimbursements of capital	Valuation at fair value	Other changes	12/31/2018
Assicurazioni Generali	3						3
Fin.Priv.	20				(4)		16
Northgate CommsTech Innovations Partners L.P.	17	(3)	2				16
Other	11	3	1	(1)			14
Total	**51**	**-**	**3**	**(1)**	**(4)**	**–**	**49**

(millions of euros)	12/31/2018	Capital expenditures	Disposals and reimburseme nts of capital	Valuation at fair value	Other changes	12/31/2019
Assicurazioni Generali	3		(3)			–
Fin.Priv.	16			5		21
Northgate CommsTech Innovations Partners L.P.	16	3				19
Other	14			(2)		12
Total	**49**	**3**	**(3)**	**3**	**–**	**52**

It should be noted that the investment in Assicurazioni Generali was sold on July 19, 2019.

It should also be noted that at December 31, 2019, the TIM Group had a subscription commitment for units in the Northgate CommsTech Innovations Partners L.P. Fund for an amount of USD 16 million, equal to 14 million euros at the exchange rate as at December 31, 2019. Following two capital calls, an additional USD 2.5 million was paid in January and March 2020, reducing the subscription commitment to USD 13.5 million.

As permitted by IFRS 9, TIM now measures all Other Investments at fair value through other comprehensive income (FVTOCI).

Further details on Financial Instruments are provided in the Note "Supplementary disclosure on financial instruments".

NOTE 9
FINANCIAL ASSETS (NON-CURRENT AND CURRENT)

Financial assets (non-current and current) were broken down as follows:

(millions of euros)		12/31/2019	12/31/2018
Other non-current financial assets			
Securities other than investments		–	–
Receivables from employees		43	43
Hedging derivatives relating to hedged items classified as non-current assets/liabilities of a financial nature		2,051	1,490
Non-hedging derivatives		6	7
Other financial receivables		–	–
		2,100	**1,540**
Financial receivables for lease contracts		**51**	**54**
Total non-current financial assets	**(a)**	**2,151**	**1,594**
Securities other than investments, other financial receivables and other current financial assets			
Securities other than investments			
Measured at amortized cost (AC)		–	–
Measured at fair value through other comprehensive income (FVTOCI)		728	945
Measured at fair value through profit or loss (FVTPL)		149	181
		877	**1,126**
Financial receivables and other current financial assets			
Liquid assets with banks, financial institutions and post offices (with maturity over 3 months)		–	–
Receivables from employees		13	14
Hedging derivatives relating to hedged items classified as current assets/liabilities of a financial nature		101	242
Non-hedging derivatives		5	12
Other short-term financial receivables		3	2
		122	**270**
	(b)	**999**	**1,396**
Financial receivables for lease contracts	**(c)**	**58**	**70**
Cash and cash equivalents	**(d)**	**3,138**	**1,917**
Total current financial assets	**e=(b+c+d)**	**4,195**	**3,383**
Financial assets relating to Discontinued operations/Non-current assets held for sale	**(f)**	**65**	**–**
Total non-current and current financial assets	**g=(a+e+f)**	**6,411**	**4,977**

Further details on Financial Instruments are provided in the Note "Supplementary disclosure on financial instruments".

Financial receivables for lease contracts refer to:

- finance leases on user rights and equipment;
- new commercial offers for TIM Consumer and Business customers involving the rental of ADSL routers;
- contracts for the rental of products to TIM customers with ancillary services ("full rent formula") and leasing contracts entered into in prior years by Teleleasing with TIM customers;

- agreements for the sale of network infrastructure in IRU with deferred collection over time recognized using the financial method envisaged by IFRS 16 given the contractual term substantially close to the economic life of the asset.

As at December 31, 2019, it should be noted that 12 million euros related to lease contracts for commercial products with customers were classified in accordance with IFRS16.

Hedging derivatives relating to hedged items classified as non-current assets/liabilities of a financial nature mainly refer to the mark-to-market spot valuation component of the hedging derivatives**,** whereas **hedging derivatives relating to hedged items classified as current assets/liabilities of a financial nature** refer to accrued income on such derivative contracts.

The **Non-hedging derivatives** consist mainly of the mark-to-market component of the non-hedging derivatives of the Brazil Business Unit.
Further details are provided in the Note "Derivatives".

Securities other than investments included in current financial assets relate to:

- 728 million euros of listed securities, of which 333 million euros of Italian and European treasury bonds purchased by Telecom Italia Finance S.A. as well as 395 million euros of bonds purchased by Telecom Italia Finance S.A. with different maturities, all with an active market and consequently readily convertible into cash. Under IFRS 9 and consistent with the Business model, such securities are classified as financial assets measured at fair value through other comprehensive income (FVTOCI). The purchases of the above government bonds, which, pursuant to Consob Communication no. DEM/11070007 of August 5, 2011, represent investments in “Sovereign debt securities”, have been made in accordance with the Guidelines for the "Management and control of financial risk" adopted by the TIM Group;
- 149 million euros of investments in monetary funds by the Brazil Business Unit, which, under IFRS 9, are classified as financial assets measured at fair value through profit or loss (FVTPL).

On November 27, 2019, in compliance with two securities lending agreements signed with Telecom Italia Finance S.A., TIM S.p.A. received on loan until April 30, 2020 (renewable term), 100 million euros (nominal) of BTP 01/03/2023 and 150 million euros of BTP 15/04/2021.
At the same time, on December 1, 2019, TIM S.p.A. lent 98 million euros (nominal) of BTP 01/03/2023 and 150 million euros (nominal) of BTP 15/04/2021 to its counterparty NatWest.
From an accounting standpoint, in compliance with IAS/IFRS, the assets are shown exclusively in the financial statements of Telecom Italia Finance S.A., which retains the risks and benefits associated with the position.

Further details are provided in the Note "Accounting standards".

Cash and cash equivalents decreased by 1,221 million euros compared to December 31, 2018 and were broken down as follows:

(millions of euros)	12/31/2019	12/31/2018
Liquid assets with banks, financial institutions and post offices	2,655	1,694
Checks, cash and other receivables and deposits for cash flexibility	–	1
Securities other than investments (due within 3 months)	483	222
Total	**3,138**	**1,917**

The different technical forms of investing available cash at December 31, 2019 had the following characteristics:

- maturities: investments have a maximum maturity of three months;
- counterparty risk: deposits have been made with leading high-credit-quality banks and financial institutions with a rating of at least BBB according to Standard & Poor's with regard to Europe, and with leading local counterparts with regard to investments in South America;
- Country risk: deposits have been made mainly in major European financial markets.

Securities other than investments (due within 3 months) included 482 million euros (221 million euros at December 31, 2018) of Brazilian bank certificates of deposit (Certificado de Depósito Bancário) held by the Brazil Business Unit with premier local banking and financial institutions.

NOTE 10
MISCELLANEOUS RECEIVABLES AND OTHER NONCURRENT ASSETS

Compared to December 31, 2018, they increased by 294 million euros and were broken down as follows:

(millions of euros)		12/31/2019	*of which Financial Instruments*	12/31/2018	*of which Financial Instruments*
Miscellaneous receivables (non-current)	**(a)**	**987**	**245**	**697**	**326**
Other non-current assets					
Deferred contract costs		1,554		1,531	
Other cost deferrals		44		63	
	(b)	**1,598**		**1,594**	
Total	**(a+b)**	**2,585**	**245**	**2,291**	**326**

Further details on Financial Instruments are provided in the Note "Supplementary disclosure on financial instruments".

Miscellaneous non-current receivables totaled 987 million euros (697 million euros at December 31, 2018) and included Non-current income tax receivables of 84 million euros (88 million euros at December 31, 2018).
This item was mainly due to the Brazil Business Unit (944 million euros; 646 million euros at December 31, 2018). In particular, the Brazil Business Unit at December 31, 2019 had non-current receivables for indirect taxes totaling 650 million euros, including receivables arising from the favourable outcome of tax disputes related to the inclusion of ICMS indirect tax in the basis of the calculation of the PIS/COFINS contribution, and receivables for court deposits of 225 million euros (307 million euros at December 31, 2018).

Further details are provided in the Note “Disputes and Pending Legal Actions, other information, commitments and guarantees”.

Other non-current assets amounted to 1,598 million euros (1,594 million euros at December 31, 2018). They mainly break down as follows:

- **Deferred contract costs** of 1,554 million euros (1,531 million euros at December 31, 2018), mainly related to the deferral of costs related to the activation and acquisitions of new contracts with customers. Contractual costs (mainly technical activation costs and commissions for the sales network) were deferred and charged to the separate consolidated income statement according to the expected duration of the contractual relationship with customers (on average around 3 years for the mobile business and 7 years for the fixed-line business).

  Total deferred contract costs (non-current and current) amounted to 2,172 million euros; the table below shows total deferred contractual costs (non-current and current) and the related movements during 2019:

(millions of euros)	12/31/2019	12/31/2018
Deferred contract costs		
Non-current deferred contract costs	1,554	1,531
Current deferred contract costs	618	634
Total	**2,172**	**2,165**

(millions of euros)	12/31/2019	12/31/2018
Deferred contract costs		
Contract acquisition costs	1,146	1,132
Contract execution costs	1,026	1,033
Total	**2,172**	**2,165**

(millions of euros)	12/31/2018	Increase	Release to income statement	Exchange differences and other changes	12/31/2019
Contract acquisition costs	1,132	391	(375)	(2)	1,146
Contract execution costs	1,033	231	(238)	–	1,026
Total	**2,165**	**622**	**(613)**	(2)	**2,172**

The deferred contract costs will be recognized in the income statement for future years and, in particular, of around 620 million euros in 2020, based on the amount at December 31, 2019 without taking into account the new deferred portions.

(millions of euros)	12/31/2019	year of recognition in the income statement					
		2020	2021	2022	2023	2024	After 2024
Contract acquisition costs	1,146	366	262	184	131	98	105
Contract execution costs	1,026	250	227	200	162	113	74
Total	**2,172**	**616**	**489**	**384**	**293**	**211**	**179**

- **Other deferred costs** of 44 million euros, mainly attributable to the Parent and to companies of the Sparkle group and of the Brazil Business Unit.

NOTE 11
INCOME TAX EXPENSE (CURRENT AND DEFERRED)

CURRENT INCOME TAX RECEIVABLES

Non-current and current income tax receivables at December 31, 2019 amounted to 233 million euros (339 million euros at December 31, 2018).
Specifically, they consisted of:

- non-current income tax receivables of 84 million euros (88 million euros at December 31, 2018);
- current income tax receivables of 149 million euros (251 million euros at December 31, 2018), relating to the companies of the Brazil Business Unit (72 million euros) and the Domestic Business Unit (77 million euros).

DEFERRED TAX ASSETS AND DEFERRED TAX LIABILITIES

The net balance of 694 million euros at December 31, 2019 (944 million euros at December 31, 2018) breaks down as follows.

(millions of euros)	12/31/2019	12/31/2018
Deferred tax assets	942	1,136
Deferred tax liabilities	(248)	(192)
Total	**694**	**944**

Deferred tax assets at December 31, 2019 mainly referred to the Domestic Business Unit, at 919 million euros. At December 31, 2018, deferred tax assets mainly consisted of 917 million euros for the Domestic Business Unit and 177 million euros for the Brazil Business Unit.
Deferred tax liabilities mainly refer to Telecom Italia Capital for 213 million euros (155 million euros at December 31, 2018) and the Domestic Business Unit for 12 million euros (25 million euros at December 31, 2018).

Since the presentation of deferred tax assets and liabilities in the financial statements takes into account the offsets by legal entity when applicable, the composition of the gross amounts before offsets is presented below:

(millions of euros)	12/31/2019	12/31/2018
Deferred tax assets	1,578	1,592
Deferred tax liabilities	(884)	(648)
Total	**694**	**944**

The temporary differences which made up this line item at December 31, 2019 and 2018, as well as the movements during 2019 were as follows:

(millions of euros)	12/31/2018	Adoption of IFRS 16	Recognized in profit or loss	Recognized in equity	Change in scope of consolidation and other changes (*)	12/31/2019
Deferred tax assets:						
Tax loss carryforwards	205		(21)		(4)	180
Derivatives	573		(3)	28		598
Provision for bad debts	186		(11)		(1)	174
Provisions	432		(33)		(2)	397
Taxed depreciation and amortization	114		7		(17)	104
Other deferred tax assets	82	1	4	10	28	125
Total	**1,592**	**1**	**(57)**	**38**	**4**	**1,578**
Deferred tax liabilities						
Derivatives	(421)		2	(52)	(1)	(472)
Business combinations - for step-up of net assets in excess of tax basis	(114)		4		14	(96)
Accelerated depreciation	(14)				1	(13)
Brazil BU - exclusion of ICMS from the PIS and Cofins calculation basis	–		(226)			(226)
Other deferred tax liabilities	(99)	16	5		1	(77)
Total	**(648)**	**16**	**(215)**	**(52)**	**15**	**(884)**
Total deferred tax assets net of deferred tax liabilities	**944**	**17**	**(272)**	**(14)**	**19**	**694**

(*) The "Change in the scope of consolidation and other changes" also includes the reclassification to the item "Discontinued operations /Non-current assets held for sale" of Inwit's "Deferred tax assets" (2 million euros).

The expirations of deferred tax assets and deferred tax liabilities at December 31, 2019 were the following:

(millions of euros)	Within 1 year	Beyond 1 year	Total at 12/31/2019
Deferred tax assets	513	1,065	1,578
Deferred tax liabilities	(64)	(820)	(884)
Total deferred tax assets net of deferred tax liabilities	**449**	**245**	**694**

At December 31, 2019, the TIM Group had unused tax loss carryforwards of 2,079 million euros, mainly relating to the Brazil Business Unit and the company Telecom Italia Finance, with the following expiration dates:

Year of expiration	(millions of euros)
2020	–
2021	–
2022	2
2023	–
2024	3
Expiration after 2024	29
Without expiration	2,045
Total unused tax loss carryforwards	**2,079**

Unused tax loss carryforwards considered in the calculation of deferred tax assets amounted to 536 million euros at December 31, 2019 (609 million euros at December 31, 2018) and mainly referred to the Brazil Business Unit. Deferred tax assets were recognized as it was considered probable that taxable income will be available in the future against which the tax losses can be utilized.

On the other hand, deferred tax assets of 393 million euros (406 million euros at December 31, 2018) were not recognized on 1,544 million euros of tax loss carryforwards since, at the reporting date, their recoverability was not considered probable.
At December 31, 2019, deferred tax liabilities were not recognized on approximately 1 billion euros of tax-suspended reserves and undistributed earnings of subsidiaries, because the TIM Group is in a position to control the timing of the distribution of those reserves and it is probable that those accumulated earnings will not be distributed in the foreseeable future. The contingent liabilities relating to taxes that should be recognized, if these reserves are distributed, are in any case not significant.

CURRENT INCOME TAX PAYABLES

Current income tax payables amounted to 145 million euros (109 million euros at December 31, 2018). They break down as follows:

(millions of euros)	12/31/2019	12/31/2018
Income tax payables:		
non-current	61	42
Current	84	67
Total	**145**	**109**

The non-current portion, amounting to 61 million euros, related to the Brazil Business Unit (42 million euros) and the Domestic Business Unit (19 million euros), while the current portion, of 84 million euros, mainly related to the Brazil Business Unit (35 million euros) and the Domestic Business Unit (28 million euros).
The increase in Income tax payables also reflected the reclassification of liabilities related to direct taxation from the Provision for taxation and tax risks.

INCOME TAX EXPENSE

Income tax expense totaled 497 million euros, up by 122 million euros compared to 2018 (375 million euros), benefiting from the recognition of deferred tax assets of the Brazil Business Unit (about 200 million euros) connected with tax recoverability of prior losses. 2019, benefited from lower Parent taxes (-244 million euros) partially offset by the higher deferred tax liabilities recognized by the Brazil Business Unit mainly against non-recurring income relating to tax credits following the favorable outcome of the disputes relating to the inclusion of the ICMS tax in the basis for calculating the PIS/COFINS contribution.

Income tax expense breaks down as follows:

(millions of euros)		2019	2018
Current taxes for the year		274	547
Net difference in prior year estimates		(33)	24
Total current taxes		**241**	**571**
Deferred taxes		272	(196)
Total taxes on continuing operations	**(a)**	**513**	**375**
Total taxes on Discontinued operations/Non-current assets held for sale	**(b)**	**(16)**	**–**
Total income tax expense for the year	**(a+b)**	**497**	**375**

The reconciliation between the theoretical tax expense, using the IRES tax rate in force in Italy (24%), and the effective tax expense for the years ended December 31, 2019 and 2018 is as follows:

(millions of euros)		2019	2018
Profit (loss) before tax from continuing operations		**1,739**	**(777)**
Theoretical income tax from continuing operations		**417**	**(186)**
Income tax effect on increases (decreases) in variations:			
Tax losses of the year not considered recoverable		2	9
Tax losses from prior years not recoverable (recoverable) in future years		(2)	(225)
Non-deductible write-down of goodwill		–	621
IRES taxes for previous years		(19)	25
Brazil: different rate compared to theoretical rate in force in Italy		100	44
Brazil: investment incentives		(44)	(34)
Other net differences		(51)	(19)
Effective income tax recognized in income statement from continuing operations, excluding IRAP tax		**403**	**235**
IRAP tax		110	140
Total effective income tax recognized in income statement from continuing operations	**(a)**	**513**	**375**
Effective income tax recognized in income statement from Discontinued operations/Non-current assets held for sale	**(b)**	**(16)**	**–**
Total effective income tax recognized in income statement	**(a)+(b)**	**497**	**375**

For the analysis of the tax burden related to the Profit (loss) before tax from continuing operations, the impact of IRAP tax has not been taken into consideration in order to avoid any distorting effect, since that tax only applies to Italian companies and is calculated on a tax base other than pre-tax profit.

NOTE 12
INVENTORIES

Other intangible assets decreased compared to December 31, 2018, to 129 million euros and were broken down as follows:

(millions of euros)	12/31/2019	12/31/2018
Raw materials and supplies	1	1
Work in progress and semifinished products	2	1
Finished goods	257	387
Total	**260**	**389**

The inventories mainly consist of fixed and mobile telecommunications equipment and handsets and related accessories, as well as office products, special printers and gaming terminals.
Inventories mainly consisted of 215 million euros for the Domestic Business Unit (348 million euros at December 31, 2018) and 45 million euros for the Brazil Business Unit (41 million euros at December 31, 2018).

The reduction during the year was mainly related to a more targeted commercial and procurement policy of mobile telephone equipment and accessories by TIM S.p.A., as well as to the revision of the purchasing planning process, the commercial discounts reserved for the sales network and the scrapping of obsolete products in Olivetti.

Inventories are stated net of a provision for bad debts amounting to 17 million euros (11 million euros at December 31, 2018).

NOTE 13
TRADE AND MISCELLANEOUS RECEIVABLES AND OTHER CURRENT ASSETS

Compared to December 31, 2018, they increased by 151 million euros and were broken down as follows:

(millions of euros)		12/31/2019	*of which Financial Instruments*	12/31/2018	*of which Financial Instruments*
Amounts due on construction contracts	**(a)**	**86**		**55**	
Trade receivables					
Receivables from customers		2,437	*2,437*	2,290	*2,290*
Receivables from other telecommunications operators		815	*815*	1,037	*1,037*
	(b)	**3,252**	*3,252*	**3,327**	*3,327*
Miscellaneous receivables (current)					
Other receivables	**(c)**	**691**	*119*	**424**	*125*
Other current assets					
Contract assets		34	*34*	46	*46*
Deferred contract costs		618		634	
Other cost deferrals		176		220	
	(d)	**828**	*34*	**900**	*46*
Total	**(a+b+c+d)**	**4,857**	**3,405**	**4,706**	**3,498**

Further details on Financial Instruments are provided in the Note "Supplementary disclosure on financial instruments".

The analyses of the aging of the financial instruments included in Trade and miscellaneous receivables and other current assets at December 31, 2019 and 2018 are provided below:

(millions of euros)	12/31/2019	Total current	Total overdue	overdue: 0-90 days	91-180 days	181-365 days	More than 365 days
Trade and miscellaneous receivables and other current assets	**3,405**	2,642	763	254	100	118	291

(millions of euros)	12/31/2018	Total current	Total overdue	overdue: 0-90 days	91-180 days	181-365 days	More than 365 days
Trade and miscellaneous receivables and other current assets	**3,498**	2,715	783	175	134	158	316

Overdue receivables fell by 73 million euros compared to December 31, 2018.
This change was mainly due to the decreases in 2019 of TIM S.p.A. (50 million euros), Telecom Italia Sparkle Group companies (21 million euros) and Olivetti (3 million euros), as well as the reclassification of INWIT in "discontinued operations/non-current assets held for sale" (20 million euros), which was only partially offset by the increase in the Brazil Business Unit (+ 19 million euros, including a negative exchange rate effect of approximately 11 million euros).

Overdue receivables fell by 20 million euros compared to December 31, 2018.
This change was mainly due to the decreases in 2019 of the Parent (13 million euros) including the overdue receivables at December 31, 2018 of Noverca, merged into TIM S.p.A. in 2019, Olivetti (12 million euros), and Telecom Italia Sparkle Group companies (10 million euros), as well as the reclassification of INWIT in "discontinued operations/non-current assets held for sale" (EUR 10 million), partially offset by the increase in the Brazil Business Unit (+37 million euros, including a negative exchange rate effect of approximately 3 million euros).

Trade receivables amounted to 3,252 million euros (3,327 million euros at December 31, 2018) and are stated net of the provision for bad debts of 757 million euros (769 million euros at December 31, 2018). They included 30 million euros (39 million euros at December 31, 2018) of medium/long-term receivables, principally in respect of agreements for the sale of transmission capacity under Indefeasible Rights of Use (IRU).
Trade receivables mainly related to TIM S.p.A. (2,239 million euros) and to the Brazil Business Unit (722 million euros).

Movements in the provision for bad debts were as follows:

(millions of euros)	12/31/2019	12/31/2018
At January 1	**769**	**744**
Provision charges to the income statement	368	320
Utilization and decreases	(361)	(281)
Change in scope	(14)	–
Exchange differences and other changes	(5)	(14)
At December 31	**757**	**769**

Miscellaneous receivables (current) refer to other receivables amounting to 691 million euros (424 million euros at December 31, 2018) and were net of a provision for bad debts of 49 million euros (52 million euros at December 31, 2018). Details are as follows:

(millions of euros)	12/31/2019	12/31/2018
Advances to suppliers	10	24
Receivables from employees	11	11
Tax receivables	376	87
Receivables for grants from the government and public entities	44	91
Sundry receivables	250	211
Total	**691**	**424**

Tax receivables mainly relate to the Brazil Business Unit (332 million euros) and are related to local indirect taxes; specifically, they include the recognition of current tax receivables resulting from the favourable outcome of tax disputes relating to the inclusion of the ICMS indirect tax in the basis for calculating of the PIS/COFINS contribution, the use of which began as early as the end of 2019.

Receivables for grants from the government and public entities (44 million euros) referred mainly to the Ultra-Broadband-UBB and Broadband-BB projects. The grants are recognized to the income statement when the related plants become ready for use.

Sundry receivables mainly included:

- receivables for with-recourse assignments to other factoring companies due to TIM S.p.A (38 million euros);
- receivables from social security and assistance agencies due to TIM S.p.A (34 million euros);
- TIM S.p.A. miscellaneous receivables from TLCs, including receivables for the contribution of the same to the Universal Service (69 million euros);
- the receivable of TIM S.p.A. for the repayment of the fine relating to Antitrust Case I761, following the ruling of the State Council of December 2019 (21 million euros).

Other current assets included:

- **Contract assets:** This item includes the effect of the advance recognition of revenues for those bundle contracts (such as bundles of products and services) with the individual performance obligations with different timing for their recognition, in which the goods recognized “at a point in time” are sold at a discounted price together with, or for those contracts which, by providing for a discount for a period of time shorter than the minimum duration contract, require, pursuant to IFRS 15, a reallocation of the discount over the minimum contractual term. *Contract Assets* at December 31, 2019 amounted to 34 million euros (46 million euros at December 31, 2018) and were net of the related write-down provision of 2 million euros. For 2019, the decrease was mainly due to the launch of commercial deals that do not require that more restrictions and the reversal to the income statement in the figure previously accumulated;
- **Deferred contractual costs** amounted to 618 million euros (634 million euros at December 31, 2018) and were contract costs (mainly costs technical costs for the activation and commissions for the sales network) deferred and recognized in the separate consolidated income statement according to the expected duration of the contractual relationship with customers (on average around 3 years for the mobile and 7 years for the fixed-line business). For additional details on the deferred contract costs and their movement during the year, please refer to the Note "Miscellaneous receivables and other non-current assets";

- **Other deferred costs** relating mainly:
  - to the Parent essentially for the deferral of costs related to rental and other leases and rentals (87 million euros), the deferral of costs for the acquisition of products and services (18 million euros), insurance premiums (14 million euros), deferral of after-sales expenses on application offers (10 million euros), deferral of costs related to TV rights and Internet rights (5 million euros) and maintenance fees (4 million euros);
  - to the Telecom Italia Sparkle group mainly related to the deferral of costs connected to payments for line lease and maintenance payments (9 million euros);
  - to the Brazil Business Unit, essentially relating to insurance premiums (around 6 million euros).

NOTE 14
DISCONTINUED OPERATIONS/NON-CURRENT ASSETS HELD FOR SALE

On December 19, 2019 the Shareholders' Meeting of Infrastrutture Wireless Italiane S.p.A. (Inwit) approved the merger by incorporation of Vodafone Towers S.r.l. into Inwit. The transaction, preparatory to the creation of Italy's leading Tower Operator, entails the sale by the TIM Group of its controlling interest in Inwit. Therefore, as at December 31, 2019, Inwit is presented as an "Asset held for sale", since it is highly probable that the transaction will be completed by 2020. Accordingly, the financial assets and liabilities have been reclassified in the “Discontinued operations/Non-current assets held for sale” and “Liabilities directly associated with Discontinued operations/Non-current assets held for sale” items of the Consolidated Statements of Financial Position at December 31, 2019.

AGREEMENTS FOR THE SHARING OF THE MOBILE NETWORK IN ITALY

On July 26, 2019, TIM and Vodafone signed agreements for the extension of the current passive infrastructure sharing agreement with INWIT and for the sharing of the active component of the mobile network.
As part of the active network sharing project, TIM and Vodafone will jointly develop 5G infrastructure to enable more efficient implementation of the new technology across a wider geographical area and at a lower cost.
The agreement also provides for a phased transaction aimed at consolidating Vodafone's passive network infrastructure within INWIT, creating the largest towerco in Italy with over 22,000 towers across the national territory, which also makes it the second largest towerco in Europe. Vodafone will transfer its passive network infrastructure to a new company, which will subsequently be incorporated into INWIT.
Prior to the merger, INWIT will acquire a stake in the new company so that the shares that Vodafone will receive through the merger will result in Vodafone and TIM having the same 37.5% stake in the capital of INWIT and equal governance rights, jointly controlling INWIT through the signing of a Shareholders' Agreement. The parties will sign a three-year lock-up agreement of their respective stakes and assess whether to jointly reduce their investment to 25% each.
INWIT is currently subject to management and coordination by TIM. After the merger, Vodafone and TIM will not exercise any direction or coordination over INWIT and will jointly control the company.
The deal was approved at the shareholders' meeting by the minority shareholders of INWIT (so-called “Whitewash” procedure) and therefore no takeover bid is planned for INWIT shares.
In addition, the transaction does not constitute grounds for the withdrawal of the company's shareholders.
On March 6, 2020 the European Commission has cleared the combination of INWIT's passive network infrastructure with Vodafone Italy's towers (the “Combination”). For futher details of see the Note “Events Subsequent to December 31, 2019”.

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The composition of Assets and Liabilities relating to Inwit S.p.A. is shown below:

(millions of euros)		12/31/2019
Discontinued operations/Non-current assets held for sale:		
of a financial nature		65
of a non-financial nature		4,582
Total	**(a)**	**4,647**
Liabilities directly associated with Discontinued operations/Non-current assets held for sale		
of a financial nature		655
of a non-financial nature		150
Total	**(b)**	**805**
Net value of assets related to the company held for sale	**(a-b)**	**3,842**

The **assets of a financial nature** are broken down as follows:

(millions of euros)	12/31/2019
Non-current financial assets	–
Current financial assets	65
Total	**65**

The **assets of a non-financial nature** are broken down as follows:

(millions of euros)	12/31/2019
Non-current assets	
Intangible assets	*3,611*
Tangible assets	*284*
Rights of use assets	*636*
Other non-current assets	9
	4,540
Current assets	**42**
Total	**4,582**

The **liabilities of a financial nature** are broken down as follows:

(millions of euros)	12/31/2019
Non-current financial liabilities	552
Current financial liabilities	103
Total	**655**

The **liabilities of a non-financial nature** are broken down as follows:

(millions of euros)	12/31/2019
Non-current liabilities	105
Current liabilities	45
Total	**150**

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Profit from Discontinued operations/Non-current assets held for sale of 16 million euros relates to a partial repayment of taxes, whose collection became certain in 2019, connected to the sale of the Sofora-Telecom Argentina group in 2016.

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NOTE 15
EQUITY

Equity consisted of:

(millions of euros)	12/31/2019	12/31/2018
Equity attributable to Owners of the Parent	20,280	19,528
Non-controlling interests	2,346	2,219
Total	**22,626**	**21,747**

The composition of **Equity attributable to owners of the Parent** is the following:

(millions of euros)	12/31/2019		12/31/2018	
Share capital		11,587		11,587
Additional paid-in capital		2,094		2,094
Other reserves and retained earnings (accumulated losses), including profit (loss) for the year		6,599		5,847
Reserve for financial assets measured at fair value through other comprehensive income	19		30	
Reserve for hedging instruments	(440)		(563)	
Reserve for exchange differences on translating foreign operations	(1,417)		(1,340)	
Reserve for remeasurements of employee defined benefit plans (IAS 19)	(124)		(90)	
Share of other profits (losses) of associates and joint ventures accounted for using the equity method	–		–	
Sundry reserves and retained earnings (accumulated losses), including profit (loss) for the year	8,561		7,810	
Total		**20,280**		**19,528**

During 2019 the **Share Capital**, amounting to 11,587 million euros, net of treasury shares of 90 million euro, did not have any movements, as shown in the tables below:

Reconciliation between the number of shares outstanding at December 31, 2018 and December 31, 2019

(number of shares)		at 12/31/2018	Share issues	at 12/31/2019	% of share capital
Ordinary shares issued	(a)	15,203,122,583	–	15,203,122,583	71.61%
less: treasury shares	(b)	(163,754,388)	–	(163,754,388)	
Ordinary shares outstanding	(c)	15,039,368,195	–	15,039,368,195	
Savings shares issued and outstanding	(d)	6,027,791,699	–	6,027,791,699	28.39%
Total TIM S.p.A. shares issued	**(a+d)**	**21,230,914,282**	**–**	**21,230,914,282**	**100.00%**
Total TIM S.p.A. shares outstanding	**(c+d)**	**21,067,159,894**	**–**	**21,067,159,894**	

Reconciliation between the value of shares outstanding at December 31, 2018 and December 31, 2019

(millions of euros)		Share capital at 12/31/2018	Change in share capital	Share capital at 12/31/2019
Ordinary shares issued	(a)	8,362	–	**8,362**
less: treasury shares	(b)	(90)	–	**(90)**
Ordinary shares outstanding	(c)	8,272	–	**8,272**
Savings shares issued and outstanding	(d)	3,315	–	**3,315**
Total TIM S.p.A. share capital issued	**(a+d)**	**11,677**	**–**	**11,677**
Total TIM S.p.A. share capital outstanding	**(c+d)**	**11,587**	**–**	**11,587**

The total value of the ordinary treasury shares at December 31, 2019, amounting to 510 million euros, was recorded as follows: the part relating to accounting par value (90 million euros) was recognized as a deduction from share capital issued and the remaining part as a deduction from Other reserves and retained earnings (accumulated losses), including profit (loss) for the year.

SHARE CAPITAL INFORMATION

The ordinary and savings shares of TIM S.p.A. are listed in Italy (FTSE index).
In the shareholder resolutions passed to increase share capital against cash payments, the pre-emptive rights can be excluded to the extent of a maximum of ten percent of the pre-existing share capital, on condition that the issue price corresponds to the market price of the shares and that this is confirmed in a specific report issued by the firm charged with the audit of the Company.
The Group sources itself with the capital necessary to fund its requirements for business development and operations; the sources of funds are found in a balanced mix of equity, permanently invested by the shareholders, and debt capital, to guarantee a balanced financial structure and minimize the total cost of capital, with a resulting advantage to all the stakeholders.
Debt capital is structured according to different maturities and currencies to ensure an adequate diversification of the sources of funding and an efficient access to external sources of financing (taking advantage of the best opportunities offered in the financial markets of the euro, U.S. dollar and Pound sterling areas to minimize costs), taking care to reduce the refinancing risk.
The remuneration of equity is proposed by the board of directors to the shareholders' meeting, which meets to approve the annual financial statements, based upon market trends and business performance, once all the other obligations are met, including debt servicing. Therefore, in order to guarantee an adequate remuneration of capital, safeguard company continuity and business development, the Group constantly monitors the change in debt levels in relation to equity, the level of net debt and the operating margin of industrial operations.

Rights of savings shares

The rights of the TIM S.p.A. savings shares are indicated below:

- the profit shown in the duly approved separate financial statements, less the amount appropriated to the legal reserve, must be distributed to the holders of savings shares in an amount up to 5% of the 0.55 euros per share;
- after assigning preferred dividends to the savings shares, the distribution of which is approved by the shareholders' meeting, the remaining profit shall be assigned to all the shares so that the savings shares have the rights to dividends that are higher, than the dividends to which the ordinary shares are entitled, by 2% of 0.55 euros per share;
- if in any one year dividends of below 5% of the 0.55 euros per share are paid to the savings shares, the difference is carried over and added to the preferred dividends for the next two successive years;
- in the case of the distribution of reserves, the savings shares have the same rights as ordinary shares. Moreover, when there is no profit or insufficient profit reported in the separate financial statements for the year to satisfy the rights of the savings shares, the shareholders' meeting called to approve those separate financial statements may choose to satisfy the dividend right and/or the additional right by distributing

available reserves. The distribution of available reserves for such payments excludes the application of the mechanism extending the right to the preferred dividend not paid through the distribution of profits for the following two years;

- the reduction of share capital as a result of losses does not affect the savings shares except for the amount of the loss which is not covered by the portion of the share capital represented by the other shares;
- upon the wind-up of TIM S.p.A., the savings shares have a pre-emptive right in the reimbursement of capital up to the amount of 0.55 euros per share;
- in the event of the cessation of trading in the Company's ordinary or savings shares, the holder of savings shares may ask TIM S.p.A. to convert its shares into ordinary shares, according to the manner resolved by the special session of the shareholders' meeting called for that purpose within two months of being excluded from trading.

Additional paid-in capital, amounting to 2,094 million euros, was unchanged with respect to December 31, 2018.

Other reserves moved through the Statements of comprehensive income comprised:

- The **Reserve for financial assets measured at fair value through other comprehensive income**, positive for 19 million euros at December 31, 2019, decreased by 11 million euros compared to the figure at December 31, 2018. In particular, the change in 2019 includes the profits from the securities portfolio of Telecom Italia Finance (15 million euros, of which 2 million euros were realized), the charges related to other financial assets held by the Parent Company TIM (31 million euros, of which 7 million euros was realized) and the profits related to the equity investments in Assicurazioni Generali and Fin.Priv. of the Parent Company TIM (5 million euros, of which 1 million euros was realized). This reserve is expressed net of deferred tax liabilities of 1 million euros (at December 31, 2018, it was expressed net of deferred tax liabilities of 9 million euros).
- The **Reserve for cash flow hedges** had a negative balance of 440 million euros at December 31, 2019, (negative 563 million euros at December 31, 2018). This reserve is stated net of deferred tax assets of 140 million euros (at December 31, 2018, it was stated net of deferred tax assets of 157 million euros). In particular, this reserve includes the effective portion of gains or losses on the fair value adjustments of derivatives designated as cash flow hedges of the exposure to volatility in the cash flows of assets or liabilities recognized in the financial statements ("*cash flow hedge*").
- The **Reserve for exchange differences on translating foreign operations** showed a negative balance of 1,417 million euros at December 31, 2019 (negative 1,340 million euros at December 31, 2018) and mainly related to exchange differences resulting from the translation into euros of the financial statements of companies belonging to the Brazil Business Unit (negative 1,439 million euros versus negative 1,360 million euros at December 31, 2018).
- The **Reserve for remeasurements of employee defined benefit plans**, had a negative balance of 124 million euros, down 34 million euros compared to December 31, 2018. This reserve is stated net of deferred tax assets of 31 million euros (at December 31, 2018, it was stated net of deferred tax assets of 21 million euros). In particular, this reserve includes the recognition of changes in actuarial gains (losses).
- The **Share of other profits (losses) of associates and joint ventures accounted for using the equity method**, was nil at both December 31, 2019 and at December 31, 2018.

Other sundry reserves and retained earnings (accumulated losses), including profit (loss) for the year amounted to 8,561 million euros and increased by 751 million euros, as detailed below:

(millions of euros)	2019	2018
Adoption of IFRS 16	–	–
Profit (loss) for the year attributable to Owners of the Parent	916	(1,411)
Dividends approved - TIM S.p.A.	(166)	(166)
Issue of equity instruments	4	2
Other changes	(3)	2
Change for the year in Sundry reserves and retained earnings (accumulated losses), including profit (loss) for the year	**751**	**(1,573)**

Dividends approved of TIM S.p.A., of 166 million euros in 2019 and in 2018, related to the holders of savings shares which receive a dividend per share of 0.0275 euros.

Regarding **Equity attributable to non-controlling interests**, amounted to 2,346 million euros, mainly relating to the companies of the Brazil Business Unit (1,681 million euros) and the company INWIT (622 million euros), increased by 127 million euros compared to December 31, 2018, as detailed below:

(millions of euros)	2019	2018
Adoption of IFRS 16	–	–
Profit (loss) for the year attributable to Non-controlling interests	326	259
Group Company dividends paid to non-controlling shareholders	(130)	(115)
Changes in the Reserve for exchange differences on translating foreign operations	(36)	(169)
Change in the scope of consolidation	(44)	–
Other changes	11	23
Change for the year in Equity attributable to Non-controlling interests	**127**	**(2)**

Dividends of Group companies to non-controlling interests, mainly refer to INWIT for 51 million euros (46 million euros in 2018) and the Brazil Business Unit for 75 million euros (66 million euros in 2018).
The Reserve for exchange differences on translating foreign operations attributable to non-controlling interests showed a negative balance of 676 million euros at December 31, 2019 (negative 640 million euros at December 31, 2018), relating entirely to exchange differences arising from the translation into euros of the financial statements of the companies belonging to the Brazil Business Unit.

POTENTIAL FUTURE CHANGES IN SHARE CAPITAL

Details of "Future potential changes in share capital" are presented in the Note "Earnings per share".

NOTE 16
FINANCIAL LIABILITIES (NON-CURRENT AND CURRENT)

Non-current and current financial liabilities (gross financial debt) were broken down as follows:

(millions of euros)		12/31/2019	12/31/2018
Non-current financial liabilities for financing contracts and others			
Financial payables (medium/long-term):			
Bonds		17,848	16,686
Convertible bonds		1,925	1,893
Amounts due to banks		3,996	3,160
Other financial payables		176	155
		23,945	**21,894**
Other financial liabilities (medium/long-term):			
Hedging derivatives relating to hedged items classified as non-current assets/liabilities of a financial nature		1,659	1,423
Non-hedging derivatives		1	2
Other liabilities		–	–
		1,660	**1,425**
	(a)	**25,605**	**23,319**
Finance lease liabilities (medium/long-term)	**(b)**	**4,576**	**1,740**
Total non-current financial liabilities	**c=(a+b)**	**30,181**	**25,059**
Current financial liabilities for financing contracts and others			
Financial payables (short-term):			
Bonds		1,952	2,912
Convertible bonds		6	6
Amounts due to banks		1,048	2,385
Other financial payables		114	64
		3,120	**5,367**
Other financial liabilities (short-term):			
Hedging derivatives relating to hedged items classified as current assets/liabilities of a financial nature		62	338
Non-hedging derivatives		–	–
Other liabilities		–	–
		62	**338**
	(d)	**3,182**	**5,705**
Finance lease liabilities (short-term)	**(e)**	**639**	**208**
Total current financial liabilities	**f=(d+e)**	**3,821**	**5,913**
Financial liabilities directly associated with Discontinued operations/Non-current assets held for sale	**(g)**	**655**	**–**
Total Financial liabilities (Gross financial debt)	**h=(c+f+g)**	**34,657**	**30,972**

Further details on Financial Instruments are provided in the Note "Supplementary disclosure on financial instruments".

The figures in the following tables as at December 31, 2019, take into account the introduction of the IFRS16 accounting standard.

Gross financial debt according to the original currency of the transaction is as follows:

	12/31/2019		12/31/2018	
	(millions of foreign currency)	(millions of euros)	(millions of foreign currency)	(millions of euros)
USD	5,683	5,059	6,450	5,633
GBP	389	457	1,267	1,416
BRL	9,444	2,086	2,609	588
JPY	20,030	164	20,033	159
ILS	60	15	–	–
EURO		26,221		23,176
Total excluding Held for Sale		**34,002**		**30,972**
Held for Sale		655		–
Total		**34,657**		**30,972**

For the exchange rates used for the conversion of amounts in foreign currency, see the Note "Other information".

The breakdown of gross financial debt by effective interest-rate bands applicable to the original currency is provided below, excluding the effect of any derivative hedging instruments:

(millions of euros)	12/31/2019	12/31/2018
Up to 2.5%	5,627	5,173
From 2.5% to 5%	13,793	10,534
From 5% to 7.5%	8,059	10,130
From 7.5% to 10%	2,211	2,209
Over 10%	1,794	443
Accruals/deferrals, MTM and derivatives	2,518	2,483
Total excluding Held for Sale	**34,002**	**30,972**
Held for Sale	655	–
Total	**34,657**	**30,972**

Following the use of derivative hedging instruments, on the other hand, the gross financial debt by nominal interest rate bracket is:

(millions of euros)	12/31/2019	12/31/2018
Up to 2.5%	13,224	12,667
From 2.5% to 5%	11,474	7,881
From 5% to 7.5%	3,747	6,155
From 7.5% to 10%	1,245	1,343
Over 10%	1,794	443
Accruals/deferrals, MTM and derivatives	2,518	2,483
Total excluding Held for Sale	**34,002**	**30,972**
Held for Sale	655	–
Total	**34,657**	**30,972**

The maturities of financial liabilities according to the expected nominal repayment amount, as defined by contract, are the following:

Details of the maturities of financial liabilities – at nominal repayment amount:

(millions of euros)	maturing by 12/31 of the year: 2020	2021	2022	2023	2024	After 2024	Total
Convertible bonds	1,488	564	3,089	2,441	3,335	10,245	21,162
Loans and other financial liabilities	382	1,451	1,203	606	161	445	4,248
Finance lease liabilities	610	521	495	496	442	2,622	5,186
Total	**2,480**	**2,536**	**4,787**	**3,543**	**3,938**	**13,312**	**30,596**
Current financial liabilities	773	–	–	–	–	–	773
Total excluding Held for Sale	**3,253**	**2,536**	**4,787**	**3,543**	**3,938**	**13,312**	**31,369**
Held for Sale	657						657
Total	**3,910**	**2,536**	**4,787**	**3,543**	**3,938**	**13,312**	**32,026**

The main components of financial liabilities are commented below.

Bonds are broken down as follows:

(millions of euros)	12/31/2019	12/31/2018
Non-current portion	17,848	16,686
Current portion	1,952	2,912
Total carrying amount	**19,800**	**19,598**
Fair value adjustment and measurements at amortized cost	(638)	(577)
Total nominal repayment amount	**19,162**	**19,021**

The **convertible bonds** consist of the unsecured equity-linked bond for 2,000 million euros, with a coupon of 1.125%, issued by TIM S.p.A., convertible into newly-issued ordinary shares, maturing in 2022. This item was broken down as follows:

(millions of euros)	12/31/2019	12/31/2018
Non-current portion	1,925	1,893
Current portion	6	6
Total carrying amount	**1,931**	**1,899**
Fair value adjustment and measurements at amortized cost	69	101
Total nominal repayment amount	**2,000**	**2,000**

The nominal repayment amount of bonds and convertible bonds totaled 21,162 million euros, down by 141 million euros compared to December 31, 2018 (21,021 million euros) as a result of new issues, repayments and the exchange effect in 2019.

The following table lists the bonds issued by companies of the TIM Group, by issuing company, expressed at the nominal repayment amount, net of bond repurchases, and also at market value:

Currency	Amount (millions)	Nominal repayment amount (millions of euros)	Coupon	Issue date	Maturity date	Issue price (%)	Market price at 12/31/19 (%)	Market value at 12/31/19 (millions of euros)
Bonds issued by TIM S.p.A.								
Euro	719.5	719.5	4.000%	12/21/12	1/21/20	99.184	100.476	723
Euro	547.5	547.5	4.875%	9/25/13	9/25/20	98.966	103.825	568
Euro	563.6	563.6	4.500%	1/23/14	1/25/21	99.447	105.047	592
Euro	(b) 205	205	6 month Euribor (base 365)	1/1/02	1/1/22	100	100	205
Euro	883.9	883.9	5.250%	2/10/10	2/10/22	99.295	110.992	981
Euro	(c) 2,000	2,000	1.125%	3/26/15	3/26/22	100	100.431	2,009
Euro	1,000	1,000	3.250%	1/16/15	1/16/23	99.446	107.711	1,077
GBP	375	440.8	5.875%	5/19/06	5/19/23	99.622	111.419	491
Euro	1,000	1,000	2.500%	1/19/17	7/19/23	99.288	105.930	1,059
Euro	750	750	3.625%	1/20/16	1/19/24	99.632	110.325	827
Euro	1,250	1,250	4.000%	1/11/19	4/11/24	99.436	111.070	1,388
USD	1,500	1,335.2	5.303%	5/30/14	5/30/24	100	108.099	1,443
Euro	1,000	1,000	2.750%	4/15/19	4/15/25	99.320	106.211	1,062
Euro	1,000	1,000	3.000%	9/30/16	9/30/25	99.806	107.331	1,073
Euro	750	750	2.875%	6/28/18	1/28/26	100	105.639	792
Euro	1,000	1,000	3.625%	5/25/16	5/25/26	100	110.986	1,110
Euro	1,250	1,250	2.375%	10/12/17	10/12/27	99.185	102.422	1,280
Euro	670	670	5.250%	3/17/05	3/17/55	99.667	115.428	773
Subtotal		16,365.5						17,453
Bonds issued by Telecom Italia Finance S.A. and guaranteed by TIM S.p.A.								
Euro	1,015	1,015	7.750%	1/24/03	1/24/33	(a) 109.646	150.613	1,529
Subtotal		1,015						1,529
Bonds issued by Telecom Italia Capital S.A. and guaranteed by TIM S.p.A.								
USD	1,000	890.15	6.375%	10/29/03	11/15/33	99.558	112.041	997
USD	1,000	890.15	6.000%	10/6/04	9/30/34	99.081	107.509	957
USD	1,000	890.15	7.200%	7/18/06	7/18/36	99.440	117.804	1,049
USD	1,000	890.15	7.721%	6/4/08	6/4/38	100	123.139	1,096
Subtotal		3,560.6						4,099
Bonds issued by Tim S.A. and guaranteed by Tim Participaçoes S.A.								
BRL	1,000	220.8	104.10% CDI	1/25/19	7/15/20	100	100	221
Subtotal		220.8						221
Total		21,161.9						23,302

(a) Weighted average issue price for bonds issued with more than one tranche.
(b) Reserved for employees.
(c) Bond convertible into newly-issued TIM S.p.A. ordinary treasury shares.

The regulations and the Offering Circulars relating to the bonds of the TIM Group are available on the corporate website www.telecomitalia.com.

The following table lists the changes in bonds during 2019:

New issues

(millions of original currency)	Currency	Amount	Issue date
Telecom Italia S.p.A. 1,250 million euros 4.000% maturing 4/11/2024	Euro	1,250	1/11/2019
TIM S.A. 1,000 million reais 104.10% CDI maturing 7/15/2020	BRL	1,000	1/25/2019
Telecom Italia S.p.A. 1,000 million euros 2.750% maturing 4/15/2025	Euro	1,000	4/15/2019

Repayments

(millions of original currency)	Currency	Amount	Repayment date
Telecom Italia S.p.A. 832 million euros 5.375% (1)	Euro	832	1/29/2019
Telecom Italia Capital S.A. 760 million USD 7.175% (2)	USD	760	6/18/2019
Telecom Italia S.p.A. 850 million GBP 6.375%	GBP	850	6/24/2019

(1) Net of buy-backs totaling 418 million euros made by the company in 2015.
(2) Net of the securities bought back by TIM S.p.A. (240 million USD) on July 20, 2015.

Medium/long-term **amounts due to banks** of 3,996 million euros (3,160 million euros at December 31, 2018) increased by 836 million euros. Short-term amounts due to banks totaled 1,048 million euros (2,385 million euros at December 31, 2018) and included 377 million euros of the current portion of medium/long-term amounts due to banks.
Medium/long-term **other financial payables** totaled 176 million euros (155 million euros at December 31, 2018), 160 million euros of which refer to the Telecom Italia Finance S.A. loan for JPY 20,000 million, maturing in 2029. Short-term other financial payables amounted to 114 million euros (64 million euros at December 31, 2018) and included 7 million euros of the current portion of medium/long-term other financial payables.
Medium/long-term **finance lease liabilities** amounted to 4,576 million euros (1,740 million euros at December 31, 2018). Short-term finance lease liabilities amounted to 639 million euros (208 million euros at December 31, 2018) and referred to the current portion of medium/long-term finance lease liabilities. Starting from January 1, 2019, the new accounting standard IFRS 16 was introduced (for more details, see the Note "Accounting standards"), whose application led at December 31, 2019 to the recognition of a finance lease liabilities of 3,270 million euros. The remainder refers to property leases accounted for according to the financial method established by IAS 17.
With reference to the financial lease liabilities recognized following the adoption of IFRS 16, in 2019 the following is noted:

(millions of euros)	12/31/2019
Principal reimbursements	610
Cash out interest portion	192
Total	**802**

Hedging derivatives relating to items classified as non-current liabilities of a financial nature amounted to 1,659 million euros (1,423 million euros at December 31, 2018). Hedging derivatives relating to items classified as current liabilities of a financial nature totaled 62 million euros (338 million euros at December 31, 2018).
Non-hedging derivatives classified under non-current financial liabilities amounted to 1 million euros (2 million euros at December 31, 2018), whereas there were no non-hedging derivatives classified as current financial liabilities (zero million euros at December 31, 2018). These also include the measurement of derivatives which, although put into place for hedging purposes, do not possess the formal requisites to be considered as such under IFRS.

COVENANTS AND NEGATIVE PLEDGES IN PLACE AT DECEMBER 31, 2019

Bonds issued by the TIM Group do not contain financial covenants (e.g. ratios such as Debt/EBITDA, EBITDA/Interest, etc.) or clauses that result in the automatic early redemption of the bonds in relation to

events other than the insolvency of the TIM Group[1]; furthermore, the repayment of the bonds and the payment of interest are not covered by specific guarantees nor are there commitments provided relative to the assumption of future guarantees, except for the full and unconditional guarantees provided by TIM S.p.A. for the bonds issued by Telecom Italia Finance S.A. and Telecom Italia Capital S.A..
Since the bonds were placed principally with institutional investors in major world capital markets (Euromarket and the U.S.A.), the terms which regulate the bonds are in line with market practice for similar transactions effected on these same markets. Consequently, they carry negative pledges, such as, for example, the commitment not to pledge the company’s assets as collateral for loans.

With regard to loans taken out by TIM S.p.A. with the European Investment Bank (EIB), at December 31, 2019, the nominal amount of outstanding loans amounted to 950 million euros, of which 850 million euros at direct risk and 100 million euros secured.
EIB loans not secured by bank guarantees for a nominal amount equal to 850 million euros signed on December 14, 2015 and November 25, 2019 are subject to the following covenants:

- in the event the company becomes the target of a merger, demerger or contribution of a business segment outside the Group, or sells, disposes of or transfers assets or business segments (except in certain cases, expressly provided for), it shall immediately inform the EIB which shall have the right to ask for guarantees to be provided or changes to be made to the loan contract, or, only for certain loan contracts, the EIB shall have the option to demand the immediate repayment of the loan (should the merger, demerger or contribution of a business segment outside the Group compromise the Project execution or cause a prejudice to EIB in its capacity as creditor);
- TIM undertook to ensure that, for the entire duration of the loan, the total financial debt of the Group companies other than TIM S.p.A. – except for the cases when that debt is fully and irrevocably secured by TIM S.p.A. – is lower than 35% (thirty-five percent) of the Group's total financial debt.

In all EIB loans, both secured by guarantees issued by banks or subject to EIB approval and at direct risk, some covenants are envisaged, including:

- "Inclusion clause", under which, in the event TIM commits to uphold financial covenants in other loan contracts (and even more restrictive clauses for the 2015 direct risk loan, including, for instance, cross default clauses and commitments restricting the sale of goods) that are not present in or are stricter than those granted to the EIB, the EIB will have the right – if, in its reasonable opinion, it considers that such changes may have a negative impact on TIM's financial capacity – to request the provision of guarantees or an amendment of the loan contract in order to establish an equivalent provision in favor of the EIB;
- "Network Event", under which, in the event of the disposal of the entire fixed network or of a substantial part of it (in any case, more than half in quantitative terms) to third parties not controlled by the Company, or in the event of disposal of the controlling interest in the company in which the network or a substantial part of it has previously been transferred, TIM must immediately inform the EIB, which may then opt to demand collateral or an amendment of the loan contract or choose an alternative solution.

The loan agreements of TIM S.p.A. do not contain financial covenants (e.g. ratios such as Debt/EBITDA, EBITDA/Interests, etc.) which would oblige the Company to repay the outstanding loan if the covenants are not observed.
The loan agreements contain the usual other types of covenants, including the commitment not to pledge the Company’s assets as collateral for loans (negative pledge) and the commitment not to change the business purpose or sell the assets of the Company unless specific conditions exist (e.g. the sale takes place at fair market value). Covenants with basically the same content are also found in export credit loan agreements.

In the Loan Agreements and the Bonds, TIM is required to provide notification of change of control. Identification of the occurrence of a change of control and the applicable consequences – including, at the discretion of the investors, the establishment of guarantees or the early repayment of the amount paid in cash or as shares and the cancellation of the commitment in the absence of agreements to the contrary – are specifically covered in the individual agreements.
In addition, the outstanding loans generally contain a commitment by TIM, whose breach is an Event of Default, not to implement mergers, demergers or transfers of business, involving entities outside the Group. Such an Event of Default may entail, upon request of the Lender, the early redemption of the drawn amounts and/or the annulment of the undrawn commitment.

In the documentation of the loans granted to certain companies of the Tim Brasil group, the companies must generally respect certain financial ratios (e.g. capitalization ratios, ratios for servicing debt and debt ratios) as well as the usual other covenants, under pain of a request for the early repayment of the loan.

Finally, as at December 31, 2019, no covenant, negative pledge or other clause relating to the debt position, had in any way been breached or violated.

(1) A change of control event can result in the early repayment of the convertible bond of TIM S.p.A., as further detailed below.

REVOLVING CREDIT FACILITY

The following table shows committed credit lines available at December 31, 2019.

(billions of euros)	12/31/2019		12/31/2018	
	Agreed	Drawn down	Agreed	Drawn down
Revolving Credit Facility – maturing January 2023	5.0	-	5.0	-
Total	**5.0**	**-**	**5.0**	**-**

At December 31, 2019, TIM had bilateral Term Loans for 1,750 million euros with various banking counterparties and overdraft facilities for 350 million euros, drawn down for the full amount.

On October 29, 2019, TIM entered into a Promissory Loan Agreement ("Schuldschein") for a total amount of 250 million euros, of which 229 million euros matures on October 29, 2023 and 21 million euros matures on October 29, 2025.

On 19 December 2019, INWIT signed a loan agreement with a pool of banks for a total amount of 3 billion euros, divided into three credit lines (bridge loan, term loan and revolving credit facility). This loan will be used to finance INWIT's acquisition of the minority stake in VOD Towers, the distribution of an extraordinary dividend, as well as to refinance part of INWIT's existing debt and meet its cash flow needs.

TIM'S RATING AT DECEMBER 31, 2019

At December 31, 2019, the three rating agencies – Standard & Poor's, Moody's and Fitch Ratings – rated TIM as follows:

	Rating	**Outlook**
STANDARD & POOR'S	BB+	Stable
MOODY'S	Ba1	Negative
FITCH RATINGS	BB+	Stable

NOTE 17
NET FINANCIAL DEBT

The following table shows the net financial debt at December 31, 2019 and December 31, 2018, calculated in accordance with the criteria indicated in the "Recommendations for the Consistent Implementation of the European Commission Regulation on Prospectuses", issued on February 10, 2005 by the European Securities & Markets Authority (ESMA), and adopted by Consob.
For the purpose of determining such figure, the amount of financial liabilities has been adjusted by the effect of the relative hedging derivatives recorded in assets and the receivables arising from financial subleasing.
This table also shows the reconciliation of the net financial debt determined according to the criteria indicated by the ESMA and net financial debt calculated according to the criteria of the TIM Group.

(millions of euros)		12/31/2019	12/31/2018
Non-current financial liabilities		**30,181**	**25,059**
Current financial liabilities		**3,821**	**5,913**
Financial liabilities directly associated with Discontinued operations/Non-current assets held for sale		**655**	**–**
Total Gross financial debt	**(a)**	**34,657**	**30,972**
Non-current financial assets (°)			
Non-current financial receivables arising from lease contracts		(51)	(54)
Non-current hedging derivatives		(2,051)	(1,490)
	(b)	**(2,102)**	**(1,544)**
Current financial assets			
Securities other than investments		(877)	(1,126)
Current financial receivables arising from lease contracts		(58)	(70)
Financial receivables and other current financial assets		(122)	(270)
Cash and cash equivalents		(3,138)	(1,917)
Financial assets relating to Discontinued operations/Non-current assets held for sale		(65)	–
	(c)	**(4,260)**	**(3,383)**
Net financial debt as per Consob communication DEM/6064293/2006 (ESMA)	**(d=a+b+c)**	**28,295**	**26,045**
Non-current financial assets (°)			
Securities other than investments		–	–
Other financial receivables and other non-current financial assets		(49)	(50)
	(e)	**(49)**	**(50)**
Net financial debt (*)	**(f=d+e)**	**28,246**	**25,995**
Reversal of fair value measurement of derivatives and related financial liabilities/assets	(g)	(578)	(725)
Adjusted net financial debt	**(f+g)**	**27,668**	**25,270**

(°) At December 31, 2019 and at December 31, 2018, "Non-current financial assets" (b+e) amounted to 2,151 million euros and 1,594 million euros, respectively.
(*) As regards the effects of related party transactions on net financial debt, reference should be made to the specific table included in the Note "Related party transactions ".

The following additional disclosures are provided in accordance with IAS 7:

Additional cash flow information required by IAS 7

(millions of euros)		12/31/2018	Cash movements		Non-cash movements			12/31/2019
			Receipts and/or issues	Payments and/or reimbursements	Differences exchange rates	Fair value changes	Other changes and reclassifications	
Financial payables (medium/long-term):								
Bonds		19,598	2,476	(2,463)	124	68	(3)	19,800
Convertible bonds		1,899					32	1,931
Amounts due to banks		4,297	1,292	(1,118)			(98)	4,373
Other financial payables		157			5		21	183
	(a)	**25,951**	**3,768**	**(3,581)**	**129**	**68**	**(48)**	**26,287**
of which short-term		*4,057*						*2,342*
Finance lease liabilities (medium/long-term):		**1,948**	**648**	**(664)**	**(39)**		**3,322**	**5,215**
	(b)	**1,948**	**648**	**(664)**	**(39)**	**–**	**3,322**	**5,215**
of which short-term		*208*						*639*
Other financial liabilities (medium/long-term):								
Hedging derivative liabilities relating to hedged items classified as non-current assets/liabilities of a financial nature		1,761			(302)	265	(3)	1,721
Non-hedging derivative liabilities		2			(1)	2	(2)	1
Other liabilities		–						–
	(c)	**1,763**	**–**	**–**	**(303)**	**267**	**(5)**	**1,722**
of which short-term		*338*						*62*
Financial payables (short-term):								
Amounts due to banks		1,248					(577)	671
Other financial payables		62					45	107
	(d)	**1,310**	**–**	**–**	**–**	**–**	**(532)**	**778**
Financial liabilities directly associated with Discontinued operations/Non-current assets held for sale:		**–**	**111**	**(167)**			**711**	**655**
	(e)	**–**	**111**	**(167)**	**–**	**–**	**711**	**655**
Total Financial liabilities (Gross financial debt)								
	(f=a+b+c+d+e)	**30,972**	**4,527**	**(4,412)**	**(213)**	**335**	**3,448**	**34,657**
Hedging derivative receivables relating to hedged items classified as current and non-current assets/liabilities of a financial nature	**(g)**	1,732			(34)	481	(27)	2,152
Non-hedging derivative receivables	**(h)**	19			(9)	1		11
Total	**(i=f-g-h)**	**29,221**	**4,527**	**(4,412)**	**(170)**	**(147)**	**3,475**	**32,494**

Additional Cash Flow information

The value of the paid and collected interest expense reported in the Report on Operations takes into account the movements relating to transactions in CCIRS derivatives to hedge underlying assets in both the assets component (collections) and the liabilities component (payments) without netting the positions.

(millions of euros)	2019	2018
Interest expense paid	(1,750)	(1,978)
Interest income received	589	871
Net total	**(1,161)**	**(1,107)**

To consider the components of CCIRS derivatives as a single transaction, a representation is given with interest flows in and out shown net. This approach gives the following results:

(millions of euros)	2019	2018
Interest expense paid	(1,341)	(1,485)
Interest income received	180	378
Net total	**(1,161)**	**(1,107)**

NOTE 18
FINANCIAL RISK MANAGEMENT

FINANCIAL RISK MANAGEMENT OBJECTIVES AND POLICIES OF THE TIM GROUP

The TIM Group is exposed to the following financial risks in the ordinary course of its business operations:

- market risk: stemming from changes in interest rates and exchange rates in connection with financial assets that have been originated and financial liabilities that have been assumed;
- credit risk: representing the risk of non-fulfillment of obligations undertaken by the counterparty with regard to the liquidity investments of the Group;
- liquidity risk: connected with the need to meet short-term financial commitments.

These financial risks are managed by:

- the establishment, at central level, of guidelines for directing operations;
- the work of an internal committee that monitors the level of exposure to market risks in accordance with preestablished general objectives;
- the identification of the most suitable financial instruments, including derivatives, to reach preestablished objectives;
- the monitoring of the results achieved;
- the exclusion of the use of financial instruments for speculative purposes.

The policies for the management and the sensitivity analyses of the above financial risks by the TIM Group are described below.

IDENTIFICATION OF RISKS AND ANALYSIS

The TIM Group is exposed to market risks, as a result of changes in interest rates and exchange rates, in the markets in which it operates or has bond issues, mainly in Europe, the United States, Great Britain and Latin America.
The financial risk management policies of the TIM Group are directed towards diversifying market risks, hedging exchange rate risk in full and minimizing interest rate exposure by an appropriate diversification of the portfolio, which is also achieved by using carefully selected derivative financial instruments.
The Group sets an optimum composition for the fixed-rate and variable-rate debt structure and uses derivative financial instruments to achieve that set composition. In consideration of the Group's operating activities, the optimum combination of medium/long-term non-current financial liabilities has been set, on the basis of the nominal amount, in the range 65%-75% for the fixed-rate component and 25%-35% for the variable-rate component.
In managing market risk, the Group has adopted Guidelines on "Management and control of financial risk" and mainly uses the following financial derivatives:

- Interest Rate Swaps (IRS), to modify the profile of the original exposure to interest rate risks on loans and bonds, both fixed and variable;
- Cross Currency and Interest Rate Swaps (CCIRS) and Currency Forwards, to convert loans and bonds issued in currencies other than euro – principally in US dollars and British pounds – to the functional currencies of the operating companies.

Derivative financial instruments are designated as fair value hedges for managing exchange rate and interest rate risk on instruments denominated in currencies other than euro and for managing interest rate risk on fixed-rate loans. Derivative financial instruments are designated as cash flow hedges when the objective is to pre-set the exchange rate of future transactions and the interest rate.
All derivative financial instruments are entered into with banking and financial counterparties with at least a “BBB-” rating from Standard & Poor’s or an equivalent rating, and an outlook that is not negative. The exposure to the various market risks can be measured by sensitivity analyses, as set forth in IFRS 7. This analysis illustrates the effects produced by a given and assumed change in the levels of the relevant variables in the various reference markets (exchange rates, interest rates and prices) on finance income and expenses and, at

times, directly on equity. The sensitivity analysis was performed based on the suppositions and assumptions indicated below:

- sensitivity analyses were performed by applying reasonably likely changes in the relevant risk variables to the amounts in the consolidated financial statements at December 31, 2019;
- the changes in value of fixed-rate financial instruments, other than derivatives, produced by changes in the reference interest rates, generate an impact on profit only when, in accordance with IAS 39 and IFRS 9, they are accounted for at their fair value through profit and loss. All fixed-rate instruments, which are accounted for at amortized cost, are not subject to interest rate risk as defined by IFRS 7;
- in the case of fair value hedge relationships, fair value changes of the underlying hedged item and of the derivative instrument, due to changes in the reference interest rates, offset each other almost entirely in the income statement for the year. As a result, these financial instruments are not exposed to interest rate risk;
- the changes in value of designated financial instruments in a cash flow hedge relationship, produced by changes in interest rates, generate an impact on the debt level and on equity; accordingly, they are included in this analysis;
- the changes in value, produced by changes in the reference interest rates, of variable-rate financial instruments, other than derivatives, which are not part of a cash flow hedge relationship, generate an impact on the finance income and expenses for the year; accordingly they are included in this analysis.

Exchange rate risk – Sensitivity analysis

At December 31, 2019 (and also at December 31, 2018), the exchange rate risk of the Group's loans denominated in currencies other than the functional currency of the consolidated financial statements was hedged in full. Accordingly, a sensitivity analysis was not performed on exchange risk.

Interest rate risk – Sensitivity analysis

The change in interest rates on the variable component of payables and liquidity may lead to higher or lower finance income and expenses, while the changes in the level of the expected interest rate affect the fair value measurement of the Group's derivatives. In particular:

- with regard to derivatives that convert the liabilities contracted by the Group to fixed rates (cash flow hedging), in line with international accounting standards that regulate hedge accounting, the fair value (mark-to-market) measurement of such instruments is set aside in a specific unavailable Equity reserve. The combined change of the numerous market variables to which the mark-to-market calculation is subject between the transaction inception date and the measurement date renders any assumption about the trend of the variables of little significance. As the contract expiration date approaches, the accounting effects described will gradually be absorbed until they cease to exist;
- if at December 31, 2019 the interest rates in the various markets in which the TIM Group operates had been 100 basis points higher/lower compared to the actual rates, then higher/lower finance expenses, before the income tax effect, would have been recognized in the income statement of 54 million euros (63 million euros at December 31, 2018).

Refer to Note "Accounting Policies" for the potential risk generated by the reform of benchmark interest rates.

Allocation of the financial structure between fixed rate and variable rate

As for the allocation of the financial structure between the fixed-rate component and the variable-rate component, for both financial assets and liabilities, reference should be made to the following tables. They show the nominal repayment/investment amount (insofar as that amount expresses the effective interest rate exposure of the Group) and, as far as financial assets are concerned, the intrinsic nature (financial characteristics and duration) of the transactions under consideration rather than just the stated contractual terms alone. Bearing that in mind, a transaction whose characteristics (short or very short time frame and frequent renewal) are such that the interest rate is periodically reset on the basis of market parameters, even though the contract does not call for re-fixing the interest rate (such as in the case of bank deposits), has been considered in the category of variable rate.

Total Financial liabilities (at the nominal repayment amount)

(millions of euros)	12/31/2019 Fixed rate	Variable Rate	Total	12/31/2018 Fixed rate	Variable rate	Total
Bonds	16,402	4,760	21,162	16,484	4,537	21,021
Loans and other financial liabilities	5,550	3,884	9,434	2,820	3,500	6,320
Total non-current financial liabilities (including the current portion of medium/long-term financial liabilities)	**21,952**	**8,644**	**30,596**	**19,304**	**8,037**	**27,341**
Total current financial liabilities (*)	**495**	**278**	**773**	**857**	**451**	**1,308**
Total excluding Held for Sale	**22,447**	**8,922**	**31,369**	**20,161**	**8,488**	**28,649**
Held for Sale	627	30	657	–	–	–
Total	**23,074**	**8,952**	**32,026**	**20,161**	**8,488**	**28,649**

Total Financial assets (at the nominal investment amount)

(millions of euros)	12/31/2019 Fixed rate	Variable Rate	Total	12/31/2018 Fixed rate	Variable rate	Total
Cash and cash equivalents	–	2,655	2,655	–	1,695	1,695
Securities	604	749	1,353	950	401	1,351
Other receivables	787	104	891	879	71	950
Total excluding Held for Sale	**1,391**	**3,508**	**4,899**	**1,829**	**2,167**	**3,996**
Held for Sale	–	65	65	–	–	–
Total	**1,391**	**3,573**	**4,964**	**1,829**	**2,167**	**3,996**

With regard to variable-rate financial instruments, the contracts provide for revisions of the relative parameters to take place within the subsequent 12 months.

Effective interest rate

As to the effective interest rate, for the categories where that parameter can be determined, such parameter refers to the original transaction net of the effect of any derivative hedging instruments.
The disclosure, since it is provided by class of financial asset and liability, was determined, for purposes of calculating the weighted average, using the carrying amount adjusted by accruals, prepayments, deferrals and changes in fair value: this is therefore the amortized cost, net of accruals and any changes in fair value as a consequence of hedge accounting.

Total Financial liabilities

(millions of euros)	12/31/2019 Adjusted carrying amount	Effective interest rate (%)	12/31/2018 Adjusted carrying amount	Effective interest rate (%)
Bonds	20,978	4.53	20,808	4.83
Loans and other financial liabilities	10,506	4.12	7,681	3.02
Total excluding Held for Sale	**31,484**	**4.39**	**28,489**	**4.34**
Held for Sale	650	2.56	–	–
Total	**32,134**	**4.36**	**28,489**	**4.34**

Total Financial assets

(millions of euros)	12/31/2019 Adjusted carrying amount	12/31/2019 Effective interest rate (%)	12/31/2018 Adjusted carrying amount	12/31/2018 Effective interest rate (%)
Cash and cash equivalents	2,655	0.05	1,695	0.12
Securities	1,353	0.33	1,351	3.13
Other receivables	153	3.35	182	2.96
Total excluding Held for Sale	**4,161**	**0.26**	**3,228**	**1.54**
Held for Sale	65	–	–	–
Total	**4,226**	**0.26**	**3,228**	**1.54**

As for financial assets, the weighted average effective interest rate is not essentially influenced by the existence of derivatives.
As for market risk management using derivatives, reference should be made to the Note "Derivatives".

CREDIT RISK

Exposure to credit risk for the TIM Group consists of possible losses that could arise from the failure of either commercial or financial counterparties to fulfill their assumed obligations. To measure this risk over time for impairment of financial assets (trade receivables due from customers included), the introduction of IFRS 9 required switching from the incurred loss model pursuant to IAS 39 to the expected credit loss model.
Such exposure mainly stems from general economic and financial factors, the potential occurrence of specific insolvency situations of some borrowers and other more strictly technical-commercial or administrative factors.
The TIM Group's maximum theoretical exposure to credit risk is represented by the carrying amount of the financial assets and trade receivables recorded in the financial statements.

Risk related to trade receivables is managed using customer scoring and analysis systems. For specific categories of trade receivables, the Group also makes use of factoring, mainly on a "non-recourse" basis.
Provision charges for bad debts are recorded for specific credit positions that have an element of individual risk. On credit positions that do not have such characteristics, provision charges are recorded by customer segment according to the average uncollectibility estimated on the basis of statistics. Further details are provided in the Note "Trade and miscellaneous receivables and other current assets".
Financial assets other than trade receivables are written down for impairment on the basis of a general model which estimates expected credit losses over the following 12 months, or over the residual life of the asset in the event of a substantial increase in its credit risk. The expected credit loss is calculated based on the default probability and the percentage of credit that cannot be recovered in the event of a default (the loss given default). The model adopted to calculate the expected credit loss is based on the Bloomberg Credit Risk Model, a model developed by Bloomberg which, starting from Merton's distance-to-default ("DD") concept, estimates the probability of default together with the recovery rate. At the same time, the loss given default is defined as the non-recoverable component of post-default financial assets.
In particular, the DD - based on balance sheet data - is enriched with a series of additional information by country (macroeconomic, risk), business sector and individual company, as well as accounting adjustments aimed at ensuring uniformity of the model's outputs; finally, through a non-linear function of the DD, you get the default probability.

Moreover, as regards credit risk relating to the asset components which contribute to the determination of "Net financial debt", it should be noted that the management of the Group's liquidity is guided by conservative criteria and is principally based on the following:

- money market management: the investment of temporary excess cash resources;
- bond portfolio management: the investment of a permanent level of liquidity and the investment of that part of medium term liquidity, as well as the improvement in the average yield.

In order to limit the risk of the non-fulfillment of the obligations undertaken by the counterparty, deposits of the European companies are made with leading banking and financial institutions rated no lower than investment grade and non-negative outlook. Investments by the companies in South America are made with leading local counterparties. Moreover, deposits are made generally for periods of less than three months. With regard to other temporary investments of liquidity, there is a bond portfolio in which the investments have a low level of risk. All investments have been carried out in compliance with the Group Guidelines on "Management and control of financial risk".

In order to minimize credit risk, the Group also pursues a diversification policy for its investments of liquidity and allocation of its credit positions among different banking counterparties. Consequently, there are no significant positions with any one single counterparty.

LIQUIDITY RISK

The Group pursues the objective of achieving an "adequate level of financial flexibility" which is expressed by maintaining a current treasury margin to cover the refinancing requirements at least for the next 12 months with irrevocable bank lines and liquidity.
10% of gross financial debt at December 31, 2019 (nominal repayment amount) will become due in the next 12 months, notwithstanding Discontinued operations /Non-current assets held for sale.
Current financial assets at December 31, 2019, together with unused committed bank lines, are sufficient to fully cover the Group's financial liabilities due at least for the next 24 months.
The following tables report the contractual cash flows, not discounted to present value, relative to gross financial debt at nominal repayment amounts and the interest flows, determined using the terms and the interest and exchange rates in place at December 31, 2019. The portions of principal and interest of the hedged liabilities includes both the disbursements and the receipts of the relative hedging derivatives. Specifically, the interest portions of "Loans and other financial liabilities" also include that relating to derivatives hedging for both loans and bonds.

Financial liabilities – Maturities of contractually expected disbursements

(millions of euros)		maturing by 12/31 of the year:						
		2020	**2021**	**2022**	**2023**	**2024**	**After 2024**	**Total**
Convertible bonds	Principal	1,488	564	3,089	2,441	3,335	10,245	21,162
	Interest portion	889	828	791	733	614	4,802	8,657
Loans and other financial liabilities (*)	Principal	382	1,451	1,203	606	161	445	4,248
	Interest portion	(68)	(77)	(91)	(97)	(81)	(696)	(1,110)
Finance lease liabilities	Principal	610	521	495	496	442	2,622	5,186
	Interest portion	288	257	228	202	177	672	1,824
Non-current financial liabilities	**Principal**	**2,480**	**2,536**	**4,787**	**3,543**	**3,938**	**13,312**	**30,596**
	Interest portion	**1,109**	**1,008**	**928**	**838**	**710**	**4,778**	**9,371**
Current financial liabilities	**Principal**	**773**	**–**	**–**	**–**	**–**	**–**	**773**
	Interest portion	**4**	**–**	**–**	**–**	**–**	**–**	**4**
Total excluding Held for Sale	**Principal**	**3,253**	**2,536**	**4,787**	**3,543**	**3,938**	**13,312**	**31,369**
	Interest portion	**1,113**	**1,008**	**928**	**838**	**710**	**4,778**	**9,375**
Held for Sale	Principal	657	–	–	–	–	–	657
	Interest portion	82	–	–	–	–	–	82
Total	**Principal**	**3,910**	**2,536**	**4,787**	**3,543**	**3,938**	**13,312**	**32,026**
	Interest portion	**1,195**	**1,008**	**928**	**838**	**710**	**4,778**	**9,457**

(*) These include hedging and non-hedging derivatives.

Derivatives on financial liabilities – Contractually expected interest flows

(millions of euros)	maturing by 12/31 of the year:						
	2020	**2021**	**2022**	**2023**	**2024**	**After 2024**	**Total**
Disbursements	302	297	297	289	240	2,123	3,548
Receipts	(427)	(426)	(425)	(415)	(346)	(2,948)	(4,987)
Hedging derivatives – net (receipts) disbursements	**(125)**	**(129)**	**(128)**	**(126)**	**(106)**	**(825)**	**(1,439)**
Disbursements	25	16	15	8	17	5	86
Receipts	(26)	(17)	(16)	(8)	(18)	(5)	(90)
Non-Hedging derivatives – net (receipts) disbursements	**(1)**	**(1)**	**(1)**	**–**	**(1)**	**–**	**(4)**
Total net receipts (disbursements)	**(126)**	**(130)**	**(129)**	**(126)**	**(107)**	**(825)**	**(1,443)**

MARKET VALUE OF DERIVATIVES

In order to determine the fair value of derivatives, the TIM Group uses various valuation models.
The mark-to-market calculation is determined by the present value discounting of the interest and notional future contractual flows using market interest rates and exchange rates.
The notional amount of IRS does not represent the amount exchanged between the parties and therefore does not constitute a measurement of credit risk exposure which, instead, is limited to the amount of the difference between the interest rates paid/received.
The market value of CCIRSs, on the other hand, also depends on the differential between the reference exchange rate at the date of signing the contract and the exchange rate at the date of measurement, since CCIRSs involve the exchange of the reference interest and principal, in the respective currencies of denomination.
The options are measured according to the Black & Scholes or Binomial models and involve the use of various measurements factors, such as: time horizon of the life of the option, risk-free rate of return, current price, volatility and any cash flows (e.g. dividend) of the underlying instrument, and exercise price.

NOTE 19
DERIVATIVES

The hedge accounting rules provided by IAS 39 continued to be applied in the first half for derivatives.

Derivative financial instruments are used by the TIM Group to hedge its exposure to foreign exchange rate risk, to manage interest rate risk and to diversify the parameters of debt so that costs and volatility can be reduced to within predetermined operational limits.
Derivative financial instruments in place at December 31, 2019 are principally used to manage debt positions. They include interest rate swaps (IRSs) to reduce interest rate exposure on fixed-rate bank loans and bonds, as well as cross currency and interest rate swaps (CCIRSs), currency forwards and foreign exchange options to convert the loans/receivables secured in currencies different from the functional currencies of the various Group companies.
IRS transactions, provide for or may entail, at specified maturity dates, the exchange of flows of interest, calculated on the notional amount, at the agreed fixed or variable rates.
The same also applies to CCIRS transactions which, in addition to the settlement of periodic interest flows, may provide for the exchange of principal, in the respective currencies of denomination, at maturity and possibly spot.

HEDGING: ECONOMIC RELATIONSHIP BETWEEN THE UNDERLYING AND DERIVATIVES

Hedging relationships recorded in hedge accounting at 12/31/2019 belong to two categories: i) hedging of the fair value of bond issues denominated in euros and ii) hedging of cash flows from coupon flows of bond issues denominated in currencies other than the euro.
In the first case, the hedged risk is represented by the fair value of the bond attributable to euro interest rates and is hedged by IRS. The present value of both instruments, the underlying and derivatives, depends on the structure of interest rates on the euro market, used to calculate the discount factor and variable interest flows of the derivative. In particular, oscillating rates will translate as changes in the discount factor of the fixed interest expense on the underlying; on the derivative, changes in the discount factor of interest income will occur, as well as changes in the nominal flow of variable interest (only partially corrected by the discounting effect). The effects on the derivative will be opposite, in accounting terms, to the effects on the underlying.

In the second case, the hedged risk is represented by the variability in cash flows (and the repayment of the nominal amount) generated by exchange rates; hedging comprises combinations of IRS and CCIRS that synthetically transform fixed rate coupon flows into currency into fixed rate flows in euro. In this case, exchange rate oscillations will usually produce contrary effects on the underlying and on the derivative as the asset leg of the latter faithfully reflects the underlying, while the liability leg is denominated in euros and is therefore insensitive to the exchange rate.

HEDGING: DETERMINATION OF THE HEDGE RATIO

The types of hedging adopted by the Group require a hedge ratio equal to 1:1, as the types of risk hedged (interest rate and exchange risks) are such as to generate economic effects on the underlying instruments that can only be offset by the same notional quantities of derivative instruments.

HEDGING: POTENTIAL SOURCES OF INEFFECTIVENESS

The contractualization of derivatives to hedge financial risks takes place at arm's length and aims to fully neutralize the effects of such risks.
However, in practice, both fair value hedges and cash flows hedges, although financially perfect, cannot guarantee absolute effectiveness due to the many banks involved, the particular nature of some derivatives attributable to fixing and/or the indexing of variable parameters, and the possible imperfect correspondence of critical terms.

The following table indicates total financial derivatives of the TIM Group at December 31, 2019 and 2018; in compliance with IFRS 7 requirements, there was a switch from a representation of the summary notional hedging amounts to the current representation in which the notional amounts are shown with reference to all the derivative instruments involved in the hedges.

The following tables break down the financial derivatives by type of risk for each kind of hedging, separating financial assets and liabilities. For CCIRS, the notional amount refers to the contractual value in euros, for IRS in a currency other than the euro, the value is indicated at the market exchange rate.

Type (millions of euros)	**Hedged risk**	**Notional amount at 12/31/2019**	**Notional amount at 12/31/2018**	**Spot (*) Mark-to-Market (Clean Price) at 12/31/2019**	**Spot Mark-to-Market* (Clean Price) at 12/31/2018**
Interest rate swaps	Interest rate risk	4,334	4,334	152	52
Cross Currency and Interest Rate Swaps	Interest rate risk and currency exchange rate risk	-	-	-	-
Total Fair Value Hedge Derivatives		**4,334**	**4,334**	**152**	**52**
Interest rate swaps	Interest rate risk	4,871	4,992	258	182
Cross Currency and Interest Rate Swaps	Interest rate risk and currency exchange rate risk	5,206	6,804	(57)	(365)
Total Cash Flow Hedge Derivatives		**10,077**	**11,796**	**201**	**(183)**
Total Non-Hedge Accounting Derivatives		**151**	**223**	**10**	**17**
Total TIM Group derivatives		**14,562**	**16,353**	**363**	**(114)**

* Spot Mark-to-market above represents the market measurement of the derivative net of the accrued portion of the flow in progress.

Fair value hedges (millions of euros)	**Accounting item**		**Notional value**	**Carrying amount**	**Change in fair value for the year**
Interest rate swaps	Hedging derivatives relating to hedged items classified as current assets/liabilities of a financial nature - Current / non-current assets.	a)	4,334	152	100
Assets				152	
Liabilities				-	
Cross Currency and Interest Rate Swaps	Hedging derivatives relating to hedged items classified as current assets/liabilities of a financial nature - Current / non-current assets.	b)	-	-	-
Assets				-	
Liabilities				-	
Derivative instruments (*spot value*)		a)+b)	**4,334**	**152**	**100**
Accruals				21	
Derivative instruments (*gross value*)				**173**	
Underlying instruments [(1)]	Bonds - Current / non-current liabilities		**4,334**	**(4,462)**	
of which the fair value adjustment	Fair value adjustment and measurements at amortized cost	c)		(148)	(90)
Ineffectiveness		a)+b)+c)			10
Fair value adjustment for hedging settled in advance [(2)]				(135)	

[(1)] Includes the amortized cost value of bonds currently hedged plus the fair value adjustment
[(2)] Referred to bonds no longer hedged, which are therefore not presented in the table.

Cash flow hedges (millions of euros)	**Accounting item**		**Notional value**	**Carrying amount**	**Change in fair value for the year**	**Change in cumulative fair value**
Interest rate swaps	Hedging derivatives relating to hedged items ssified as current assets/liabilities of a financial ure - Current / non-current assets.	a)	4,871	258	76	
Assets				1,193	271	
Liabilities				(935)	(194)	
Cross Currency and Interest Rate Swaps	Hedging derivatives relating to hedged items classified as current assets/liabilities of a financial nature - Current / non-current assets.	b)	5,206	(57)	308	
Assets				667	76	
Liabilities				(724)	231	
Derivative instruments (*spot value*)		a)+b)	**10,077**	**201**	**384**	
Accruals				57		
Derivative instruments (*gross value*)				**258**		
of which equity reserve gains and losses					118	
Determination of ineffectiveness						
Change in derivatives		c)				87
Change in underlying instruments [3]		d)				(63)
Ineffectiveness [4]	Positive fair value adjustment of financial derivatives - non-hedging	c)+d)				16
Equity reserve						
Equity reserve balance				(578)		
of which due to the fair value of hedging settled in advance				(1)		
Reclassification to P&L	Negative reversal of the reserve for the fair value adjustment of hedging derivatives (cash flow hedges)				(4)	

[3] Hypothetical derivatives used in measuring the effectiveness of cash flow hedges.
[4] The ineffectiveness, due to its nature and calculation, does not necessarily coincide with the difference in cumulative changes in the fair value of derivatives and the underlying; the effect due to the adoption of CVA/DVA is not considered.

The change in the equity reserve attributable to the effective hedging component is equal to 140 million euros and comprises:

Changes in the equity cash flow hedge reserve (millions of euros)	**Balance 12/31/2018**	**Change**				**Balance 12/31/2019**
		Hedging instrument gains / losses	**Reversal from reclassification**	**Reversal for the fair value adjustment of hedging settled in advance**	**Other**	
	(720)					(580)
Change in the effective fair value of derivatives		118				
Change in the CVA/DVA		14				
Reversal for ineffectiveness 2017			10			
Amortization in P&L of the fair value of hedging settled in advance				4		
Other					(6)	
Overall change						**140**

None of the parameters represented includes any income tax effect.

The transactions hedged by cash flow hedges will generate cash flows and produce economic effects in the income statement in the periods indicated in the following table:

Currency of denomination	**Notional amount in currency of denomination** (millions)	**Start of period**	**End of period**	**Rate applied**	**Interest period**	**Notional in euro hedging** (millions)	**Rate in euro hedging**
GBP	375	Jan-20	May-23	5.875%	Annually	552	5.535%
JPY*	20,000	Jan-20	Oct-29	5.000%	Semiannually	174	5.940%
JPY**	20,000	Jan-20	Oct-29	0.750%	Semiannually	138	0.696%
USD	1,000	Jan-20	Nov-33	6.375%	Semiannually	849	5.994%
USD	1,500	Jan-20	May-24	5.303%	Semiannually	1,099	4.226%
USD	1,000	Jan-20	Sept-34	6.000%	Semiannually	794	4.332%
USD	1,000	Jan-20	July-36	7.200%	Semiannually	791	5.884%
USD	1,000	Jan-20	Jun-38	7.721%	Semiannually	645	7.470%

* The coupon cash flows are denominated in USD and calculated on a notional amount of USD 187.6 million.
** Hedging of the coupon cash flow only following a step-up on the loan.

The method selected to test the effectiveness retrospectively and, whenever the principal terms do not fully coincide, prospectively, for cash flow hedge derivatives and fair value hedge derivatives is the Volatility Risk Reduction (VRR) Test. This test assesses the ratio between the portfolio risk (where the portfolio means the derivative and the item hedged) and the risk of the hedged item taken separately. In essence, the portfolio risk must be significantly less than the risk of the hedged item.

NOTE 20
SUPPLEMENTARY DISCLOSURES ON FINANCIAL INSTRUMENTS

MEASUREMENT AT FAIR VALUE

For the purposes of the comparative information between the carrying amounts and the fair value of financial instruments, required by IFRS 7, the majority of the non-current financial liabilities of the TIM Group consist of bonds, whose fair value is directly observable in the financial markets, as they are financial instruments that, due to their size and diffusion among investors, are commonly traded on the relevant markets (see the Note "Financial Liabilities (non-current and current)"). For other types of financing, however, the following assumptions have been made in determining fair value:

- for variable-rate loans: the nominal repayment amount has been assumed;
- for fixed-rate loans: fair value has been assumed to be the present value of future cash flows using market interest rates at December 31, 2019;
- for some types of loans granted by government institutions for social development purposes, for which fair value cannot be reliably calculated, the carrying amount has been used.

Lastly, for the majority of financial assets, their carrying amount constitutes a reasonable approximation of their *fair value* since these are short-term investments that are readily convertible into cash.

The fair value measurement of the financial instruments of the Group is classified according to the three levels set out in IFRS 7. In particular, the *fair value* hierarchy introduces the following levels of input:

- Level 1: quoted prices in active market;
- Level 2: prices calculated using observable market inputs;
- Level 3: prices calculated using inputs that are not based on observable market data.

The following tables set out, for assets and liabilities at December 31, 2019 and December 31, 2018 and in accordance with the categories established by IFRS 9, the supplementary disclosure on financial instruments required by IFRS 7 and the schedules of gains and losses. It does not include Discontinued operations/Non-current assets held for sale and Liabilities directly associated with Discontinued operations/Non-current assets held for sale.

Key for IFRS 9 categories

		Acronym
Financial assets measured at:		
Amortized cost	Amortized cost	AC
Fair value through other comprehensive income	Fair value through other comprehensive income	FVTOCI
Fair value through profit or loss	Fair value through profit or loss	FVTPL
Financial liabilities measured at:		
Amortized cost	Amortized cost	AC
Fair value through profit or loss	Fair value through profit or loss	FVTPL
Hedging Derivatives	Hedging Derivatives	HD
Not applicable	Not applicable	n.a.

Carrying amount and fair value hierarchy for each category/class of financial asset/liability and comparison with their fair value at 12/31/2019

(millions of euros)	IFRS 9 categories	note	Carrying amount at 12/31/2019	Amounts recognized in financial statements			Levels of hierarchy or of fair value			Amounts recognized in the financial statements pursuant to IFRS 16	Fair Value at 12/31/2019
				Amortized cost	Fair value recognized in the statements of comprehensive income	Fair value through profit or loss	Level 1	Level 2	Level 3		
ASSETS											
Financial assets measured at amortized cost	AC		**6,847**	**6,847**							**6,847**
Non-current assets											
· *Receivables from employees*		9)	*43*	43							
· *Other financial receivables*		9)	*–*								
· *Miscellaneous receivables (non-current)*			*245*	245							
Current assets											
· *Receivables from employees*		9)	*13*	13							
· *Other short-term financial receivables*		9)	*3*	3							
· *Cash and cash equivalents*		9)	*3,138*	3,138							
· *Trade receivables*		13)	*3,252*	3,252							
· *Other receivables (current)*		13)	*119*	119							
· *Contract assets*		13)	*34*	34							
Financial assets measured at fair value through other comprehensive income	FVTOCI		**780**		**780**						**780**
Non-current assets											
· *Other investments*		8)	*52*		52		-	21	31		
· *Securities other than investments*		9)	*–*								
Current assets											
· *Trade receivables*		13)									
· *Securities other than investments*		9)	*728*		728		728				
Financial assets measured at fair value through profit or loss	FVTPL		**160**			**160**					**160**
Non-current assets											
· *Non-hedging derivatives*		9)	*6*			6		6			
Current assets											
· *Securities other than investments*		9)	*149*			149	149				
· *Non-hedging derivatives*		9)	*5*			5		5			
Hedging Derivatives	HD		**2,152**	**–**	**1,979**	**173**					**2,152**
Non-current assets											
· *Hedging derivatives*		9)	*2,051*		1,899	152		2,051			
Current assets											
· *Hedging derivatives*		9)	*101*		80	21		101			
Financial receivables for lease contracts	n.a.		**109**							**109**	**109**
Non-current assets		9)	*51*							51	
Current assets		9)	*58*							58	
Total			**10,048**	**6,847**	**2,759**	**333**	**877**	**2,184**	**31**	**109**	**10,048**

The financial instruments belonging to hierarchy level 3 of fair value are represented by the following Other investments recognized as Non-current assets, for which directly or indirectly observable prices on the market are not available:

- Northgate CommsTech Innovations Partners L.P.;
- Banca UBAE;
- Istituto Europeo di Oncologia;
- Other minor companies.

Northgate CommsTech Innovations Partners L.P. was measured based on the latest available Net Asset Value reported by the fund manager.
Banca UBAE, Istituto Europeo di Oncologia and the other minor companies were measured on the basis of an analysis, deemed reliable, of their main assets and liabilities.

The profit/(loss) recognized in Other components of the Consolidated Statements of Comprehensive Income were recognized within the scope of the Reserve for financial assets measured at fair value through other comprehensive income.

(millions of euros)	IFRS 9 categories	note	Carrying amount at 12/31/2019	Amounts recognized in financial statements			Levels of hierarchy or of fair value		Amounts recognized in the financial statements pursuant to IFRS 16	Fair Value at 12/31/2019
				Amortized cost	Fair value recognized in the statements of comprehensive income	Fair value through profit or loss	Level 1	Level 2		
LIABILITIES										
Financial liabilities measured at amortized cost	AC/HD		**31,745**	**31,745**						**33,126**
Non-current liabilities										
· *Financial payables (medium/long-*		16)	*23,945*	23,945						
Current liabilities										
· *Financial payables (short-term)*		16)	*3,120*	3,120						
· *Trade and miscellaneous payables and other*		24)	*4,527*	4,527						
· *Contract liabilities*		24)	*153*	153						
Financial liabilities measured at fair value through profit or loss	FVTPL		**1**			**1**				**1**
Non-current liabilities										
· *Non-hedging derivatives*		16)	*1*			1		1		
Current liabilities										
· *Non-hedging derivatives*		16)	*–*							
Hedging Derivatives	HD		**1,721**		**1,721**					**1,721**
Non-current liabilities										
· *Hedging derivatives*		16)	*1,659*		1,659			1,659		
Current liabilities										
· *Hedging derivatives*		16)	*62*		62			62		
Finance lease liabilities	n.a.		**5,215**						**5,215**	**5,664**
Non-current liabilities		16)	*4,576*						4,576	
Current liabilities		16)	*639*						639	
Total			**38,682**	**31,745**	**1,721**	**1**	**–**	**1,722**	**5,215**	**40,512**

Carrying amount and fair value hierarchy for each category/class of financial asset/liability and comparison with their fair value at 12/31/2018

(millions of euros)	IFRS 9 categories	note	Carrying amount in financial statements at 12/31/2018	Amounts recognized in financial statements: Amortized cost	Amounts recognized in financial statements: Fair value recognized in the statements of comprehensive income	Amounts recognized in financial statements: Fair value through profit or loss	Levels of hierarchy or of fair value: Level 1	Levels of hierarchy or of fair value: Level 2	Levels of hierarchy or of fair value: Level 3	Amounts recognized in financial statements according to IAS 17	Fair Value at 12/31/2018
ASSETS											
Financial assets measured at amortized cost	AC		**5,800**	**5,800**	**–**	**–**					**5,800**
Non-current assets											
· *Receivables from employees*		9)	*43*	43							
· *Other financial receivables*		9)	*–*	–							
· *Miscellaneous receivables (non-*		10)	*326*	326							
Current assets											
· *Receivables from employees*		9)	*14*	14							
· *Other short-term financial receivables*		9)	*2*	2							
· *Cash and cash equivalents*		9)	*1,917*	1,917							
· *Trade receivables*		13)	*3,327*	3,327							
· *Other receivables (current)*		13)	*125*	125							
· *Contract assets*		13)	*46*	46							
Financial assets measured at fair value through other comprehensive income	FVTOCI		**994**	**–**	**994**	**–**					**994**
Non-current assets											
· *Other investments*		8)	*49*		49		3	16	30		
· *Securities other than investments*		9)	*–*		–						
Current assets											
· *Trade receivables*		13)	*–*		–						
· *Securities other than investments*		9)	*945*		945		945				
Financial assets measured at fair value through profit or loss	FVTPL		**200**	**–**	**–**	**200**					**200**
Non-current assets											
· *Non-hedging derivatives*		9)	*7*			7		7			
Current assets											
· *Securities other than investments*		9)	*181*			181	181				
· *Non-hedging derivatives*		9)	*12*			12		12			
Hedging Derivatives	HD		**1,732**	**–**	**1,659**	**73**					**1,732**
Non-current assets											
· *Hedging derivatives*		9)	*1,490*		1,438	52		1,490			
Current assets											
· *Hedging derivatives*		9)	*242*		221	21		242			
Financial receivables for lease contracts	n.a.		**124**							**124**	**124**
Non-current assets		9)	*54*							54	
Current assets		9)	*70*							70	
Total			**8,850**	**5,800**	**2,653**	**273**	**1,129**	**1,767**	**30**	**124**	**8,850**

(millions of euros)	IFRS 9 categories	note	Carrying amount in financial statements at 12/31/2018	Amounts recognized in financial statements: Amortized cost	Amounts recognized in financial statements: Fair value recognized in the statements of comprehensive income	Amounts recognized in financial statements: Fair value through profit or loss	Levels of hierarchy or of fair value: Level 1	Levels of hierarchy or of fair value: Level 2	Amounts recognized in financial statements according to IAS 17	Fair Value at 12/31/2018
LIABILITIES										
Financial liabilities measured at amortized cost	AC/HD		**32,064**	**32,064**						**32,123**
Non-current liabilities										
· *Financial payables (medium/long-*		16)	*21,894*	21,894						
Current liabilities										
· *Financial payables (short-term)*		16)	*5,367*	5,367						
· *Trade and miscellaneous payables and other*		24)	*4,610*	4,610						
· *Contract liabilities*		24)	*193*	193						
Financial liabilities measured at fair value through profit or loss	FVTPL		**2**			**2**				**2**
Non-current liabilities										
· *Non-hedging derivatives*		16)	*2*			2		2		
Current liabilities										
· *Non-hedging derivatives*		16)	–							
Hedging Derivatives	HD		**1,761**		**1,761**					**1,761**
Non-current liabilities										
· *Hedging derivatives*		16)	*1,423*		1,423			1,423		
Current liabilities										
· *Hedging derivatives*		16)	*338*		338			338		
Finance lease liabilities	n.a.		**1,948**						**1,948**	**3,359**
Non-current liabilities		16)	*1,740*						1,740	
Current liabilities		16)	*208*						208	
Total			**35,775**	**32,064**	**1,761**	**2**	**–**	**1,763**	**1,948**	**37,245**

Gains and losses by IAS 9 category - Year 2019

(millions of euros)	IFRS 9 categories	**Net gains/(losses) 2019** (1)	**of which interest**
Assets measured at amortized cost	AC	(584)	34
Assets and liabilities measured at fair value through profit or loss	FVTPL	(2)	
Assets measured at fair value recognized in the statements of comprehensive income	FVTOCI	2	
Liabilities measured at amortized cost	AC	(1,099)	1,082
Total		**(1,683)**	**1,116**

(1) Of which 2 million euros for fees and expenses not included in the effective interest rate calculation on financial assets/liabilities other than those at fair value through profit or loss.

Gains and losses by IAS 9 category - Year 2018

(millions of euros)	IFRS 9 categories	**Net gains/(losses) 2018** (1)	**of which interest**
Assets measured at amortized cost	AC	(540)	40
Assets and liabilities measured at fair value through profit or loss	FVTPL	25	
Assets measured at fair value recognized in the statements of comprehensive income	FVTOCI	7	
Liabilities measured at amortized cost	AC	(1,160)	1,178
Total		**(1,668)**	**1,218**

(1) Of which 2 million euros relates to fees and expenses not included in the effective interest rate calculation on financial assets/liabilities other than those at fair value through profit or loss.

NOTE 21
EMPLOYEE BENEFITS

Employee benefits fell by 195 million euros compared to December 31, 2018. The figure breaks down as follows:

(millions of euros)		12/31/2017	Increases/ Present value	Decrease	Exchange differences and other changes	12/31/2018
Provision for employee severance indemnities	**(a)**	**958**	**(8)**	**(63)**	**-**	**887**
Provision for pension and other plans		22	3	(3)		22
Provision for termination benefit incentives and corporate restructuring		853	205	(348)		710
Total other provisions for employee benefits	**(b)**	**875**	**208**	**(351)**	**-**	**732**
Total	**(a+b)**	**1,833**	**200**	**(414)**		**1,619**
of which:						
non-current portion		**1,736**				**1,567**
current portion (*)		**97**				**52**

(*) The current portion refers only to Other provisions for employee benefits.

(millions of euros)		12/31/2018	Increases/ Present value	Decrease	Exchange differences and other changes	Held for sale Inwit	12/31/2019
Provision for employee severance indemnities	**(a)**	**887**	**44**	**(88)**	**-**	**(2)**	**841**
Provision for pension and other plans		22	4	(2)			24
Provision for termination benefit incentives and corporate restructuring		710	256	(402)	(5)		559
Total other provisions for employee benefits	**(b)**	**732**	**260**	**(404)**	**(5)**	**-**	**583**
Total	**(a+b)**	**1,619**	**304**	**(492)**	**(5)**	**(2)**	**1,424**
of which:							
non-current portion		**1,567**					**1,182**
current portion (*)		**52**					**242**

(*) The current portion refers only to Other provisions for employee benefits.

The **Provision for employee severance indemnities (T.F.R.)** only refers to Italian companies and decreased overall by 46 million euros. The decreases of 88 million euros relating to indemnities paid during the year to employees who terminated employment or for advances.
The increase of 44 million euros in the column "Increases/discounting" consists of the following:

(millions of euros)	2019	2018
(Positive)/negative effect of curtailment	(8)	-
Current service cost (*)	-	-
Finance expenses	10	13
Net actuarial (gains) losses for the year	42	(23)
Total	**44**	**(10)**
Effective return on plan assets	there are no assets servicing the plan	

(*) The portions intended for the INPS Treasury Fund or for the supplementary pension funds have been recorded under "Employee benefits expenses" and "Social security expenses". The latter account is used only for the severance indemnity expenses of companies with less than 50 employees.

The positive impact of the curtailment, amounting to 8 million euros, was linked to the updated actuarial forecasts resulting from the review of the outflow estimates of the corporate restructuring plan of the Parent (further details are provided in the Note "Employee benefits expenses").
The net actuarial losses recognized at December 31, 2019 amounted to 42 million euros (net actuarial gains of 23 million euros in 2018), are essentially the result of the change in the discount rate, which amounted to 0.77% compared to 1.57% used at December 31, 2018, while the expected inflation rate went from 1.5% at December 31, 2018 to 1.2% at December 31, 2019.

According to national law, the amount of provision for employee severance indemnities to which each employee is entitled depends on the period of service and must be paid when the employee leaves the company. The amount of severance indemnity due upon termination of employment is calculated on the basis of the period of employment and the taxable compensation of each employee. This liability is adjusted annually based on the official cost-of-living index and legally-set interest. The liability is not associated with any vesting condition or period or any funding obligation; accordingly, there are no assets servicing the provision. The liability is recognized net of the partial prepayments of the fund and the payments of the amounts obtained by employees for the reasons permitted by the applicable regulations.

Under the regulations introduced by Italian Legislative Decree 252/2005 and Law no. 296/2006 with which, for companies with at least 50 employees, the severance indemnities accruing from 2007 are assigned, as elected by the employees, to either the INPS Treasury Fund or to supplementary pension funds and take the form of a "defined contribution plan".

However, for all companies, the revaluations of the amounts in the provision for employee severance indemnities existing at the election date, and also the amounts accrued and not assigned to supplementary pension plans for companies with less than 50 employees, are retained in the provision for employee severance indemnities. In accordance with IAS 19, the provision has been recognized as a "defined benefit plan".

In application of IAS 19, the employee severance indemnities have been calculated using the "Projected Unit Credit Method" as follows:

- the future possible benefits which could be paid to each employee registered in the program in the event of retirement, death, disability, resignation etc. have been projected on the basis of a series of financial assumptions (cost-of-living increases, interest rate, increase in compensation etc.). The estimate of future benefits includes any increases for additional service seniority, as well as the estimated increase in the compensation level at the measurement date – only for employees of companies with less than 50 employees during the year 2006;
- the average present value of future benefits has been calculated, at the measurement date, on the basis of the annual interest rate adopted and the probability that each benefit actually has to be paid;
- the liability of each company concerned has been calculated as the average present value of future benefits that will be generated by the existing provision at the measurement date, without considering any future accruals (for companies with at least 50 employees during the year 2006) or by identifying the amount of the average present value of future benefits which refer to the past service already accrued by the employee in the company at the measurement date (for the others), i.e. adopting the "service pro-rate".

The following assumptions have been made:

FINANCIAL ASSUMPTIONS	Executives	Non-executives
Inflation rate	1.20% per annum	1.20% per annum
Discount rate	0.77% per annum	0.77% per annum
Employee severance indemnities annual increase rate	2.40% per annum	2.40% per annum
Annual real wage growth:		
equal to or less than 40 years of age	1.0% per annum	1.0% per annum
over 40 but equal to or less than 55 years of age	0.5% per annum	0.5% per annum
over 55 years of age	0.0% per annum	0.0% per annum

DEMOGRAPHIC ASSUMPTIONS	Executives	Non-executives
Probability of death	RG 48 mortality tables published by "Ragioneria Generale dello Stato"	RG 48 mortality tables published by "Ragioneria Generale dello Stato"
Probability of disability	INPS tables divided by age and sex	INPS tables divided by age and sex

Probability of resignation:		
up to 40 years of age	2.00%	1.00%
From 41 to 50 years of age	2.00%	0.50%
From 51 to 59 years of age	1.00%	0.50%
From 60 to 64 years of age	None	0.50%
Over 65 years of age	None	None
Probability of retirement	100% om achievement of the AGO requirements aligned with D.L. 4/2019	
Probability of receiving at the beginning of the year an advance from the provision for severance indemnities accrued equal to 70%	1.5% per annum	1.5% per annum

The adoption of the above assumptions resulted in a liability for employee severance indemnities at December 31, 2019, net of the reclassification of the liability for employee severance indemnities of INWIT (*Held for Sale*), of 841 million euros (887 million euros at December 31, 2018).

Reported below is a sensitivity analysis for each significant actuarial assumption adopted to calculate the liability as at year end, showing how the liability would have been affected by changes in the relevant actuarial assumption that were reasonably possible at that date, stated in amounts.
The weighted average duration of the obligation of the Parent amounted to 10.3 years.

CHANGES IN ASSUMPTIONS	**Amounts** (millions of euros)
Turnover rate:	
+0.25 p.p.	– (2)
- 0.25 p.p.	– 2
Annual inflation rate:	
+0.25 p.p.	– 15
- 0.25 p.p.	– (15)
Annual discount rate:	
+0.25 p.p.	– (20)
- 0.25 p.p.	– 21

The **Provision for pension and other plans** amounted to 24 million euros at December 31, 2019 (22 million euros at December 31, 2018) and mainly represented pension plans in place at foreign companies of the Group.

The **Provision for termination benefit incentives and corporate restructuring** decreased by a total of 151 million euros, mainly as a result of the redundancies and the reclassification to payables of the amounts not yet paid, relating to plans already allocated in previous years (402 million euros). Increases, amounting to 256 million euros, are related to the revision of the estimate of the Parent and effect from exit provided for the year 2020 (also through the application of Article 4, of Italian Law 92 of June 28, 2012, as defined by that in the Trade Union Agreement of February 26 2019) and to the provision made for departures based on the application of Article 4, of Italian Law 92 of June 28, 2012, following the agreements signed with trade unions being respectively 12 July 2019 by Olivetti, to 29 November 2019 by the company H.R. Services and December 18, 2019 by Telecom Italia Sparkle.

NOTE 22
PROVISIONS

The item increased compared to December 31, 2018, by 69 million euros and is broken down as follows:

(millions of euros)	12/31/2018	Increase	Taken to income	Used directly	Exchange differences and other changes	Held for sale Inwit	12/31/2019
Provision for taxation and tax risks	**104**	23	–	(21)	(23)	–	**83**
Provision for restoration costs	**348**	20	–	(6)	–	(102)	**260**
Provision for legal disputes	**709**	491	(1)	(333)	3	–	**869**
Provision for commercial risks	**33**	14	–	(18)	1	–	**30**
Provision for risks and charges on investments and corporate-related transactions	**21**	–	–	–	–	–	**21**
Other provisions	**5**	22	–	(1)	–	–	**26**
Total	**1,220**	**570**	**(1)**	**(379)**	**(19)**	**(102)**	**1,289**
of which:							
non-current portion	**876**						**725**
current portion	**344**						**564**

The non-current portion of provisions for risks and charges mainly related to the provision for restoration costs and some of the provision for legal disputes. More specifically, in accordance with accounting policies, the total amount of the provision for restoration costs is calculated by re-measuring the amounts for which a probable outlay is envisaged, based on the estimated inflation rates for the individual due dates, and subsequently discounted to the reporting date based on the average cost of debt, taking into account cash outflow forecasts.

The **provision for taxation and tax risks** decreased by 21 million euros compared to December 31, 2018. The figure at the end of the year reflects provisions and utilizations made mainly by the Brazil Business Unit. The other changes include the reclassification under "Income tax payables" of liabilities related to the direct taxation.

The **provision for restoration costs** refers to the provision for the costs expected to be incurred for the restoration of leased properties and sites used in the mobile telephony sector and for the dismantling of certain assets (in particular: batteries and wooden piling) mainly by the Parent (250 million euros) and the Brazil Business Unit (9 million euros).

The **provision for legal disputes** included the provision for litigation with employees, social security entities, regulatory authorities and other counterparties.
The amount of the provision at December 31, 2019 included 756 million euros for the Parent and 112 million euros for the Brazil Business Unit. Draw downs mainly related to the Brazil Business Unit (95 million euros) and the Domestic Business Unit (238 million euros) and were essentially related to settlement agreements reached.

The **provision for commercial risks**, essentially unchanged compared to the previous year, related mainly to the Parent.

The **provision for risks and charges on investments and corporate-related transactions** is substantially unchanged compared to the previous year.

Other provisions for risks and charges increased by 21 million euros compared to December 31, 2018 and was almost entirely attributable to the Parent.

NOTE 23 MISCELLANEOUS PAYABLES AND OTHER NON-CURRENT LIABILITIES

Trade and miscellaneous payables and other current liabilities fell by 83 million euros compared to December 31, 2018. The figure breaks down as follows:

(millions of euros)		12/31/2019	12/31/2018
Miscellaneous payables (non-current)			
Payables to social security agencies		379	275
Income tax payables (*)		61	42
Other payables		1,808	1,919
	(a)	**2,248**	**2,236**
Other non-current liabilities			
Deferred revenues from customer contracts (Contract liabilities)		94	109
Other deferred revenue and income		553	595
Capital grants		319	357
	(b)	**966**	**1,061**
Total	**(a+b)**	**3,214**	**3,297**

(*) Analyzed in the Note "Income tax expense"

Miscellaneous payables (non-current) included:

- **Payables to social security agencies** amounting to 379 million euros, mainly relating to the aforementioned debt position the INPS for the application of the 2015 and subsequent agreements signed in 2018 and 2019, relating to article 4, paragraphs 1-7ter, of Italian Law 92 of June 28, 2012 (for more details see the Note "Employee benefits expenses").

  Details are as follows:

(millions of euros)	12/31/2019	12/31/2018
Non-current payables:		
Due from 2 to 5 years after the end of the reporting period	369	259
Due beyond 5 years after the end of the reporting period	10	16
	379	**275**
Current payables	**217**	**173**
Total	**596**	**448**

- **other payables** equal to 1,807 million euros at December 31, 2019. They include, in particular, the non-current payable connected to the acquisition - which took place in 2018 - of the user licenses for the frequencies in the 694-790 MHz, 3600-3800 MHz and 26.5-27.5 GHz bands, to be allocated on 5G mobile communication services in Italy. The residual amount payable was 1,793 million euros and recognized under the item non-current miscellaneous payables and 110 million euros under the item current miscellaneous payables; the payment schedule is the following:
  - 110 million euros by September 2020;
  - 55 million euros by September 2021;
  - 1,738 million euros by September 2022.

Other non-current liabilities included:

- **Deferred revenues from contracts with customers (contract liabilities)** of 94 million euros (109 million euros at December 31, 2018) which are reversed to the income statement according to the duration of the contractual obligations between the parties, averaging 24 months; therefore, the balance as at December 31, 2019 will be reversed to the income statement generally by 2021. In particular, the item includes:
  - deferred revenues for activation and installation fees charged on new TIM S.p.A. customer contracts (8 million euros): in this regard, it is noted that under IFRS 15 activation/installment revenue are allocated to other contract obligations and recognized throughout the period of performance of the contract, as they do not relate to separate performance obligations.
  - deferred revenues related to network access fees of TIM S.p.A. (30 million euros);
  - deferred revenues for TIM S.p.A. subscription fees and rent and maintenance (50 million euros).
- **Other deferred revenue and income** totaling 553 million euros; the item mainly consisted of the non-current portion (approx. 174 million euros) of the deferred gain on the sale and lease-back of telecommunication towers by the Brazil Business Unit; this item also includes deferred revenues related to agreements for the sale of the transmission capacity (lease operating income).
- **Capital grants,** which came to 319 million euros at December 31, 2019: the item represents the component still to be released to the income statement based on the remaining useful life (estimated at around 18 years) of the assets that the grants refer to and is mainly connected to the realization of the infrastructures on the Ultra-Broadband-UBB and Broadband-BB projects.

NOTE 24
TRADE AND MISCELLANEOUS PAYABLES AND OTHER CURRENT LIABILITIES

Miscellaneous payables and other non-current liabilities rose by 317 million euros compared to December 31, 2018. The figure breaks down as follows:

(millions of euros)		12/31/2019	*of which Financial Instruments*	12/31/2018	*of which Financial Instruments*
Payables on construction work	**(a)**	**20**		**18**	
Trade payables					
Payables to suppliers		3,937	*3,937*	4,090	*4,090*
Payables to other telecommunication operators		386	*386*	380	*380*
	(b)	**4,323**	*4,323*	**4,470**	*4,470*
Tax payables	**(c)**	**245**		**262**	
Miscellaneous payables					
Payables for employee compensation		197		151	
Payables to social security agencies		338		338	
Payables for TLC operating fee		15		15	
Dividends approved, but not yet paid to shareholders		50	*50*	35	*35*
Other		300	*154*	164	*105*
Employee benefits (except for employee severance indemnities) for the current portion expected to be settled within 1 year		242		52	
Provisions for risks and charges for the current portion expected to be settled within 1 year		564		344	
	(d)	**1,706**	*204*	**1,099**	*140*
Other current liabilities					
Liabilities from customer contracts (Contract liabilities)		823	*153*	931	*193*
Other deferred revenue and income		101		121	
	(e)	**924**	*153*	**1,052**	*193*
Total	**(a+b+c+d+e)**	**7,218**	**4,680**	**6,901**	**4,803**

Further details on Financial Instruments are provided in the Note "Supplementary disclosure on financial instruments".

Trade payables amounting to 4,323 million euros (4,470 million euros at December 31, 2018), mainly refer to TIM S.p.A. (3,013 million euros) and to the companies of the Brazil Business Unit (918 million euros); as regards TIM S.p.A., the reduction in trade payables reflects the trend in payments of bills payable.

Tax payables amounted to 245 million euros and mainly consisted of both the tax payables of the Brazil Business Unit (136 million euros) and the related payables of TIM S.p.A.: the amount owed to the tax authorities for tax payables withheld as withholding agent (75 million euros), the amount payable for the government concession tax (13 million euros) and the VAT payable (3 million euros).

Miscellaneous payables include, among others, the current debt position towards INPS in relation to the application of the 2015 and subsequent agreements signed in 2018 and 2019, relating to Article 4, paragraphs 1-7ter, of Italian Law 92 of June 28, 2012, as described in the Note “Miscellaneous payables and other non-current liabilities”.

Other current liabilities amounted to 924 million euros (1,052 million euros at December 31, 2018). They break down as follows:

- **Liabilities from customer contracts (Contract liabilities)**, totaling 823 million euros. This item includes liabilities to customers related to the obligations of Group companies to transfer goods and services for which have received a price. Liabilities with customers are shown below, which generally have a maturity within 12 months; therefore, the figure at December 31, 2019 will be paid back substantially by December 31, 2020.

  In particular:

  - **contract liabilities** amounting to 57 million euros; the item includes bundle contracts (good and services packages) with performance obligations with different timing for the recognition of revenues and consequent deferral of the fees originally recognized. The decrease recognized in the year (62 million euros) was mainly linked to the launch of commercial offers that no longer require a fixed duration and the reversal to the income statement of the balance previously accumulated;

  - **customer-related items**, equal to 381 million euros; the item includes trade payables following contractual relationships, such as the payable for prepaid traffic and the subscription charges charged in advance;

  - **progress payments and advances** equal to 101 million euros relating to trade payables following prepayments, such as deposits made by subscribers for telephone calls;

  - **deferred revenues from customer contracts**, equal to 284 million euros essentially include:

    - deferred revenues for the Parent interconnection charges (118 million euros);
    - deferred revenues for the Parent rent and maintenance (93 million euros);
    - deferred revenues on activation and installation of new contracts with customers of the Parent (40 million euros);
    - deferred revenues from subscription fees for other services (29 million euros).

- **Other deferred revenue and income** amounted to 101 million euros. They mainly refer to deferred revenues from transmission capacity transfer contracts and deferred revenues from real estate leases (lease operating income).

NOTE 25
DISPUTES AND PENDING LEGAL ACTIONS, OTHER INFORMATION, COMMITMENTS AND GUARANTEES

A description is provided below of the most significant judicial, arbitration and tax disputes in which TIM Group companies are involved at December 31, 2019, as well as those that came to an end during the period.
The TIM Group has posted liabilities totaling 915 million euros for those disputes described below where the risk of losing the case has been considered probable.
It should be noted that for some disputes described below, on the basis of the information available at the closing date of the Annual Financial Report and with particular reference to the complexity of the proceedings, to their progress, and to elements of uncertainty of a technical-trial nature, it was not possible to make a reliable estimate of the size and/or times of possible payments, if any. Moreover, in those cases in which disclosure of information on a dispute could seriously jeopardize the position of TIM or its subsidiaries, only the general nature of the dispute is described.
Lastly, as regards the proceedings with the Antitrust Authority, please note that based on Article 15, paragraph 1 of Italian Law 287/1990 (“Antitrust regulations”), the Authority has the right to impose an administrative sanction calculated on the turnover of the Group in cases of breaches considered serious.

A) SIGNIFICANT DISPUTES AND PENDING LEGAL ACTIONS

International tax and regulatory disputes

At December 31, 2019, companies belonging to the Brazil Business Unit were involved in tax or regulatory disputes, the outcome of which is estimated as a possible loss totaling around 16.2 billion reais (16.5 billion reais at December 31, 2018). The main types of litigation are listed below, classified according to the tax to which they refer.

Federal taxes

On March 22, 2011, TIM Celular S.A. (company incorporated into TIM S.A. starting from October 31, 2018) was served notice of a tax assessment issued by the Federal Tax Authorities of Brazil for a total sum of 1,265 million reais as of the date of the notification, including fines and interest, as a result of the completion of a tax investigation concerning financial years 2006, 2007, 2008 and 2009 for the companies TIM Nordeste Telecomunicações S.A. and TIM Nordeste S.A. (formerly Maxitel), companies which have been progressively incorporated into TIM Celular with the aim of rationalizing the corporate structure in Brazil.
The assessment notice includes various adjustments; the main challenges may be summarized as follows:

- non-recognition of the tax effects of the merger of TIM Nordeste Telecomunicações S.A. and Maxitel S.A.;
- non-recognition of the tax-deductibility of the amortization of goodwill relating to the purchase of Tele Nordeste Celular Participações S.A. (“TNC”);
- non-recognition of certain tax offsets;
- denial of the SUDENE regional tax benefit, due to alleged irregularities in the management and reporting of the benefit itself.

The adjustments included in the assessment notice were disputed by TIM Celular, in administrative court, with the filing of its first objections on April 20, 2011. On 20 April 2012, TIM Celular received notification of the decision of the administrative court of first instance which confirmed the findings set out in the assessment notice; TIM Celular promptly filed an appeal against this decision on May 21, 2012.

The Company, as confirmed by specific legal opinions, believes it is unlikely that significant disbursements can be expected.

Still in relation to the federal level of taxation, the following additional disputes should also be noted:

- challenges regarding offsetting against previous tax losses;
- further challenges regarding the tax deductibility of the amortization of goodwill;

- imposition of income tax on certain types of exchange rate differences;
- imposition of withholding taxes on certain types of payments to foreign entities (for example, payments for international roaming);
- further challenges regarding offsets made between taxes payable and group company credit positions.

Overall, the risk for these cases, considered to be possible, amounts to 4.3 billion reais (4 billion reais at December 31, 2018).

State taxes

Within the scope of the state levy, there are numerous challenges regarding ICMS, and in particular:

- challenges concerning the reduction of the tax base due to discounts granted to customers, as well as challenges regarding the use of tax credits declared by group companies, with respect to the return of loaned telephone handsets, and following the detection of contract frauds to the detriment of the companies;
- subjection of some fees owed to group companies and classified by them as fees for services other than telecommunications to ICMS;
- challenges over the use of the "PRO-DF" tax benefit originally granted by some States, and subsequently declared unconstitutional (the challenge refers to the actual credit due to ICMS, declared by the TIM Cellular on the basis of the aforementioned tax benefits);
- challenges relating to the use of ICMS credits claimed by Group companies as a result of the acquisition of tangible assets, and in relation to the supply of electricity to the companies, as well as in application of the provisions on acting as a withholding agent;
- fines imposed on group companies for irregularities in tax return compliance.

In February 2018 the State of São Paulo notified two tax assessments regarding ICMS to TIM Celular, for a total amount of 679 million reais (at the date of the assessment, including fines and interest). The first assessment (344 million reais) regarded a challenge of ICMS credits in relation to acting as a withholding agent, applicable when equipment is bought and distributed in different States. The second assessment (335 million reais) challenged ICMS credits deriving from the "special credit" recognized by the company to its prepaid customers, against subsequent top-ups.

In June 2018 the State of São Paulo notified two further tax assessments to TIM Celular, again relating to ICMS, for a total amount of 369 million reais (at the date of the assessment, including fines and interest). This assessment too relates to ICMS credits deriving from the "special credit" recognized by the company to its prepaid customers against subsequent top-ups, as well as to the fines imposed for ICMS breaches. For a minor part of the claim, the company decided to authorize payment of the amount requested, instead of starting legal proceedings, benefiting from a discount on the fine. The dispute thus continues for the remaining amount, 296 million reais.

Overall, the risk for these cases, considered to be possible, amounts to 8.2 billion reais (8.9 billion reais at December 31, 2018).

Municipal taxes

Among disputes classified with a "possible" degree of risk, there are some relating to municipal taxes for a total amounting to around 0.7 billion reais (around 0.7 billion reais at December 31, 2018).

FUST and FUNTTEL

The main challenges about contributions to the regulatory body (Anatel), and in particular in terms of FUST and FUNTTEL, concern whether or not interconnection revenues should be subject to these contributions.

Overall, the risk for these cases, considered to be possible, amounts to 3 billion reais (2.9 billion reais at December 31, 2018).

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Contingent assets related to exclusion of ICMS from the PIS/COFINS tax base

In March 2017, the Supreme Federal Court of Brazil recognized the inclusion of ICMS in the calculation of the PIS/COFINS contribution as unconstitutional. The companies of the TIM Brasil Group (formerly TIM Nordeste, TIM Celular and TIM S.A.) have been involved in legal proceedings since 2006, with reimbursement requests related - as allowed - to the previous five years, and therefore with effect from 2001.

During 2018, following a definitive and indisputable decision, the Company recognized a receivable of 353 million reais, of which 159 million reais for tax and 194 million reais for legal revaluations (amounts relating to the then TIM Nordeste).

During the year 2019, as a result of two final decisions (TIM Celular S.A. and TIM S.A.), the company has posted an additional receivable of 3,024 million reais, of which 1,795 million reais for tax and 1,229 million reais for stautory revaluation by law, as detailed in the following table:

	(millions of euros)	(millions of reais)
	2019	**2019**
ICMS indirect tax recovery:	**685**	**3,024**
• Tax (Principal)	407	1,795
• Legal revaluation (Monetary adjustment)	278	1,229
Income tax expense		
Deferred taxes	(233)	(1,028)
Net impact	**452**	**1,996**

The use of the recognized tax receivables started from the end of 2019, in compliance with the formal certification procedures established by the Brazilian tax authorities with a conjectured horizon of three years, and will be subject to taxation; therefore, deferred direct taxes with a horizon were recognized.

Administrative offense charge pursuant to Legislative Decree 231/2001 for the so-called TIM Security Affair

In December 2008 TIM received notification of the application for its committal for trial for the administrative offense specified in articles 21 and 25, subsections 2 and 4, of Legislative Decree 231/2001 in relation to the affairs that involved several former employees of the Security function and former collaborators of the Company charged – among other things – with offenses involving corruption of public officials, with the object of acquiring information from confidential files. In May 2010, TIM definitively ceased to be a defendant in the criminal trial, the Judge for the Preliminary Hearing having approved the motion for settlement of the proceedings (plea bargaining) presented by the Company. In the hearing before Section One of the Milan Court of Assizes, TIM acted in the dual role of civil party and civilly liable party. On the one hand, in fact, TIM was admitted as the civil party damaged by all the accused parties on all counts, and on the other it was charged with civil liability under Article 2049 of the Civil Code for the facts allegedly committed by the accused in relation to 32 civil parties. Telecom Italia Latam and Telecom Italia Audit & Compliance Services (now incorporated into TIM) also participated in the hearing as civil parties, having filed appearances since the Preliminary Hearing and brought charges against the defendants for hacking. After the lengthy evidence hearings, 22 civil parties filed claims for compensation, also against TIM as civilly liable party, for over 60 million euros (over 42 million euros of which requested by a single civil party). The Company itself, as civil party, also summarized its conclusions against the defendants, requesting that they be found liable for all the damages suffered as a result of the facts of the case. In February 2013, Section 1 of the Milan Court of Assizes issued the first instance judgment, sentencing the defendants to terms of imprisonment of between 7 years and 6 months and one year. The Court also recognized that there had been non-pecuniary damage to some of the civil parties as a consequence of the alleged facts, and sentenced the defendants, jointly and severally with civilly liable party TIM, to compensate said damages, totaling 270,000 euros (in part jointly and severally with Pirelli) plus legal fees; at the same time the Court also sentenced the defendants to pay compensation for pecuniary and non-pecuniary damages incurred by the Company, granting it a provisional sum of 10 million euros. The judgment also recognized the existence of non-pecuniary damage to the companies Telecom Italia Latam and Telecom Italia Audit & Compliance Services, sentencing the defendants to pay compensation for damages on an equitable basis of 20,000 euros for each company. In November 2013 the grounds for the judgment in the first instance were published (which, for its part, the Company decided not to contest). At the end of the appeal, which was brought by the convicted defendants, the judgment in the first instance was partly reversed. The appeal judge took note of the fact that the time-limit had expired on the majority of the charges, and made an order not to proceed against the defendants who had been convicted in the lower court, with the exception of two private investigators, who were found guilty of the offense of revealing information which was subject to a prohibition on disclosure. As for the civil judgments, the Court revoked those made by the judge of first instance and ruled in favor of three ministries, AGCM and the Revenues Agency. The Court also decided to revoke the provisional sum of 10 million euros awarded to the Company as civil party at the end of the proceedings in the court of first instance, making a generic ruling that the defendants should pay compensatory civil damages. Finally, the appeal judge also rejected all the demands for compensation advanced in the appeals by certain civil parties for a total of about 60 million euros, in respect of which the Company has the role of party liable for damages. At the end of the appeal, therefore, the civil rulings settled in the first instance were confirmed which TIM, as the party liable for damages, had already paid to the damaged requesting parties. The three defendants brought an appeal to the Court of Cassation against the judgment of the second instance issued by the Milan Appeal Court of Assizes. In April 2018 the Supreme Court confirmed the convictions of the defendants and canceled the civil rulings, referring the issue generically to the civil court, for a more careful assessment of the claims made, above all concerning the quantum of evidence. It also canceled and referred the confiscation in favor of the State, which will have to be reassessed by a different section of the Milan Court of Assizes of Appeal.

Golden Power Case

In August 2017 the Presidency of the Council of Ministers started formal proceedings against TIM (and also against Vivendi) to ascertain that TIM was indeed obliged to notify Vivendi's acquisition of corporate control of TIM and its strategic assets, pursuant to the 'Golden Power' law. In September 2017, the proceedings in question concluded by ascertaining that this obligation did exist for TIM with effect from May 4, 2017 (the date of the Shareholders' Meeting that renewed TIM's corporate bodies).

As a result of this decision by the Presidency of the Council of Ministers, new and separate administrative proceedings started for the imposition on TIM of a financial penalty laid down by the Golden Power law for non-compliance with the aforementioned obligation to notify. These proceedings ended on May 8, 2018 with the imposition of a financial penalty of 74.3 million euros.

The Company is convinced that it has the legal arguments to demonstrate that it was under no obligation to notify the control exercised over it by Vivendi, has already filed an extraordinary appeal to the President of the Republic to request the abrogation of the order of September 2017 and has appealed to the Lazio Regional Administrative Court (TAR) against the aforementioned order of May 8, 2018 which imposed a financial penalty, requesting its precautionary suspension. After granting in July 2018, the application of the Company and thereby suspending payment of the fine, the Regional Administrative Court of Lazio with its provisional ruling of May 2019: rejected the exception of inadmissibility of the appeal on the sanction of 74.3 million euros; suspended the ruling preliminarily as regards the extraordinary appeal concerning the obligation of notification pursuant to the Golden Power rules; further suspended execution of the challenged measure.

It should also be noted that in May 2018 a guarantee bond for 74.3 million euros was issued in favor of the Presidency of the Council. TIM had been requested to submit such a bond for its application to Lazio TAR for precautionary suspension of the collection of the fine imposed for alleged breach of Article 2 of Decree Law 21 of March 15, 2012 (the "Golden Power" law).

On the other hand, the Presidency of the Council of Ministers exercised the special powers prescribed in the Golden Power law through two specific rulings in October and November 2017 with which it imposed specific prescriptions and conditions on TIM S.p.A. and on the companies of the Telecom Italia Sparkle group and Telsy Elettronica e Telecomunicazioni.

The prescriptions, according to the Administrative Authority, are essentially connected to the circumstance that these companies, in part, perform activities that are relevant for national security and as far as TIM is concerned to the circumstance that it also owns the infrastructure and the systems used to provide access to end-users of services covered by the universal service obligation.

Any failure on the part of the recipients of the orders to execute the conditions and prescriptions is penalized in the same way as failure to notify significant acts for the purpose of the application of Golden Power law.

The companies subject to the prescriptions are required to send periodic reports to a special Monitoring Committee established at the office of the Prime Minister in order to verify compliance with the aforementioned prescriptions.

In December 2017 the Group sent to the Presidency of the Council of Ministers the first compliance report outlining all the proposals and activities put in place to carry out the prescriptions. This report is then followed by half yearly reports, as required by current legislation.

In this case too TIM has already submitted an extraordinary appeal to the President of the Republic to request abrogation of the orders in question.

As stated, the premise for exercising special powers was (erroneously, according to the Company) referred to the de facto control resulting from the outcome of the shareholders' meeting of May 4, 2017 and to the direction and coordination of TIM by Vivendi. Both these circumstances no longer apply, as: at the shareholders' meeting of May 4, 2018, the slate presented by the shareholders Elliott International LP, Elliott

Associates LP and The Liverpool Limited Partnership received the majority vote; the Board of Directors was re-appointed with 13 independent directors out of a total of 15, with only 5 from the slate presented by Vivendi; thus, Vivendi no longer has direction and coordination, nor is there de facto control.
Consequently, the Company requested the Prime Minister's Office to revoke the two Decrees, stating, in any case that it was willing as an alternative to assist in rewording the requirements applicable to TIM in view of the changed situation.
In a decree of July 6, 2018, the Prime Minister's Office did not consider an additional exercise of special powers, upholding the validity of the two Decrees already issued and rejecting the request to revoke them.
The reason for the above is due to the alleged circumstance that the new governance structures of the Company would be highly variable; this would not allow for the rulings according to which the special powers were exercised to be overruled, save for the need to protect the public interest as regards network security and operation.
The Company has lodged an appeal, with additional reasons and as part of the appeals already lodged, against the Prime Minister's decrees of October 16 and November 2, 2017, and against the Prime Minister's resolution of July 6, 2018, rejecting the appeal for revocation presented by the company, on the outcome of the changed situation in corporate governance.

Italian Competition Authority Case A428

Case A428 was closed in May 2013 with the decision by the Italian Antitrust Authority (AGCM) to impose two administrative fines on TIM of 88,182,000 euros and 15,612,000 euros for abuse of a dominant position. The Company (i) allegedly hindered or delayed the activation of access services requested by OLOs through refusals made on unjustified and spurious grounds; (ii) allegedly offered its access services to end customers on economic and technical terms and conditions claimed to be unmatchable by competitors that purchase wholesale access services from TIM, solely in geographical areas of the country where access services are available unbundled from the local network and hence where other operators can compete more effectively with the Company.
TIM contested the decision with the Lazio Regional Administrative Court (TAR), requesting suspension of payment of the fine. Specifically, it was argued: that the right of defense in the proceeding had been infringed; that the alleged organizational arrangements disputed by the AGCM and purportedly at the basis of the infringement of provisioning processes for OLOs had been the subject of specific provisions by the Authority for the sector (AGCom); that a comparative analysis of internal/external provisioning processes in truth resulted in improved outcomes for the OLOs with respect to the Retail division of TIM and as such no form of inequality of treatment and/or opportunistic conduct by TIM existed; and (with reference to the second count of abuse) that the conduct challenged was structurally inapt to squeeze the margins of the OLOs.
In May, 2014, the Lazio TAR handed down its ruling rejecting TIM's appeal and upholding the fines imposed by the decision contested. In September 2014, the Company lodged an appeal against the ruling.
In May 2015, by ruling 2497/15, the Council of State found the judgment of first instance did not present the irregularities claimed by TIM and upheld the decision of the AGCM. The Company had already, at that date, paid the fines and relative interest.
In July 2015, TIM was served notice of the AGCM's decision to initiate an investigation for non-compliance to determine whether the Company had complied with the order not to engage in conduct having the same or similar object as the infringement identified by the decision that settled the A428 case in May 2013.
On January 13, 2017, TIM was served notice of AGCM's final assessment, which found that TIM had complied in full with the A428 decision and, as such, the conditions for the imposition of a fine for non-compliance were not present.
AGCM also acknowledged that the conduct of TIM following the 2013 decision was geared towards the continuous improvement of performance in the supply of wholesale access services, as concerns not only the services subject to investigation, but also new services for ultra-broadband access. In its assessment of compliance, AGCM acknowledged the positive impact of the roll-out, although not yet completed, of TIM's New Equivalence Model (NEM). The AGCM decision ordered TIM to: (i) continue with the roll-out of the NEM through to its completion, scheduled for April 30, 2017; (ii) inform the Authority of the performance levels of wholesale access service supply systems and of the completion of the relative internal reorganization project by the end of May 2017. TIM promptly complied with both orders, as positively assessed by the Authority by notice dated August 9, 2017.
Vodafone disputed the final decision adopted by the AGCM on the non-compliance investigation with the Lazio Regional Administrative Court (TAR). TIM filed an appearance, as in the other lawsuits filed in March 2017 by the operators CloudItalia, KPNQWest Italia and Digitel.

Vodafone (A428)

In August 2013, Vodafone, also in its capacity as acquiring entity of the operator Teletu, filed a major damages claim with the Court of Milan for alleged anti-competitive and abusive conduct (based primarily on the AGCM A428 decision) purportedly pursued by TIM over the period 2008–2013. The damages claim was quantified by Vodafone for an estimated amount between 876 million euros and 1,029 million euros.

Specifically, Vodafone alleged that a technical boycott had been put in place by refusing the activation of lines requested for Teletu customers (in the period from 2008 to June 2013) and that purportedly abusive pricing policies had been adopted for wholesale network access services (from 2008 to June 2013). In addition, the plaintiff complained of margin squeezing practices through the alleged application of higher than permitted discounts for business customers and the alleged implementation of unlawful and anti-competitive win-back practices (from the second half of 2012 to June 2013).
TIM filed an appearance challenging the substance and amount of the plaintiff's claims and lodging, in turn, a counterclaim. Following the ruling in August 2016 of the Italian Supreme Court of Cassation confirming the jurisdiction of the Court of Milan to hear the dispute, the main proceedings were resumed with the hearing held in December 2016.

With writ of summons before the Milan Court served in May 28, 2015, Vodafone filed additional damages claims, all based on the same AGCM A428 decision and referring to alleged damages suffered between July 2013 and December 2014 (and hence over a period subsequent to that of the damages claim reported above), for a total amount of around 568.5 million euros.
In its claim, the plaintiff also reserved the right to quantify additional damages during the case for subsequent periods, on the grounds that TIM had continued to engage in the alleged abusive conduct. TIM filed an appearance challenging the substance and amount of the plaintiff's claims and lodging, in turn, a counterclaim.

By order of October 6, 2016, the judge approved Vodafone's application for the two A428 lawsuits brought by it to be joined. At the end of the hearing on December 21 reopening the proceeding, terms were set for the filing of preliminary pleadings and the hearing for the submission of means of proof was set for July 11, 2017. With the first preliminary pleading, filed after the favorable outcome for TIM of the A428-C case (which found the Company had not engaged in abusive conduct after 2011), Vodafone decided to file an additional and similar damages claim for the period 2015–2016, which revised the claim for a total of 1,812 million euros of damages, which TIM contested and refuted.

Colt Technology Services

With writ of summons before the Milan Court served in August 2015, the operator Colt Technology Services filed a damages claim based on the A428 decision, requesting compensation for alleged damages suffered from 2009 to 2011 as a result of purportedly inefficient and discriminatory conduct by TIM in the wholesale service supply process. The damages claim was quantified in a total of 27 million euros for lost profits from the alleged non-acquisition of new customers and the claimed impossibility of providing new services to customers already acquired. The plaintiff also filed a damages claim for compensation for damages to its commercial image and reputation. The lawsuit follows on from an out-of-court claim for around 23 million euros made by Colt in June 2015, which the Company had rejected outright. TIM has filed an appearance, fully contesting the claims of the other party.

COMM 3000 S.p.A. (formerly KPNQWest Italia S.p.A.)

With writ of summons before the Rome Court, COMM 3000 S.p.A. (formerly KPNQWest Italia S.p.A.) filed a damages claim for a total of 37 million euros in compensation for alleged anticompetitive and abusive conduct over the period 2009–2011, in the form of technical boycotting (refusals to activate wholesale services – KOs); the claim was based on the contents of the decision of the Italian Antitrust Authority that settled the A428 case. TIM filed an appearance, contesting all of the plaintiff's allegations. In the judgment with ruling in April 2019, the Court of Rome partially granted the applications of COMM 3000 S.p.A. (formerly KPNQWest Italia S.p.A.), sentencing TIM to pay an amount significantly lower than the amount in the counterparty's damages claim. In June 2019, TIM filed an appeal against the ruling, requesting full rejection of the claims presented by COMM 3000 S.p.A. (formerly KPNQWest Italia S.p.A.) in the ruling of first instance and, in July, obtained the suspension of payment of a significant portion of the amount defined in the ruling.

Teleunit

With a writ of summons before the Rome Court, Teleunit claimed 35.4 million euros in compensation from TIM, based on the known decision of the Italian Competition Authority that settled the A428 case. Specifically, the other party complained that in the period 2009/2010 it had suffered abusive conduct on TIM's part in the form of technical boycotting (refusals to activate network access services – KOs), and anticompetitive practices in the form of margin squeezing (excessive squeezing of discount margins, considered abusive inasmuch as they cannot be replicated by competitors). TIM filed an appearance, contesting all of the plaintiff's allegations.
With a writ of summons issued in October 2009 before the Milan Appeal Court, Teleunit asked that TIM alleged acts of abuse of its dominant position in the premium services market be ascertained. The plaintiff quantified

its damages at a total of approximately 362 million euros. TIM filed an appearance, contesting the claims of the other party.
After the ruling of January 2014 with which the Court of Appeal declared that it was not competent in this matter and referred the case to the Court, Teleunit reinstated the case before the Milan Court the following April. TIM filed an appearance in the reinstated proceedings challenging the plaintiff's claims.
In its judgment of May 2017, the Milan Court rejected Teleunit's claim in its entirety, and ordered the company to pay the legal costs of the case. This judgment was appealed by Teleunit, in June 2017, before the Milan Court of Appeal. TIM filed an appeal challenging the arguments presented by the other party and asking that the judgment in the first instance be fully confirmed. With an order in March 2018 the Milan Court of Appeal declared Teleunit's appeal pursuant to Article 348-bis of the Italian Code of Civil Procedure to be manifestly without foundation, and hence inadmissible. In May 2018 Teleunit appealed the judgment of the Court of Appeal to the Court of Cassation. TIM lodged a counter-appeal seeking confirmation in full of the order being appealed (and thus of the judgment at first instance).

Siportal

The lawsuit brought by Siportal against TIM is currently pending before the Rome Court, by which Siportal has sued for approximately 48.4 million euros of compensation for alleged damages from abusive conduct in the form of technical boycotting over the period 2009–2011 and from the knock-on effects of the abuse until 2015, with the loss of commercial partners and the non-acquisition of new customers (the latter quantified for 25 million euros of damages). The claims are based on the decision of the Italian Antitrust Authority that settled the A428 case. TIM has filed an appearance, fully contesting the claims of the other party. The Court of Rome decided in favor of Siportal on the *an* of the alleged plaintiff; the case will continue with the Court Appointed Expert. TIM reserves every right to protect its own interests.

MC-Link

With writ of summons before the Rome Court, MC-Link filed a damages claim for a total of 51 million euros in compensation for alleged anticompetitive and abusive conduct over the period 2009–2012, in the form of technical boycotting (refusals to activate wholesale services – KOs). The claim was based on the contents of the decision of the Italian Antitrust Authority that settled the A428 case. TIM filed an appearance, contesting all of the plaintiff's allegations.

Antitrust Case I761

By decision adopted on July 10, 2013, AGCM extended to TIM the investigation initiated in March that year into a number of companies engaged in the fixed-line network maintenance services sector, aimed at establishing whether an agreement was in place breaching Article 101 of the Treaty on the Functioning of the European Union. The investigation was initiated following two reports made by Wind informing AGCM that it had found, when inviting bids for the award of corrective maintenance services on the network, substantial uniformity among the prices applied by the aforementioned companies and a significant difference with the bids subsequently tendered by other various companies.
TIM was charged by AGCM with having played a role in coordinating the other parties investigated, both in the formulation of the bids invited by Wind and in relation to the positions taken by them before the Italian Communications Authority.
TIM challenged the decisions with the Regional Administrative Court (TAR) on the grounds that the Competition Authority lacked jurisdiction.
On July 7, 2014, notice was served of the AGCM's decision to extend the object of the investigation to determine whether the Company had abused its dominant position by taking initiatives apt to influence the bid terms and conditions for ancillary technical services in the preparation of the bids for Wind and Fastweb by the maintenance companies. With the extension decision, the Authority also extended the closing date of the investigation, originally set for July 31, 2014, to July 31, 2015. The extension decision was similarly challenged with the Lazio Regional Administrative Court on the grounds that the Competition Authority lacked jurisdiction.
In November 2014, for reasons of procedural economy, although convinced of the legitimacy of its actions, TIM submitted a proposed series of undertakings to AGCM to resolve the competition concerns under investigation. On December 19, 2014, AGCM issued its decision finding that the undertakings were not clearly unfounded and subsequently ordered their publication for market testing.
On March 25, 2015, AGCM definitively rejected the undertakings, finding them insufficient to resolve the anticompetition concerns under investigation.
On July 21, 2015, notice was served on the parties under investigation of the Investigation Findings, in which the offices of AGCM recommended (i) dismissing the charges of abuse of a dominant position and (ii)

confirming, instead, the existence between TIM and the maintenance companies of an agreement aimed at coordinating the economic terms and conditions of the bids for Wind and Fastweb and preventing the disaggregated supply of ancillary technical services.
On December 16, 2015, a final decision was handed down confirming the conclusions of the Investigation Findings, asserting the existence, between 2012 and 2013, of an agreement restricting competition and imposing on the Company, as a result, a fine of 21.5 million euros, which was paid in March 2016. The relevant market is that for corrective maintenance (assurance) services, or, more precisely, troubleshooting on TIM ULL lines. The objective of the conduct engaged in by the Company and the network companies was to restrict competition and prevent the development of disaggregated forms of supply of ancillary technical services.
TIM lodged an appeal against the decision with the Lazio Regional Administrative Court. In September 2016, the court dismissed the appeal in its judgment 09554/2016, which the Company has challenged in an appeal with the Council of State. On the outcome of the proceedings, with the ruling of December 2019, the Council of State, deciding in favor of TIM, annulled the AGCM I761 provision and referred the task of conducting a new investigation to AGCM, within the limits that decided by the Consiglio di Stato itself.

Wind (I761)

With writ of summons before the Milan Court, Wind filed a damages claim against TIM for approximately 57 million euros, recently increased during the case to approximately 58 million euros, in compensation for damages arising from alleged anticompetitive conduct which AGCM had fined in the I-761 case (concerning corrective maintenance). The other party alleged that such conduct had delayed and hindered its chances of obtaining more favorable terms and conditions on the disaggregated purchase of fault repair services on ULL access lines, the effects of which were initially claimed to have persisted until December 2015, but were then claimed by Wind to be still underway. TIM has filed an appearance, refuting the claims of the other party.

Vodafone (I761)

With writ of summons before the Milan Court, Vodafone filed a damages claim against TIM and some network companies for approximately 193 million euros in compensation from the Company for damages arising from alleged anticompetitive conduct which AGCM had fined in the I-761 case (concerning corrective maintenance), over the period 2011–2017.
Vodafone claimed that TIM had allegedly infringed antitrust regulations in the wholesale markets for access to its fixed-line network (ULL lines; Bitstream; WLR) through the abuse of a dominant position and an unlawful agreement with maintenance companies to maintain a monopoly on the offer of corrective maintenance services on its network. Specifically, the restrictive agreement allegedly concerned the coordination, by the Company, of the economic terms and conditions contained in the bids for maintenance services prepared by the aforementioned companies for OAOs, with artificially high prices with respect to the cost of the maintenance included in the regulated access fee, with a view to discouraging the disaggregation of the service itself. The Company has filed an appearance, challenging all of the plaintiff’s allegations.

Italian Competition Authority Case A514

In June 2017 the Italian Antitrust Authority (AGCM) started proceedings A514 against TIM, to ascertain a possible abuse of its dominant market position in breach of article 102 of the “Treaty on the Functioning of the European Union”. The proceedings were started based on some complaints filed in May and June 2017, by Infratel, Enel, Open Fiber, Vodafone and Wind Tre, and concerns a presumed abuse of TIM's dominant position in the market for wholesale access services and for retail services using the broadband and ultra-broadband fixed network. In particular, the AGCM hypothesized that TIM had adopted conduct aimed at: i) slowing and hindering the course of the Infratel tender processes so as to delay, or render less remunerative the entry of another operator in the wholesale market; ii) preemptively securing customers on the retail market for ultra-broadband services by means of commercial policies designed to restrict the space of customer contendibility remaining for the competitor operators.
After the start of the proceedings, the Authority's officials carried out an inspection at some of TIM’s offices in the month of July 2017. On November 2, 2017, TIM filed a defense brief in which, in support of the correctness of its actions, it challenged all the arguments that the conduct it had allegedly engaged in, and which was the subject of the case, was unlawful.
On February 14, 2018, AGCM resolved to extend the scope of the case to investigate further behavior concerning TIM's wholesale pricing strategy on the market for wholesale access to broadband and ultra-broadband, and the use of the confidential information of customers of the alternative operators.
On July 5, 2018 TIM filed proposed undertakings which, if accepted by the Authority, would close the investigation without any offense being established or sanction being administered. The undertakings were considered as admissible by the Authority, that market tested them in August and September.

On October 30, 2018, TIM replied to observations made by third parties and modified its proposed undertakings. With its decision notified on December 4, 2018, the Italian Antitrust Authority once and for all rejected the proposed series of undertakings as it considered them unsuitable in light of the objections raised.
On March 4, 2019, TIM requested AGCM for an extension of the deadline for closing the proceedings (initially set for May 31, 2019).
On April 10, 2019, AGCM resolved to extend the deadline for conclusion of the proceedings until September 30, 2019. On May 17, 2019, AGCM notified TIM of the results of the investigation (CRI). In the CRI, AGCM essentially confirmed the case for the prosecution outlined in the start-up and extension of the proceedings orders.
On June 12, 2019 AGCM extended the deadline for deposit of TIM's final defense to September 20, 2019 and set the final hearing for September 25, 2019.
On September 18, 2019, AGCM resolved to extend the deadline for conclusion of the proceedings until February 28, 2020.
On March 6, 2020, TIM was notified of the decision to close the investigation, by which AGCM ruled that TIM had abused its dominant position, finding that TIM had put in place an anti-competitive strategy designed to hinder the competitive development of investment in ultra-broadband network infrastructure. The fine imposed on TIM for the anti-competitive offense is 116,099,937.60 euros. TIM intends to appeal. In addition, after notification of the AGCM measure, the Company received an action for damages based on the facts underlying AGCM's proceedings. The Company has just started the first examination of this act, convinced, also in this case, that it has all the legal arguments for its own protection.

Antitrust Case I799

At its meeting on February 1, 2017, AGCM initiated an investigation for possible breach of Article 101 of the TFEU (prohibition of agreements that restrict competition) against TIM S.p.A. and Fastweb S.p.A., following the signing of an agreement aimed at setting up a cooperative joint venture called Flash Fiber S.r.l.. TIM, in agreement with Fastweb, submitted some amendments to the agreements signed, in the form of proposed undertakings, aimed at closing the investigation without any breach being ascertained and, therefore, without any fine.
On March 28, 2018, AGCM resolved to approve the undertakings, making them binding on the Parties, and closed the case without imposing any fine.
On January 30, 2019, TIM sent the planned annual report on the provided coverage to AGCM, supplemented by a subsequent communication dated March 29, 2019. TIM transmitted further details to AGCM in July and AGCM acknowledged it on October 15, 2019. On January 31, 2020 TIM sent AGCM the third report on the implementation of the commitments made.
On June 11, 2018, Open Fiber S.p.A. and Wind Tre S.p.A. filed separate appeals to the Lazio Regional Administrative Court (TAR) against the order closing case I799 with the acceptance of the undertakings. They allege that this order has a series of procedural and substantial defects.
Open Fiber S.p.A. also asked for the precautionary suspension of the order.
In a ruling of March 2020, the Regional Administrative Court rejected in full the appeal by Open Fiber S.p.A.. A hearing on the merits has not yet been scheduled for Wind Tre's appeal.

Vodafone

In June 2015, Vodafone filed a damages claim with the Milan Court for the alleged abuse of a dominant position by TIM in the market for NGA and VULA bitstream fiber access services, with the claim for damages initially set at approximately 4.4 million euros, and later raised to a range between 30 and 48.9 million euros.
The plaintiff complained that TIM allegedly had engaged in abusive conduct by way of aggressive price offers to win customers and by hindering its access to the fiber network to make it more difficult for the party to provide ultra-broadband services to its customers.
The Company has filed an appearance, challenging the claims of the plaintiff in full and, subsequently, the revised estimate of damages made in 2016 during the case.

Eutelia and Voiceplus

In June 2009, Eutelia and Voiceplus asked that alleged acts of abuse by TIM of its dominant position in the premium services market (based on the public offer of services provided through so-called Non Geographic Numbers) be investigated. The complainants quantified their damages at a total of approximately 730 million euros.
The case follows a precautionary procedure in which the Milan Appeal Court prohibited certain behaviors of the Company relating to the management of some financial relations with Eutelia and Voiceplus concerning the Non Geographic Numbers, for which TIM managed the payments from the end customers, on behalf of such OLOs and in the light of regulatory requirements. After the ruling with which the Milan Court of Appeal accepted TIM's objections, declaring that it was not competent in this matter and referring the case to the Civil Court, Eutelia in extraordinary administration and Voiceplus in liquidation resubmitted the matter to the Milan

Court. The first hearing took place in the month of March 2014. TIM filed an appearance challenging the claims of the other parties. After the collapse of Voiceplus, the Milan Court declared the case suspended, in an order in September 2015. The case was later resumed by Voiceplus.
With a judgment issued in February 2018, the Milan Court accepted TIM's defense and rejected the plaintiffs' claim for compensation, ordering them, jointly and severally, to pay the legal costs. In March 2018 Eutelia and Voiceplus proposed an appeal against the judgment in the first instance.
TIM appealed against the claim, requesting confirmation in full of the judgment in the first instance. The appeal of Eutelia and Voiceplus was fully rejected with the judgment of August 5, 2019. In December 2019 Eutelia and Voiceplus appealed to the Court of Cassation over the judgment of the Court of Appeal. TIM notified a counterclaim asking confirmation of the ruling appealed against.

SKY

In 2016, TIM has started civil proceedings against SKY Italia in the Milan Court, asking the court to void the contract signed by the two companies in April 2014 for the delivery and marketing, between 2015 and 2019, of the SKY IPTV (Internet Protocol Television) offer on the TIM IPTV platform, due to abuse of dominant position by the other party.
As an alternative, the Company also asked the court to reduce to a fair level the amounts demanded by SKY by way of the so-called Guaranteed Minimums ("penalties") established to SKY's advantage and related to predetermined customer sign-up and churn-rate thresholds in the five years of the partnership.
SKY filed an appearance in February 2017, challenging TIM's claim and demanding payment of the Guaranteed Minimums it claimed to have accrued, a request which was opposed by the Company.
The suit was settled with the signing of a settlement agreement in August 2019.

28-day billing

Resolution 121/17/CONS introduced instructions on billing intervals for telephony, prescribing, for fixed telephony, that the interval should be monthly, or multiples thereof, and, for mobile telephony, that it should be at least four-weekly. TIM appealed Resolution 121/17/CONS to the Regional Administrative Court. The judgment rejecting the appeal was published in February 2018. TIM appealed this judgment to the Council of State on June 18, 2018 and the hearing is set for May 7, 2020.
With its Resolution 499/17/CONS, having confirmed the breach of Resolution 121/17/CONS, AGCom fined TIM 1,160,000 euros, ordering it to make provision – when the billing cycle was restored to monthly intervals or multiples thereof – to return the amounts corresponding to the fee for the number of days that, from June 23, 2017, had not been used by the users in terms of the supply of service due to the misalignment of the four-weekly and monthly billing cycles. TIM also appealed this second resolution to the Regional Administrative Court of Lazio, asking for its precautionary suspension which, on February 22, 2018, was accepted by the Regional Administrative Court of Lazio limited to the part relating to the reimbursement orders.
Subsequently, Law no 172 of December 4, 2017 decreed that contracts for the supply of electronic communications services should obligatorily prescribe that the renewal of offers and the billing of services be based on a month, or multiples thereof. TIM adapted to this order within the period of time prescribed by law, namely within 120 days of the date it came into force (April 5, 2018).
In March 2018, with Decision 112/2018/CONS AGCom (i) cautioned TIM, with regard to fixed-line voice services only, against postponing the starting date of invoices issued after the return to monthly invoicing by the same number of days as those presumably deducted starting from June 23, 2017 with the four-weekly invoicing cycle; and (ii) revoked the preceding resolution 499/17/CONS in the part in which TIM was ordered to repay the amounts presumably lost from June 23, 2017 onwards, with the four-weekly billing cycle. This resolution was also challenged by with an additional submission triggered as part of the appeal against resolution 499/17/CONS, with a request for single precautionary measures, which was provisionally granted until the hearing before the Council on April 11, 2018 with a Presidential Decree published on March 26, 2017.
Under Presidential Decree 9/18/PRES, AGCom amended the provisions of Decision 112/18/CONS requiring the deferment of billing once the billing cycle was restored to monthly intervals, or multiples thereof, while also ordering that the timescales for complying with the order would be identified after hearings with the operators and the main consumer protection associations. TIM and the other operators affected by the presidential decree waived the precautionary petition against Resolution 112/18/CONS. In May 2018, TIM therefore appealed AGCom Presidential Decree 9/18/PRES and Resolution 187/18/CONS which ratified this decree.
In July 2018, AGCom issued resolution 269/18/CONS, with which it set December 31, 2018 as the date by which the operators must return to their fixed network customers a number of days of service equal to those eroded as an effect of 28-day billing, or propose to the affected customers any alternative compensatory measures, after having notified them to AGCom. TIM, in keeping with actions taken and arguments made, intends to appeal this resolution.
In September 2018, TIM appealed Resolution 297/18/CONS in which AGCom imposed a fine of 696,000 euros for having continued to adopt – in violation of AGCom resolution 121/17/CONS – four-weekly billing and renewal of consumer offers as from February 16, 2018 (and until March 31, 2018).
With the judgment published in November 2018, the TAR canceled the pecuniary administrative sanction of 1.16 million euros imposed with Resolution 499/17/CONS, and confirmed the obligation of restitutio in integrum

to the fixed-line customers by December 31, 2018. TIM submitted its preventive appeal before the Council of State to interrupt execution of said decision and, with its ruling of December 20, 2018, the Council of State, in upholding TIM's appeal, interrupted the effectiveness of the aforesaid decision for the reversal order only, until March 31, 2019.
In November, 2018, AGCom published resolution 521/18/CONS with which it imposed a sanction of 1,044,000 euros on TIM. The sanction was imposed for breach of the transparency rules and rights to withdraw in amending the contractual terms and conditions of the mobile offers applied to customers starting from April 8, 2018 following restoration of monthly billing. TIM appealed this resolution as well to the Regional Administrative Court in January 2019. Following a new application submitted by TIM, the Council of State, with its ruling published on March 20, 2019, extended the precautionary measure to suspend the effectiveness of the decision until May 21, 2019 while awaiting publication of the grounds for the judgment.
Having acknowledged the publication of the grounds of the ruling handed down on May 10, 2019, the Council on May 21, 2019 ordered postponement of discussion of the application for precautionary measures to the Council meeting of July 4, 2019 in order to allow TIM to finalize its additional grounds with a new application for precautionary measures. Following this hearing, the Council of State rejected TIM's application to suspend execution of the ruling of the Regional Administrative Court with its ruling published on July 5, 2019, so it is operational starting from May 21, 2019. The hearing to discuss the introductory appeal and additional grounds submitted by TIM in the meantime is still, as of writing, to be set. On July 12, 2019 the ruling mechanisms with which the Council of State rejected the similar appeals made by Vodafone, Wind Tre and Fastweb were published and in February 2020 the judgments containing the grounds for the appeals by Vodafone and Fastweb were published.
In September 2019, TIM also challenged resolution 221/19/CONS, before the Regional Administrative Court (TAR), with which the sanction pursuant to Resolution 499/17/CONS, canceled by the Regional Administrative Court of Lazio, was recalculated to the amount of 580,000.00 euros, with the maximum fine provided for by Art. 98, paragraph 16 of the CCE in force at the time of the events applied.
In August 2019, AGCom initiated new proceedings (CONT 12/19/DTC) for failure to comply with the order to refund the days eroded by billing every 28 days for fixed network and convergent customers, according to the procedures established with resolutions nos. 112/18/CONS and 269/18/CONS. TIM submitted its defense in the proceedings and their conclusion is expected by March 2020.
In the meantime, in June 2019, TIM had in any case decided to offer its fixed network customers, active prior to the March 31, 2018 and subjected to billing every 28 days, the possibility of accepting a compensatory solution, an alternative to refunding the eroded days pursuant to AGCom resolution no. 269/18/CONS. Subsequently, from September 2019, TIM decided to also accept requests for the refund of the eroded days. In both cases, TIM informed customers with several messages in the bill, on the web in the main newspapers. The initiatives just described were communicated to AGCom as part of the aforementioned penalty proceedings.

Antitrust Case I820

On February 19, 2018, AGCM initiated a I820 preliminary proceeding against the companies TIM, Vodafone, Fastweb and Wind Tre and the industry association ASSTEL to investigate the alleged existence of an agreement among the major fixed-line and mobile telephone operators to restrict competition by coordinating their respective commercial strategies, in breach of Article 101 of the TFUE.
The presumed coordination, according to the opening provision of the proceedings by AGCM, would take the form of implementation of the obligation introduced by Article 19-quinquiesdecies of Decree Law 148/2017 (converted by Law 172/2017) which requires operators of electronic communication services to send out monthly (or monthly multiples) bills and renewed offers for fixed and mobile services.
On March 21, 2018, AGCM issued a provisional precautionary measure against all the operators involved in the proceedings with which it ordered the suspension, pending the proceedings, of the implementation of the agreement concerning the determination of repricing communicated to users at the time of reformulating the billing cycle in compliance with Law 172/17 and to independently redetermine its commercial strategy. With its decision no. 27112 of April 11, 2018, AGCM confirmed the precautionary measure.
On June 12, 2018, TIM filed an appeal with the TAR for the quashing of said measure.
In its session on June 27, 2018, AGCM took note of the brief submitted by TIM regarding compliance with the precautionary measure.
On July 17, 2019, AGCM resolved to extend the deadline for conclusion of the proceedings until January 31, 2020.
In the findings of the preliminary inquiry (CRI) communicated by AGCM to TIM, the Offices confirm the existence of a unique, complex and continuos agreement restricting competition between Telecom, Vodafone, Fastweb and Wind Tre, with the facilitation of the Asstel category association.
On October 10, TIM filed its final brief, and the final hearing was held on October 15 at AGCM.
On January 31, 2020, TIM was notified of the decision to close the investigation, in which AGCM confirmed the existence of the agreement between Telecom, Vodafone, Fastweb and WindTre, but excluding Asstel from participation in the agreement. The fine imposed on TIM for participation in the anti-competitive agreement was 114,398,325 euros. TIM intends to appeal.

Data Protection Authority Case

On January 23, 2020, the Italian Data Protection Authority notified the Company of the final decision of the proceedings initiated in July 2019 following inspections carried out between November 2018 and February 2019 at the Company and some of its telesales channel partners.
The decision - which mainly concerned telemarketing activities, covering issues including the management of some apps, the TIM Party program and several data breaches - the Data Protection Authority ordered the definitive restriction of some processing, issued orders and imposed a fine of 27,802,949 euros, equal to 0.2% of the TIM S.p.A.'s 2018 turnover, indicating that the penalty would be reduced by half if TIM had decided to settle the dispute by making payment within thirty days.
The Company therefore promptly initiated consultations with the Authority in a spirit of full and effective cooperation, to ensure the correct interpretation of the organizational, procedural and technological measures that TIM has already implemented and those that it intends to adopt in light of the requirements of the decision.
On 13 February 2020, the Authority agreed the interpretations put forward by the Company and also accepted its request to extend the deadline for the implementation of some of the corrective measures.
The Company has therefore decided not to appeal the decision and has paid the penalty with a 50% discount.

Vodafone Dispute – Universal Service

In a decision published in July 2015, the Council of State rejected the appeal lodged by AGCom and TIM against the judgment of the Lazio Administrative Court (TAR) on the financing of the universal service obligations for the period 1999–2003. With this judgment the judge had granted the appeals by Vodafone, annulling AGCom decisions 106, 107, 109/11/CONS on the renewal of the related proceedings, which included Vodafone among the subjects required to contribute, for a sum of approximately 38 million euros. Essentially, the judgment confirms that the Authority has not demonstrated the particular degree of "replaceability" between fixed and mobile telephony for mobile operators to be included among the subjects required to repay the cost of the universal service, which means that AGCom needs to issue a new ruling.
TIM has filed an application with AGCom to renew the proceedings, and an appeal against the judgment of the Council of State to the Court of Cassation (which subsequently ruled that the appeal was inadmissible).
In April 2016 Vodafone appealed against the Ministry of Economic Development (MISE) and TIM to the Council of State, for non-compliance with the judgment of the Council of State. This appeal referred to AGCom decision 109/11/CONS (2003 yearly payment, on the basis of which Vodafone had paid the sum of approximately 9 million euros as contribution, restitution of which was requested).
In its judgment of November 2016, the Council of State rejected the appeal, referring to the Regional Administrative Court (TAR) the decision on the methods of compliance. In February 2017, Vodafone presented the Lazio Regional Administrative Court with four new appeals against the Ministry of Economic Development and TIM regarding observance of the ruling, upheld on appeal, countermanding the resolutions for the years 1999–2003 and repayment of the aforesaid amounts of around 38 million euros already paid to the Ministry of Economic Development as a contribution.
With a judgment issued in June 2018, the TAR rejected all of Vodafone's appeals for observance, and, as requested by TIM, expressly affirmed that AGCom must renew the proceedings, particularly with regard to the determination of the degree of replaceability between fixed and mobile telephony. Vodafone challenged the four judgments before the Council of State, which, with a decision of October 2019, upheld Vodafone's appeal and confirmed the restitutory obligation of the sums in question applicable to TIM.

Dispute on "Adjustments to license fees" for the years 1994–1998

In relation to lawsuits brought in past years concerning the demand for payment, by the Ministry of Communications, of adjustments to amounts paid for license fees for the years 1994–1998 (for a total of 113 million euros), the Lazio Regional Administrative Court (TAR) dismissed the Company's appeal against the demand for payment of the adjustment for 1994 for a total of around 11 million euros, of which 9 million euros for revenues not received due to credit losses. TIM has appealed the judgment. On the outcome of proceedings, with the ruling of December 2019, the Council of State partially accepted TIM's position, establishing the principle, according to which, the receivables referring to 1994 not collected for reasons not attributable to the operator, could have been deducted from the tax base for calculating the concession fee.
In another two judgments, the Lazio TAR dismissed, on the same grounds set out previously, the Company's appeals against the demand for payment of adjustments to the license fees for the years 1995, 1996, 1997, and 1998, for a total of approximately 46 million euros. TIM has lodged appeals against the judgments with the Council of State.
With reference to the 1998 fee adjustment (equal to about 41 million), the Lazio TAR, by TAR order of December 2018, suspended the judgment, raising preliminary questions with the EU Court of Justice on the

correct scope of EC Directive no. 97/13 (in the matter of general authorizations and individual licenses in the field of telecommunications services on the basis of the currently pending litigation on the 1998 license fee, currently pending before the Rome Court of Appeal and illustrated in a subsequent paragraph).
The referred questions were based, inter alia, on the question posed to the Court of Justice on the possible conflict between the aforementioned EC Directive 97/13 and national law, which extended the obligation for telecommunications license-holders to pay the license fee for 1998 (commensurate with a portion of turnover), despite the liberalization process underway. In its judgment of March 2020, the EU Court of Justice held that the EU regulatory system must be interpreted as not allowing national legislation to extend to 1998 the obligation imposed on a telecommunications undertaking that was previously the concession holder (such as TIM) to pay a fee calculated on the basis of turnover and not only the administrative costs connected with the granting, management, control and implementation of the general authorizations and individual licenses scheme. The Court held, inter alia, that the Council of State – having held in its judgment 7506/2009 that the fee imposed for 1998 on TIM, the holder of an authorization existing on the date of entry into force of Directive 97/13, was due – interpreted national law in a way that was incompatible with EU law, as interpreted by the Court in its judgment of February 21, 2008. The case concerning the adjustment of the '98 license fee will now continue before the Lazio Regional Administrative Court, which must make its decision based on the above-mentioned judgment of the EU Court of Justice.

Olivetti – Asbestos exposure

In September 2014 the Ivrea Public Prosecutor's Office closed the investigation on the presumed exposure to asbestos of 15 former workers from the companies "Ing. C. Olivetti S.p.A." (now TIM S.p.A.), "Olivetti Controllo Numerico S.p.A.", "Olivetti Peripheral Equipment S.p.A.", "Sixtel S.p.A." and "Olteco S.p.A." and served notice that the investigations had been concluded on the 39 people investigated (who include former Directors of the aforementioned companies).
On December 2014 the Ivrea Public Prosecutor's Office formulated a request for 33 of the 39 people originally investigated to be committed for trial, and at the same time asked that 6 investigations be archived.
During the preliminary hearing, which started in April 2015, TIM assumed the role of civilly liable party, after being formally summonsed by all 26 civil parties (institutions and natural persons) joined in the proceedings. At the end of the preliminary hearing, 18 of the original 33 persons accused were committed for trial. The trial started in November 2015, and, as the party liable for damages, the Company has reached a settlement agreement with 12 of the 18 individuals (heirs/injured persons/family members) who are civil parties to the dispute and they have, therefore, withdrawn the claim against TIM.
In the judgment of first instance, in July 2016, 13 of the 18 defendants were found guilty, with sentences ranging from 1 year to 5 years of imprisonment: four of the defendants were found not guilty, and one case was dismissed for health reasons. The defendants were also sentenced to pay compensation jointly and severally with the party liable for damages TIM, of an overall sum of approximately 1.9 million euros as a provisional payment to INAIL and 6 heirs who were not part of the settlement. A generic judgment to pay compensation for damages to the remaining damaged parties (entities/unions/associations) was issued, although they must in any case ask the civil court to quantify the damages. The Company challenged the rationale for the judgment in the first instance, and signed settlements, including with the final 6 heirs who constituted the civil party, before the judgment in the second instance was issued. So the only civil parties to the appeal were organizations and associations.
In April 2018, the Turin Appeal Court, overturning the judgment of the court of the first instance, found all the accused not guilty: "because there was no case to answer for all the charges".
In its considerations, filed in October 2018, the Court recognized that there was no causal link between the individual behavior of the accused persons and the death of the former workers.
The Public Prosecutor's Office at the Turin Appeal Court appealed to the Court of Cassation against said judgment. In October 2019 the Supreme Court rejected the appeal and definitively confirmed the acquittal handed down by the Turin Appeal Court.

Wind Tre

With writ of summons before the Milan Court, served in April 2019, Wind Tre S.p.A. filed a damages claim against TIM for approximately 255 million euros in compensation for damages arising from alleged anticompetitive conduct in the years 2014-2018. More specifically, according to Wind Tre, TIM allegedly illegally used information gained when supplying provisioning and wholesale services assurance through its sales division to convince customers to return to TIM or to activate the new user with TIM; carried out commercial promotion activity for TIM through its technical personnel when repairing failures or activating Wind Tre users; behaved unfairly in order to get Wind Tre customers to switch over to TIM. To support its arguments, Wind Tre also pleads some elements that emerged during the investigation for the AGCM A514 case. TIM has filed an appearance, fully contesting the claims of the other party and making a counterclaim, based on facts similar to those put forward by the plaintiff, reserving the right to quantify the damages suffered.

Poste

Litigation is still pending for lawsuits brought at the end of the 1990s by Ing. C. Olivetti & C. S.p.A. (now TIM) against Poste for the non-payment of services provided under a series of supply agreements for IT goods and services. The judgments handed down on first instance ruled partially in favor of the former Olivetti, but were challenged by Poste in individual appeals.
In 2009, the Rome Court of Appeal confirmed one of the credit claims of TIM, however in another judgment the same Court declared one of the disputed agreements null and void. Following that judgment, Poste served a writ of execution for the reimbursement of around 58 million euros, which TIM rejected given that its appeal against the judgment was still pending before the Supreme Court of Cassation.
In 2012, the Italian Supreme Court of Cassation overturned the Appeal Court ruling on which the writ of execution was based, after which the Rome Court ruled that the enforcement procedure was devoid of purpose as there was no longer any basis for the writ of execution obtained by Poste. The case has been reinstated before another section of the Rome Court of Appeal. In ruling no. 563 of January 25, 2019, the Rome Court of Appeal at the time of proceedings, reversing the Company's previous unfavorable appeal, confirmed the contract's validity and, with it, the legitimacy of TIM's view of the amount already collected, of which Poste had requested reimbursement. This ruling was challenged by Poste with appeal filed with the Court of Cassation, notified on July 31, 2019, which TIM challenged with relevant counter appeal.

Elinet S.p.A. bankruptcy

In 2014, the trustees in the bankruptcy of Elinet S.p.A., and subsequently the trustees of Elitel S.r.l. and Elitel Telecom S.p.A. (the parent, at the time, of the Elitel group) appealed the judgment by which the Court of Rome dismissed the damages claim brought by the trustees of the Elinet-Elitel group, filing a new damages claim for a total of 282 million euros. The Company is alleged to have exercised management and control powers over the plaintiff, and, with it, over the Elitel group (an OLO in which TIM has never held any equity interest) through the management of trade receivables. TIM has filed an appearance, refuting the claims of the other party. The judgment on the appeal was handed down with ruling in July 2019, which with reference to TIM confirmed full legality of its conduct and total non-existence of any element of management and coordination. The receivers of Elinet S.p.A. and Elitel Telecom S.p.A. appealed to the Court of Cassation in January 2020 to obtain the annulment of the judgment in the second instance. the receiver of Elitel S.r.l. has not filed an appeal with the Court of Cassation and, consequently, the total claim for damages has been reduced to 244 million euros. TIM notified a counterclaim asking confirmation of the ruling appealed against.

Antitrust Proceedings PS11379 – mobile winback actions

Started on February 26, 2019 on the report of Iliad, the proceedings concern the alleged misconduct of mobile winback actions. The challenged aspects concern deceptive communication given to the target of reference and the aggressiveness of the conduct, since in the opinion of the AGCM Authority there would be pre-activated services in the offers made to customers. TIM believes that the commercial proposition of its mobile offers is fair, but to ensure ever-increasing transparency for its customers, during the course of the proceedings TIM gave commitments mainly aimed at improving the information relating to the components of the offer subject of the dispute. In spite of rejection of the commitments, TIM commenced the implementation of the proposed remedies as proof of good faith and of its fair conduct. Proceedings have also been started against the other major operators. The proceedings were concluded on December 20, 2019 with assessment of the unfairness of the conduct challenged, ordering TIM to pay to 4.8 million euros (VO ordered to pay 6 million euros and Wind/3 4.3 million euros). The decision will be challenged before the regional administrative court.

Antitrust Proceedings IP 312 - Fiber non-compliance

Proceedings began on February 18, 2019 on AGCM's own initiative, concerning the alleged failure to comply with the provisions of PS10696 on advertising fiber offers.
The disputed aspects relate to the lack of proof of the information available to consumers on the technical and geographic limits and on the performance tests. TIM also defined its defensive position with the presentation of commitments. The proceedings were concluded on August 1, 2019 with a fine of 200 thousand euros, considering that AGCM appreciated the corrective conduct on transparency implemented by TIM. In August, AGCM concluded proceedings against the other operators.

Antitrust proceedings PS11532 – “TIM in Nave”

Launched on December 4, 2019 prompted by complaints filed by several consumers, the proceedings, for the “TIM in Nave” service with the challenge of Deceptiveness on customer information profiles and aggressiveness profiles. “TIM in Nave” is not an ancillary service, but, in full *compliance* with the sector regulations, a type of roaming tariff which is activated when the customer is under the maritime coverage network. Significant commitments were made to improve information, making the consumer fully aware of how “TIM in Nave” works. Closure of the proceedings is scheduled for May 2020 and in the event of acceptance there will be no fine. Similar proceedings have also been started against the other major operators.

Antitrust Case IP 327 - IBAN discrimination

Officially started on December 23, 2019 by the Authority, the proceedings concern the alleged non-compliance with the provisions of PV4 on IBAN Discrimination, dated April 2019. In particular, AGCM disputes that the direct debit process on the web channel is not yet automated and therefore the customer is not autonomous in managing this activity. TIM has eliminated all forms of discrimination between Italian banks and SEPA area banks with the complete automation of the web domiciliation process. The proceedings are expected to end in April 2020. Similar proceedings have also been started against the other major operators.

Brazil – Opportunity Arbitration

In May 2012, TIM and Telecom Italia International N.V. (now merged in Telecom Italia Finance) were served with a notice of arbitration proceedings brought by the Opportunity group, claiming compensation for damages allegedly suffered for presumed breach of a settlement agreement signed in 2005. Based on the plaintiff’s allegations, the damages relate to circumstances that emerged in the criminal proceedings pending before the Milan Court regarding, inter alia, unlawful activities engaged in by former employees of TIM.
The investigatory phase having been completed, the hearing for oral discussion took place in November 2014, after which the parties filed their concluding arguments in preparation for the decision on the case.
In September 2015, the Board of Arbitration declared the proceedings closed, as the award was going to be filed.
Subsequently, the Board of Arbitration allowed the parties to exchange short arguments and the ICC Court extended the term for the filing of the award.
In September 2016 the ICC Court notified the parties of its judgment, based on which the Board of Arbitration rejected all the claims made by the Opportunity group and decided that the legal costs, administrative costs and costs for expert witnesses should be split between the parties.
In April 2017 the Opportunity group filed an appeal against the arbitration award before the Paris Court of Appeal.
In November 2017, TIM and Telecom Italia Finance received from the Secretariat of the ICC’s International Court of Arbitration notice of a Request for Revision of the arbitration finding, filed by the Opportunity group, asking for a new ruling. A Board of Arbitration was subsequently established.
In October 2018, TIM and Telecom Italia Finance requested proceedings with the Paris Court of Appeal to be suspended, in the light of proceedings pending with the Court of Arbitration of the International Chamber of Commerce to review the same arbitration award. In November 2018, the Paris Court of Appeal suspended the proceedings until the decision is taken by the Court of Arbitration in the review proceedings.
As regards the proceedings to review the award, in October 2019 the ICC held the discussion hearing in Paris.

B) OTHER INFORMATION

Mobile telephony – criminal proceedings

In March 2012, TIM was served notice of the conclusion of preliminary enquiries, which showed that the Company was being investigated by the Public Prosecutor of Milan pursuant to Legislative Decree 231/2001, for the offenses of handling stolen goods and counterfeiting, committed, according to the Prosecution, by fourteen employees of the so-called “ethnic channel”, with the participation of a number of dealers, for the purpose of obtaining undeserved commissions from TIM.
The Company, as the injured party damaged by such conduct, had brought two legal actions in 2008 and 2009 and had proceeded to suspend the employees involved in the criminal proceedings (suspension later followed by dismissal). It has also filed an initial statement of defense, together with a technical report by its own expert, requesting that the proceedings against it be suspended, and that charges of aggravated fraud against the Company be brought against the other defendants. In December 2012, the Public Prosecutor's Office filed a request for 89 defendants and the Company itself to be committed for trial.
During the preliminary hearing, the Company was admitted as civil party to the trial and, in November 2013, the conclusions in the interest of the civil party were filed, reaffirming TIM's total lack of involvement in the offenses claimed.
At the end of the preliminary hearing, which took place in March 2014, the Judge for the Preliminary Hearing committed for trial all the defendants (including TIM) who had not asked for their situation to be settled with alternative procedures, on the grounds that “examination in a trial” was needed. In April 2016, at the end of the trial, the Public Prosecutor asked for TIM to be sentenced to pay an administrative fine of 900 thousand euros, but decided not to ask for any of the purported profits from the offenses to be confiscated (quantified in the committal proceedings as totaling several million euros), based on the assumption that TIM had in any event remedied the presumed organizational inadequacies. While acknowledging the notable redimensioning of the accusations, the Company reiterated its total non-involvement in the facts at issue. In November 2016, the Court handed down its ruling acquitting the Company of the accusations. All the individuals standing trial were also acquitted, on various grounds.
The Public Prosecutor appealed the acquittal and appealed to the Court of Cassation "per saltum”. In January 2019, the Italian Supreme Court of Cassation agreed to the appeal and therefore ordered that the deeds be sent to the Milan Court of Appeal.

Dispute concerning the license fees for 1998

TIM has summoned the Prime Minister’s Office to appear in a civil suit for compensation for damages caused by the Italian State through appeal ruling 7506/09, handed down by the Council of State in breach, in the view of the Company, of Community law.
The primary claim brought by the action is founded on a precedent in Community case law which affirms the right to bring actions against a State for breach of rights recognized by Community law and infringed by a judgment that has become final, against which no other remedy can be sought. The Council of State ruling definitively denied TIM the right to the refund of the license fee for 1998 (equal to 386 million euros for Telecom Italia and 143 million euros for the former TIM, plus interest), which had already been denied by the Lazio TAR, despite the favorable and binding ruling of the Court of Justice of the European Union in February 2008. That ruling concerned the conflict between Directive 97/13/EC on a common framework for general authorizations and individual licenses in the field of telecommunications services and national law, which extended the obligation for telecommunications license-holders to pay the license fee for 1998, despite the liberalization process underway. Within the scope of the same action, the Company also filed an alternative claim for damages for tort within the meaning of Article 2043 of the Italian Civil Code. The damages claim was quantified for a total of around 529 million euros, plus legal interest and adjustment. The State Attorney’s Office filed an appearance, presenting a counterclaim for the same amount. The action was assessed for its admissibility by the Court, which declared TIM’s primary claim (action for damages for manifest breach of Community law under Law 117/88) to be inadmissible. The decision was overturned on appeal, in favor of the Company. In March 2015, the Rome Court handed down its judgment of first instance, ruling that the Company’s claim was inadmissible. TIM has appealed the decision, and the case is now pending the hearing specifying the nature of the forms of order sought.

Vodafone (formerly TELETU)

The damages claim filed by TIM, with writ of summons in February 2012 against the operator TELETU (now merged into Vodafone) for having unduly impeded customers intending to return to TIM, is pending. The damages claim has been quantified for approximately 93 million euros.

Other liabilities connected with the disposal of assets and investments

As part of agreements for the sale of assets and companies, the TIM Group has undertaken guarantees to indemnify the buyers for liabilities mainly connected with legal, tax, social security, and labor law issues, for an amount normally set as a percentage of the purchase price.
To cover such contingent liabilities, amounting to a total of around 500 million euros, provisions totaling approximately 9 million euros have been allocated solely for those cases for which payment is considered likely.
Furthermore, we report that in relation to the disposal of assets and investments, the TIM Group has commitments to pay additional indemnities under specific contractual provisions, the contingent liability of which cannot be measured at present.

C) COMMITMENTS AND GUARANTEES

Guarantees, net of back-to-back guarantees received, amounted to 41 million euros.

The guarantees provided by third parties to Group companies, amounting to 5,855 million euros, refer to guarantee financing from banks and other financial institutions consisting of guarantees for loans received (204 million euros) and of performance guarantees under outstanding contracts (5,651 million euros).
In particular, we report:

- The TIM Group issued six guarantees to the Ministry of Economic Development for a total of 1,922 million euros for the deferment of the payment of the amount due for the acquisition of the user rights to frequencies in the 694-790 MHz, 3600-3800 MHz and 26.5-27.5 GHz bands, which will be reserved for 5G mobile telecommunications services. At December 31, 2019, the remaining guarantee was €1,908 million;
- The insurance guarantees, which totaled 773 million euros, mainly refer to guarantee financing by the TIM Group in applying legal provisions for contracts of Public Administrations and similar bodies.
- the TIM Group has reversed guarantees in favor of INPS in support of the application - by TIM and some Group companies - of Article 4 of Italian Law 92 of June 28, 2012, for the voluntary redundancy of employees meeting the requirements; the total amount of the guarantees issued is 878 million euros, of which 826 million euros for TIM and 52 million euros for Group companies.

Furthermore, In May 2018, as mentioned above, TIM issued a surety to the Prime Minister's Office for 74.3 million euros to secure an appeal to the Lazio Administration Court for a provisional stay of the administrative fine levied on TIM following the preliminary investigation connected with the penalty proceeding initiated under Article 2 of Decree Law 21 of March 15, 2012 (the "Golden Power rule").

Main guarantees for loans at December 31, 2019

Issuer

(millions of euros)	**Amount** (1)
Intesa Sanpaolo	115
Commerzbank	58

(1) The amounts shown in the table relate to loans issued by the EIB for the TIM Broadband Digital Divide and TIM RDI for Broadband Service/B projects.

It is specified that:

- the guarantee at 58 million euros of Commerzbank relating to the loan granted by the EIB for the TIM RDI for Broadband Project Service/B, repaid on maturity for 50 million euros, will remain valid for 6 months after the repayment as provided in the agreement to protect against clawback risk (April 7, 2020).

There are also surety bonds on the telecommunication services in Brazil for 115 million euros.

D) ASSETS PLEDGED TO GUARANTEE FINANCIAL LIABILITIES

The contracts for low-rate loans granted by the Brazilian development bank BNDES (Banco Nacional de Desenvolvimento Econômico e Social) to Tim Celular now merged into TIM S.A., for a total equivalent amount of 147 million euros are covered by specific *covenants*. In the event of non-compliance with the *covenant* obligations, BNDES will have a right to the receipts which transit on the bank accounts of the company.

NOTE 26
REVENUES

Revenues decreased by 966 million euros compared to 2018. The breakdown is as follows:

(millions of euros)	2019	2018
Equipment sales	1,613	1,538
Services	16,327	17,379
Revenues on construction contracts	34	23
Total	**17,974**	**18,940**

Revenues from telecommunications services are presented gross of amounts due to other TLC operators, equal to 1,205 million euros (1,616 million euros in 2018), included in Costs of services.

Revenues from services in 2019 include revenues for voice and data services on fixed and mobile networks for Retail customers for 9,967 million euros and for other Wholesale operators for 2,731 million euros.

For a breakdown of revenues by operating segment/geographical area, reference should be made to the Note "Segment Reporting".

NOTE 27
OTHER OPERATING INCOME

Other operating income rose by 592 million euros compared to 2018. The breakdown is as follows:

(millions of euros)	2019	2018
Late payment fees charged for telephone services	59	60
Recovery of employee benefit expenses, purchases and services rendered	50	27
Capital and operating grants	33	39
Damages, penalties and recoveries connected with litigation	20	29
Partnership agreements and other arrangements with suppliers	–	22
Estimate revisions and other adjustments	36	73
Income tax Brazil Business Unit	685	37
Other	50	54
Total	**933**	**341**

They include, among others, the income related to the recognition in the Brazil Business Unit of tax receivables resulting from the favourable outcome of disputes relating to the inclusion of the ICMS indirect tax in the basis for calculating the PIS/COFINS contribution, for which the Company has been suing since 2006, with refund requests referring - as permitted - to the previous five years, and therefore with effect from 2001.
The benefit from 2019, amounting to 685 million euros, includes 407 million euros in tax refunds and 278 million euros in revaluations required by law.

NOTE 28
ACQUISITION OF GOODS AND SERVICES

Acquisition of goods and services decreased by 1,723 million euros compared to 2018. The breakdown is as follows:

(millions of euros)		2019	2018
Acquisition of raw materials and merchandise	**(a)**	**1,396**	**1,957**
Costs of services:			
Revenues due to other TLC operators		1,205	1,616
Costs for telecommunications network access services		119	171
Commissions, sales commissions and other selling expenses		1,133	1,134
Advertising and promotion expenses		218	236
Professional and consulting services		220	242
Utilities		472	417
Maintenance		244	221
Outsourcing costs for other services		403	465
Mailing and delivery expenses for telephone bills, directories and other materials to customers		63	84
Other service expenses		562	658
	(b)	**4,639**	**5,244**
Lease and rental costs:			
Rent and leases		68	607
TLC circuit subscription charges		110	126
Other lease and rental costs		250	252
	(c)	**428**	**985**
Total	**(a+b+c)**	**6,463**	**8,186**

In 2019 leases and rentals include around 20 million euros in lease payments for short term contracts.

NOTE 29
EMPLOYEE BENEFITS EXPENSES

They amounted to 3,077 million euros, down 28 million euros compared with 2018 and were broken down as follows:

(millions of euros)		2019	2018
Employee benefits expenses			
Wages and salaries		1,950	1,994
Social security expenses		716	738
Other employee benefits		143	144
	(a)	**2,809**	**2,876**
Costs and provisions for temp work	**(b)**	**-**	**-**
Miscellaneous expenses for personnel and other labor-related services rendered			
Charges for termination benefit incentives		9	8
Corporate restructuring expenses		256	216
Other		3	5
	(c)	**268**	**229**
Total	**(a+b+c)**	**3,077**	**3,105**

Employee benefits expenses mainly related to the Domestic Business Unit for 2,753 million euros (2,781 million euros in 2018) and to the Brazil Business Unit for 323 million euros (317 million euros in 2018).

"Corporate restructuring expenses" amounted to 256 million euros. Provisions are connected to the revision of the estimate and starting date of the Parent's outflows provided for the year 2020 (including through the application of Article 4 of Italian Law 92 of June 28, 2012, as last defined in the Agreement of 26 February 2019) and the costs allocated as a result of the outflows pursuant to the application of Article 4, of Italian Law 92 of June 28, 2012, following the agreements signed with trade unions on July 12, 2019 by Olivetti, to November 29, 2019 by the company H.R. Services and on December 18, 2019 by Telecom Italia Sparkle.
Expenses totaling 216 million euros were recognized in 2018.

The average salaried workforce, including personnel with temp work contracts, stood at 51,917 employees in 2019 (54,423 in 2018). A breakdown by category is as follows:

(number)	2019	2018
Executives	566	646
Middle Management	4,157	4,271
White collars	47,188	49,505
Blue collars	1	1
Employees on payroll	**51,912**	**54,423**
Employees with temp work contracts	5	-
Total average salaried workforce	**51,917**	**54,423**

Headcount in service at December 31, 2019, including personnel with temp work contracts, stood at 55,198 employees (57,901 at December 31, 2018), showing a decrease of 2,703 employees.

NOTE 30
OTHER OPERATING EXPENSES

Other operating expenses rose by 366 million euros compared to 2018. The breakdown is as follows:

(millions of euros)	2019	2018
Write-downs and expenses in connection with credit management	577	518
Provision charges	497	189
TLC operating fees and charges	268	286
Indirect duties and taxes	124	125
Penalties, settlement compensation and administrative fines	58	73
Association dues and fees, donations, scholarships and traineeships	12	12
Other	89	56
Total	**1,625**	**1,259**
of which, included in the supplementary disclosure on financial instruments	*577*	*518*

Further details on Financial Instruments are provided in the Note "Supplementary disclosure on financial instruments".

NOTE 31
INTERNALLY GENERATED ASSETS

Internally generated assets decreased by 33 million euros compared to 2018. The breakdown is as follows:

(millions of euros)	2019	2018
Intangible assets with a finite useful life	238	248
Tangible assets	299	322
Total	**537**	**570**

They mainly refer to labor costs for technical staff dedicated to the design, construction and testing of network infrastructure and systems, as well as software development and development of network solutions, applications and innovative services.

NOTE 32
DEPRECIATION AND AMORTIZATION

Depreciation and amortization rose by 672 million euros compared to 2018. The figure breaks down as follows:

(millions of euros)		2019	2018
Amortization of intangible assets with a finite useful life:			
Industrial patents and intellectual property rights		1,187	1,171
Concessions, licenses, trademarks and similar rights		486	422
Other intangible assets		2	6
	(a)	**1,675**	**1,599**
Depreciation of tangible assets owned:			
Buildings (civil and industrial)		38	36
Plant and equipment		2,272	2,229
Manufacturing and distribution equipment		12	14
Other		147	162
	(b)	**2,469**	**2,441**
Depreciation of tangible assets held under finance leases:			
Buildings (civil and industrial)		–	159
Plant and equipment		–	18
Other		–	38
	(c)	**–**	**215**
Depreciation of rights of use assets			
Property		475	–
Plant and equipment		264	–
Other		44	–
	(d)	**783**	**–**
Total	**(a+b+c+d)**	**4,927**	**4,255**

For further details refer to the Notes "Tangible and intangible assets with finite useful lives", "Tangible assets" and "Rights -of-use assets".

For a breakdown of depreciation and amortization by operating segment/geographical area, reference should be made to the Note "Segment Reporting".

NOTE 33
GAINS/(LOSSES) ON DISPOSALS OF NON-CURRENT ASSETS

This item was broken down as follows:

(millions of euros)		2019	2018
Gains on disposals of non-current assets:			
Gains on the retirement/disposal of intangible, tangible and user rights on rental		14	13
Gains on the disposal of investments in subsidiaries		–	–
	(a)	**14**	**13**
Losses on disposals of non-current assets:			
Losses on the retirement/disposal of intangible, tangible and user rights on rental		45	14
Losses on the disposal of investments in subsidiaries		18	–
	(b)	**63**	**14**
Total	**(a-b)**	**(49)**	**(1)**

The loss on the disposal of investments in consolidated companies is related to the sale of the company Persidera S.p.A., after splitting it into two different entities.
Following the sale of Persidera, which generated proceeds of 142 million euros, as required by IAS 36, paragraph 86 the derecognition of the associated goodwill amounting to 68 million euros was carried out, with the result shown in the table below.
In the Separate Financial Statements, this disposal transaction generated a total gain of about 8 million euros.

NOTE 34 IMPAIRMENT REVERSALS (LOSSES) ON NON-CURRENT ASSETS

This item was broken down as follows:

(millions of euros)		2019	2018
Reversals of impairment losses on non-current assets:			
on intangible assets		–	4
on tangible assets		–	–
	(a)	**–**	**4**
Impairment losses on non-current assets:			
on intangible assets		–	2,590
on tangible assets		–	–
	(b)	**–**	**2,590**
Total	**(a-b)**	**–**	**(2,586)**

The impairment losses for the year 2019 amounted to nil.

The impairment losses for the year 2018 amounted to 2,590 million euros and related to the goodwill impairment loss attributed to Core Domestic and International Wholesale.
Reversals in 2018 amounted to 4 million euros as a result of an update by the Parent of the assessment of several works in progress for previous impairment loss.

NOTE 35 OTHER INCOME (EXPENSES) FROM INVESTMENTS

Details are as follows:

(millions of euros)	2019	2018
Dividends from Other investments	1	11
Net gains on the sale of investments in associates and joint ventures accounted for using the equity method	2	–
Total	**3**	**11**
of which, included in the supplementary disclosure on financial instruments	*1*	*11*

In 2019, this item was positive by 3 million euros.
Gains on disposals of investments in associates and joint ventures accounted for using the equity method mainly related to the sale of the investment of TIM S.p.A. in Alfiere S.p.A.

In 2018, this item was positive for 11 million euros and mainly consisted of the dividends paid by the company Emittenti Titoli to TIM S.p.A.

NOTE 36
FINANCE INCOME AND EXPENSES

Finance income (expenses) showed a net expense of 1,436 million euros (expense of 1,348 million euros in 2018) and comprises:

(millions of euros)	2019	2018
Finance income	946	1,056
Finance expenses	(2,382)	(2,404)
Net finance income/(expenses)	**(1,436)**	**(1,348)**

The items break down as follows:

(millions of euros)		2019	2018
Interest expenses and other finance expenses:			
Interest expenses and other costs relating to bonds		(962)	(1,012)
Interest expenses to banks		(74)	(72)
Interest expenses to others		(21)	(20)
Interest expenses on lease liabilities		(356)	(184)
		(1,413)	**(1,288)**
Commissions		(67)	(70)
Miscellaneous finance expenses (*)		(211)	(232)
		(278)	**(302)**
Interest income and other finance income:			
Interest income		76	52
Income from financial receivables, recorded in Non-current assets		–	–
Income from securities other than investments, recorded in Non-current assets		–	–
Income from securities other than investments, recorded in Current assets (*)		26	17
Miscellaneous finance income		19	55
		121	**124**
Total net finance interest/(expenses)	**(a)**	**(1,570)**	**(1,466)**
Other components of financial income and expense:			
Net exchange gains and losses		3	(1)
Net result from derivatives		133	114
Net fair value adjustments to fair value hedge derivatives and underlyings		9	(3)
Net fair value adjustments to non-hedging derivatives		(11)	8
Total other components of financial income and expense	**(b)**	**134**	**118**
Total net financial income (expenses)	**(a+b)**	**(1,436)**	**(1,348)**
of which, included in the supplementary disclosure on net financial instruments		*(1,107)*	*(1,161)*

(*) of which IFRS 9 impact:

(millions of euros)	2019	2018
Income/Expenses from IFRS 9 reserve impairment on financial assets measured at FVTOCI	*(2)*	*(10)*
Reversal of IFRS 9 impairment reserve on financial assets measured through FVTOCI	*8*	*4*
Impairment losses on financial assets other than investments	–	–

Further details on Financial Instruments are provided in the Note "Supplementary disclosure on financial instruments".

For greater clarity of presentation, the net effects relating to derivative financial instruments are summarized in the following table:

(millions of euros)		2019	2018
Exchange gains		141	265
Exchange losses		(138)	(266)
Net exchange gains and losses		**3**	**(1)**
Income from fair value hedge derivatives		43	41
Charges from fair value hedge derivatives		–	–
Net result from fair value hedge derivatives	(a)	**43**	**41**
Positive effect of the reversal of the Reserve of cash flow hedge derivatives to the income statement (interest rate component)		474	524
Negative effect of the reversal of the Reserve of cash flow hedge derivatives to the income statement (interest rate component)		(381)	(446)
Net effect of the Reversal of the Reserve of cash flow hedge derivatives to the income statement (interest rate component)	(b)	**93**	**78**
Income from non-hedging derivatives		4	4
Charges from non-hedging derivatives		(7)	(9)
Net result from non-hedging derivatives	(c)	**(3)**	**(5)**
Net result from derivatives	**(a+b+c)**	**133**	**114**
Positive fair value adjustments to fair value hedge derivatives		100	50
Negative fair value adjustments to Underlying financial assets and liabilities of fair value hedge derivatives		(91)	(53)
Net fair value adjustments	**(d)**	**9**	**(3)**
Positive fair value adjustments to Underlying financial assets and liabilities of fair value hedge derivatives		1	–
Negative fair value adjustments to fair value hedge derivatives		(1)	–
Net fair value adjustments	(e)	**–**	**–**
Net fair value adjustments to fair value hedge derivatives and underlyings	**(d+e)**	**9**	**(3)**
Positive fair value to non-hedging derivatives	(f)	62	48
Negative fair value adjustments to non-hedging derivatives	(g)	(73)	(40)
Net fair value adjustments to non-hedging derivatives	**(f+g)**	**(11)**	**8**

NOTE 37
PROFIT (LOSS) FOR THE YEAR

Profit for the year compared to 2018 increased by 2,394 million euros and was broken down as follows:

(millions of euros)	2019	2018
Profit (loss) for the year	**1,242**	**(1,152)**
Attributable to:		
Owners of the Parent:		
Profit (loss) from continuing operations	900	(1,411)
Profit (loss) from Discontinued operations/Non-current assets held for sale	16	–
Profit (loss) for the year attributable to Owners of the Parent	**916**	**(1,411)**
Non-controlling interests:		
Profit (loss) from continuing operations	326	259
Profit (loss) from Discontinued operations/Non-current assets held for sale	–	–
Profit (loss) for the year attributable to Non-controlling interests	**326**	**259**

NOTE 38
EARNINGS PER SHARE

		2019	2018
Basic earnings per share			
Profit (loss) for the year attributable to Owners of the Parent		916	(1,411)
Less: additional dividends for the savings shares (0.011 euros per share and up to capacity)		(66)	–
	(millions of euros)	850	(1,411)
Average number of ordinary and savings shares	(millions)	21,067	21,067
Basic earnings per share – Ordinary shares	(euros)	0.04	(0.07)
Plus: additional dividends per savings share		0.01	–
Basic earnings per share – Savings shares	(euros)	0.05	(0.07)
Basic earnings per share from continuing operations			
Profit (loss) from continuing operations attributable to Owners of the Parent		900	(1,411)
Less: additional dividends for the savings shares		(66)	–
	(millions of euros)	834	(1,411)
Average number of ordinary and savings shares	(millions)	21,067	21,067
Basic earnings per share from continuing operations – Ordinary shares	(euros)	0.04	(0.07)
Plus: additional dividends per savings share		0.01	–
Basic earnings per share from continuing operations – Savings shares	(euros)	0.05	(0.07)
Basic earnings per share from Discontinued operations/Non-current assets held for sale			
Profit (loss) from Discontinued operations/Non-current assets held for sale	(millions of euros)	16	–
Average number of ordinary and savings shares	(millions)	21,067	21,067
Basic earnings per share from Discontinued operations/Non-current assets held for sale – Ordinary shares	(euros)	–	–
Basic earnings per share from Discontinued operations/Non-current assets held for sale – Savings shares	(euros)	–	–

	2019	2018
Average number of ordinary shares	15,039,368,195	15,039,368,195
Average number of savings shares	6,027,791,699	6,027,791,699
Total	**21,067,159,894**	**21,067,159,894**

		2019	2018
Diluted earnings per share			
Profit (loss) for the year attributable to Owners of the Parent		916	(1,411)
Dilution effect of stock option plans and convertible bonds (*)		41	40
Less: additional dividends for the savings shares (0.011 euros per share and up to capacity)		(66)	–
	(millions of euros)	891	(1,371)
Average number of ordinary and savings shares	(millions)	22.167	22,167
Diluted earnings per share – Ordinary shares	(euros)	0.04	(0.06)
Plus: additional dividends per savings share		0.01	–
Diluted earnings per share – Savings shares	(euros)	0.05	(0.06)
Diluted earnings per share from continuing operations			
Profit (loss) from continuing operations attributable to Owners of the Parent		900	(1,411)
Dilution effect of stock option plans and convertible bonds (*)		41	40
Less: additional dividends for the savings shares		(66)	–
	(millions of euros)	875	(1,371)
Average number of ordinary and savings shares	(millions)	22.167	22,167
Diluted earnings per share from continuing operations – Ordinary shares	(euros)	0.04	(0.06)
Plus: additional dividends per savings share		0.01	–
Diluted earnings per share from continuing operations – Savings shares	(euros)	0.05	(0.06)
Diluted earnings per share from Discontinued operations/Non-current assets held for sale			
Profit (loss) from Discontinued operations/Non-current assets held for sale	(millions of euros)	16	–
Dilution effect of stock option plans and convertible bonds		–	–
Average number of ordinary and savings shares	(millions)	22.167	22,167
Diluted earnings per share from Discontinued operations/Non-current assets held for sale – Ordinary shares	(euros)	–	–
Diluted earnings per share from Discontinued operations/Non-current assets held for sale – Savings shares	(euros)	–	–

	2019	2018
Average number of ordinary shares (*)	16,139,213,020	16,139,213,020
Average number of savings shares	6,027,791,699	6,027,791,699
Total	**22,167,004,719**	**22,167,004,719**

(*) The average number of ordinary shares also includes the potential ordinary shares relating to the equity compensation plans of employees for which the (market and non-market) performance conditions have been met, in addition to the theoretical number of shares that are issuable as a result of the conversion of the unsecured equity-linked convertible bond. Consequently, the "Net profit (loss) for the year attributable to Owners of the Parent and the "Profit (loss) from continuing operations attributable to Owners of the Parent" were also adjusted to exclude the effects, net of tax, related to the above-mentioned plans and to the convertible bond (+41 million euros in 2019; +40 million euros in 2018).

POTENTIAL FUTURE CHANGES IN SHARE CAPITAL

The table below shows future potential changes in share capital, based on the issuance of the convertible bond by TIM S.p.A. in March 2015, the authorizations to increase the share capital in place at December 31, 2019, and the options and rights granted under equity compensation plans, still outstanding at December 31, 2019:

	Number of maximum shares issuable	Share capital (thousands of euros)	Additional Paid-in capital (thousands of euros)	Subscription price per share (euros)
Capital increases already approved (ordinary shares)				
2014-2016 Stock Option Plan				
	133,042	73	80	1.15
	343,069	189	158	1.01
	893,617	492	393	0.99
	13,497,406	7,423	5,264	0.94
Stock Options	**14,867,134**	**8,177**	**5,895**	
2015 Convertible Bond (ordinary shares) (*)	1,082,485,386	2,000,000	n.a.	n.a.
Convertible bonds		**2,000,000**		
Total		**2,008,177**		

(*) The number of shares potentially issuable shown may be subject to adjustments.

Further information is provided in the Notes “Financial liabilities (non-current and current)” and “Equity compensation plans”.

NOTE 39
SEGMENT REPORTING

A) SEGMENT REPORTING

Segment reporting is based on the following operating segments:

- Domestic
- Brazil
- Other Operations

Separate Consolidated Income Statements by Operating Segment

(millions of euros)	Domestic		Brazil		Other Operations		Adjustments and eliminations		Consolidated Total	
	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018
Third-party revenues	14,039	14,998	3,935	3,942	–	–	–	–	17,974	18,940
Intragroup revenues	39	33	2	1	–	–	(41)	(34)	–	–
Revenues by operating segment	**14,078**	**15,031**	**3,937**	**3,943**	**–**	**–**	**(41)**	**(34)**	**17,974**	**18,940**
Other income	225	273	708	69	–	–	–	(1)	933	341
Total operating revenues and other income	**14,303**	**15,304**	**4,645**	**4,012**	**–**	**–**	**(41)**	**(35)**	**18,907**	**19,281**
Acquisition of goods and services	(5,042)	(6,360)	(1,450)	(1,846)	(6)	(7)	35	27	(6,463)	(8,186)
Employee benefits expenses	(2,753)	(2,781)	(323)	(317)	(1)	(6)	–	(1)	(3,077)	(3,105)
of which: accruals to employee severance indemnities	(7)	(1)	–	–	–	–	–	–	(7)	(1)
Other operating expenses	(1,099)	(763)	(523)	(491)	(2)	(6)	(1)	1	(1,625)	(1,259)
of which: write-downs and expenses in connection with credit management and provision charges	(825)	(501)	(249)	(208)	–	–	–	1	(1,074)	(708)
Change in inventories	(132)	88	5	14	–	–	(1)	–	(128)	102
Internally generated assets	431	467	97	95	–	–	9	8	537	570
EBITDA	**5,708**	**5,955**	**2,451**	**1,467**	**(9)**	**(19)**	**1**	**–**	**8,151**	**7,403**
Depreciation and amortization	(3,761)	(3,340)	(1,165)	(915)	(1)	–	–	–	(4,927)	(4,255)
Gains/(losses) on disposals of non-current assets	(60)	(13)	11	12	–	–	–	–	(49)	(1)
Impairment reversals (losses) on non-current assets	–	(2,586)	–	–	–	–	–	–	–	(2,586)
EBIT	**1,887**	**16**	**1,297**	**564**	**(10)**	**(19)**	**1**	**–**	**3,175**	**561**
Share of profits (losses) of associates and joint ventures accounted for using the equity method	(3)	(1)	–	–	–	–	–	–	(3)	(1)
Other income (expenses) from investments									3	11
Finance income									946	1,056
Finance expenses									(2,382)	(2,404)
Profit (loss) before tax from continuing operations									**1,739**	**(777)**
Income tax expense									(513)	(375)
Profit (loss) from continuing operations									**1,226**	**(1,152)**
Profit (loss) from Discontinued operations/Non-current assets held for sale									16	–
Profit (loss) for the year									**1,242**	**(1,152)**
Attributable to:										
Owners of the Parent									**916**	**(1,411)**
Non-controlling interests									326	259

Revenues by operating segment

(millions of euros)	Domestic		Brazil		Other Operations		Adjustments and eliminations		Consolidated Total	
	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018
Revenues from equipment sales - third party	1,436	1,358	177	180	–	–	–	–	1,613	1,538
Revenues from equipment sales - intragroup	–	–	–	–	–	–	–	–	–	–
Total revenues from equipment sales	**1,436**	**1,358**	**177**	**180**	**–**	**–**	**–**	**–**	**1,613**	**1,538**
Revenues from services - third party	12,569	13,617	3,758	3,762	–	–	–	–	16,327	17,379
Revenues from services - intragroup	39	33	2	1	–	–	(41)	(34)	–	–
Total revenues from services	**12,608**	**13,650**	**3,760**	**3,763**	**–**	**–**	**(41)**	**(34)**	**16,327**	**17,379**
Revenues on construction contracts - third party	34	23	–	–	–	–	–	–	34	23
Revenues on construction contracts-intragroup	–	–	–	–	–	–	–	–	–	–
Total revenues on construction contracts	**34**	**23**	**–**	**–**	**–**	**–**	**–**	**–**	**34**	**23**
Total third-party revenues	14,039	14,998	3,935	3,942	–	–	–	–	17,974	18,940
Total intragroup revenues	39	33	2	1	–	–	(41)	(34)	–	–
Total revenues by operating segment	**14,078**	**15,031**	**3,937**	**3,943**	**–**	**–**	**(41)**	**(34)**	**17,974**	**18,940**

Purchase of intangible assets, tangible assets and rights of use assets by operating segment

(millions of euros)	Domestic		Brazil		Other Operations		Adjustments and eliminations		Consolidated Total	
	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018
Purchase of intangible assets	871	3,385	193	262	–	–	–	–	1,064	3,647
Purchase of tangible assets	1,964	2,194	680	637	–	–	–	–	2,644	2,831
Purchase of rights of use assets	800	–	416	–	–	–	–		1,216	–
Total purchase of intangible assets, tangible assets and rights of use assets	**3,635**	**5,579**	**1,289**	**899**	**–**	**–**	**–**	**–**	**4,924**	**6,478**
of which: capital expenditures	*2,912*	*5,518*	*872*	*890*	*–*	*–*	*–*	*–*	*3,784*	*6,408*
of which: increases in lease/leasing contracts for right-of-use assets	*723*	*61*	*417*	*9*	*–*	*–*	*–*	*–*	*1,140*	*70*

Headcount by Operating Segment

(number)	Domestic		Brazil		Other Operations		Consolidated Total	
	12/31/2019	12/31/2018	12/31/2019	12/31/2018	12/31/2019	12/31/2018	12/31/2019	12/31/2018
Headcount	**45,496**	**48,200**	**9,689**	**9,658**	**13**	**43**	**55,198**	**57,901**

Assets and liabilities by Operating Segment

(millions of euros)	Domestic		Brazil		Other Operations		Adjustments and eliminations		Consolidated Total	
	12/31/2019	12/31/2018	12/31/2019	12/31/2018	12/31/2019	12/31/2018	12/31/2019	12/31/2018	12/31/2019	12/31/2018
Non-current operating assets	45,342	48,056	7,498	6,037	1	3	(1)	(1)	52,840	54,095
Current operating assets	3,964	4,233	1,166	874	6	5	(19)	(17)	5,117	5,095
Total operating assets	49,306	52,289	8,664	6,911	7	8	(20)	(18)	57,957	59,190
Investments accounted for using the equity method	11	16	–	–	–	–	–	–	11	16
Discontinued operations /Non-current assets held for sale									4,647	–
Unallocated assets									7,489	6,413
Total Assets									**70,104**	**65,619**
Total operating liabilities	10,645	10,732	1,739	1,885	38	48	(96)	(69)	12,326	12,596
Liabilities directly associated with Discontinued operations/Non-current assets held for sale									805	–
Unallocated liabilities									34,347	31,276
Equity									22,626	21,747
Total Equity and Liabilities									**70,104**	**65,619**

B) REPORTING BY GEOGRAPHICAL AREA

(millions of euros)		Revenues				Non-current operating assets	
		Breakdown by location of operations		Breakdown by location of customers		Breakdown by location of operations	
		2019	2018	2019	2018	12/31/2019	12/31/2018
Italy	(a)	13,815	14,711	13,178	13,839	45,066	47,795
Outside Italy	(b)	4,159	4,229	4,796	5,101	7,774	6,300
Total	**(a+b)**	**17,974**	**18,940**	**17,974**	**18,940**	**52,840**	**54,095**

C) INFORMATION ABOUT MAJOR CUSTOMERS

None of the TIM Group's customers exceeds 10% of consolidated revenues.

NOTE 40
RELATED-PARTY TRANSACTIONS

The following tables show the figures relating to related party transactions and the impact of those amounts on the separate consolidated income statements, consolidated statements of financial position and consolidated statements of cash flows.

Related-party transactions, when not dictated by specific laws, were conducted at arm's length. They were performed in compliance with the internal procedure, which sets forth rules designed to ensure the transparency and fairness of the transactions in accordance with Consob Regulation 17221/2010. The current procedure is available on the website www.telecomitalia.com, under the Group section/Governance System channel.

The effects of the related party transactions on the Group separate consolidated income statement line items for 2019 and 2018 are as follows:

SEPARATE CONSOLIDATED INCOME STATEMENT LINE ITEMS 2019

(millions of euros)	Total (a)	Associates, subsidiaries of associates and joint ventures	Other related parties (*)	Pension funds	Key managers	Total related parties (b)	% of financial statement item (b/a)
Revenues	**17,974**	2	2			**4**	0.0
Acquisition of goods and services	**6,463**	6	141			**147**	2.3
Employee benefits expenses	**3,077**			76	20	**96**	3.1

(*) Vivendi group and Companies belonging to the group that it belongs to; other related parties through directors, statutory auditors and key managers.

SEPARATE CONSOLIDATED INCOME STATEMENT LINE ITEMS 2018

(millions of euros)	Total (a)	Associates, subsidiaries of associates and joint ventures	Other related parties (*)	Pension funds	Key managers	Total related parties (b)	% of financial statement item (b/a)
Revenues	**18,940**	2	3			**5**	0.0
Acquisition of goods and services	**8,186**	5	157			**162**	2.0
Employee benefits expenses	**3,105**			78	14	**92**	3.0
Finance income	**1,056**		8			**8**	0.8
Finance expenses	**2,404**	3	6			**9**	0.4

(*) Vivendi group and Companies belonging to the group that it belongs to; other related parties through directors, statutory auditors and key managers.

The effects of the related party transactions on the Group separate consolidated statement of financial position line items for 2019 and 2018 are as follows:

CONSOLIDATED STATEMENTS OF FINANCIAL POSITION LINE ITEMS AT 12/31/2019

(millions of euros)	Total (a)	Associates, subsidiaries of associates and joint ventures	Other related parties (*)	Pension funds	Total related parties (b)	% of financial statement item (b/a)
Net financial debt						
Non-current financial liabilities for lease contracts	**4,576**	–	1		**1**	0.0
Other statement of financial position line items					**–**	
Trade and miscellaneous receivables and other current assets	**4,857**	2	6		**8**	0.2
Miscellaneous payables and other non-current liabilities	**3,214**	–	1		**1**	0.0
Trade and miscellaneous payables and other current liabilities	**7,218**	4	34	23	**61**	0.8

(*) Vivendi group and Companies belonging to the group that it belongs to; other related parties through directors, statutory auditors and key managers.

CONSOLIDATED STATEMENTS OF FINANCIAL POSITION LINE ITEMS AT 12/31/2018

(millions of euros)	Total (a)	Associates, subsidiaries of associates and joint ventures	Other related parties (*)	Pension funds	Total related parties (b)	% of financial statement item (b/a)
Other statement of financial position line items					**–**	
Trade and miscellaneous receivables and other current assets	**4,706**	3	19		**22**	0.5
Miscellaneous payables and other non-current liabilities	**3,297**		1		**1**	0.0
Trade and miscellaneous payables and other current liabilities	**6,901**	3	46	24	**73**	1.1

(*) Vivendi group and Companies belonging to the group that it belongs to; other related parties through directors, statutory auditors and key managers.

The effects of the related party transactions on the significant Group consolidated statements of cash flows line items for 2019 and 2018 are as follows:

CONSOLIDATED STATEMENT OF CASH FLOWS LINE ITEMS 2019

(millions of euros)	Total	Associates, subsidiaries of associates and joint ventures	Other related parties (*)	Pension funds	Total related parties	% of financial statement item
	(a)				(b)	(b/a)
Purchase of intangible assets, tangible assets and rights of use assets on an accrual basis	4,924	2			2	0.0

(*) Vivendi group and Companies belonging to the group that it belongs to; other related parties through directors, statutory auditors and key managers.

CONSOLIDATED STATEMENT OF CASH FLOWS LINE ITEMS 2018

(millions of euros)	Total	Associates, subsidiaries of associates and joint ventures	Other related parties (*)	Pension funds	Total related parties	% of financial statement item
	(a)				(b)	(b/a)
Purchase of intangible assets, tangible assets and rights of use assets on an accrual basis	6,478	3			3	0.0

(*) Vivendi group and Companies belonging to the group that it belongs to; other related parties through directors, statutory auditors and key managers.

TRANSACTIONS WITH ASSOCIATES, SUBSIDIARIES OF ASSOCIATES AND JOINT VENTURES

SEPARATE CONSOLIDATED INCOME STATEMENT LINE ITEMS

(millions of euros)	2019	2018	TYPE OF CONTRACT
Revenues			
Asscom S.r.l.	1	1	Insurance brokerage.
NordCom S.p.A.	1	1	Fixed and mobile voice services, equipment, data network connections and outsourcing.
Total revenues	**2**	**2**	
Acquisition of goods and services			
W.A.Y. S.r.l.	5	4	Supply, installation and technical assistance services for geolocation equipment provided as part of offers to TIM customers, developments of the CCS software platform dedicated to TIM's Company Car Sharing service.
Other minor companies	1	1	
Total acquisition of goods and services	**6**	**5**	
Finance expenses		**3**	Write-down of the financial receivable due from Alfiere.

CONSOLIDATED STATEMENTS OF FINANCIAL POSITION LINE ITEMS

(millions of euros)	12/31/2019	12/31/2018	TYPE OF CONTRACT
Net financial debt			
Trade and miscellaneous receivables			
Alfiere S.p.A.		1	Contracts for project management, administration, corporate and compliance services, and sundry chargebacks.
W.A.Y. S.r.l.	2	1	Deferred costs for supply of customized platforms, application offers and fixed and mobile voice services.
Other minor companies		1	
Total trade and miscellaneous receivables and other current assets	**2**	**3**	
Trade and miscellaneous payables and other current liabilities			
Movenda S.p.A.	1	1	Supply and certification of SIM-cards, software systems.
W.A.Y. S.r.l.	2	1	Supply, installation and technical assistance services for geolocation equipment provided as part of offers to TIM customers, developments of the CCS software platform dedicated to TIM's Company Car Sharing service.
Other minor companies	1	1	
Total trade and miscellaneous payables and other current liabilities	**4**	**3**	

CONSOLIDATED STATEMENT OF CASH FLOWS LINE ITEMS

(millions of euros)	2019	2018	TYPE OF CONTRACT
Purchase of intangible assets, tangible assets and rights of use assets on an accrual basis			
Movenda S.p.A.	1	2	Supply and development systems software.
Other minor companies	1	1	
Total purchase of intangible, tangible and rights of use assets on an accrual basis	**2**	**3**	

The shareholder loan of 11 million euros (fully written down) and trade receivables of 1 million euros to the joint venture Alfiere S.p.A., present as at December 31, 2018, were fully used to cover the losses for 2018. On June 24, 2019 the sale was completed to CDP Immobiliare S.r.l. of 4,625 ordinary shares of Alfiere S.p.A., equal to 50% of the share capital, held by TIM S.p.A.; at the same time, the guarantee provided for TIM was terminated.

TRANSACTIONS WITH OTHER RELATED PARTIES (BOTH THROUGH DIRECTORS, STATUTORY AUDITORS AND KEY MANAGERS AND AS PARTICIPANTS IN SHAREHOLDER AGREEMENTS PURSUANT TO ARTICLE 122 OF THE CONSOLIDATED LAW ON FINANCE)

Details are provided below of the transactions with:

- Vivendi Group and the companies of the group that it belongs to (as a result of the resolutions of the Board of Directors of TIM S.p.A. of May 3 and June 1, 2017);
- Related companies through Directors appointed on May 4, 2018;
- Related companies through Directors whose term of office ended on May 4, 2018;

The most significant amounts are summarized as follows:

(millions of euros)	2019	2018	TYPE OF CONTRACT
Revenues			
Other Directors or through	1	1	Fixed-line and mobile voice services and devices.
Havas Group	1		Fixed and mobile phone services.
Mediobanca group		1	Telephone services, sale of equipment, data network services and Internet accesses.
Other minor companies		1	
Total revenues	**2**	**3**	
Acquisition of goods and services			
Other Directors or through		2	Amounts recognized for telephone services to be paid back.
Havas Group	137	146	Purchase of media space on behalf of the TIM Group and, to a lesser extent, development and delivery of advertising campaigns.
Vivendi group	4	9	Purchase of musical and television digital content (TIMmusic and TIMvision) and supply of D&P cloud-based games (TIMgames).
Total acquisition of goods and services	**141**	**157**	
Finance income		**8**	Bank accounts, bank deposits and hedging derivatives with the Mediobanca group.
Finance expenses		**6**	Term Loan Facility and Revolving Credit Facility and hedging derivatives with the Mediobanca group.

CONSOLIDATED STATEMENTS OF FINANCIAL POSITION LINE ITEMS

(millions of euros)	12/31/2019	12/31/2018	TYPE OF CONTRACT
Net financial debt			
Non-current financial liabilities	**1**		The liability arising from recognition of the right-of-use assets for leases as a result of the application of IFRS 16 with Other Directors or performed through.

(millions of euros)	12/31/2019	12/31/2018	TYPE OF CONTRACT
Other statement of financial position line items			
Trade and miscellaneous receivables			
Other Directors or through	1	1	Fixed-line and mobile voice services and devices.
Havas Group	4	17	Prepaid expenses related to costs for advertising services.
Vivendi group		1	TIM Show 2018 service and TV series rights.
Other minor companies	1		
Total trade and miscellaneous receivables and other current assets	**6**	**19**	
Miscellaneous payables and other non-current liabilities	**1**	**1**	Deferred income for IRU sale to the Vivendi group.
Trade and miscellaneous payables and other current liabilities			
Havas Group	33	44	Purchase of media space on behalf of the TIM Group and, to a lesser extent, development and delivery of advertising campaigns.
Vivendi group	1	2	Purchase of musical and television digital content (TIMmusic and TIMvision) and supply of D&P cloud-based games (TIMgames).
Total trade and miscellaneous payables and other current liabilities	**34**	**46**	

TRANSACTIONS WITH PENSION FUNDS

SEPARATE CONSOLIDATED INCOME STATEMENT LINE ITEMS

(millions of euros)	2019	2018	TYPE OF CONTRACT
Employee benefits expenses			Contributions to pension funds.
Fontedir	7	8	
Telemaco	65	66	
Other pension funds	4	4	
Total employee benefits expenses	**76**	**78**	

CONSOLIDATED STATEMENTS OF FINANCIAL POSITION LINE ITEMS

(millions of euros)	12/31/2019	12/31/2018	TYPE OF CONTRACT
Trade and miscellaneous payables and other current liabilities			Payables for contributions to pension funds.
Fontedir	3	3	
Telemaco	20	21	
Total trade and miscellaneous payables and other current liabilities	**23**	**24**	

REMUNERATION TO KEY MANAGERS

In 2019, the total remuneration recorded on an accrual basis by TIM or by Group subsidiaries in respect of key managers amounted to 20.0 million euros (14.0 million euros in 2018). The figure breaks down as follows:

(millions of euros)

	2019		2018	
Short-term remuneration	11.9	(1)	6.8	(4)
Long-term remuneration	0.3	(2)	0.6	
Employment termination benefit incentives	5.6	(3)	5.6	(5)
Share-based payments (*)	2.2		1.0	(6)
	20.0		**14.0**	

(*) These refer to the fair value of the rights, accrued to December 31, under the share-based incentive plans of TIM S.p.A. and its subsidiaries (Long Term Incentive 2018 and Plans of the subsidiaries).
(1) of which 1.2 million euros recorded by the subsidiaries;
(2) of which 0.3 million euros recorded by the subsidiaries;
(3) of which 1.0 million euros recorded by the subsidiaries;
(4) of which 1.1 million euros recorded by the subsidiaries;
(5) of which 2.4 million euros recorded by the subsidiaries;
(6) of which 0.2 million euros recorded by the subsidiaries.

Short-term remuneration is paid during the period it pertains to, and, at the latest, within the six months following the end of that period. In 2018, they do not include the effects of the reversal of the accruals relating to the 2017 costs amounting to -1.25 million euros.

Long-term remuneration, in 2019, does not include the effects of the reversal of the accruals related to the 2018 costs of -0.5 million euros.

The *indemnities for early termination of employment*, for 2019, do not include the effects of the reversal of the accruals related to the 2018 costs amounting to 0.2 million euros.

The *share-based payments*, in 2019, do not include the effects of the reversal of the accruals related to the 2018 costs of the LTI 2018/2020 of -0.4 million euros.

In 2019, contributions to defined contribution plans (Assida and Fontedir) paid by TIM S.p.A. or subsidiaries of the Group in favor of Key Managers totaled 141,000 euros (119,000 euros in 2018).

In 2019, "Key managers", i.e. those who have the power and responsibility, directly or indirectly, for the planning, direction and control of the operations of the TIM Group, including directors, were the following:

Directors:		
Luigi Gubitosi		Managing Director and Chief Executive Officer of TIM S.p.A.
		General Manager of TIM S.p.A.
Managers:		
Sami Foguel	(1)	Diretor Presidente Tim Participações S.A.
Pietro Labriola	(2)	
Stefano Azzi	(3)	Chief Consumer Office
Mario Di Mauro	(4)	Innovation and Customer Experience Manager
Lorenzo Forina	(3)	Chief Business & Top Clients Office
	(5)	Chief Revenue Office
Michele Gamberini	(6)	Chief Technology & Information Office
Stefano Grassi	(7)	Head of Security
Riccardo Meloni	(8)	Head of Human Resources, Organization & Real Estate
Luciano Sale	(9)	
Giovanni Gionata Massimiliano Moglia	(7)	Chief Regulatory Affairs & Wholesale Market Office
Carlo Nardello	(10)	Chief Strategy, Customer Experience & Transformation Office
Agostino Nuzzolo		Head of Legal and Tax
Piergiorgio Peluso	(11)	Chief Financial Office
Giovanni Ronca	(12)	
Elisabetta Romano	(13)	Chief Technology and Innovation Office
	(6)	Chief Innovation & Partnership Office
Anna Spinelli	(14)	Head of Procurement
Federico Rigoni	(15)	
Stefano Siragusa		Chief Operations Office

(1) to April 2, 2019;
(2) from April 3, 2019;
(3) to January 17, 2019;
(4) to February 28, 2019; on March 8, 2019 the Department Innovation & Customer Experience has been replaced;
(5) from January 18, 2019;
(6) from November 12, 2019;
(7) from 27 June 2019
(8) to February 4, 2019;
(9) from February 5, 2019;
(10) from February 22, 2019
(11) to June 2, 2019;
(12) from June 3, 2019;
(13) to November 11, 2019;
(14) to March 31, 2019;
(15) from April 1, 2019.

NOTE 41
EQUITY COMPENSATION PLANS

Equity compensation plans in place at December 31, 2019 are used for retention purposes and to offer long-term incentives to Group managers and personnel.
A summary is provided below of the plans in place at December 31, 2019.

DESCRIPTION OF STOCK OPTION PLANS

TIM S.p.A. 2014-2016 Stock Option Plan

The objective of the 2014–2016 Stock Option Plan, introduced following its approval by the Board of Directors of the Company on June 26, 2014, was to encourage management holding organizational positions that are crucial to the company business to focus on the medium/long-term growth in value of company shares. It was aimed at the then Chief Executive Officer, Top Management (including Key Officers) and select TIM Group managers.
Please refer to the Financial Statements at December 31, 2017 for a description of the plan.
The three-year exercise period (March 24, 2017 - March 24, 2020) commenced following the approval of the financial statements for 2016 by the Board of Directors on March 23, 2017.
Based on final data approved, the number of exercisable options is 20% of the total options assigned to targets.
The exercise price was set, by the Board of Directors meeting that initiated the plan at 0.94 euros per option (strike price). For the allocations made in 2015 and 2016, the strike price was determined as the higher of the price established upon initial allocation and the price resulting from the application of the above criteria at the time of allocation of the options. Below is the situation at December 31, 2019:

- 133,042 shares at a unit price of 1.15 euros;
- 343,069 shares at a unit price of 1.01 euros;
- 893,617 shares at a unit price of 0.99 euros;
- 13,497,406 shares at a unit price of 0.94 euros.

Tim Participações S.A. Stock Option Plan

- **2011-2013 Plan**

On August 5, 2011, the General Meeting of Shareholders of Tim Participações S.A. approved the long-term incentive plan for managers in key positions in the company and its subsidiaries. Exercise of the options is subject to achieving two objectives simultaneously:

- absolute performance: increase in value of the Tim Participações S.A.'s shares;
- relative performance: performance of the price of Tim Participações S.A.'s shares against a benchmark index mainly composed of in the Telecommunications, Information Technology and Media industry.

Performance targets refer to the three-year period 2011-2013 and performance is recorded in July and August of each year.
The vesting period is 3 years (33% the first year, 66% the second year and the balance in the third year), the options are valid for 6 years, and the company does not have the legal obligation to repurchase or liquidate the options in cash, or in any other form.

- **2011**
  The grantees of the options were granted the right to purchase a total of 2,833,596 shares. The exercise period expired in August 2017. As such, the plan is now closed.
- **2012**
  On September 5, 2012 the grantees of the options were granted the right to purchase a total of 2,661,752 shares. The exercise period expired in September 2018; the 194,756 pending options were canceled and so the plan was closed.
- **2013**
  On July 30, 2013, the grantees of the options were granted the right to purchase a total of 3,072,418 shares. In July 2019 the terms of the year expired, the 543,583 pending options were cancelled and the plan is therefore concluded.

- **2014-2016 Plan**

On April 10, 2014, the General Meeting of Shareholders of Tim Participações S.A. approved the long-term incentive plan for managers in key positions in the company and its subsidiaries.
Exercise of the options is not subject to the achievement of specific performance targets, but the exercise price is adjusted upwards or downwards according to the performance of the Tim Participações S.A. shares in a ranking of Total Shareholder Return, in which companies in the Telecommunications, Information Technology and Media industry are compared during each year of validity of the plan. If the performance of the Tim Participações S.A. shares, in the 30 days prior to September 29 of each year, is in last place in that ranking, the participant loses the right to 25% of the options vesting at that time.
The vesting period is 3 years (a third per year), the options are valid for 6 years, and the company does not have the legal obligation to repurchase or liquidate the options in cash, or in any other form.

- **Year 2014**
  On September 29, 2014, the grantees of the options were granted the right to purchase a total of 1,687,686 shares.
  In 2019, 32,511 options were exercised and 121,175 expired due to a number of terminations, giving a total of 1,249,465 expired options and 59,935 excercised options.
  In its first and second *tranche* of the year it was valued at 13.8652 reais, up by 3.33% based on the ranking of the companies being benchmarked.
  In the last *tranche*, the options have been exercised with a price of 13.4184 reais.
  At the end of December 2019, 378,286 options were still valid.
- **Year 2015**
  On October 16, 2015, the grantees of the options were granted the right to purchase a total of 3,355,229 shares.
  In 2019 159,675 options have been exercised, for a total of 1,646,080 options expired and 1,576,301 options vested.
  The first *tranche* exercised was valued at 8.7341 reais, up by 3.33% based on the ranking of the companies being benchmarked.
  In the second *tranche*, the options have been exercised with a price of 8.4526 reais.
  In the last *tranche*, the options have been exercised, with a price of 7.6074 reais with a discount of 10% based on the ranking of the companies being benchmarked.
  At the end of December 2019, 132,848 options were still valid.
- **2016**
  On November 8, 2016, the grantees of the options were granted the right to purchase a total of 3,922,204 shares.
  In December 2019 476,182 options were exercised, for a total of 1,727,424 options expired and 1,775,440 options vested. In its first and third *tranche* of the year it was valued at 7.6928 reais with a discount of 5% based on the ranking of the companies being benchmarked.
  The first *tranche*, the options have been exercised with a price of 7.2879 reais with a discount of 10% based on the ranking of the companies being benchmarked.
  At the end of December 2019, 419,340 options were still valid.

DESCRIPTION OF OTHER EQUITY COMPENSATION PLANS

TIM S.p.A. - 2018-2020 Long Term Incentive Plan

The Plan, approved by the Shareholders' Meeting of Telecom Italia S.p.A. of April 24, 2018, provides for a three-year vesting period (2018-2020) and the bonus allocation of Telecom Italia S.p.A. ordinary shares subject to the achievement of two performance conditions, as assessed by the Board of Directors when approving the TIM Group's consolidated financial statements at December 31, 2020:

- average performance of TIM ordinary shares versus the average market performance of a peer basket in the quarters preceding the start and the end of the period (70% weighting). The peer basket consists of the following Companies: Deutsche Telekom AG, Vodafone Group PLC, Telefonica SA, Orange SA, BT Group PLC, Telenor ASA, Swisscom AG, Telia Co AB, Koninklijke KPN NV, Proximus SADP, Elisa OYJ;
- cumulative equity free cash flow over the period 2018-2020 (30% weighting). This parameter is linked to the generation of cash flow, understood as net cash flow before dividends and investments in frequencies. Represents the Free Cash Flow available for the payment of dividends, the repayment of the debt, the impact of IAS 17 (finance leases) and the investment in frequencies, and do not include the financial impact of any acquisition and/or disposal of equity investments (M&A).

The Plan envisages two grants: a first grant reserved to the Chief Executive Officer, serviced by a maximum of 30,000,000 shares; a second grant for a select number of Group management (serviced by a maximum of 55,000,000 shares).
Following assignment, all shares will be subject to the lock-up clause for two years.
The operating terms and conditions of the Plan are set forth in the Plan Rules, approved by the Board of Directors on July 24, 2018, which resolved its start-up.

TIM S.p.A. - Special Award 2016 – 2019

For the description of the Special Award 2016-2019, launched in 2016, see the Consolidated financial statements at December 31, 2017.
At December 31, 2019 the Key Managers, recipients of this bonus, were awarded a total amount of 250,000 euros (represented for 200,000 euros by 256,410 ordinary shares of TIM S.p.A.). The payment is scheduled for after the approval of the Financial Statements for the year 2019.

TIM Participações S.A. – 2018-2020 Plan

On April 19, 2018, the General Meeting of Shareholders of Tim Participações S.A. approved the long-term incentive plan for managers in key positions in the company and its subsidiaries. The plan aims to remunerate participants with shares issued by the company, subject to specific temporal and/or performance conditions (upon reaching specific targets).
The vesting period is 3 years (a third per year) and the company does not have the legal obligation to repurchase or liquidate the shares in cash or in any other form. The portion of shares linked to performance (70%) is granted 1/3 each year, if the performance target is achieved; the remaining portion of shares (30%) is granted 3 years after allocation.
The plan - in addition to provide the transfer of the shares - also includes the possibility of the payment of the equivalent value in cash.

- **Year 2018**

On April 20, 2018, the grantees were granted the right to obtain a total of 849,932 shares.
In 2019, 115,949 shares were allocated and 97,228 were cancelled (for a number of terminations), out a total of 480,646 expired shares. At year end 2019, 253,337 shares remain valid.
The initial allocation was measured with a correction of the number of shares to 122.46%.

- **Year 2019**

On July 30, 2019, the grantees were granted the right to obtain a total of 930,662 shares.
As at December 31, 2019, the first vesting period has not yet finished. However, 33,418 shares were canceled due to the participants leaving the company. At year end 2019, 897,244 shares remain valid.

INWIT S.p.A. - Long Term Incentive 2018-2020

The INWIT S.p.A. Shareholders' Meeting approved the Long Term Incentive Plan 2018 – 2020 (the "Plan") on April 13, 2018 and authorized the Board of Directors to purchase and make available Company shares in one or more times and for an eighteen-month period starting from the date of the shareholders' meeting resolution. These shares serve to establish the aforementioned share incentive plan. The purchases will concern a maximum number of 400,000 ordinary shares of the Company, representing about 0.07% of the INWIT share capital.
The objective of the Plan is to create incentives for Beneficiaries upon achievement of Company strategic objectives set out in the industrial plan communicated to the market, bringing the interests of management holding organizational positions that are crucial to the company business into line with the interests of INWIT owners in terms of growth in value of the share over the medium to long term.
The Plan provides for a three-year vesting period (2018–2020) and the bonus allocation of shares subject to the achievement of two performance conditions, as assessed by the Board of Directors when approving the Company financial statements at December 31, 2020:

- Total Shareholder Return regarding INWIT (60% weighting). The parameter measures INWIT's TSR position in the Italian and foreign TowerCo TSR ("peer group") rankings;
- cumulative Recurring Free Cash Flow over the period 2018-2020 (40% weighting). This indicates the cash flow generated by operational management after investments to maintain infrastructures and after finance expenses. On the other hand, development investments are not included.

The operating terms and conditions of the Plan are set forth in the Plan Rules, approved by the Board of Directors during its meeting on July 23, 2018.
The Plan, which start was approved by the Board of Directors' meeting held on November 6, 2018, two *tranches* of granting: the first on November 6, 2018 and the second on January 28, 2019.
Purchase of 222,118 treasury shares through Mediobanca - Banca di Credito Finanziario S.p.A., representing 0.037% of the share capital implemented by INWIT for funding the service of the 2018-2020 Long Term Incentive Plan, was finalized on November 15, 2018.
The shares are deposited on a securities account held by Inwit S.p.A. at Intesa Sanpaolo S.p.A..

CALCULATION OF FAIR VALUE MEASUREMENT OF THE GRANTED OPTIONS AND RIGHTS

Parameters used to determine fair value – Tim S.p.A. LTI 2018-2020 Plan

Plans/Parameters	Exercise price (euros)	Nominal value (euros) (1)	Volatility (2)	Period	Expected dividends (euros)	Risk-free interest rate (3)
LTI Plan 2018-2020 - equity component	-	0.63	n.a.	3 years	_	-0.552% at 3 years
LTI Plan 2018-2020 - equity component (two-year CEO granting)	-	0.51	n.a.	2 years	_	-0.594% at 2 years
LTI 2018 – 2020 Plan – equity component (two-year allocations)	-	0.48	n.a.	2 years	_	-0.569% at 2 years
LTI 2018 – 2020 Plan – equity component (two-year allocations)	-	0.48	n.a.	2 years	_	-0.570% at 2 years

(1) Arithmetic mean of the official prices of the Shares recognized starting from the stock market trading day prior to that of assignment until the thirtieth previous ordinary calendar day (both included) on the Electronic Stock Exchange organized and managed by Borsa Italiana S.p.A., calculated using only the days to which the prices taken as the basis of calculation refer as the divisor, cut off at the second decimal.
(2) Based on the performance objectives of the plan, the TIM share volatility values were considered and, if necessary, also those of the securities of the major companies of the telecommunications sector ("peer basket").
(3) The risk-free interest rate refers to the rate of government securities of the Federal Republic of Germany (market benchmark for transactions in euros) with due date consistent with the period of reference at the valuation date.

Parameters used for the assignments of Tim Participações S.A.

Plans/Parameters	Exercise price (reais)	Nominal value (reais)	Volatility	Period	Expected dividends (reais)	Risk-free interest rate
Stock option plan 2011	8.84		51.73%	6 years	-	11.94% per annum
Stock option plan 2012	8.96		50.46%	6 years	-	8.89% per annum
Stock option plan 2013	8.13		48.45%	6 years	-	10.66% per annum
Stock option plan 2014	13.42		44.60%	6 years	-	10.66% per annum
Stock option plan 2015	8.45		35.50%	6 years	-	16.10% per annum
Stock option plan 2016	8.10		36.70%	6 years	-	11.73% per annum
2018-2020 Plan: stock grant 2018	-	14.41	-	3 years	-	NA
2018-2020 Plan: stock grant 2019	-	11.28	-	3 years	-	NA

Parameters used to determine the fair value – INWIT S.p.A.

Plans/Parameters	Exercise price (euros)	Normal value (1) (euros)	Volatility	Period	Expected dividends (euros)	Interest rate
INWIT LTI 2018-2020	-	6.208	n.a.	3 years	0.19	-0.1% annual

(1) Arithmetic mean of the official prices of the INWIT S.p.A. ordinary shares recognized on the Electronic Stock Exchange organized and managed by Borsa Italiana S.p.A. over the 30 calendar days prior to the date of the Board of Directors meeting held November 6, 2018 (October 6, 2018 - November 5, 2018).

Effects on the income statement and statement of financial position

Equity compensation plans which call for payment in equity instruments are recorded at *fair value* (except for the 2018 Plan of TIM Participações) which represents the cost of such instruments at the grant date and is recorded in the separate income statements under "Employee benefits expenses" over the period between the grant date and the vesting period with a contra-entry to the equity reserve "Other equity instruments". For the portion of the plans that provide for the payment of compensation in cash, the amount is recognized in liabilities as a contra-entry to "Employee benefits expenses"; at the end of each year such liability is measured at fair value (except for the 2018 Plan of TIM Participações).
Equity compensation plans which call for payment in equity instruments did not have significant impacts either on the income statements or the statements of financial position or of cash flows of the TIM Group at December 31, 2019.

NOTE 42
SIGNIFICANT NON-RECURRING EVENTS AND TRANSACTIONS

The effect of 2019 non-recurring events and transactions on the equity, profit, net financial debt and cash flows of the TIM Group is set out below in accordance with Consob Communication DEM/6064293 of July 28, 2006. The non-recurring effects on Equity and Profit (loss) for the year are shown net of tax effects.

(millions of euros)		Equity	Profit (loss) for the year	Net financial debt carrying amount	Cash flows (*)
Carrying amount	**(a)**	**22,626**	**1,242**	**28,246**	**1,581**
Revenues - adjustments from previous years		(15)	(15)	–	–
Other income - Effect of tax recovery of Brazil BU and recovery operating expenses of Domestic BU		473	473	–	–
Acquisition of goods and services - Expenses related to agreements and the development of non-recurring projects		(15)	(15)	14	(14)
Employee benefits expenses - Charges related to corporate reorganization/restructuring and other charges		(202)	(202)	268	(268)
Other operating expenses - Expenses related to disputes and regulatory sanctions and potential liabilities related to them, and expenses related to disputes with former employees and liabilities with customers and/or suppliers		(368)	(368)	13	(13)
Gains on disposals of non-current assets		(18)	(18)	(146)	125
Other income (expenses) from investments		6	6	(3)	3
Miscellaneous finance expenses		(23)	(23)	–	–
Total non-recurring effects	**(b)**	**(162)**	**(162)**	**146**	**(167)**
Income/(Expenses) relating to Discontinued operations	**(c)**	**16**	**16**	**(16)**	**16**
Figurative amount – financial statements	**(a–b-c)**	**22,772**	**1,388**	**28,116**	**1,732**

(*) Cash flows refer to the increase (decrease) in Cash and cash equivalents during the year.

The impact of non-recurring items on the separate consolidated income statement line items is as follows:

	2019	2018
Revenues:		
Revenue adjustments of previous years	(15)	(62)
Other income:		
Brazil Business Unit Tax recovery and Domestic Business Unit operating expenses	706	37
Acquisition of goods and services, Change in inventories:		
Professional expenses, consulting services and other costs	(21)	(15)
Employee benefits expenses:		
Charges related to corporate reorganization/restructuring and other charges	(282)	(233)
Other operating expenses:		
Sundry expenses and other provisions	(459)	(135)
Impact on Operating profit (loss) before depreciation and amortization, capital gains (losses) and impairment reversals (losses) on non-current assets (EBITDA)	**(71)**	**(408)**
Gains (losses) on non-current assets:		
Sale of Persidera S.p.A. (Domestic BU)	(18)	–
Impairment reversals (losses) on non-current assets:		
Goodwill impairment loss attributed to Core Domestic CGU and International Wholesale CGU	–	(2,590)
Impact on EBIT - Operating profit (loss)	**(89)**	**(2,998)**
Other income (expenses) from investments:		
Net gains on the sale of investments in associates and joint ventures accounted for using the equity method	1	–
Finance income:		
Other finance income	–	45
Finance expenses:		
Miscellaneous finance expenses	(34)	(38)
Impact on profit (loss) before tax from continuing operations	**(122)**	**(2,991)**
Income taxes on non-recurring items	(40)	71
Income/(Expenses) relating to Discontinued operations	16	–
Impact on Profit (loss) for the year	**(146)**	**(2,920)**

NOTE 43
POSITIONS OR TRANSACTIONS RESULTING FROM ATYPICAL AND/OR UNUSUAL OPERATIONS

In accordance with Consob Communication DEM/6064293 of July 28, 2006, a statement is made to the effect that in 2019 the TIM Group did not pursue any atypical and/or unusual transactions, as defined by that Communication.

NOTE 44
OTHER INFORMATION

A) EXCHANGE RATES USED TO TRANSLATE THE FINANCIAL STATEMENTS OF FOREIGN OPERATIONS(*)

		Year-end exchange rates (statements of financial position)		**Average exchange rates for the year** (income statements and statements of cash flows)	
(local currency against 1 euro)		**12/31/2019**	**12/31/2018**	**2019**	**2018**
Europe					
BGN	Bulgarian Lev	**1.95580**	1.95580	**1.95580**	1.95580
CZK	Czech koruna	**25.40800**	25.72400	**25.66928**	25.64653
CHF	Swiss franc	**1.08540**	1.12690	**1.11263**	1.15517
TRY	Turkish lira	**6.68430**	6.05880	**6.36122**	5.69649
GBP	Pound sterling	**0.85080**	0.89453	**0.87750**	0.88474
RON	Romanian leu	**4.78300**	4.66350	**4.74547**	4.65399
RUB	Russian ruble	**69.95600**	79.71500	**72.45046**	74.03808
North America					
USD	U.S. dollar	**1.12340**	1.14500	**1.11954**	1.18121
Latin America					
VES	Venezuelan bolivar - Soberano	**52,308.38000**	729.80267	**14,692.87000**	(**)139,15438
BOB	Bolivian Bolíviano	**7.76270**	7.91200	**7.73599**	8.16218
PEN	Peruvian nuevo sol	**3.72550**	3.86300	**3.73612**	3.87979
ARS	Argentine peso	**67.27490**	43.15930	**53.80911**	32.85850
CLP	Chilean peso	**844.86000**	794.37000	**786.86284**	756.93992
COP	Colombian peso	**3,688.66000**	3,721.81000	**3,673.62602**	3,488.43046
BRL	Brazilian real	**4.52808**	4.43664	**4.41422**	4.30628
Other countries					
ILS	Israeli shekel	**3.88450**	4.29720	**3.99076**	4.24360
NGN	Nigerian Naira	**344.32200**	350.94300	**343.07080**	360.98553

(*) Source: data processed by the European Central Bank, Reuters and major Central Banks.
(**) On August 20, 2018 the Venezuelan Central Bank introduced a new currency (Bolivar Soberano, VES) to replace the previous currency (Bolivar Fuerte, VEF).

B) RESEARCH AND DEVELOPMENT

Expenditures for research and development activities are represented by external costs, labor costs of dedicated staff and depreciation and amortization. Details are as follows:

(millions of euros)	2019	2018
Research and development costs expensed during the year	55	44
Capitalized development costs	1,111	1,168
Total research and development costs (expensed and capitalized)	**1,166**	**1,212**

The decrease recognized in 2019 was mainly due to the completion of the engineering, diffusion and development activities conducted on the LTE and NGAN network, which have now reached maturity, partially offset by greater implementation activities related to the new generation 5G network by the Parent.
In the 2019 separate consolidated income statements, a total of 922 million euros of amortization expense was recorded for development costs, capitalized during the year and in prior years.
Research and development activities carried out by the TIM Group are described in detail in the Report on Operations ("Research and Development" section).

C) LEASING INCOME

The TIM Group has entered into lease contracts on land and buildings for office and industrial use, mobile network infrastructure sites and network infrastructure. at December 31, 2019, the lease installments at nominal value still to be collected totaled:

(millions of euros)	12/31/2019
Within 1 year	147
From 1 to 2 years after the end of the reporting period	113
From 2 to 3 years after the end of the reporting period	87
From 3 to 4 years after the end of the reporting period	59
From 4 to 5 years after the end of the reporting period	46
Beyond 5 years after the end of the reporting period	76
Total	**528**

For further details on the application of the new IFRS 16 accounting standard, see the Note "Accounting Policies".

D) PUBLIC FUNDS

Italian Law 124/2017 requires that information on subsidies, contributions, paid assignments and economic benefits of any kind received from Italian public administrations be provided. In this regard, the following table shows the disbursements collected by the TIM Group in the years 2019 and 2018:

Distributing entity	**area of intervention**	**Received in 2019 (millions of euros)**	**Received in 2018 (millions of euros)**
Fondimpresa / Fondigirenti	training	4	6
Infratel	construction of ultrabroadband infrastructure	28	106
MIUR	Research projects and energy efficiency	2	1
Sundry income (*)		-	3
Total		**34**	**116**

(*) Ministry of Economic Development (MiSE); MINISTRY OF THE ECONOMY AND FINANCE (MEF); Lazio Region; Piedmont Region; Veneto Region; Autonomous Province of Trento.

E) DIRECTORS' AND STATUTORY AUDITORS' REMUNERATION

Total remuneration due for 2019 to the directors and statutory auditors of TIM S.p.A. for the performance of these functions at the Parent and in other consolidated companies totaled 8.7 million euros for directors and 0.5 million euros for statutory auditors. In reference to the compensation to which the Directors are entitled, it should be noted that the amount was calculated by considering only compensation for corporate offices (in primis those under Article 2389, paragraphs 1 and 3 of the Italian Civil Code), thus excluding amounts relating to any employment relationship with the companies of the Group and any non-monetary fringe benefits; for a complete and detailed description of the compensation paid to the directors, reference should be made to the Compensation Report, available at the Company's headquarters and on the corporate website at the following address: www.telecomitalia.com/shareholders.

F) SUMMARY SCHEDULE OF FEES DUE TO THE AUDIT FIRM AND OTHER FIRMS IN ITS NETWORK

The following schedule reports the fees due to EY S.p.A. and to the other firms in the EY network for the audit of the 2019 financial statements, and the fees referring to 2019 for other audit and review services, and for other services besides audit rendered to the companies of the TIM Group from EY S.p.A. and other firms in the EY network. The out-of-pocket expenses incurred for these services in 2019 are also shown.

	EY S.p.A.			Other entities of the EY network			
(euros)	TIM S.p.A.	Subsidiaries	TIM Group	TIM S.p.A.	Subsidiaries	TIM Group	Total EY network
Audit services	2,513,000	1,127,437	3,640,437		1,739,146	1,739,146	5,379,583
Verification services with issue of certification							
Attestation of compliance of the Consolidated Non-Financial Statement	72,000		72,000		20,366	20,366	92,366
Other services:				43,000		43,000	43,000
Total 2019 fees due for audit and other services to the EY network	**2,585,000**	**1,127,437**	**3,712,437**	**43,000**	**1,759,512**	**1,802,512**	**5,514,949**
Out-of-pocket expenses							178,695
Total							**5,693,644**

NOTE 45
EVENTS SUBSEQUENT TO DECEMBER 31, 2019

LOAN CONTRACT WITH THE BANCO DO NORDESTE DO BRASIL

On January 31, 2020, TIM S.A. entered into an agreement for the loan with the Banco do Nordeste do Brasil, for a total amount of 752,479 thousands of reais: (i) 325,071 thousands of reais at cost IPCA + 1.4386% and subject to a default bonus of 15%; and (ii) 427,408 thousands of reais at cost IPCA + 1.7582% and subject to a default bonus of 15%. The aim of the *facility* is to fund its additions in the northeast and in the north of the states of Minas Gerais and Espírito Santo from 2019 at 2022 with a total payment term of 8 years, or 3 years of suspension (*grace period*) and 5 years of depreciation. The transaction will be guaranteed by (i) a surety on-demand bank of 100% of the amount of any payment; And (ii) a note equal to 5% of the amount of each payment. To date, there have been no disbursements.

TIM AND SANTANDER CONSUMER BANK S.P.A. LAUNCH JOINT VENTURE TO OFFER CONSUMER CREDIT TO TIM CUSTOMERS

On February 17 2020 agreements were signed between Santander Consumer Bank S.p.A. and TIM S.p.A. signal the start of a partnership to offer a consumer credit delivery platform for TIM customers, as announced by the two companies in November 2019.
Thanks to the partnership, instalment plan financing for product purchases will be progressively rolled out in all TIM stores. They will subsequently also offer personal loans, credit cards and insurance products designed to meet customers' needs, with a high degree of innovation and digitalisation, both of which have always been hallmarks of the two companies.
The launch of the consumer credit service is the first phase of the new joint venture, which will begin operating once the necessary authorizations have been obtained. The deal will allow TIM to further reduce debt and optimize credit costs, and give Santander Consumer Bank access to a larger pool of customers, consolidating its leading position in the consumer credit market. TIM customers will also gain quick and easy access to customised and transparent financial and insurance solutions, strengthening and improving the continuity of customer relationships.
The joint venture company – 51% owned by Santander and 49% by TIM – is unique in the consumer credit market and will be based in Turin.
TIM was advised in the transaction by the law firm Bonelli Erede and assisted by ValeCap and JPMorgan. Santander Consumer Bank was advised by the law firm Clifford Chance and assisted by KPMG.

TIM AND GOOGLE CLOUD LAUNCH STRATEGIC PARTNERSHIP

On March 4, 2020,TIM and Google Cloud announced the signing of the official agreement that will launch a joint technology collaboration, following the Memorandum of Understanding (MoU) signed in November 2019 between the two companies. TIM and Google Cloud have agreed to work together to create innovative public, private and hybrid cloud services to expand TIM's technology services offering. TIM intends to extend its leadership in Cloud and Edge Computing services as a result of this collaboration. TIM is aiming to accelerate the growth of its revenues from technology services, with the objective of reaching 1 billion euros in revenues and 0.4 billion euros in EBITDA by 2024.
To accelerate the development of new products for customers, TIM and Google Cloud engineers will work closely together to create highly innovative solutions for the Italian market. This close collaboration will bring give Italian companies access to the latest innovations for digital transformation and other emerging technologies, helping them to become truly digital.
TIM's planned investments in innovation and the creation of new and modern Data Centers have been confirmed, as well as the development of new cloud-related capabilities, including through new hires and an extensive training plan involving 6,000 people in the commercial, pre-sales and technical areas.
To confirm its commitment to Italy, Google Cloud will also work with TIM on the opening of new Cloud regions. The new regions will see Google Cloud and TIM customers in Italy benefit from low-latency, high-performance cloud services and data.
The partnership with Google Cloud will also allow TIM to consolidate its key role in supporting the technological innovation of Italian businesses, where innovative technologies – such as Cloud, 5G, Internet of Things (IoT) and artificial intelligence (AI) – will play an increasingly pivotal role for the competitiveness of companies and the development of the national economy as a whole.

EUROPEAN COMMISSION CLEARS MERGER OF INWIT AND VODAFONE ITALY TOWERS

On March 6, 2020 the European Commission has cleared the combination of INWIT's passive network infrastructure with Vodafone Italy's towers (the "Combination"), creating Europe's second largest listed tower company with over 22,000 towers.

Following constructive talks with the European Commission, TIM and Vodafone have offered commitments to support access to INWIT's passive infrastructure by all market participants. Under the commitments, INWIT will make space available to third parties on 4,000 of its towers in more urbanised areas while committing to preserving existing tenancies. The commitments ensure that INWIT can maximise tower utilisation while preserving the ability of Vodafone and TIM to efficiently roll out their respective 5G networks.

The European Commission has confirmed that it is supportive of TIM and Vodafone's plans to share active network equipment outside of major cities, allowing a faster deployment of 5G over a wider geographic area, at a lower cost, and with a lower environmental impact. The active sharing partnership will exclude municipalities with populations of over 100,000 inhabitants, as well as their more densely populated suburbs.

As a result of the Combination - which was approved with 99.9% of the votes by INWIT minority shareholders in favour, and that is expected to take place by the end of March – Vodafone will receive proceeds of 2,140 million euros, as announced in July 2019, and both Vodafone and TIM will each hold a 37.5% shareholding in INWIT. INWIT will then pay a special dividend of 0.5936 euro to holders of the company's post-merger ordinary shares, as already approved by INWIT's shareholders on December 19, 2019. Assuming the Combination completesby the May 19th record date, the ordinary dividend for 2019 (to be approved by INWIT's shareholders on April 6 of this year) will be 0.132 euro per share.

NOTE 46
LIST OF COMPANIES OF THE TIM GROUP

In accordance with Consob Communication DEM/6064293 dated July 28, 2006, the list of companies is provided herein.
The list is divided by type of investment, consolidation method and operating segment.
The following is indicated for each company: name, head office, country and share capital in the original currency. In addition to the percentage ownership of share capital, the percentage of voting rights in the ordinary shareholders' meeting, if different from the percentage holding of share capital, and which companies hold the investment.

Company name	Head office	Currency	Share capital	% Ownership	% of voting rights	Held by
PARENT COMPANY						
TIM S.p.A.	MILAN (ITALY)	EUR	11,677,002,855			
SUBSIDIARIES CONSOLIDATED LINE-BY-LINE						
DOMESTIC BU						
CD FIBER S.r.l. (design, construction, maintenance and management of network infrastructure services and high-speed electronic communication systems)	ROME (ITALY)	EUR	50,000	100.0000		TIM S.p.A.
FLASH FIBER S.r.l. (development, implementation, maintenance and supply of the fiber network in Italy)	MILAN (ITALY)	EUR	30,000	80.0000		TIM S.p.A.
H.R. SERVICES S.r.l. (personnel training and services)	L'AQUILA (ITALY)	EUR	500,000	100.0000		TIM S.p.A.
MED 1 SUBMARINE CABLES Ltd (construction and management of the submarine cable lev1)	RAMAT GAN (ISRAEL)	ILS	55,886,866	100.0000		TELECOM ITALIA SPARKLE S.p.A.
OLIVETTI S.p.A. (production and sale of office equipment and information technology services)	IVREA (TURIN) (ITALY)	EUR	10,000,000	100.0000		TIM S.p.A.
TELECOM ITALIA SAN MARINO S.p.A. (San Marino telecommunications management)	BORGO MAGGIORE (SAN MARINO)	EUR	1,808,000	100.0000		TIM S.p.A.
TELECOM ITALIA SPARKLE S.p.A. (completion and management of telecommunications services for public and private use)	ROME (ITALY)	EUR	200,000,000	100.0000		TIM S.p.A.
TELECOM ITALIA TRUST TECHNOLOGIES S.r.l. (other operations related to non-classified IT services)	POMEZIA ROME (ITALY)	EUR	7,000,000	100.0000		TIM S.p.A.
TELECOM ITALIA VENTURES S.r.l. (investment holding company)	MILAN (ITALY)	EUR	10,000	100.0000		TIM S.p.A.
TELECONTACT CENTER S.p.A. (telemarketing services)	NAPLES (ITALY)	EUR	3,000,000	100.0000		TIM S.p.A.
TELEFONIA MOBILE SAMMARINESE S.p.A. (development and management of mobile telecommunications plants and services)	BORGO MAGGIORE (SAN MARINO)	EUR	78,000	51.0000		TELECOM ITALIA SAN MARINO S.p.A.
TELENERGIA S.r.l. (import, export, purchase, sale and trade of electricity)	ROME (ITALY)	EUR	50,000	100.0000		TIM S.p.A.
TELSY ELETTRONICA E TELECOMUNICAZIONI S.p.A. (production and sale of equipment and systems for crypto telecommunications)	TURIN (ITALY)	EUR	390,000	100.0000		TIM S.p.A.
TI SPARKLE AMERICAS Inc. (managed bandwidth services)	MIAMI (UNITED STATES)	USD	10,000	100.0000		TELECOM ITALIA SPARKLE S.p.A.
TI SPARKLE ARGENTINA S.A. (managed bandwidth services)	BUENOS AIRES (ARGENTINA)	ARS	9,998,000	100.0000		TELECOM ITALIA SPARKLE S.p.A.
TI SPARKLE AUSTRIA GmbH (telecommunications services)	VIENNA (AUSTRIA)	EUR	2,735,000	100.0000		TELECOM ITALIA SPARKLE S.p.A.
TI SPARKLE BELGIUM S.P.R.L. - B.V.B.A. (telecommunications services)	BRUSSELS (BELGIUM)	EUR	2,200,000	99.9999 0.0001		TELECOM ITALIA SPARKLE S.p.A. TI SPARKLE UK Ltd

Company name	Head office	Currency	Share capital	% Ownership	% of voting rights	Held by
TI SPARKLE BOLIVIA S.r.l.	LA PAZ	BOB	1,747,600	99.9999		TELECOM ITALIA SPARKLE S.p.A.
(managed bandwidth services)	(BOLIVIA)			0.0001		TI SPARKLE AMERICAS Inc.
TI SPARKLE BRASIL PARTIÇIPAÇÕES Ltda	RIO DE JANEIRO	BRL	71,563,866	99.9999		TELECOM ITALIA SPARKLE S.p.A.
(investment holding company)	(BRAZIL)			0.0001		TI SPARKLE AMERICAS Inc.
TI SPARKLE BRASIL TELECOMUNICAÇÕES Ltda	RIO DE JANEIRO	BRL	69,337,363	99.9999		TI SPARKLE BRASIL PARTIÇIPAÇÕES Ltda
(managed bandwidth services)	(BRAZIL)			0.0001		TI SPARKLE AMERICAS Inc.
TI SPARKLE BULGARIA EOOD	SOFIA	BGN	100,000	100.0000		TELECOM ITALIA SPARKLE S.p.A.
(telecommunications)	(BULGARIA)					
TI SPARKLE CHILE S.p.A.	SANTIAGO	CLP	5,852,430,960	100.0000		TELECOM ITALIA SPARKLE S.p.A.
(managed bandwidth services)	(CHILE)					
TI SPARKLE COLOMBIA Ltda	BOGOTA'	COP	5,246,906,000	99.9999		TELECOM ITALIA SPARKLE S.p.A.
(managed bandwidth services)	(COLOMBIA)			0.0001		TI SPARKLE AMERICAS Inc.
TI SPARKLE CZECH S.R.O.	PRAGUE	CZK	6,720,000	100.0000		TELECOM ITALIA SPARKLE S.p.A.
(telecommunications services)	(CZECH REPUBLIC)					
TI SPARKLE FRANCE S.A.S.	PARIS	EUR	18,295,000	100.0000		TELECOM ITALIA SPARKLE S.p.A.
(installation and management of telecommunications services for fixed network and related activities)	(FRANCE)					
TI SPARKLE GERMANY Gmbh	FRANKFURT	EUR	25,000	100.0000		TELECOM ITALIA SPARKLE S.p.A.
(telecommunications services)	(GERMANY)					
TI SPARKLE GREECE S.A.	ATHENS	EUR	368,760	100.0000		TELECOM ITALIA SPARKLE S.p.A.
(telecommunications)	(GREECE)					
TI SPARKLE ISRAEL Ltd	RAMAT GAN	ILS	1,000	100.0000		TELECOM ITALIA SPARKLE S.p.A.
(international wholesale telecommunication services)	(ISRAEL)					
TI SPARKLE NETHERLANDS B.V.	AMSTERDAM	EUR	18,200	100.0000		TELECOM ITALIA SPARKLE S.p.A.
(telecommunications services)	(NETHERLANDS)					
TI SPARKLE NORTH AMERICA, Inc.	NEW YORK	USD	15,550,000	100.0000		TELECOM ITALIA SPARKLE S.p.A.
(telecommunications and promotional services)	(UNITED STATES)					
TI SPARKLE PANAMA S.A.	PANAMA	USD	10,000	100.0000		TELECOM ITALIA SPARKLE S.p.A.
(managed bandwidth services)						
TI SPARKLE PERU' S.A.	LIMA	PEN	57,101,788	99.9999		TELECOM ITALIA SPARKLE S.p.A.
(managed bandwidth services)	(PERU)			0.0001		TI SPARKLE AMERICAS Inc.
TI SPARKLE PUERTO RICO LLC	SAN JUAN	USD	50,000	100.0000		TELECOM ITALIA SPARKLE S.p.A.
(managed bandwidth services)	(PUERTO RICO)					
TI SPARKLE ROMANIA S.r.l.	BUCHAREST	RON	3,021,560	100.0000		TELECOM ITALIA SPARKLE S.p.A.
(telecommunications services)	(ROMANIA)					
TI SPARKLE RUSSIA LLC	MOSCOW	RUB	8,520,000	99.0000		TELECOM ITALIA SPARKLE S.p.A.
(telecommunications services)	(RUSSIA)			1.0000		TI SPARKLE UK Ltd
TI SPARKLE SINGAPORE Pte.Ltd	SINGAPORE	USD	5,121,120	99.9999		TELECOM ITALIA SPARKLE S.p.A.
(telecommunications services)				0.0001		TI SPARKLE NORTH AMERICA, Inc.
TI SPARKLE SLOVAKIA S.R.O.	BRATISLAVA	EUR	300,000	100.0000		TELECOM ITALIA SPARKLE S.p.A.
(telecommunications services)	(SLOVAKIA)					
TI SPARKLE SPAIN TELECOMMUNICATIONS S.L.	MADRID	EUR	1,687,124	100.0000		TELECOM ITALIA SPARKLE S.p.A.
(telecommunications services)	(SPAIN)					
TI SPARKLE ST. CROIX LLC	VIRGIN ISLANDS	USD	1,000	100.0000		TELECOM ITALIA SPARKLE S.p.A.
(managed bandwidth services)	(UNITED STATES)					

Company name	Head office	Currency	Share capital	% Ownership	% of voting rights	Held by
TI SPARKLE SWITZERLAND GmbH	ZURICH	CHF	2,000,000	100.0000		TELECOM ITALIA SPARKLE S.p.A.
(telecommunications services)	(SWITZERLAND)					
TI SPARKLE TURKEY TELEKOMÜNIKASYON ANONIM SIRKETI	YENISBONA	TRY	65,000,000	100.0000		TELECOM ITALIA SPARKLE S.p.A.
(telecommunications services)	ISTANBUL					
	(TURKEY)					
TI SPARKLE UK Ltd	LONDON	EUR	3,983,254	100.0000		TELECOM ITALIA SPARKLE S.p.A.
(value-added and networking services)	(UNITED KINGDOM)					
TI SPARKLE VENEZUELA C.A.	CARACAS	VES	10	100.0000		TELECOM ITALIA SPARKLE S.p.A.
(managed bandwidth services)	(VENEZUELA)					
TIM RETAIL S.r.l. (ex 4G RETAIL S.r.l.)	MILAN (ITALY)	EUR	2,402,241	100.0000		TIM S.p.A
(sale of fixed and mobile telecommunications products and services and all analog and digital broadcasting equipment)						
TIMVISION S.r.l.	ROME (ITALY)	EUR	50,000	100.0000		TIM S.p.A.
(production, co-production, conception and creation of programs, films and audiovisual content, including multimedia and interactive content)						
TIS LAGOS LIMITED	LAGOS	NGN	10,000,000	99.9999		TELECOM ITALIA SPARKLE S.p.A.
(telecommunications services)	(NIGERIA)			0.0001		TI SPARKLE UK Ltd
TN FIBER S.r.l.	TRENTO (ITALY)	EUR	55,918,000	100.0000		TIM S.p.A.
(design, construction, maintenance and supply of optical network access to users in the province of Trento)						
BRAZIL BU						
TIM BRASIL SERVIÇOS E PARTICIPAÇÕES S.A.	RIO DE JANEIRO	BRL	7,169,029,859	99.9999		TELECOM ITALIA FINANCE S.A.
(investment holding company)	(BRAZIL)			0.0001		TIM S.p.A.
TIM PARTICIPAÇÕES S.A.	RIO DE JANEIRO	BRL	9,913,414,422	66.5819	66.5877	TIM BRASIL SERVIÇOS E PARTICIPAÇÕES S.A.
(investment holding company)	(BRAZIL)			0.0087		TIM PARTICIPAÇÕES S.A.
TIM S.A.	RIO DE JANEIRO	BRL	13,476,171,765	100.0000		TIM PARTICIPAÇÕES S.A.
(telecommunications services)	(BRAZIL)					
OTHER OPERATIONS						
OLIVETTI DEUTSCHLAND GmbH	NURENBERG	EUR	25,600,000	100.0000		OLIVETTI S.p.A.
(sale of office equipment and supplies)	(GERMANY)					
OLIVETTI UK Ltd.	NORTHAMPTON	GBP	6,295,712	100.0000		OLIVETTI S.p.A.
(sale of office equipment and supplies)	(UNITED KINGDOM)					
TELECOM ITALIA CAPITAL S.A.	LUXEMBOURG	EUR	2,336,000	100.0000		TIM S.p.A.
(financial company)						
TELECOM ITALIA FINANCE S.A.	LUXEMBOURG	EUR	1,818,691,979	100.0000		TIM S.p.A.
(financial company)						
TELECOM ITALIA LATAM PARTICIPAÇÕES E GESTÃO ADMINISTRATIVA Ltda	SÃO PAULO	BRL	118,925,804	100.0000		TIM S.p.A.
(telecommunications and promotional services)	(BRAZIL)					
TIAUDIT COMPLIANCE LATAM S.A. (in liquidation)	RIO DE JANEIRO	BRL	1,500,000	69.9996		TIM S.p.A.
(internal audit services)	(BRAZIL)			30.0004		TIM BRASIL SERVIÇOS E PARTICIPAÇÕES S.A.
TIESSE S.c.p.A.	IVREA	EUR	103,292	61.0000		OLIVETTI S.p.A.
(installation and assistance for electronic, IT, telematics and telecommunications equipment)	(TURIN) (ITALY)					
TIM TANK S.r.l.	MILAN (ITALY)	EUR	18,600,000	100.0000		TIM S.p.A.
(fund and securities investments)						
SUBSIDIARIES HELD FOR SALE						
INFRASTRUTTURE WIRELESS ITALIANE S.p.A.	MILAN (ITALY)	EUR	600,000,000	60.0333	60.0556	TIM S.p.A.
(installation and operation of installations and infrastructure for the management and the sale of telecommunications services)				0.0370		INFRASTRUTTURE WIRELESS ITALIANE S.p.A.

Company name	Head office	Currency	Share capital	% Ownership	% of voting rights	Held by
ASSOCIATES AND JOINT VENTURES ACCOUNTED FOR USING THE EQUITY METHOD						
AREE URBANE S.r.l. (in liquidation) (real estate management)	MILAN (ITALY)	EUR	100,000	32.6200		TIM S.p.A.
ASSCOM INSURANCE BROKERS S.r.l. (insurance brokerage)	MILAN (ITALY)	EUR	100,000	20.0000		TIM S.p.A.
CONSORZIO E O (in liquidation) (training services)	ROME (ITALY)	EUR	30,987	50.0000		TIM S.p.A.
KOPJRA S.r.l. (development, production and sale of innovative products or services with high technological value)	SCHIO (VICENZA) (ITALY)	EUR	16,207	22.8491		TELECOM ITALIA VENTURES S.r.l.
MOVENDA S.p.A. (design, construction and diffusion of Internet sites, products and computer media)	ROME (ITALY)	EUR	133,333	24.9998		TELECOM ITALIA FINANCE S.A.
NORDCOM S.p.A. (application service provider)	MILAN (ITALY)	EUR	5,000,000	42.0000		TIM S.p.A.
OILPROJECT S.r.l. (research, development, marketing and patenting of all intellectual property related to technology, information technology and TLC)	MILAN (ITALY)	EUR	13,556	(*)		TELECOM ITALIA VENTURES S.r.l.
PEDIUS S.r.l. (implementation of specialized telecommunications applications, telecommunications services over telephone connections, VOIP services)	ROME (ITALY)	EUR	181	(*)		TELECOM ITALIA VENTURES S.r.l.
TIGLIO I S.r.l. (real estate management)	MILAN (ITALY)	EUR	1,000,000	47.8020		TIM S.p.A.
TIGLIO II S.r.l. (in liquidation) (real estate management)	MILAN (ITALY)	EUR	10,000	49.4700		TIM S.p.A.
W.A.Y. S.r.l. (development and sale of geolocation products and systems for security and logistics)	TURIN (ITALY)	EUR	136,383	39.9999		OLIVETTI S.p.A.
WIMAN S.r.l. (development, management and implementation of platforms for social-based Wi-Fi authentication)	MATTINATA (FOGGIA) (ITALY)	EUR	22,233	(*)		TELECOM ITALIA VENTURES S.r.l.

(*) Associate over which TIM S.p.A., directly or indirectly, exercises significant influence pursuant to IAS 28 (Investments in Associates and Joint Ventures).

Company name	Head office	Currency	Share capital	% Ownership	% of voting rights	Held by
OTHER SIGNIFICANT EQUITY INVESTMENTS PURSUANT TO CONSOB RESOLUTION NO. 11971 OF MAY 14, 1999 AS AMENDED						
CONSORZIO HEALTH INNOVATION HUB (in liquidation) (development of the market for systems and services for the social welfare and healthcare sector)	TRENTO (ITALY)	EUR	48,000	12.5000		TIM S.p.A.
DAHLIA TV S.p.A. (in liquidation) (pay-per-view services)	ROME (ITALY)	EUR	11,318,833	10.0786		TIM S.p.A.
FIN.PRIV. S.r.l. (financial company)	MILAN (ITALY)	EUR	20,000	14.2900		TIM S.p.A.
IGOON S.r.l. (carpooling scheme to share unused seating capacity in cars in real time through a mobile App	NAPLES (ITALY)	EUR	16,498	14.2805		TELECOM ITALIA VENTURES S.r.l.
INNAAS S.r.l. (design, development and sale of high-tech software and hardware)	ROME (ITALY)	EUR	108,700	15.2539		TELECOM ITALIA VENTURES S.r.l.
ITALBIZ.COM Inc. (Internet services)	DELAWARE (UNITED STATES OF AMERICA)	USD	4,721	19.5000		TIM S.p.A.
MIX S.r.l. (Internet service provider)	MILAN (ITALY)	EUR	1,000,000	11.0937		TIM S.p.A.

CERTIFICATION OF THE CONSOLIDATED FINANCIAL STATEMENTS PURSUANT TO ARTICLE 81-TER OF THE CONSOB REGULATION 11971 DATED MAY 14, 1999, WITH AMENDMENTS AND ADDITIONS

1. We, the undersigned, Luigi Gubitosi, as Chief Executive Officer, and Giovanni Ronca, as Manager responsible for preparing TIM S.p.A. financial reports, certify, having also considered the provisions of Article 154-bis, paragraphs 3 and 4, of Italian Legislative Decree 58 of February 24, 1998:
   - the adequacy in relation to the characteristics of the company and
   - the effective application

   of the administrative and accounting procedures used in the preparation of the consolidated financial statements for the 2019 fiscal year.

2. TIM has adopted the Internal Control – Integrated Framework Model (2013), issued by the Committee of Sponsoring Organizations of the Treadway Commission, as its framework for the establishment and assessment of its internal control system, with particular reference to the internal controls for the preparation of the financial statements.

3. The undersigned also certify that:

   3.1 the Consolidated Financial Statements at December 31, 2019:

   a) have been prepared in compliance with the international accounting standards adopted by the European Union pursuant to Regulation (EC) 1606/2002 of the European Parliament and Council of July 19, 2002 (International Financial Reporting Standards – *IFRS*), as well as the legislative and regulatory provisions in force in Italy, including, in particular, the measures enacted for the implementation of Article 9 of Italian Legislative Decree 38 of February 28, 2005;
   b) agree with the results of the accounting records and entries;
   c) provide a true and fair view of the financial condition, the results of operations and the cash flows of the Company and its consolidated subsidiaries;

   3.2 the report on operations contains a reliable operating and financial review of the Company and of the Group, as well as a description of their exposure to the main risks and uncertainties. The Report on Operations also contains a reliable analysis of information concerning significant related party transactions.

March 10, 2020

Chief Executive Officer	Manager Responsible for Preparing the Corporate Financial Reports
____________*(signed)*___________	__________*(signed)*___________
Luigi Gubitosi	Giovanni Ronca

INDEPENDENT AUDITORS' REPORT

EY S.p.A.
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00187 Roma

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Fax: +39 06 324755504
ey.com

Independent auditor's report pursuant to article 14 of Legislative Decree n. 39, dated 27 January 2010 and article 10 of EU Regulation n. 537/2014
(Translation from the original Italian text)

To the Shareholders of
TIM S.p.A.

Report on the Audit of the Consolidated Financial Statements

Opinion

We have audited the consolidated financial statements of TIM Group (the Group), which comprise the consolidated statement of financial position as at December 31 ,2019, and the consolidated income statement, the consolidated statement of comprehensive income, consolidated statement of changes in equity and consolidated statement of cash flows for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the consolidated financial statements give a true and fair view of the financial position of the Group as at December 31, 2019, and of its financial performance and its cash flows for the year then ended in accordance with International Financial Reporting Standards as adopted by the European Union and with the regulations issued for implementing art. 9 of Legislative Decree n. 38/2005.

Basis for Opinion

We conducted our audit in accordance with International Standards on Auditing (ISA Italia). Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Consolidated Financial Statements section of our report. We are independent of TIM S.p.A. in accordance with the regulations and standards on ethics and independence applicable to audits of financial statements under Italian Laws. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Other matters

The consolidated financial statements of TIM S.p.A. for the year ended December 31, 2018, were audited by another auditor who expressed an unmodified opinion on those statements on March 8, 2019.

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

EY S.p.A.
Sede Legale: Via Lombardia, 31 - 00187 Roma
Capitale Sociale Euro 2.525.000,00 i.v.
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Iscritta all'Albo Speciale delle società di revisione
Consob al progressivo n. 2 delibera n.10831 del 16/7/1997
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We identified the following key audit matters:

Key Audit Matter	Audit Response
Impairment test of goodwill – Domestic	
As of December 31, 2019 goodwill amounts to Euro 23,083 million, and refers for Euro 22,231 million to the Domestic cash generating unit ("CGU") and for Euro 852 million to the Brazil CGU. The processes and methodologies used by the Group to evaluate and determine the recoverable amount of each CGU, in terms of value in use, are based on assumptions that are in some cases complex and that, due to their nature, imply the use of judgement by Management, in particular with reference to the forecast of future cash flows and to the estimate of the long-term growth and discount rates applied to the future cash flow forecasts. Considering the level of judgment required and the complexity of the assumptions applied in estimating the recoverable amount of goodwill, we considered that this area represents a key audit matter. Disclosures related to the assessment of goodwill are reported in note 4 "Goodwill" and in note 2 "Accounting policies" in the paragraphs "Impairment of intangible and tangible assets" and "Use of estimates".	Our audit procedures in response to the key audit matter included, among others: ► the assessment of the processes implemented by the Group with reference to the criteria and methodology of the impairment test; ► the validation of the CGUs perimeter and the test of the allocation of the carrying value of the Group's assets to each CGU; ► the assessment of the future cash flows forecasts, including comparisons with sector data and forecasts; ► the assessment of the consistency of the future cash flows forecasts of each CGU with the Group business plan; ► the assessment of forecasts in light of their historical accuracy; ► the assessment of the reasonableness of long-term growth rates and discount rates. The procedures referred to in the previous points also concerned the analysis of the assessments performed by the independent experts appointed by the Group. In performing our analysis, we involved our experts in valuation techniques, who performed an independent recalculation and carried out sensitivity analyses on the key assumptions in order to determine which changes in the assumptions could materially affect the recoverable amount. Lastly, we reviewed the adequacy of the disclosures provided in the notes to the consolidated financial statements with regards to the valuation of goodwill.
Revenue recognition	
TIM Group's revenues amounted to € 17,960	Our audit procedures in response to the key

million as of December 31, 2019 and refer almost entirely to the telecommunications services rendered to retail and wholesale customers (other telecommunications operators).

Procedures over the accounting of revenues required significant focus in the context of our audit procedures due to i) a highly complex accounting process due to the number of commercial offers, the number of underlying application systems and the related reconciliation processes and ii) the presence of certain manual phases in the revenue recognition process, in particular for services provided to large customers.

The Group provides the relative disclosures in Note 26 "Revenues" of the consolidated financial statements.

audit matter included, among others:

- an understanding of the processes underlying the revenue recognition;
- the understanding and verification of the design and operation of the relevant controls over the revenue recognition process;
- the analysis of the application systems supporting the revenue recognition process;
- the assessment that the accounting policy adopted for the main commercial offers is consistent with the provisions of the reference accounting standard;
- the analysis, on a sample basis, of some significant transactions relating to invoices issued and invoices to be issued, in order to verify that the contractual data and the evidence supporting the actual service rendered and / or goods transferred were consistent with the accounting policy adopted;
- the reconciliation of the management accounts with the accounting records in connection with the main balance sheet items related to customer relations;
- the analysis of the manual journal entries.

We also required external confirmations for a sample of customers and transactions.

Lastly, we reviewed the adequacy of the disclosure provided in the notes to the consolidated financial statements with regards to the revenue recognition process.

Regulatory disputes

As of December 31, 2019, TIM Group is involved in several regulatory disputes in progress, many of which are characterized by significant counterparty requests.

The main disputes concern (i) the so-called 'follow-on' A428 proceedings, which arose following claims for compensation made by other Italian telco operators after certain fines had been imposed by the AGCM to TIM for market abuse of a dominant position, (ii) the 28-

Our audit procedures in response to the key audit matter included, among others:

- an understanding of the process put in place by Management for assessing disputes, accompanied by test of the effectiveness of the internal controls relevant for this process;
- inquiries with Management regarding the main assumptions made in connection with

day billing proceeding, in which AGCOM ordered TIM to reimburse customers for unused service days, (iii) the I820 proceeding, started by AGCM against TIM and other telco operators, to ascertain a possible conduct restricting market competition and (iv) the A514 procedure in which the AGCM charged TIM with conduct aimed at hindering the entry on the market of a new operator.

The assessment of the disputes was carried out by Management, as of 31 December 2019, based on the opinion of the external lawyers, as well as considering the latest information available.

The estimation of the risks connected to the disputes in which the Group is involved, requires a high degree of judgment by the management and, also considering the complexity of the regulatory framework, we considered that this area represents a key audit matter.

Disclosures related to the assessment of the risks relating to the regulatory disputes in which the Group is involved is reported in note 25 "Disputes and pending legal actions, other information, commitments and guarantees".

disputes;

- the analysis of the legal opinions prepared by external consultants, based on which Management has based its assessments;
- the analysis of the responses received from external lawyers following our external confirmations procedures.

Lastly, we reviewed the adequacy of the disclosures provided in the notes to the consolidated financial statements with regards to the disputes in which the Group is involved, based on their compliance with the international accounting standards and their consistency with the results of our audit procedures.

Fiscal disputes in Brazil

As of December 31, 2019, the TIM Group is involved in several disputes with the Brazilian tax authorities.

The maximum potential liability associated with these disputes, as at December 31, 2019, amounts to Euro 3,587. With reference to this potential liability, the Group recognized a provision of Euro 74 million with regards to the risks deemed probable.

The assessment of the risk related to the tax disputes in Brazil in which the Group is involved, requires a high degree of judgment by the Management and, also considering the significance of the amounts involved, we considered it to be a key audit matter.

Disclosures related to the assessment of the risks relating to the fiscal disputes in which the Group is involved is reported in note 25

Our audit procedures in response to the key audit matter included, among others:

- an understanding of the process put in place by Management for assessing disputes, accompanied by test of the effectiveness of the controls relevant for this process;
- inquiries with Management regarding the main assumptions made in connection with disputes;
- the analysis of the legal opinions prepared by external consultants, based on which Management has based its assessments;
- the analysis of the responses to our external confirmations procedures received from external lawyers, also with the involvement of our experts in tax disputes.

Lastly, we reviewed the adequacy of the

"Disputes and pending legal actions, other information, commitments and guarantees".	disclosures provided in the notes to the consolidated financial statements with regards to the disputes in which the Group is involved, based on their compliance with the international accounting standards and their consistency with the results of our audit procedures.
First time adoption of IFRS 16 – Leases	
Starting from January 1, 2019 the new International Financial Reporting Standard 16 - Leasing (‘’ IFRS 16’’), relating to the accounting of lease contracts, is fully enacted. The new standard provides that, for passive lease contracts, a lessee shall recognize a right-of-use asset and a lease liability, measuring the lease liability at the present value of the lease payments that are not paid at that date. In accordance with the provisions of IFRS 16, the TIM Group has disclosed the information pertaining to the impacts of the first-time adoption starting from January 1, 2019. As of January 1, 2019, the Group has recorded rights of use assets and financial liabilities for a total amount of Euro 3,484. The high degree of judgment required by IFRS 16 in estimating the assumptions necessary for the adoption of the standard, together with the significance of the impacts on the Group's consolidated financial statements, represented for us a key audit matter.	Our audit procedures in response to the key audit matter included, among others: ► the analysis of accounting policies and assumptions used by Management in connection with the adoption of the standard; ► the assessment of the effectiveness of the internal control system put in place by Management; ► the assessment of the correct determination of the discount rate used; ► the assessment of the additions occurred during the year, as well as the changes in the perimeter that have occurred. Lastly, we reviewed the adequacy of the disclosures provided in the notes to the consolidated financial statements with regards to their compliance with the provisions of IFRS 16.

Responsibilities of Directors and Those Charged with Governance for the Consolidated Financial Statements

The Directors are responsible for the preparation of the consolidated financial statements that give a true and fair view in accordance with International Financial Reporting Standards as adopted by the European Union and with the regulations issued for implementing art. 9 of Legislative Decree n. 38/2005, and, within the terms provided by the law, for such internal control as they determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

The Directors are responsible for assessing the Group’s ability to continue as a going concern and, when preparing the consolidated financial statements, for the appropriateness of the going concern assumption, and for appropriate disclosure thereof. The Directors prepare the consolidated financial statements on a going concern basis unless they either intend to liquidate the Parent Company TIM

S.p.A. or to cease operations, or have no realistic alternative but to do so.

The statutory audit committee ("Collegio Sindacale") is responsible, within the terms provided by the law, for overseeing the Group's financial reporting process.

Auditor's Responsibilities for the Audit of the Consolidated Financial Statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but it is not a guarantee that an audit conducted in accordance with International Standards on Auditing (ISA Italia) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with International Standards on Auditing (ISA Italia), we have exercised professional judgment and maintained professional skepticism throughout the audit. In addition:

- we have identified and assessed the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, designed and performed audit procedures responsive to those risks, and obtained audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control;
- we have obtained an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of Group's internal control;
- we have evaluated the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the Directors;
- we have concluded on the appropriateness of Directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to consider this matter in forming our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern;
- we have evaluated the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- we have obtained sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We have communicated with those charged with governance, identified at an appropriate level as required by ISA Italia, regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We have provided those charged with governance with a statement that we have complied with the ethical and independence requirements applicable in Italy, and we have communicated with them all matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, we have determined those matters that were of most significance in the audit of the financial statements of the current period and are therefore the key audit matters. We have described these matters in our auditor's report.

Additional information pursuant to article 10 of EU Regulation n. 537/14

The shareholders of TIM S.p.A., in the general meeting held on March 29, 2019, engaged us to perform the audits of the separate and consolidated financial statements for each of the years ending December 31, 2019 to December 31, 2027.

We declare that we have not provided prohibited non-audit services, referred to article 5, par. 1, of EU Regulation n. 537/2014, and that we have remained independent of the Group in conducting the audit.

We confirm that the opinion on the consolidated financial statements included in this report is consistent with the content of the additional report to the audit committee (Collegio Sindacale) in their capacity as audit committee, prepared pursuant to article 11 of the EU Regulation n. 537/2014.

Report on compliance with other legal and regulatory requirements

Opinion pursuant to article 14, paragraph 2, subparagraph e), of Legislative Decree n. 39 dated 27 January 2010 and of article 123-bis, paragraph 4, of Legislative Decree n. 58, dated 24 February 1998

The Directors of TIM S.p.A. are responsible for the preparation of the Report on Operations and of the Report on Corporate Governance and Ownership Structure of TIM Group as at December 31, 2019, including their consistency with the related consolidated financial statements and their compliance with the applicable laws and regulations.

We have performed the procedures required under audit standard SA Italia n. 720B, in order to express an opinion on the consistency of the Report on Operations and of specific information included in the Report on Corporate Governance and Ownership Structure as provided for by article 123-bis, paragraph 4, of Legislative Decree n. 58, dated 24 February 1998, with the consolidated financial statements of TIM Group] as at December 31 ,2019 and on their compliance with the applicable laws and regulations, and in order to assess whether they contain material misstatements.

In our opinion, the Report on Operations and the above mentioned specific information included in the Report on Corporate Governance and Ownership Structure are consistent with the consolidated financial statements of TIM Group as at December 31, 2019, and comply with the applicable laws and regulations.

With reference to the statement required by art. 14, paragraph 2, subparagraph e), of Legislative

Decree n. 39, dated 27 January 2010, based on our knowledge and understanding of the entity and its environment obtained through our audit, we have no matters to report.

Statement pursuant to article 4 of Consob Regulation implementing Legislative Decree n. 254, dated 30 December 2016

The Directors of TIM S.p.A. are responsible for the preparation of the non-financial information pursuant to Legislative Decree n. 254, dated 30 December 2016. We have verified that non-financial information has been approved by Directors.

Pursuant to article 3, paragraph 10, of Legislative Decree n. 254, dated 30 December 2016, such non-financial information is subject to a separate compliance report signed by us.

Rome, March 25, 2020

EY S.p.A.
Signed by: Massimo Antonelli, Auditor

This report has been translated into the English language solely for the convenience of international readers.

TIM S.p.A. Separate Financial Statements

CONTENTS

STATEMENTS OF FINANCIAL POSITION

Assets

(euros)	note	12/31/2019	of which related parties	12/31/2018	of which related parties
Non-current assets					
Intangible assets					
Goodwill	3)	24,340,444,756		24,340,444,756	
Intangible assets with a finite useful life	4)	5,818,455,532		6,339,060,237	
		30,158,900,288		**30,679,504,993**	
Tangible assets	5)				
Property, plant and equipment owned		10,591,121,055		10,781,945,585	
Assets held under finance leases	2)	–		1,693,641,336	
		10,591,121,055		**12,475,586,921**	
Rights of use assets	(2) (6)	**4,905,684,994**	*1,294,419,000*	**–**	
Other non-current assets					
Investments	7)	6,861,203,426		7,821,303,331	
Non-current financial receivables arising from lease contracts	8)	16,335,820		14,693,027	
Other non-current financial assets	8)	2,332,818,305	*641,496,000*	1,627,242,631	*473,285,000*
Miscellaneous receivables and other non-current assets	9)	1,745,781,815	*139,378,000*	1,704,270,021	*129,414,000*
Deferred tax assets	10)	881,857,275		882,254,309	
		11,837,996,641		**12,049,763,319**	
Total Non-current assets	**(a)**	**57,493,702,978**		**55,204,855,233**	
Current assets					
Inventories	11)	155,541,552		261,461,628	
Trade and miscellaneous receivables and other current assets	12)	3,729,789,412	*331,469,000*	3,850,731,081	*441,891,000*
Current income tax receivables	10)	67,540,811		166,154,717	
Current financial assets					
Current financial receivables arising from lease contracts		53,793,050		64,122,748	
Securities other than investments, other financial receivables and other current financial assets		121,953,712	*17,186,000*	728,686,497	*231,348,000*
Cash and cash equivalents		829,022,799	*780,000*	885,426,755	*3,552,000*
	8)	**1,004,769,561**		**1,678,236,000**	
Current assets sub-total		**4,957,641,336**		**5,956,583,426**	
Discontinued operations /Non-current assets held for sale	13)	828,494,069		–	
Total Current assets	**(b)**	**5,786,135,405**		**5,956,583,426**	
Total Assets	**(a+b)**	**63,279,838,383**		**61,161,438,659**	

Equity and Liabilities

(euros)	note	12/31/2019	*of which related parties*	12/31/2018	*of which related parties*
Equity	14)				
Share capital issued		11,677,002,855		11,677,002,855	
less: Treasury shares		(20,719,608)		(20,719,608)	
Share capital		**11,656,283,247**		**11,656,283,247**	
Additional paid-in capital		**2,094,207,410**		**2,094,207,410**	
Legal reserve		**2,293,873,993**		**2,293,873,993**	
Other reserves					
Reserve for remeasurements of employee defined benefit plans (IAS 19)		(110,564,900)		(80,505,118)	
Other		1,366,969,441		1,530,185,329	
Total Other reserves		**1,256,404,541**		**1,449,680,211**	
Retained earnings (accumulated losses), including profit (loss) for the year		**873,523,296**		**644,160,192**	
Total Equity	**(c)**	**18,174,292,487**		**18,138,205,053**	
Non-current liabilities					
Non-current financial liabilities for financing contracts and others	15)	26,181,613,166	*5,756,665,000*	23,331,699,974	*5,245,192,000*
Non-current financial liabilities for lease contracts	15)	4,001,651,991	*997,771,000*	1,445,322,543	
Employee benefits	20)	1,106,545,929		1,502,454,739	
Deferred tax liabilities	10)	2,352,153		2,856,579	
Provisions	21)	527,779,856		579,249,461	
Miscellaneous payables and other non-current liabilities	22)	2,973,016,553	*141,214,000*	3,006,870,953	*135,487,000*
Total Non-current liabilities	**(d)**	**34,792,959,648**		**29,868,454,249**	
Current liabilities					
Current financial liabilities for financing contracts and others	15)	3,787,097,263	*1,330,093,000*	7,744,428,419	*3,767,299,000*
Current financial liabilities for lease contracts	15)	666,329,070	*270,191,000*	158,630,349	
Trade and miscellaneous payables and other current liabilities	23)	5,842,636,759	*381,348,000*	5,237,699,768	*378,003,000*
Income tax payables	10)	16,523,156		14,020,821	
Total Current Liabilities	**(e)**	**10,312,586,248**		**13,154,779,357**	
Total Liabilities	**(f=d+e)**	**45,105,545,896**		**43,023,233,606**	
Total Equity and Liabilities	**(c+f)**	**63,279,838,383**		**61,161,438,659**	

SEPARATE INCOME STATEMENTS

(euros)	note	**Year 2019**	*of which related parties*	**Year 2018**	*of which related parties*
Revenues	25)	**13,136,933,872**	*333,157,000*	**13,901,473,076**	*494,056,000*
Other income	26)	197,623,543	*11,224,000*	252,176,098	*17,311,000*
Total operating revenues and other income		**13,334,557,415**		**14,153,649,174**	
Acquisition of goods and services	27)	(4,595,820,812)	*(913,114,000)*	(5,800,582,478)	*(1,154,585,000)*
Employee benefits expenses	28)	(2,491,870,230)	*(84,151,000)*	(2,541,086,946)	*(79,419,000)*
Other operating expenses	29)	(1,061,237,597)	*(6,359,000)*	(722,128,807)	*(15,656,000)*
Change in inventories	30)	(106,500,060)		83,631,721	
Internally generated assets	31)	403,037,336		434,317,757	
Operating profit (loss) before depreciation and amortization, capital gains (losses) and impairment reversals (losses) on non-current assets (EBITDA)		**5,482,166,052**		**5,607,800,421**	
of which: impact of non-recurring items	39)	*(668,135,000)*		*(404,121,000)*	
Depreciation and amortization	32)	(3,719,256,987)	*(273,443,000)*	(3,154,977,771)	
Gains/(losses) on disposals of non-current assets	33)	(41,501,105)		(10,719,554)	*917,000*
Impairment reversals (losses) on non-current assets	34)	117,583		(2,682,635,959)	
Operating profit (loss) (EBIT)		**1,721,525,543**		**(240,532,863)**	
of which: impact of non-recurring items	39)	*(668,135,000)*		*(3,090,416,000)*	
Income/(expenses) from investments	35)	116,990,556	*139,341,000*	71,346,959	*114,018,000*
Finance income	36)	1,195,620,784	*171,298,000*	1,177,089,965	*371,388,000*
Finance expenses	36)	(2,461,921,850)	*(1,004,648,000)*	(2,427,443,856)	*(866,677,000)*
Profit (loss) before tax		**572,215,033**		**(1,419,539,795)**	
of which: impact of non-recurring items	39)	*(672,642,000)*		*(3,099,025,000)*	
Income tax expense	10)	(190,143,377)		(434,065,544)	
Profit (loss) for the year		**382,071,656**		**(1,853,605,339)**	
of which: impact of non-recurring items	39)	*(514,863,000)*		*(3,023,469,000)*	

STATEMENTS OF COMPREHENSIVE INCOME

Note 14

(euros)		Year 2019	Year 2018
Profit (loss) for the year	**(a)**	**382,071,656**	**(1,853,605,339)**
Other components of the Statements of Comprehensive Income			
Other components that will not be reclassified subsequently to Separate Income Statements			
Financial assets measured at fair value through other comprehensive income:			
Profit (loss) from fair value adjustments		3,227,418	(4,455,936)
Income tax effect		(52,113)	52,075
	(b)	**3,175,305**	**(4,403,861)**
Remeasurements of employee defined benefit plans (IAS 19):			
Actuarial gains (losses)		(39,552,345)	20,105,536
Income tax effect		9,492,563	(4,825,329)
	(c)	**(30,059,782)**	**15,280,207**
Share of other comprehensive income (loss) of associates and joint ventures accounted for using the equity method			
Profit (loss)		–	–
Income tax effect		–	–
	(d)	**–**	**–**
Total other components that will not be reclassified subsequently to Separate Income Statements	**(e=b+c+d)**	**(26,884,477)**	**10,876,346**
Other components that will be reclassified subsequently to Separate Income Statements			
Financial assets measured at fair value through other comprehensive income:			
Profit (loss) from fair value adjustments		(36,051,956)	11,497,530
Loss (profit) transferred to the Separate Income Statement		24,882,430	–
Income tax effect		1,074,869	(3,151,768)
	(f)	**(10,094,657)**	**8,345,762**
Hedging instruments:			
Profit (loss) from fair value adjustments		(201,997,758)	70,451,359
Loss (profit) transferred to the Separate Income Statement		7,856,000	9,229,000
Income tax effect		46,594,022	(19,123,286)
	(g)	**(147,547,736)**	**60,557,073**
Share of other comprehensive income (loss) of associates and joint ventures accounted for using the equity method			
Profit (loss)		–	–
Loss (profit) transferred to the Separate Income Statement		–	–
Income tax effect		–	–
	(h)	**–**	**–**
Total other components that will be reclassified subsequently to Separate Income Statements	**(i= f+g+h)**	**(157,642,393)**	**68,902,835**
Total other components of the Statements of Comprehensive Income	**(k= e+i)**	**(184,526,870)**	**79,779,181**
Total comprehensive income (loss) for the year	**(a+k)**	**197,544,786**	**(1,773,826,158)**

STATEMENTS OF CHANGES IN EQUITY

Changes in Equity from January 1 to December 31, 2018

(euros)	Share capital	Additional paid-in capital	Reserve for financial assets measured at fair value through other comprehensive income	Reserve for hedging instruments	Reserve for remeasurements of employee defined benefit plans (IAS 19)	Other reserves and retained earnings (accumulated losses), including profit (loss) for the year	Total Equity
Balance at December 31, 2017	11,656,283,247	2,094,207,410	13,149,595	(1,052,623,106)	(95,785,325)	7,459,923,144	20,075,154,965
Changes in equity during the year:							
Dividends approved						(165,764,272)	(165,764,272)
Total comprehensive income (loss) for the year			3,941,901	60,557,073	15,280,207	(1,853,605,339)	(1,773,826,158)
Issue of equity instruments						2,130,017	2,130,017
Other changes						510,501	510,501
Balance at December 31, 2018	11,656,283,247	2,094,207,410	17,091,496	(992,066,033)	(80,505,118)	5,443,194,051	18,138,205,053

Changes in Equity from January 1 to December 31, 2019 – Note 14

(euros)	Share capital	Additional paid-in capital	Reserve for financial assets measured at fair value through other comprehensive income	Reserve for hedging instruments	Reserve for remeasurements of employee defined benefit plans (IAS 19)	Other reserves and retained earnings (accumulated losses), including profit (loss) for the year	Total Equity
Balance at December 31, 2018	11,656,283,247	2,094,207,410	17,091,496	(992,066,033)	(80,505,118)	5,443,194,051	18,138,205,053
Adoption of IFRS 16						233,916	233,916
Adjusted balance at 1.1.2019	11,656,283,247	2,094,207,410	17,091,496	(992,066,033)	(80,505,118)	5,443,427,967	18,138,438,969
Changes in equity during the year:							
Dividends approved						(165,764,272)	(165,764,272)
Total comprehensive income (loss) for the year			(6,919,352)	(147,547,736)	(30,059,782)	382,071,656	197,544,786
Norverca S.p.A. and TIM S.p.A. merger surplus						526,081	526,081
Issue of equity instruments						3,516,061	3,516,061
Other changes			1,361,353			(1,330,491)	30,862
Balance at December 31, 2019	11,656,283,247	2,094,207,410	11,533,497	(1,139,613,769)	(110,564,900)	5,662,447,002	18,174,292,487

STATEMENTS OF CASH FLOWS

(euros)	note	Year 2019	Year 2018
Cash flows from operating activities:			
Profit (loss) for the year		382,071,656	(1,853,605,339)
Adjustments for:			
Depreciation and amortization	32)	3,719,256,987	3,154,977,771
Impairment losses (reversals) on non-current assets (including investments)		57,335,000	2,738,929,000
Net change in deferred tax assets and liabilities		55,119,000	(13,546,000)
Losses (gains) realized on disposals of non-current assets (including investments)		31,886,000	10,739,000
Change in provisions for employee benefits		(259,846,000)	(193,634,000)
Change in inventories		106,500,000	(83,632,000)
Change in trade receivables and net amounts due from customers on construction contracts		106,733,000	(65,947,000)
Change in trade payables		(120,373,000)	(173,998,000)
Net change in income tax receivables/payables		99,830,000	(205,353,000)
Net change in miscellaneous receivables/payables and other assets/liabilities		216,689,245	(433,792,593)
Cash flows from (used in) operating activities	**(a)**	**4,395,201,888**	**2,881,137,839**
Cash flows from investing activities:			
Purchases of intangible, tangible and rights of use assets on a cash basis		(2,307,295,000)	(3,143,551,000)
Contributions for plants received		28,034,000	108,285,000
Cash arising from corporate actions	7)	13,976,000	–
Acquisitions/disposals of other investments		(43,472,000)	(130,412,000)
Change in financial receivables and other financial assets (excluding hedging and non-hedging derivatives under financial assets)		240,825,000	264,820,000
Proceeds received from the sale of investments in subsidiaries		142,170,000	–
Proceeds from sale/repayments of intangible, tangible, rights of use assets and other non-current assets		12,183,000	23,987,000
Cash flows from (used in) investing activities	**(b)**	**(1,913,579,000)**	**(2,876,871,000)**
Cash flows from financing activities			
Change in current financial liabilities and other		(885,905,000)	681,485,000
Proceeds from non-current financial liabilities (including current portion)		3,814,352,000	2,722,628,000
Repayments of non-current financial liabilities (including current portion)		(4,795,912,000)	(3,533,673,000)
Changes in hedging and non-hedging derivatives		(187,407,000)	(223,726,000)
Share capital proceeds/reimbursements		–	–
Dividends paid		(165,720,000)	(165,721,000)
Cash flows from (used in) financing activities	**(c)**	**(2,220,592,000)**	**(519,007,000)**
Aggregate cash flows	**(d=a+b+c)**	**261,030,888**	**(514,740,161)**
Net cash and cash equivalents at beginning of the year	**(e)**	**(215,667,084)**	**299,073,077**
Net cash and cash equivalents at end of the year	**(f=d+e)**	**45,363,804**	**(215,667,084)**

Purchases of intangible, tangible and rights of use assets

(euros)	note	Year 2019	Year 2018
Purchase of intangible assets	4)	(819,485,000)	(3,310,520,000)
Purchase of tangible assets [1]	5)	(1,657,804,000)	(1,791,405,000)
Purchase of rights of use assets	6)	(920,375,000)	–
Total purchase of intangible, tangible and rights of use assets on an accrual basis (*)		**(3,397,664,000)**	**(5,101,925,000)**
Change in payables arising from purchase of intangible, tangible and rights of use assets		1,090,369,000	1,958,374,000
Total purchase of intangible, tangible and rights of use assets on a cash basis		**(2,307,295,000)**	**(3,143,551,000)**
(*) of which related parties:		315,473,000	17,806,000

(1) In 2018, includes purchases of assets held under finance leases

Additional Cash Flow Information

(euros)	Year 2019	Year 2018
Income taxes (paid) received	(27,544,000)	(632,326,000)
Interest expense paid	(1,689,383,000)	(2,034,325,000)
Interest income received	654,562,000	952,861,000
Dividends received	140,495,000	115,199,000

Analysis of Net Cash and Cash Equivalents

(euros)	Year 2019	Year 2018
Net cash and cash equivalents at beginning of the year:		
Cash and cash equivalents	885,426,755	771,483,135
Bank overdrafts repayable on demand	(1,101,093,839)	(472,410,058)
	(215,667,084)	**299,073,077**
Net cash and cash equivalents at end of the year:		
Cash and cash equivalents	829,022,799	885,426,755
Bank overdrafts repayable on demand	(783,658,995)	(1,101,093,839)
	45,363,804	**(215,667,084)**

The additional disclosures required by IAS 7 are provided in the Note “Net financial debt” to these separate financial statements.

NOTE 1
FORM, CONTENT AND OTHER GENERAL INFORMATION

FORM AND CONTENT

Telecom Italia, TIM in brief, is a joint-stock company (S.p.A.) organized under the laws of the Republic of Italy.
The registered offices of TIM S.p.A. are located in Milan, Italy, at Via Gaetano Negri 1.
The duration of TIM S.p.A., as stated in the company's bylaws, extends until December 31, 2100.
TIM S.p.A. operates in Italy in the fixed and mobile telecommunications sector.
The TIM S.p.A. separate financial statements at December 31, 2019 have been prepared on a going concern basis (further details are provided in the Note "Accounting Policies") and in accordance with the International Financial Reporting Standards issued by the International Accounting Standards Board and endorsed by the European Union (designated as "IFRS"), as well as laws and regulations in force in Italy.
It should also be noted that in 2019 TIM S.p.A. applied accounting standards consistent with those of the previous year, except for the new standards / interpretations adopted as from 1 January 2019 and described below.
The separate financial statements have been prepared under the historical cost convention except for financial assets measured at fair value through other comprehensive income, financial assets measured at fair value through profit or loss and derivative financial instruments which have been measured at fair value. The carrying amounts of hedged assets and liabilities have been adjusted to reflect the changes in fair value of the hedged risks (fair value hedge).
In accordance with IAS 1 (Presentation of Financial Statements) comparative information included in the consolidated financial statements is, unless otherwise indicated, that of the preceding years.
The statements of financial position, the separate income statements, the statements of comprehensive income, the statements of changes in equity and the statements of cash flows are presented in euros (without cents) and the notes to these separate financial statements in millions of euros, unless otherwise indicated.
The publication of TIM S.p.A.'s separate financial statements for the year ended December 31, 2019 was approved by resolution of the Board of Directors on March 10, 2020.
However, final approval of the TIM S.p.A. separate financial statements rests with the shareholders' meeting.

FINANCIAL STATEMENT FORMATS

The financial statement formats adopted are consistent with those indicated in IAS 1. In particular:

- the **separate statements of financial position** have been prepared by classifying assets and liabilities according to the "current and non-current" criterion;
- the **separate income statement** has been prepared by classifying operating expenses by nature of expense, as this form of presentation is considered more appropriate and representative of the specific business of the Company, conforms to internal reporting and is in line with industry practice.
  In addition to EBIT or Operating profit (loss), the separate income statement includes the alternative performance measure of EBITDA or Operating profit (loss) before depreciation and amortization, Capital gains (losses) and Impairment reversals (losses) on non-current assets.

  In particular, besides EBIT, EBITDA is used by TIM as the financial target in internal presentations (business plans) and in external presentations (to analysts and investors). It represents a useful unit of measurement for the evaluation of the operating performance of TIM S.p.A.. EBIT and EBITDA are calculated as follows:

Profit (loss) before tax from continuing operations	
+	Finance expenses
-	Finance income
+/-	Income (Expenses) from investments
EBIT – Operating profit (loss)	
+/-	Impairment losses (reversals) on non-current assets
+/-	Losses (gains) on disposals of non-current assets
+	Depreciation and amortization
EBITDA – Operating profit before depreciation and amortization, capital gains (losses) and impairment reversals (losses) on non-current assets	

- the **statements of comprehensive income** include the profit or loss for the year as shown in the separate consolidated income statements and all other non-owner changes in equity;
- the **statement of cash flows** has been prepared by presenting cash flows from operating activities according to the "indirect method", as permitted by IAS 7 (Statement of Cash Flows).

Furthermore, as required by Consob Resolution 15519 of July 27, 2006, in the separate income statement, income and expenses relating to transactions, which by nature do not occur during normal operation (non-recurring transactions) have been specifically identified and their impact has been shown separately, when they are significant. Specifically, non-recurring income/(expenses) include, for instance: income/expenses arising from the sale of properties, plant and equipment, business segments and investments; expenses stemming from company reorganization and streamlining processes and projects, also in connection with corporate transactions (mergers, spin-offs, etc.); expenses resulting from litigation and regulatory fines and related liabilities; other provisions and related reversals; costs for the settlement of disputes; items connected to adjustments and realignments relative to previous years; impairment losses on goodwill and/or other intangible and tangible assets.
Also in reference to the above Consob Resolution, the amounts relating to balances or transactions with related parties have been shown separately in the financial statements.

NOTE 2
ACCOUNTING POLICIES

GOING CONCERN

The separate financial statements for the year ended December 31, 2019 have been prepared on a going concern basis as there is the reasonable expectation that TIM S.p.A. will continue its operational activities in the foreseeable future (and in any event for a time horizon of at least twelve months).
In particular, the following factors have been taken into consideration:

- the main risks and uncertainties (that are for the most part of an external nature) to which TIM is exposed:
  - changes in the general macroeconomic situation in the Italian, European and Brazilian markets, as well as the volatility of financial markets in the Eurozone also as a result of “Brexit” in the UK;
  - variations in business conditions, also related to competition;
  - changes to laws and regulations (price and rate variations);
  - outcomes of legal disputes and proceedings with regulatory authorities, competitors and other parties;
  - financial risks (interest rate and/or exchange rate trends, changes in the Group's credit rating by rating agencies);
- the optimal mix between risk capital and debt capital as well as the policy for the remuneration of risk capital, as described in the paragraph "Share capital information" under the Note "Equity";
- the policy for financial risk management (market risk, credit risk and liquidity risk), as described in the Note "Financial risk management".

Based on these factors, the Management believes that, at the present time, there are no elements of uncertainty regarding TIM S.p.A.’s ability to continue as a going concern.

INTANGIBLE ASSETS

Goodwill

In accordance with IFRS 3 (Business Combinations), goodwill is recognised in the financial statements at the acquisition date (including through mergers or contributions) of companies or business units and is calculated as the difference between the consideration paid (measured in accordance with IFRS 3, generally determined on the basis of the fair value at the acquisition date) and the fair value at the acquisition date of the identifiable assets acquired net of the identifiable liabilities assumed.
Goodwill is classified in the statements of financial position as an intangible asset with an indefinite useful life, whereas any gain from a bargain purchase or negative goodwill is recognized in the separate income statement.
Goodwill initially recognized is subsequently reduced only by cumulative impairment losses (for more details, see the section "Impairment of intangible assets, tangible assets and rights of use assets - Goodwill", below).

Development costs

Costs incurred internally for the development of new products and services represent either intangible assets (mainly costs for software development) or tangible assets. These costs are capitalized only when all the following conditions are satisfied: i) the cost attributable to the development phase of the asset can be measured reliably, ii) there is the intention, the availability of financial resources and the technical ability to complete the asset and make it available for use or sale and iii) it can be demonstrated that the asset will be able to generate future economic benefits. Capitalized development costs comprise only expenditures that can be attributed directly to the development process for new products and services.
Capitalized development costs are amortized systematically over the estimated product or service life so that the amortization method reflects the way which the asset's future economic benefits are expected to be consumed by the entity.

Other intangible assets with a finite useful life

Other purchased or internally-generated intangible assets with a finite useful life are recognized as assets, in accordance with IAS 38 (Intangible Assets), where it is probable that the use of the asset will generate future economic benefits and where the cost of the asset can be reliably measured.
Such assets are recorded at purchase or production cost and amortized on a straight-line basis over their estimated useful lives; the amortization rates are reviewed annually and revised if the current estimated useful life is different from that estimated previously. The effect of such changes is recognized in the separate consolidated income statements prospectively.

TANGIBLE ASSETS

Property, plant and equipment

Property, plant and equipment is recognized at purchase or production cost. Subsequent expenditures are capitalized only if they increase the future economic benefits embodied in the related item of property, plant and equipment. All other expenditures are expensed as incurred.
Cost also includes the expected costs of dismantling the asset and restoring the site if a legal or constructive obligation exists. The corresponding liability is recognized at its present value as a provision in the statement of financial position. These capitalized costs are depreciated and charged to the separate consolidated income statements over the useful life of the related tangible assets.
The recalculation of estimates for dismantling costs, discount rates and the dates in which such costs are expected to be incurred is reviewed annually, at each financial year-end. Changes in the above liability must be recognized as an increase or decrease of the cost of the relative asset; the amount deducted from the cost of the asset must not exceed its carrying amount. The excess if any, should be recorded immediately in the separate consolidated income statements, conventionally under the line item "Depreciation".
Depreciation of property, plant and equipment owned is calculated on a straight-line basis over the estimated useful life of the assets. The depreciation rates are reviewed annually and revised if the current estimated useful life is different from that estimated previously. The effect of such changes is recognized in the separate consolidated income statements prospectively.
Land, including land pertaining to buildings, is not depreciated.
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RIGHTS OF USE ASSETS

In accordance with IFRS 16, lease liabilities are presented through the recognition of a financial liability in the statement of financial position at the present value of future lease payments, against the recognition of a right of use asset of the leased asset.
On the commencement date of the lease, the right of use asset is recognized at cost, including: the amount of the initial measurement of the lease liability, any lease payments made at or before the commencement date, initial direct costs incurred in negotiating the lease and the present value of the estimated restoration or dismantling costs set out in the lease, less any incentives.
Subsequently, the right of use is amortized over the term of the lease (or the useful life of the asset, if lower), subject to impairment and adjusted for any remeasurement of the lease liability.

IMPAIRMENT OF INTANGIBLE, TANGIBLE AND RIGHTS OF USE ASSETS

Goodwill

Goodwill is tested for impairment at least annually or more frequently whenever events or changes in circumstances indicate that goodwill may be impaired, as set forth in IAS 36 (*Impairment of Assets*); however, when the conditions that gave rise to an impairment loss no longer exist, the original amount of goodwill is not reinstated.
The test is generally conducted at the end of every year so the date of testing is the year-end closing date of the financial statements. Goodwill acquired and allocated during the year is tested for impairment at the end of the year in which the acquisition and allocation took place.
For the purpose of verifying its recoverability, goodwill is allocated, from the acquisition date, to each of the cash-generating units, or groups of cash-generating units, that is expected to benefit from the combination.

If the carrying amount of the cash-generating unit (or group of cash-generating units) exceeds the recoverable amount, an impairment loss is recognized in the separate income statement. The impairment loss is first recognized as a deduction of the carrying amount of goodwill allocated to the cash-generating unit (or group of cash-generating units) and then only applied to the other assets of the cash-generating unit in proportion to their carrying amount, up to the recoverable amount of the assets with a finite useful life. The recoverable amount of a cash-generating unit (or group of cash-generating units) to which goodwill is allocated is the higher between the fair value less costs to sell and its value in use.

In calculating the value in use, the estimated future cash flows are discounted to present value using a discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. The future cash flows are those arising from an explicit time horizon between three and five years as well as those extrapolated to estimate the terminal value. The long-term growth rate used to estimate the terminal value of the cash-generating unit (or group of cash-generating units) is assumed not to be higher than the average long-term growth rate of the segment or market in which the cash-generating unit (or group of cash-generating units) operates.

Future cash flows are estimated by referring to the current operating conditions of the cash-generating unit (or group of cash-generating units) and, therefore, do not include either benefits originating from future restructuring for which the entity is not yet committed, or future investments for the improvement or optimization of the cash-generating unit.

For the purpose of calculating impairment, the carrying amount of the cash-generating unit is established based on the same criteria used to determine the recoverable amount of the cash-generating unit, excluding surplus assets (that is, financial assets, deferred tax assets and net non-current assets held for sale).

After conducting the goodwill impairment test for the cash-generating unit (or groups of cash-generating units), a second level of impairment testing is carried out which includes the corporate assets which do not generate positive cash flows and which cannot be allocated by a reasonable and consistent criterion to the single units. At this second level, the total recoverable amount of all cash-generating units (or groups of cash-generating units) is compared to the carrying amount of all cash-generating units (or groups of cash-generating units), including also those cash-generating units to which no goodwill was allocated, and the corporate assets.

Tangible and intangible assets with finite useful lives and rights of use assets

At the end of each reporting period, the Company assesses whether there is any indication that an asset – whether tangible or intangible with finite useful lives or a right of use – may be impaired. Both internal and external sources of information are used for this purpose. Internal sources include obsolescence or physical damage, and significant changes in the use of the asset and the economic performance of the asset compared to estimated performance. External sources include the market value of the asset, changes in technology, markets or laws, trend in market interest rates and the cost of capital used to evaluate investments, and an excess of the carrying amount of the net assets of the Company over market capitalization.

If there is any indication that an asset – whether tangible or intangible with finite useful lives or a right of use – may be impaired, then its carrying amount is reduced to its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs to sell, and its value in use. In calculating the value in use, the estimated future cash flows are discounted to present value using a discount rate that reflects current market assessments of the time value of money and the risks specific to the asset or right. Where it is not possible to estimate the recoverable amount, the Company estimates the recoverable amount of the cash-generating unit to which the asset belongs. Impairment losses are recognized in the separate income statement.

When the reasons for the impairment subsequently cease to exist, the carrying value of the asset/ right of use or of the cash generating unit is increased up to the new estimate of the recoverable amount which, however, cannot exceed the amount that would have been determined had no impairment loss been recognized. The reversal of an impairment loss is recognized as income in the separate consolidated income statements.

FINANCIAL INSTRUMENTS

Business models for financial assets management

For the management of trade receivables, Company Management has identified different business models based on the specific nature of the receivables, the type of counterparty and collection times, this was in order to optimize the management of working capital through the constant monitoring of the payment performance of customers, the steering of credit collection policies, and the management of programs for the disposal of receivables,
activation of factoring consistent with financial planning requirements.
The business models adopted are:

- Hold to Collect: receivables usually held to maturity, such as trade receivables due from large customers and the OLOs; these instruments fall within IFRS 9 category “Assets measured at amortized cost”;
- Hold to Collect and Sell: receivables usually traded massively and on a recurring basis, such as receivables due from active consumer, small and business customers held for sale; these instruments fall under IFRS 9 category "Financial assets measured at fair value through other comprehensive income". As required by IFRS 9, the related reserve is reversed to the separate income statements when disposed of or impaired.

As part of managing financial assets other than trade receivables, Company Management has identified its business models on the basis of how the financial instruments are managed and how their cash flows are used. This is done to ensure an adequate level of financial flexibility and to best manage, in terms of risks and returns, the financial resources immediately available and in accordance with the strategies.
The Business Models adopted are the following:

- Hold to Collect: financial instruments used to absorb temporary cash surpluses; such instruments are low risk and mostly held to maturity; they are measured at amortized cost;
- Hold to Collect and Sell: monetary or debt instruments used to absorb short/medium-term cash surpluses; such instruments are low risk and generally held to maturity, or otherwise sold to cover specific cash requirements; they are measured at fair value through other comprehensive income;
- Hold to Sell: monetary, debt and equity trading instruments used to dynamically manage cash surpluses not managed under the business models identified above; such instruments are higher risk and traded repeatedly over time; they are measured at fair value through profit or loss.

Investments in subsidiaries, associates and joint ventures

Investments in subsidiaries, associates and joint ventures are measured at cost adjusted by impairment losses. When there is objective evidence of an impairment, recoverability is verified by comparing the carrying amount of the investment against its recoverable amount consisting of the greater of fair value, net of disposal costs, and value in use.

Other investments

Other investments (other than those in subsidiaries, associates and joint ventures) are classified as non-current or current assets if they will be kept in the Company’s portfolio for a period of more or not more than 12 months, respectively.

Other investments are classified as “financial assets measured at fair value through profit or loss” (FVTPL), as current assets.

At the purchase time of each investment, IFRS 9 provides for the irrevocable option to recognize these investments in "financial assets measured at fair value through other comprehensive income" (FVTOCI) as non-current or current assets.

The other investments classified as “financial assets measured at fair value through other comprehensive income” are measured at fair value; changes in the fair value of these investments are recognized in a special equity reserve under the other components of the statements of comprehensive income (Reserve for financial assets measured at fair value through other comprehensive income), without reclassification to the separate income statement when the financial asset is disposed of or impaired. Dividends, on the other hand, are recognized in the separate income statements.
Changes in the value of other investments classified as "financial assets at fair value through separate profit or loss" are recognized directly in the separate income statements.

Securities other than investments

Securities other than investments included among non-current or current assets, depending on the business model adopted and the contractual flows envisaged, fall among financial assets measured at amortized cost, or measured at fair value through other comprehensive income or at fair value though profit or loss.
Securities other than investments, classified as current assets, are those that, by decision of the directors, are intended to be kept in TIM S.p.A.'s portfolio for a period of not more than 12 months, and are included:

- as "financial assets measured at amortized cost" (AC) when held to maturity (originally more than 3 months but less than 12 months, or, with an original maturity of more than 12 months but the remaining maturity at the date of purchase is more than 3 months but less than 12 months);
- as "financial assets measured at fair value through other comprehensive income" (FVTOCI) when held in the scope of a business model whose objective is to sell the financial asset and/or collect the contractual flows. The "Reserve for financial assets measured at fair value through other comprehensive income" is reversed to the separate income statements when the financial asset is disposed of or impaired;
- as "financial assets measured at fair value through profit or loss" (FVTPL) in the other cases.

Cash and cash equivalents

Cash and cash equivalents are recorded, according to their nature, at nominal value or amortized cost.
Cash equivalents are short-term and highly liquid investments that are readily convertible to known amounts of cash, subject to an insignificant risk of change in value and their original maturity or the remaining maturity at the date of purchase does not exceed 3 months.

Impairment of financial assets

At every closing date, assessments are made as to whether there is any objective evidence that a financial asset or a group of financial assets may be impaired.
The impairment of financial assets is based on the expected credit loss model.
In particular:

- impairment on trade receivables and on contract assets is carried out using the simplified approach that involves estimating the loss expected over the life of the receivable at the time of initial recognition and on subsequent measurements. For each customer segment, the estimate is principally made by calculating the average expected uncollectibility, based on historical and statistical indicators, possibly adjusted using forward-looking elements. For some categories of receivables characterized by specific risk elements, specific measurements are made on individual credit positions;
- impairment on financial assets other than trade receivables is carried out on the basis of a general model which estimates expected credit losses over the following 12 months, or over the residual life of the asset in the event of a substantial increase in its credit risk.

Derivatives

As allowed by IFRS 9, the Company decided to continue to apply the hedge accounting provisions contained in IAS 39 instead of those of IFRS 9.
Derivatives are used by the Company to manage its exposure to exchange rate and interest rate risks and to diversify the parameters of debt so that costs and volatility can be reduced to within pre-established operational limits.
In accordance with IAS 39, derivative financial instruments qualify for hedge accounting only when:

- at the inception of the hedge, the hedging relationship is formally designated and documented;
- the hedge is expected to be highly effective;
- its effectiveness can be reliably measured;
- the hedge is highly effective throughout the financial reporting periods for which it is designated.

All derivative financial instruments are measured at fair value in accordance with IAS 39.
When derivative financial instruments qualify for hedge accounting, the following accounting treatment applies:

- Fair value hedge – Where a derivative financial instrument is designated as a hedge of the exposure to changes in fair value of an asset or liability due to a particular risk, the gain or loss from re-measuring the hedging instrument at fair value is recognized in the separate income statements. The gain or loss on the hedged item attributable to the hedged risk adjusts the carrying amount of the hedged item and is recognized in the separate income statement.
- *Cash flow hedge* – Where a derivative financial instrument is designated as a hedge of the exposure to variability in cash flows of an asset or liability or a highly probable expected transaction, the effective portion of any gain or loss on the derivative financial instrument is recognized directly in a specific equity reserve (*Reserve for cash flow hedges*). The cumulative gain or loss is removed from equity and recognized in the separate income statement at the same time the hedged transaction affects the separate income statement. The gain or loss associated with the ineffective portion of a hedge is recognized in the separate income statement immediately. If the hedged transaction is no longer probable, the cumulative gains or losses included in the equity reserve are immediately recognized in the separate income statement.

For derivatives for which a hedging relationship has not been designated, changes in value compared to initial recognition are recognized directly in the separate income statement.

Financial liabilities

Financial liabilities include financial payables, including payables for advances on assignments of receivables where the assignment does not transfer substantially all the risks and rewards, as well as other financial liabilities, including derivative financial instruments and liabilities in respect of assets recognized under finance leases recognized in accordance with IFRS 16.
In accordance with IFRS 9, they also include trade and other payables.
Reverse factoring transactions are also classified under trade payables. TIM has put in place reverse factoring agreements through which TIM gives partner banks a mandate to pay its suppliers as invoices become due. Suppliers participating in these programmes have the right to sell (without any cost for TIM) receivables due from TIM. They can exercise this right at their total discretion and incurring all the costs to benefit from collection before the contractual due date.
Financial liabilities other than derivatives are initially recognized at fair value and subsequently measured at amortized cost.

Financial liabilities hedged by derivative instruments designed to manage exposure to changes in fair value of the liabilities (fair value hedge derivatives) are measured at fair value in accordance with the hedge accounting principles of IAS 39. Gains and losses arising from re-measurement at fair value, to the extent of the hedged component, are recognized in the separate income statement and are offset by the effective portion of the gain or loss arising from re-measurement at fair value of the hedging instrument.
Financial liabilities hedged by derivative instruments designed to manage exposure to variability in cash flows (cash flow hedge derivatives) are measured at amortized cost in accordance with the hedge accounting principles of IAS 39.

SALES OF RECEIVABLES

TIM S.p.A. carries out sales of receivables under factoring contracts. These sales, in the majority of cases, are characterized by the transfer of substantially all the risks and rewards of ownership of the receivables to third parties, therefore meeting the requirements of IFRS 9 for derecognition. Special service contracts, under which the purchasers grant TIM S.p.A. a mandate to oversee the collection and management of the receivables, have been entered into to maintain the relationship between the Company and its customers.

AMOUNTS DUE FROM CUSTOMERS ON CONSTRUCTION CONTRACTS

Amounts due from customers on construction contracts, regardless of the duration of the contracts, are recognized in accordance with the percentage of completion method and classified under current assets.

INVENTORIES

Inventories are measured at the lower of purchase and production cost and estimated realizable value; the cost is determined using the weighted average cost formula for each movement, while the estimated realizable value is determined by observing general prices at the end of the year. Provision is made for obsolete and slow-moving inventories based on their expected future use and estimated realizable value.

NON-CURRENT ASSETS HELD FOR SALE/DISCONTINUED OPERATIONS

Non-current assets held for sale or disposal groups whose carrying amount will mainly be recovered through sale, rather than through ongoing use, are classified as held for sale and shown separately from other assets and liabilities in the separate statements of financial position. The corresponding amounts for the previous year are not reclassified in the statement of financial position but are instead shown separately in a specific column in the changes in assets and liabilities in the year in which the non-current assets held for sale or the disposal groups are classified as such.
An operating asset sold (*Discontinued Operations*) is a component of an entity that has been disposed of or classified as held for sale and:

- represents a major line of business or geographical area of operations; or
- is part of a single coordinated plan to dispose of a separate major line of business or geographical area of operations; or
- is a subsidiary acquired exclusively with a view to resale.

The results arising from Discontinued Operations – whether disposed of or classified as held for sale – are shown separately in the separate income statement, net of tax effects. The corresponding values for the previous periods, where present, are reclassified and reported separately in the separate income statement, net of tax effects, for comparative purposes.
Non-current assets held for sale or disposal groups classified as held for sale are first recognized in compliance with the appropriate IFRS applicable to the specific assets and liabilities and subsequently measured at the lower of the carrying amount and fair value, less costs to sell.
Any subsequent impairment losses are recognized as a direct adjustment to the non-current assets or disposal groups classified as held for sale and expensed in the separate income statement.
An entity shall recognize a gain for any subsequent increase in fair value less costs to sell of an asset, but not in excess of the cumulative impairment loss that has been recognized.
As required by IFRS 5 (*Non-current assets held for sale and discontinued operations*), an entity shall not depreciate (or amortize) a non-current asset while it is classified as held for sale or while it is part of a disposal group classified as held for sale.
The finance expenses and other expenses attributable to the liabilities of a disposal group classified as held for sale must continue to be recognized.

EMPLOYEE BENEFITS

Provision for employee severance indemnity

Employee severance indemnity, mandatory pursuant to Article 2120 of the Italian Civil Code, is deferred compensation and is based on the employees' years of service and the compensation earned by the employee during the service period.
Under IAS 19 (*Employee Benefits*), the employee severance indemnity as calculated is considered a "Defined benefit plan" and the related liability recognized in the statement of financial position (Provision for employee severance indemnities) is determined by actuarial calculations.
The remeasurements of actuarial gains and losses are recognized in other components of other comprehensive income. The interest expenses related to the "time value" component of the actuarial calculations (the latter classified as Finance expenses), are recognized in the separate income statement under financial expenses.

Starting from January 1, 2007, Italian Law gave employees the choice to direct their accruing indemnity either to supplementary pension funds or leave the indemnity as an obligation of the Company. Companies that employ at least 50 employees should transfer the employee severance indemnity to the "Treasury fund" managed by INPS, the Italian Social Security Institute. Consequently, the Group's obligation to INPS and the contributions to supplementary pension funds take the form, under IAS 19, of a "Defined contribution plan".

Equity compensation plans

TIM S.p.A. provides additional benefits to certain managers of the Group companies through equity compensation plans (for example: stock options and long-term incentive plans). The above plans are recognized in accordance with IFRS 2 (*Share-Based Payment*).
In accordance with IFRS 2, such plans represent a component of the beneficiaries' compensation. Therefore, for the plans that provide for compensation in equity instruments, the cost is represented by the fair value of such instruments at the grant date, and is recognized in "Employee benefits expenses", for employees of the Company, and in "Investments", for employees of subsidiaries, over the period between the grant date and vesting date with a contra-entry to an equity reserve denominated "Other equity instruments". Changes in the fair value subsequent to the grant date do not affect the initial measurement. At the end of each year, adjustments are made to the estimate of the number of rights that will vest up to expiry. An adjustment is made to "Other equity instruments" for the impact of the change in estimate with contra-entry to "Employee benefits expenses" or "Investments".
For the portion of the plans that provide for the payment of compensation in cash, the amount is recognized in liabilities as a contra-entry to "Employee benefits expenses" for employees of the Company, and in "Investments", for employees of subsidiaries; at the end of each year such liability is measured at fair value.

PROVISIONS

The Company records provisions for risks and charges when it has a present obligation, legal or constructive, to a third party, as a result of a past event, when it is probable that an outflow of resources will be required to satisfy the obligation and when the amount of the obligation can be estimated reliably.
If the effect of the time value is material, and the payment date of the obligations can be reasonably estimated, provisions to be accrued are the present value of the expected cash flows, taking into account the risks associated with the obligation. The increase in the provision due to the passage of time is recognized as "Finance expenses".

GOVERNMENT GRANTS

Government grants are recognized when there is a reasonable certainty that they will be received and that the Company will satisfy all the conditions established for their granting by the government, government entities and equivalent local, national or international entities.
Government grants are recognized in the separate income statement, on a straight-line basis, over the periods in which the Company recognizes the expenses that the grants are intended to offset as costs.
Government grants related to assets received for the acquisition and/or construction of non-current tangible assets are recorded as deferred income in the statement of financial position and credited to the separate income statement on a straight-line basis over the useful life of the plants that the grants relate to.

TREASURY SHARES

Treasury shares are recognized as a deduction from equity. In particular, the treasury shares are reported as a deduction from the share capital issued in the amount corresponding to the "accounting par value", that is the ratio of total share capital and the number of issued shares, while the excess cost of acquisition over the accounting par value is presented as a deduction from "Other reserves and retained earnings (accumulated losses), including profit (loss) for the year".

FOREIGN CURRENCY TRANSACTIONS

Transactions in foreign currencies are recorded at the foreign exchange rate prevailing at the date of the transaction. Monetary assets and liabilities denominated in foreign currencies are translated at the foreign exchange rate prevailing at the statement of financial position date. Exchange differences arising from the settlement of monetary items or from their conversion at rates different from those at which they were initially recorded during the year or at the end of the prior year, are recognized in the separate consolidated income statements.

REVENUES

Revenues are the gross inflows of economic benefits during the period arising in the course of the ordinary activities of an entity. Amounts collected on behalf of third parties such as sales taxes, goods and services taxes and value added taxes are not economic benefits which flow to the entity and do not result in increases in equity. Therefore, they are excluded from revenues.

The process underlying recognition of revenues follows the steps set out in IFRS 15:

- **identification of the contract:** takes place when the parties approve the contract (with commercial substance), and identify the respective rights and obligations: in other terms, the contract must be legally binding, the rights to receive goods and/or services and the terms of payment can be clearly identified and the Company considers receipt of payment as probable;
- **identification of the** performance obligations: the main performance obligations identified, i.e. promises to transfer goods and services that are distinct, are services rendered (including voice and data traffic and ICT solutions) to retail customers, services rendered to wholesale customers and sale of products;
- **determination of the transaction price:** is the total amount contracted with the other party regarding the entire contractual term. the Company has determined that the contractual term is the one arising from the contractual obligations between the parties or, in lack of these obligations, it is by convention one month;
- **allocation of the** transaction price **to the** performance obligations**:** the allocation is made proportionately to the respective stand alone selling prices calculated based on the list prices (if present) or estimated by applying an appropriate margin to the cost of purchase/production of the good/service.

  Revenues from activating the connectivity service are not a performance obligation; they are therefore allocated to the contractual performance obligations (typically to services).
  For offerings which include the sale of devices and service contracts (bundle offerings), the Company allocates the contractual transaction price to the performance obligations of the contract, proportionately to the stand alone selling prices of the single performance obligations;

- **recognition of revenues:** revenues are stated net of discounts, allowances, and returns in connection with the characteristics of the type of revenue:
  - **Revenues from services rendered**

    Revenues from services rendered are recognized in the separate income statements according to the stage of completion of the service, that is based on actual consumption.
    Traffic revenues from interconnection and roaming are reported gross of the amounts due to other TLC operators.
    Revenues for delivering information or other content are recognized on the basis of the amount invoiced to the customer, when the service is rendered directly by the Company. In the event that the Company is acting as agent (for example non-geographic numbers) only the commission received from the content provider is recognized as revenue.
    Revenues from prepaid traffic are recorded on the basis of effective consumption. Deferred revenues for traffic already collected but not yet consumed are recorded in "Trade and miscellaneous payables and other current liabilities" in the statements of financial position.
    Revenues on construction contracts are recognized based on the stage of completion (percentage of completion method).
    Revenues for services rendered are generally invoiced and collected bimonthly/monthly (for retail customers) or in 40-60 days (for wholesale customers).

  - **Revenues from sales**

    Revenues from sales (telephone and other equipment) are recognized upon delivery when control of the assets is transferred to the customers.
    The devices sold separately from the services are invoiced at the time of delivery; collection takes place on demand or based on installment plans (up to 48 monthly installments). The devices sold as part of bundle offerings are invoiced at the time of delivery and usually collected in 24 monthly installments.

The recognition of revenues can generate the recognition of an asset or liability deriving from contracts. In particular:

- **Contract assets** are the right to a consideration in exchange for goods or services that have been transferred to the customer, when the right is conditioned on something other than the passage of time.
- **Liabilities deriving from a contract** are the obligation to transfer goods or services to the customer for which the Company has received (or for which it is due) a consideration from the customer.

Contract costs (incremental costs of obtaining a contract and costs to fulfill a contract; mainly technical activation costs and costs for sales network commissions) are deferred and recognized through separate profit or loss depending on the expected term of the contractual relationship with the customers. TIM avails itself of the practical expedient, provided for by IFRS 15, to recognize the incremental costs for obtaining the contract entirely in the income statement, provided the amortization period does not exceed 12 months.

The recoverability of contract assets and deferred costs is periodically assessed.

RESEARCH COSTS AND ADVERTISING EXPENSES

Research costs and advertising expenses are charged directly to the separate consolidated income statements in the year in which they are incurred.

FINANCE INCOME AND EXPENSES

Finance income and expenses are recognized on an accrual basis and include: interest accrued on the related financial assets and liabilities using the effective interest rate method, the changes in fair value of derivatives and other financial instruments measured at fair value through profit or loss, gains and losses on foreign exchange and financial instruments (including derivatives).

DIVIDENDS

Dividends received are recognized in the separate income statement in the year in which they become receivable following the resolution by the shareholders' meeting for the distribution of dividends of the investee companies. Dividends payable are reported as a change in equity in the year in which they are approved by the shareholders' meeting.

INCOME TAX EXPENSE (CURRENT AND DEFERRED)

Income tax expense includes all taxes calculated on the basis of the taxable income of the Company.
Current and deferred income tax expense is calculated using all the elements and information available at the reporting date, taking into account current laws and considering all the elements that could give rise to uncertainties in the determination of the amounts due to the tax authorities, as provided for in IFRIC 23.
The income tax expense is recognized in the separate income statement, except to the extent that it relates to items directly charged or credited to equity, in which case the related tax effect is recognized in the relevant equity reserves. In the Statements of comprehensive income the amount of income tax expense relating to each item included as "Other components of the Statements of comprehensive income" is indicated.
Deferred tax liabilities / assets are recognized using the "Balance sheet liability method". They are calculated on all temporary differences that arise between the tax base of an asset or liability and the relevant carrying amounts in the separate financial statements, except for non tax-deductible goodwill. Deferred tax assets relating to unused tax loss carryforwards are recognized to the extent that it is probable that future taxable income will be available against which they can be utilized. Current and deferred tax assets and liabilities are offset when there is a legally enforceable right of offset. Deferred tax assets and liabilities are determined based on enacted tax rates that are expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled.
Taxes, other than income taxes, are included in "Other operating expenses".

USE OF ESTIMATES

The preparation of separate financial statements and related disclosure in conformity with IFRS requires management to make estimates and assumptions based also on subjective judgments, past experience and assumptions considered reasonable and realistic in relation to the information known at the time of the estimate. Such estimates have an effect on the reported amount of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements, as well as the amount of revenues and costs during the year. Actual results could differ, even significantly, from those estimates owing to possible changes in the factors considered in the determination of such estimates. Estimates are reviewed periodically.
The most significant accounting estimates that involve a high level of subjective assumptions and judgements by directors are set out below.

Financial statements area	**Accounting estimates**
Goodwill impairment	The impairment test on goodwill is carried out by comparing the carrying amount of cash-generating units and their recoverable amount. The recoverable amount of a cash-generating unit is the higher of fair value, less costs to sell, and its value in use. This complex valuation process entails the use of methods such as the discounted cash flow method which uses assumptions to estimate cash flows. The recoverable amount depends significantly on the discount rate used in the discounted cash flow model as well as the expected future cash flows and the growth rate used for the extrapolation. The key assumptions used to determine the recoverable amount for the different cash-generating units, including a sensitivity analysis, are detailed in the Note "Goodwill".
Impairment of tangible and intangible assets with finite useful lives and rights of use assets	At the end of each reporting period, the company assesses whether there is any indication that an asset – whether tangible or intangible with finite useful lives or a right of use – may be impaired. Both internal and external sources of information are used for this purpose. Identifying the impairment indicators, estimating the future cash flows and calculating the fair value of each asset requires Management to make significant estimates and assumptions in calculating the discount rate to be used, and the useful life and residual value of the assets. These estimates can have a significant impact on the fair value of the assets and on the amount of any impairment write-downs.
Lease liabilities and rights of use assets	The value of lease liabilities and corresponding rights of use is determined by calculating the present value of the lease payments, also bearing in mind whether the renewal of the lease is reasonably certain.
Capitalization/deferment of costs	The capitalization/deferment of internal and external costs is a process that entails elements of estimation and valuation. Specifically, it involves the valuation of: i) the likelihood that capitalized costs will be recovered through correlated future revenues; and ii) the effective increase in the future economic benefits embodied in the related asset.
Provision for bad debts	Impairment on trade receivables and on the contract assets is carried out using the simplified approach that involves estimating the loss expected over the life of the receivable at the time of initial recognition and on subsequent measurements. For each customer segment, the estimate is principally made by calculating the average expected uncollectibility, based on historical and statistical indicators, possibly adjusted using forward-looking elements. For some categories of receivables characterized by specific risk elements, specific measurements are made on individual credit positions.
Depreciation and amortization	Changes in the economic conditions of the markets, technology and competitive forces could significantly affect the estimated useful lives of tangible and intangible non-current assets and may lead to a difference in the timing, and thus on the amount of depreciation and amortization expense.
Accruals, contingent liabilities and employee benefits	As regards the provisions for restoration costs the estimate of future costs to dismantle tangible assets and restore the site is a complex process that requires an assessment of the liability arising from such obligations which seldom are entirely defined by law, administrative regulations or contract clauses and which normally are to be complied with after an interval of several years. The accruals related to legal, arbitration and fiscal disputes as well as regulatory proceedings are the result of a complex estimation process based upon the probability of an unfavorable outcome. Employee benefits, especially the provision for employee severance indemnities, are calculated using actuarial assumptions; changes in such assumptions could have a material impact on such liabilities.
Revenues	The recognition of revenues is influenced by estimates of the amount of discounts, rebates and returns to be reported as a direct adjustment to revenues, as well as the methods for defining individual product or service stand alone selling prices and for determining the duration of the contract when there are renewal options.

Contract costs (IFRS 15)	The recognition of the costs of obtaining and fulfilling contracts is influenced by the estimated expected duration of the relationship with the customer, calculated on the basis of the historical turnover indexes and future estimates. However, this estimate is subject to fluctuations and could only represent customers' future behavior in a limited way, especially if there are new commercial offers or changes in the competitive environment.
Income tax expense (current and deferred)	Income taxes (current and deferred) are calculated according to a prudent interpretation of the tax laws in effect. This process sometimes involves complex estimates to determine taxable income and deductible and taxable temporary differences between the carrying amounts and the taxable amounts. In particular, deferred tax assets are recognized to the extent that future taxable income will be available against which they can be utilized. The measurement of the recoverability of deferred tax assets, recognized based on both unused tax loss carry-forwards to future years and deductible differences, takes into account the estimate of future taxable income and is based on conservative tax planning.
Derivative instruments and equity instruments	The fair value of derivative instruments and equity instruments is determined both using valuation models which also take into account subjective measurements such as, for example, cash flow estimates, expected volatility of prices, etc., or on the basis of either prices in regulated markets or quoted prices provided by financial counterparts. For more details, see the Note "Supplementary disclosures on financial instruments".

As required by IAS 8.10 (*Accounting Policies, Changes in Accounting Estimates and Errors*) in the absence of a Standard or an Interpretation that specifically applies to a particular transaction, Management, through careful subjective evaluation techniques, chooses the accounting methods to adopt with a view to providing financial statements which faithfully represent the financial position, the results of operations and the cash flows of the Company, which reflect the economic substance of the transactions, which are neutral, prepared on a prudent basis and complete in all material respects.

NEW STANDARDS AND INTERPRETATIONS ENDORSED BY THE EU AND IN FORCE FROM JANUARY 1, 2019

As required by IAS 8 (Accounting Policies, Changes in Accounting Estimates and Errors), the following is a brief description of the IFRS in force commencing as of January 1, 2019.
The impacts arising from the application, as of January 1, 2019, of IFRS 16 (Leases) are instead set out in the subsequent paragraph "Adoption of the new IFRS 16 (Leases) standard".

Amendments to IFRS 9 (Financial Instruments): Prepayment Features with Negative Compensation

On March 22, 2018, Regulation EU 2018/498 was issued, endorsing some limited amendments to IFRS 9 (Financial Instruments) at EU level.
The amendments allow the entity to measure financial assets that are "prepayable with negative compensation" (e.g. debt instruments where the borrower is allowed to repay early for an amount that may be less than the residual debt including interest due) at amortized cost or at fair value through other comprehensive income instead of at fair value through profit or loss.
The adoption of these amendments had no effect on the financial statements at December 31, 2019.

IFRIC 23 – Uncertainty over income tax treatments

IFRS 23 (Uncertainty over income tax treatments) was endorsed by the European Union on October 23, 2018 with Regulation (EU) 2018/1595. This interpretation governs how to deal with uncertainty in the accounting of income taxes. In this regard, IAS 12 - Income taxes specifies how to account for current and deferred taxes but not how to represent the effects of uncertainty. For example there may be doubts:

- on how tax law applies to a particular transaction or circumstance, or
- whether the tax authorities will accept the treatment chosen/applied by the entity. If an entity concludes it is not probable that the taxation authority will accept the tax treatment, the entity must use estimates (most likely or expected value) to determine the tax treatment (taxable profits, tax base, unused tax losses, unused tax credits, tax rates, etc.). The decision must be based on the method that best enables the outcome of the uncertainty to be assessed.

The adoption of these amendments had no effect on the financial statements at December 31, 2019, notwithstanding the reclassification of income tax provisions to payables.

Amendments to IAS 28 (Investments in Associates and Joint Ventures): long-term interests in associates and joint ventures

On February 8, 2019, Regulation EU 2019/237 was issued, endorsing some limited amendments to IAS 28 (Investments in Associates and Joint Ventures) at EU level.
IFRS 9 excludes investments in associates and joint ventures accounted for in accordance with IAS 28. Accordingly, an entity applies IFRS 9 to other financial instruments held in associates and joint ventures, including long-term interests (e.g. financial receivables) not subject to the equity but which, in substance, are part of the net investment in those associates and joint ventures.
The adoption of these amendments had no effect on the financial statements at December 31, 2019.

Amendments to IAS 19 – Employee benefits: plan amendment, curtailment or settlement

On March 13, 2019, Regulation EU 2019/402 was issued, endorsing some limited amendments to IAS 19 (Employee Benefits) at EU level. These changes relate to amendments, curtailments or settlements of defined benefit plans.
The amendments require an entity, in the event of plan amendment, curtailment or settlement, to use the actuarial assumptions of this remeasurement to determine the current service cost and net interest for the remaining reporting period after the plan amendment.
The adoption of these amendments had no effect on the financial statements at December 31, 2019.

Improvements to the IFRS (2015–2017 cycle)

On March 14, 2019, Regulation EU 2019/412 was issued, endorsing some improvements to the IFRS for the 2015-2017 cycle at EU level. In particular these included:

- **Amendments to IFRS 3 *Business Combinations* and IFRS 11 *Joint Arrangements***: the amendments to IFRS 3 clarify that when an entity, which is already part of a joint operation, obtains control of that operation that constitutes a business, the entity shall remeasure its previously held interest in the joint operation. The amendments to IFRS 11 clarify that when an entity in a joint operation obtains joint control of that operation that constitutes a business, the entity does not remeasure the interests previously held in that joint operation.
- **Amendments to IAS 12 Income taxes**: the amendments clarify that an entity must recognize taxes on dividends in the separate income statement, or in other comprehensive income or equity, depending on how the transaction/event that resulted in the distributable profits that generated the dividends was accounted for.
- **Amendments to IAS 23 Borrowing costs**: the amendments clarify that if any specific financing remains outstanding after the associated asset is ready for its intended use or sale, that financing becomes part of the funds that an entity uses when calculating the capitalization rate on general financing.

The adoption of these amendments had no effect on the financial statements at December 31, 2019.

ADOPTION OF THE NEW IFRS 16 (LEASES) STANDARD

This section provides an overview of IFRS 16 (Leases) main disclosure elements and of the impacts arising from the application of the standard starting from January 1, 2019.

IFRS 16 (Leases) was endorsed by the European Union on October 31, 2017 with the Commission Regulation (EU) 2017/1986.
IFRS 16 has replaced IAS 17 (Leases) and the relative interpretations (IFRIC 4 Determining Whether an Arrangement Contains a Lease; SIC 15 Operating Leases – Incentives; SIC 27 Evaluating the Substance of Transactions Involving the Legal Form of a Lease). During 2019, the IFRIC also expressed an opinion on the duration of leasing contracts, leasehold improvements, the incremental rate of financing and subsoil exploitation rights; the application of the standard also took account of these interpretations.
As allowed by the new standard, TIM S.p.A. has applied the modified retrospective method with the recognition of the cumulative effect of the standard first-time adoption as an adjustment to the opening balance of equity at the data of the first application, without restating prior comparative periods.
In accordance with IFRS 16, lease liabilities are presented through the recognition of a financial liability in the statement of financial position at the present value of future lease payments, against the recognition of a right of use asset of the leased asset. This liability is subsequently adjusted over the lease contract term in order to reflect the payment of interest on the debt and the repayment of the principal; the right of use of the leased asset is amortized over the contract term. The application of IFRS 16 determines lower operating costs and higher amortization/depreciation and financial charges in comparison with IAS 17 which required the recognition of operating costs for non-financial leases; moreover, according to IFRS 16 for the lessees the distinction between financial and operating leases doesn't exist any longer.

At the transition date (January 1, 2019), for leases previously classified according to IAS 17 as operating leases, TIM S.p.A applied the simplified retrospective method with the recognition of the financial lease liability and the corresponding value of the right of use measured on the basis of the residual contractual lease payments at the transition date.

At TIM S.p.A., the contracts falling within the scope of application of IFRS 16 mainly refer to:

- land and buildings for office and industrial use,
- infrastructure sites for the mobile network and
- network infrastructure (when not services).

With reference to the options and exemptions provided for by IFRS 16, the TIM Group has adopted the following choices:

- IFRS 16 is not usually applied to intangible assets or to short-term (i.e. less than 12 months) contracts with low unit value;
- rights of use and financial liabilities relating to lease agreements have been classified on specific line items in the statement of financial position;
- any service contract component included in the lease payments have been generally excluded from the IFRS 16 scope;
- contracts with similar characteristics have been assessed using a single discount rate;
- leases previously recognized as finance leases in accordance with IAS 17 have retained their previous measurements.

The impacts during transition are not indicative of future developments since the choices of allocating capital might change with resulting economic and financial repercussions on recognition in the financial statements.

IMPACTS ARISING FROM THE ADOPTION OF IFRS 16

Impacts on the statements of financial position at 1/1/2019 (transition date)

The adoption of IFRS 16 led to higher non-current assets for TIM S.p.A. due to the recognition of the "right of use of leased assets" as a contra-entry to higher financial liabilities. In detail, the impacts on the main statement of financial position items of TIM S.p.A. upon transition are summarized below.

(millions of euros)	12/31/2018	Reclassification (*)	IFRS 16 impacts (**)	1/1/2019 Restated
Assets				
Non-current assets				
Intangible assets	30,680	(120)		30,560
Tangible assets	12,476	(1,719)		10,757
Rights of use assets	-	1,839	2,909	4,748
Other non-current assets				
Non-current financial receivables arising from lease contracts	15	-	6	21
Miscellaneous receivables and other non-current assets	1,704	-	(1)	1,703
Deferred tax assets	882	-	-	882
Current assets				
Trade and miscellaneous receivables and other current assets	3,850	-	(15)	3,835
Current financial receivables arising from lease contracts	64	-	4	68
Total Assets	**61,161**	**-**	**2,903**	**64,064**
Equity and Liabilities				
Equity	**18,138**	**-**		**18,138**
Non-current liabilities				
Non-current financial liabilities for lease contracts	1,445	-	2,434	3,879
Deferred tax liabilities	3	-	-	3
Current liabilities				
Current financial liabilities for lease contracts	159	-	516	675
Trade and miscellaneous payables and other current liabilities	5,238	-	(47)	5,191
Total Equity and Liabilities	**61,161**	**-**	**2,903**	**64,064**

(*) The column includes reclassification of Rights of use assets (1,839 million euros) of:

- Indefeasible Rights of Use - IRU (120 million euros), previously recognized as intangible assets;
- assets held under finance leases (1,694 million euros), previously recognized as tangible assets;
- improvements to third-party assets (25 million euros), previously recognized as tangible assets

(**) The column includes recognition of the rights of use, the related financial payable and related items consequent to IFRS 16.

The amount of net Liabilities (Assets) recognized for Leases at January 1, 2019 is the following:

(millions of euros)	
Financial liabilities for lease contracts payable, non-current and current, at December 31, 2018 (2018 financial statements)	1,604
Other financial liabilities recognized for leases at January 1, 2019	2,950
Total financial liabilities at January 1, 2019	**4,554**
Financial assets for lease contracts receivable, non-current and current, at December 31, 2018 (2018 financial statements)	(79)
Other financial assets recognized for leases at January 1, 2019	(10)
Total financial assets at January 1, 2019	**(89)**
Net Liabilities (Assets) recognized for leases at January 1, 2019	**4,465**

Adjusted net financial debt

(millions of euros)

Adjusted net financial debt at December 31, 2018	**28,053**
Other financial liabilities recognized for leases at January 1, 2019	2,950
Other financial assets recognized for leases at January 1, 2019	(10)
Adjusted net financial debt at January 1, 2019	**30,993**

Below is a reconciliation of the differences between the commitments existing at December 31, 2018 arising from operating leases (in application of IAS 17) and the lease liabilities recognized in the statement of financial position at January 1, 2019 (in application of IFRS 16).

(millions of euros)

Non-cancellable operating leases at December 31, 2018 (nominal value)	(a)	**1,925**
Non-cancellable operating leases not subject to IFRS 16 (nominal value)	(b)	237
Non-cancellable operating leases subject to IFRS 16 (nominal value)	(c) = (a) - (b)	**1,688**
Non-cancellable leases - impact of discounting	(d)	121
Present value of non-cancellable operating leases	(e) = (c) - (d)	**1,567**
Land component on finance lease IAS 17 (present value)	(f)	543
Real estate contracts (including renewal option effects) (present value)	(g)	329
Co-siting contracts (including renewal option effects) (present value)	(h)	507
Other contracts (present value)	(i)	4
Other lease liabilities at January 1, 2019	(l) = (e) + (f) + (g) + (h) + (i)	**2,950**

The average discount rate applied to the lease liabilities recognized in the statements of financial position, at the date of initial application (January 1, 2019), was 2.5%.

Impact on the main items of the separate income statement and balance sheet for 2019

Below is a breakdown of the impact of IFRS 16 on the main income statement figures for 2019 compared with the comparable 2019 financial year.

(millions of euros)		Year 2019 comparable (*) (a)	Impact IFRS 16 (b)	Year 2019 (a+b)
Revenues	**(1)**	**13,140**	**(3)**	**13,137**
Operating expenses	(2)	(8,409)	556	(7,853)
EBITDA		**4,929**	**553**	**5,482**
Depreciation of finance lease assets	(3)	(192)	(487)	(679)
Gains/(losses) on disposals of non-current assets	(4)	(32)	(9)	(41)
EBIT		**1,665**	**57**	**1,722**
Finance expenses on finance lease liabilities	(5)	(104)	(59)	(163)
Profit (loss) before tax		**574**	**(2)**	**572**
Income tax expense	(6)	(188)	(2)	(190)
Profit (loss) for the year		**386**	**(4)**	**382**

(*) In the comparable year 2019, the signed lease contracts starting from January 1, 2019 are always classified as operating leases for IAS 17 purposes

The different nature, qualification and classification of the expenses, with recognition of the "Amortization of rights of use assets" and of "Financial expense for interest relating to rights of use " instead of "Lease and rental costs - payments for operating leases" according to IAS 17, has determined a positive impact on EBITDA equal to 553 million euros.

In particular, the application of IFRS 16 to leases caused the:

(1) reduction of **Operating revenues** due to the different accounting treatment of the payments relating to the subleasing of commercial products

(2) reduction of **Operating expenses** for the different accounting treatment of the payments relating to the lease contracts of land, building for office and industrial use, infrastructure sites for the mobile telephony network and network infrastructure (when not classifiable as services);

(3) the increase in **Amortization of rights of use assets** consequent to recognition of higher non-current assets ("Rights of Use asset") amortized for the term of the contract;

(4) the increase in **Losses on disposals of non-current assets** due to the early termination of contracts already classified as finance leases;

(5) the increase in **Finance expenses** for interest due to the recognition of higher financial liabilities connected to the rights of use assets;

(6) the change in **Income tax expense** that shows the income tax effect of the changes illustrated above.

Details of the impact of the new accounting standards on the main figures in the statement of financial position at December 31, 2019 are provided below.

(millions of euros)	12/31/2019 comparable (a)	Impact IFRS 16 (b)	12/31/2019 (c=a+b)
Assets			
Non-current assets			
Intangible assets	30,159	–	30,159
Tangible assets	10,591	–	10,591
Rights of use assets	1,839	3,067	4,906
Other non-current assets	11,834	4	11,838
Total Non-current assets	**54,423**	**3,071**	**57,494**
Current assets sub-total	**4,985**	**(27)**	**4,958**
Discontinued operations /Non-current assets held for sale	**828**	**–**	**828**
Current assets	**5,813**	**(27)**	**5,786**
Total Assets	**60,236**	**3,044**	**63,280**
Equity and liabilities			
Total Equity	**18,177**	**(3)**	**18,174**
Non-current liabilities	**32,228**	**2,565**	**34,793**
Current liabilities	**9,831**	**482**	**10,313**
Total Liabilities	**42,059**	**3,047**	**45,106**
Total Equity and Liabilities	**60,236**	**3,044**	**63,280**

The impact of IFRS 16 on net financial debt is detailed below.

Adjusted net financial debt

(millions of euros)	12/31/2019
Comparable adjusted net financial debt	**26,675**
Additional financial liabilities recognized in application of IFRS 16	3,077
Additional financial assets recognized in application of IFRS 16	(12)
Adjusted net financial debt	**29,740**

NEW STANDARDS AND INTERPRETATIONS ISSUED BY IASB BUT NOT YET APPLICABLE

At the date of preparation of these separate financial statements, the IASB had issued the following new standards / interpretations which have not yet come into force:

	Mandatory application starting from
New Standards and Interpretations not yet endorsed by the EU	
Amendments to IFRS 3 (Business Combinations)	1/1/2020
Amendments to IAS 1 and IAS 8 (Definition of Material)	1/1/2020
Amendments to References to the Conceptual Framework in IFRS Standards	1/1/2020
Interest-rate benchmark reform: Amendments to IFRS 9 (Financial Instruments), IAS 39 (Financial Instruments: Recognition and Measurement) and IFRS 7 (Financial Instruments: disclosures)	1/1/2020

The potential impacts on the separate financial statements from application of these new standards and interpretations are currently being assessed.

In particular, with regard to the process of reforming benchmark interest rates, no impact on the hedges documented in Hedge Accounting is expected in 2020 because of:

(i) Regulation 2020/34 published on 15 January 2020 by the EU, which introduces a series of amendments to IAS 39, IFRS 9 and IFRS 7 on benchmark parameters for interest rates, aimed at allowing financial and accounting management of hedges in full alignment with the past, at least until the replacement of the IBOR parameters becomes effective in 2022;

(ii) the nature of TIM S.p.A.'s hedges; mainly fixed-rate bonds hedged by derivatives not subject to clearing mechanisms. However, more in-depth analysis will be devoted to the hedging of loans with banks and Group companies.

In particular, the process of replacing IBOR parameters in all markets in which the Company operates will be closely monitored, with simultaneous checks on contracts and fallback clauses of the financial instruments affected by the reform – in line with the developments provided in this area by ISDA and similar bodies – as well as on the related risk exposures, so as to ensure an adequate and timely response to the changes induced by the reform, both at the management and accounting levels.

NOTE 3
GOODWILL

The item at December 31, 2019 amounted to 24,341 million euros (unchanged compared to December 31, 2018) and related to the goodwill included in the domestic business segment of TIM S.p.A..
Starting from the end of 2019, the distinction between Core Domestic and International Wholesale – Telecom Italia Sparkle cash generating units no longer applies, due to a gradual and significant integration of the business of the Sparkle group with the Core Domestic business. This integration is related to the transformation of the Sparkle group aimed at focusing on the innovation of the part of traditional business which is capable of meeting the challenges of the new Gigabit Society. Therefore, as at 31 December 2019, the company TIM as a whole is considered a Cash Generating Unit.
As known, on December 19, 2019 the Shareholders' Meeting of Infrastrutture Wireless Italiane S.p.A. (Inwit) approved the merger by incorporation of Vodafone Towers S.r.l. into Inwit. The transaction, preparatory to the creation of Italy's leading Tower Operator, entails the sale by the TIM Group of its controlling interest in Inwit. Therefore, as at December 31, 2019, the Inwit stake is presented in the Separate Financial Statements as an "Asset held for sale"; Consequently, goodwill was allocated in accordance with the provisions of IAS 36 and the related fair value method. In Tim's separate financial statements, the transaction resulted in the allocation to the investment in Inwit of a portion of Goodwill amounting to 2,188 million euros, net of the amount already included in the investment.

In accordance with IAS 36, goodwill is not subject to amortization, but is tested for impairment on at least an annual basis when preparing the separate financial statements of TIM S.p.A., which in preparing the 2019 financial statements carried out impairment testing in accordance with the procedure adopted by the Company. The recoverable amount of the assets at December 31, 2019 was higher than the net carrying amount and therefore no impairment losses were recorded.

The recoverable value of the assets was determined in accordance with the impairment test of the Domestic CGU carried out for the purposes of preparing the Group's consolidated financial statements and concerned the domestic business unit of TIM S.p.A., corresponding to the Domestic Cash Generating Unit (CGU) considered for the purposes of the goodwill impairment test in the consolidated financial statements, after excluding the book values of the subsidiaries that fall within its perimeter.

The "recoverable amount" of the CGU at December 31, 2019 is equal to the higher of its "fair value net of disposal costs" and its "value in use".

The value in use estimate was made – in accordance with IAS 36 and with valuation principles and best practices – based on the expected cash flows in different scenarios. The various expected cash flows were then summarized into an average normal cash flow, determined with the aid of Experts (expert appraisers and industry experts) and based on the data from the 2020-2022 Industrial Plan approved by the Board of Directors. In particular, expected average cash flows were measured for the three years of the 2020-2022 Industrial Plan, plus an additional two years on the basis of extrapolated data, for which future cash flows were explicitly forecast for a period of five years (2020-2024). The extrapolation of forecast data for the two-year period 2023-2024 was carried out in order to intercept market and competitive trends that will become manifest beyond the forecast horizon of the Industrial Plan.
As regards the estimate of the terminal value, the sustainable long-term cash flow was assumed to be the extrapolation of the estimated cash flow at 2024, adjusted as necessary to take into consideration a suitable level of long-term capital expenditure. Furthermore, with specific reference to the incremental value deriving from 5G license use and therefore from the development of new and innovative business areas, a measurement model has been adopted that takes into account the net incremental flows for a defined period of time based on the duration of the license. This approach is consistent with the need to include in the configuration of value, on one hand the outflows deriving from the payment of the license (2019 - 2022) and the capex to support its development (as per the Industrial Plan), and on the other the positive net flows from the incremental business component of the license acquisition that will develop over a broad period of time and over the 5 years of explicit forecast.

The Industrial Plan (2020-2022) incorporates valuations of potential risk factors and the actions adopted to mitigate them. In order to define the average normal cash flow for the impairment test, the management, with the aid of Experts, identified additional risk factors, making changes to the amounts and/or in the time distribution of future cash flows, giving greater weight to the external evidence available.

The cost of capital used to discount the future cash flows in the estimate of the value in use was determined as follows:

- it was estimated using the Capital Asset Pricing Model (CAPM), which is one of the generally accepted application criteria referred to in IAS 36;

- it reflects current market estimates of the time value of money and the specific risks associated with the asset groups, and includes appropriate yield premiums for country risk and the risk associated with the depreciation of the currency of denomination of the cash flows;
- it was calculated using comparative market parameters to estimate the “Beta coefficient” and the weighting coefficient of the equity and debt capital components.
- takes into account the impact of the application of the new accounting standard IFRS 16.

The following are provided below:

- the weighted average cost of capital (WACC rate) used to discount the future cash flows and the equivalent rate before tax;
- the growth rates used to estimate the residual value after the explicit forecast period (the G-Rates), which are expressed in nominal terms;
- implicit capitalization rates resulting from the difference between the cost of capital, after tax, and the G-Rate.

PRINCIPAL PARAMETERS FOR THE ESTIMATES OF VALUE IN USE

	TIM S.p.A.
WACC	4.89%
WACC before tax	6.47%
Growth rate beyond the explicit period (g)	0.5%
Capitalization rate after tax (WACC-g)	4.39%
Capitalization rate before tax (WACC-g)	5.97%
Capex/Revenues, perpetual	19.9%

The growth rate of the terminal value “g” was estimated taking into account the expected outlook during the explicit forecast period and is consistent with the range of growth rates applied by analysts who monitor TIM shares.
The capital expenditure phase, competitive positioning and technological infrastructure managed were considered in the estimate of the level of capital expenditure required to sustain the perpetual generation of cash flows in the period after the explicit forecast period.

In estimating the recoverable amounts, simulations were conducted on the results with respect to changes in the relevant parameters. Below are the parameters that, if considered individually and on a consistent basis, make the recoverable value equal to their net carrying amount.

PARAMETERS THAT MAKE THE VALUE IN USE EQUAL TO THE CARRYING AMOUNT

	TIM S.p.A.
WACC before tax	9.04%
Capitalization rate before tax (WACC-g)	8.54%
Capex/Revenues, perpetual	30.91%

In addition to average normal cash flows, to take into account the market operator’s perspective, sensitivity analyses were conducted on the main risk factors identified with the Experts to determine the value in use. As a result of these analyses, the recoverable value was in any case higher than the net carrying amount.

NOTE 4
INTANGIBLE ASSETS WITH A FINITE USEFUL LIFE

Intangible assets with a finite useful life decreased by 521 million euros compared to December 31, 2018. The breakdown and movements are as follows.

(millions of euros)	**12/31/2017**	IFRS 15 adoption	Capital expenditures	Depreciation and amortization	Impairment (losses) / reversals	Disposals	Other changes	**12/31/2018**
Industrial patents and intellectual property rights	**1,223**		498	(847)	–	–	382	**1,256**
Concessions, licenses, trademarks and similar rights	**1,800**		23	(297)	–	–	634	**2,160**
Other intangible assets	**80**	(78)	–	(2)	–	–	–	**–**
Work in progress and advance payments	**1,146**		2,789	–	4	–	(1,016)	**2,923**
Total	**4,249**	**(78)**	**3,310**	**(1,146)**	**4**	**–**	**–**	**6,339**

(millions of euros)	**12/31/2018**	IFRS 16 reclassifications	Capital expenditures	Depreciation and amortization	Impairment (losses) / reversals	Disposals	Other changes	**12/31/2019**
Industrial patents and intellectual property rights	**1,256**		511	(842)			424	**1,349**
Concessions, licenses, trademarks and similar rights	**2,160**	(120)	–	(380)			1,719	**3,379**
Other intangible assets	**–**		1					**1**
Work in progress and advance payments	**2,923**		307			(1)	(2,140)	**1,089**
Total	**6,339**	**(120)**	**819**	**(1,222)**	**–**	**(1)**	**3**	**5,818**

Following the adoption of IFRS16 (Leases), the Indefeasible Right of Use - IRU for an amount of 120 million euros was reclassified from Intangible assets with a finite useful life - Concessions, licenses, trademarks and similar rights to the new item Right of use assets - Plant and machinery.

Industrial patents and intellectual property rights consisted of software patents and television rights. In particular:

- during 2019, television rights were acquired - for a total amount of 29 million euros - for TIM multimedia platforms. Television rights are amortized over the duration of the contracts;
- application and plant operation software, purchased outright and with user licenses, is amortized over an expected useful life of two or three years;
- patents are amortized over five years. A statement is made to the effect that the column Other changes includes 2 million euros relating to patent rights acquired as a result of the merger of Noverca S.r.l., which took place on November 1, 2019, with tax and accounting effects backdated to January 1, 2019.

Concessions, licenses, trademarks and similar rights mainly related to the unamortized cost of licenses for mobile and fixed telecommunications services. Compared to December 31, 2018, these are up by 1,219 million euros mainly due to the entry into force of the user licenses for the frequencies in 3600-3800 MHz and 26.5-27.5 GHz bands. You are reminded that in 2018, as a result of the participation in the tender for the assignment of the user rights for the frequencies in the 694-790 MHz, 3600-3800 MHz and 26.5-27.5 GHz bands, to be used for 5G mobile communication services in Italy, TIM acquired the rights for an amount of 2,399 million euros (net of the 8 million euro discount applied to the award proportionate to the population in the areas affected by the testing). The user rights were formally awarded on October 9, 2018, with the rights to 3600–3800 MHz and 26.5–27.5 GHz frequencies made available on a definitive basis in January 2019; the user rights to 694–790 MHz frequencies will be made available in July 2022. The payment of the rights awarded will take place in annual installments, the first six of which have already been unpaid, for an amount of 495 million euros.

The amount of telephone licenses and similar rights in operation at December 31, 2019 (3,379 million euros) and their useful lives are detailed below:

Type	Residual amount at 12/31/2019 (millions of euros)	Useful life (Years)	Maturity	Amortization expense for 2019 (millions of euros)
UMTS	269	18	12/31/2021	134
UMTS 2100 MHz	15	12	12/31/2021	7
WiMax	3	15	05/31/2023	1
LTE 1800 MHz	86	18	12/31/2029	9
LTE 800 MHz	600	17	12/31/2029	60
LTE 2600 MHz	66	17	12/31/2029	6
L Band (1452-1492 MHz)	165	14	12/31/2029	16
900 and 1800 MHz band	547	11	12/31/2029	55
3600-3800 MHz band (5G)	1,597	19	12/31/2037	89
26.5-27.5 GHz band (5G)	31	19	12/31/2037	2

Intangible assets in progress and advance payments amounted to 1,089 million euros (2,923 million euros at December 31, 2018), a decrease of 1,834 million euros, mainly as a result of the above-mentioned reclassification to licenses of the user rights for the frequencies in the 3600-3800 MHz and 26.5-27.5 GHz (5G) bands. They include 680 million euros relating to the rights to frequencies in the 694-790 MHz bands that are not yet operational and work in progress mainly relating to software development. The Other changes column includes 4 million euros relating to intangible assets in progress acquired following the aforementioned merger of Noverca S.r.l.

Capital **expenditures** in 2019 amounted to 819 million euros, down 2,491 million euros compared to 2018, mainly due to the investment made in 2018 and related to the aforementioned acquisition of the user rights of the frequencies in the 694-790 MHz, 3600-3800 MHz and 26.5-27.5 GHz bands, to be allocated to 5G mobile communication services.
They include 185 million euros of internally generated assets (197 million euros in 2018), involving development and evolutionary maintenance of software programs and platforms and innovative network engineering and solution, application and service design activities.

Amortization of intangible assets amounted to 1,222 million euros and increased by 76 million euros compared to the amount recognized in 2018 (1,146 million euros). Amortization is recorded in the income statement under the components of EBIT.

The gross carrying amount, accumulated impairment losses and accumulated depreciation at December 31, 2019 and December 31, 2018 can be summarized as follows:

		12/31/2018		
(millions of euros)	**Gross carrying amount**	**Accumulated impairment losses**	**Accumulated depreciation**	**Net carrying amount**
Industrial patents and intellectual property rights	6,761		(5,505)	1,256
Concessions, licenses, trademarks and similar rights	5,006		(2,846)	2,160
Other intangible assets	55		(55)	–
Work in progress and advance payments	2,949	(26)		2,923
Total	**14,771**	**(26)**	**(8,406)**	**6,339**

(millions of euros)	Gross carrying amount	12/31/2019 Accumulated impairment losses	Accumulated depreciation	Net carrying amount
Industrial patents and intellectual property rights	7,060		(5,711)	**1,349**
Concessions, licenses, trademarks and similar rights	6,523		(3,144)	**3,379**
Other intangible assets	56		(55)	**1**
Work in progress and advance payments	1,089			**1,089**
Total	**14,729**	**–**	**(8,911)**	**5,818**

With regard to the gross carrying amounts of intangible assets with a finite useful life, in 2019 disposals of 636 million euros were made, fully amortized, relating to intellectual property rights, which mainly concerned obsolete releases of system software; the work in progress relating to DBSS, already written down for the amount of 26 million euros, was also disposed of, with consequent use of the dedicated write-down provision.

NOTE 5
TANGIBLE ASSETS

PROPERTY, PLANT AND EQUIPMENT, OWNED

The item decreased by 191 million euros compared to December 31, 2018. The breakdown and movements are as follows.

(millions of euros)	12/31/2017	Capital expenditures	Depreciation and amortization	Impairment (losses) / reversals	Disposals	Other changes	12/31/2018
Land	**193**					31	**224**
Buildings (civil and industrial)	**469**	78	(33)			60	**574**
Plant and equipment	**9,183**	1,210	(1,669)		(10)	448	**9,162**
Manufacturing and distribution equipment	**35**	7	(14)			2	**30**
Other	**235**	45	(95)			34	**219**
Construction in progress and advance payments	**756**	320			(7)	(496)	**573**
Total	**10,871**	**1,660**	**(1,811)**	**–**	**(17)**	**79**	**10,782**

(millions of euros)	12/31/2018	Reclassifications IFRS 16	Capital expenditures	Depreciation and amortization	Impairment (losses) / reversals	Disposals	Other changes	12/31/2019
Land	**224**						2	**226**
Buildings (civil and industrial)	**574**		6	(36)			21	**565**
Plant and equipment	**9,162**		1,120	(1,689)		(20)	359	**8,932**
Manufacturing and distribution equipment	**30**		5	(12)			2	**25**
Other	**219**	(25)	41	(81)			33	**187**
Construction in progress and advance payments	**573**		486	–		(3)	(400)	**656**
Total	**10,782**	**(25)**	**1,658**	**(1,818)**	**–**	**(23)**	**17**	**10,591**

Following the adoption of IFRS16 (Leases), the improvements on leased assets for an amount of 25 million euros was reclassified from Owned tangible assets - Other assets to the new item Rights of use assets - Other assets.

Land includes both built-up land (with buildings or light constructions) and other available land (on which various building works stand that are not recorded in the land registry, such as pylons, building podia, etc.). It should be noted that land, including land pertaining to buildings, is not depreciated.

The item **Buildings (civil and industrial)** includes buildings for industrial use hosting telephone exchanges or for office and light constructions (small prefabricated buildings and stacked containers).

The item **Plant and machinery** represents the technical infrastructure used for the provision of telecommunications services (transport and distribution of voice/data traffic). In detail it consists of switching and power supply systems, copper and fiber optic backbones, transmission equipment for fixed and mobile networks and traffic termination telephone systems used by the various customer segments. This item decreased by 230 million euros compared to December 31, 2018, mainly as a result of a higher incidence of the amortization charge for the year, partially offset by the capital expenditure and exercisability relating to the access and carrier network in fiber optics (202 million euros), underground and overhead copper network (292 million euros), subscriber connection units (181 million euros), LTE / UMTS core + access (159 million euros), NGAN equipment (64 million euros), transmission equipment including SDH-Wdm (105 million euros), data network and switching (223 million euros) and fixed and mobile commercial products for customer rental contracts (151 million euros).

Manufacturing and distribution equipment consists of instruments and equipment used for the operation and maintenance of plant and equipment.

Other is mostly made up of hardware for the functioning of the Data Centers and for work stations, furniture and fixtures and, to a minimal extent, transport vehicles and office machines; decreased by 32 million euros compared to December 31, 2018, mainly as a result of the depreciation charge for the year (81 million euros) and of the above-mentioned reclassification of improvements on leased assets to the Rights of use on leased assets item. Investments (41 million euros) are mainly attributable to the purchase of hardware for the data center and work stations. The Other changes column includes 2 million euros relating to intangible assets acquired following the aforementioned merger of Noverca S.r.l.

Construction in progress and advance payments increased by 83 million euros compared to December 31, 2018 and refers to the internal and external costs incurred for the acquisition and internal production of tangible assets, which are not yet in use. Other changes included the entry intro operation of capitalizations from previous years.

Disposals amounted to 23 million euros and mainly related to disposals of the Mobile network (10 million euros), Cabinet sales (3 million euros) and disposals for the closure of BTS-Base Transceiver Station sites (3 million euros).

Capital expenditures in 2019, amounting to 1,658 million euros, decreased by 2 million euros. include 218 million euros of internally generated assets (237 million euros in 2018), relating to the installation of access and carrier networks.

Depreciation of tangible assets in 2019 totaled 1,818 million euros, an increase of 7 million euros compared to 2018.
Depreciation is calculated using the straight-line method over the remaining useful lives of the assets in accordance with the depreciation plan reviewed annually to take account of useful lives by single class of fixed asset. The effects of any changes in the useful life are recognized in the separate income statement prospectively.
Depreciation for the year 2019 is calculated on a straight-line basis over the estimated useful lives of the assets according to the following minimum and maximum rates:

Buildings (civil and industrial)	3% – 5.55%
Plant and equipment	3% - 50%
Manufacturing and distribution equipment	20%
Other	11% - 33%

The gross carrying amount, accumulated impairment losses and accumulated depreciation at December 31, 2019 and December 31, 2018 can be summarized as follows:

	12/31/2018			
(millions of euros)	Gross carrying amount	Accumulated impairment losses	Accumulated depreciation	Net carrying amount
Land	224			**224**
Buildings (civil and industrial)	1,767		(1,193)	**574**
Plant and equipment	61,932	(5)	(52,765)	**9,162**
Manufacturing and distribution equipment	285		(255)	**30**
Other	2,736	(3)	(2,514)	**219**
Construction in progress and advance payments	573			**573**
Total	**67,517**	**(8)**	**(56,727)**	**10,782**

(millions of euros)	Gross carrying amount	12/31/2019 Accumulated impairment losses	Accumulated depreciation	Net carrying amount
Land	226			**226**
Buildings (civil and industrial)	1,794		(1,229)	**565**
Plant and equipment	62,204	(5)	(53,267)	**8,932**
Manufacturing and distribution equipment	284		(259)	**25**
Other	2,124	(3)	(1,934)	**187**
Construction in progress and advance payments	656			**656**
Total	**67,288**	**(8)**	**(56,689)**	**10,591**

With regard to the gross carrying amounts of non-current tangible assets, in 2019 disposals were made for a total value of 1,708 million euros, mainly in relation to fully depreciated assets. The assets most affected were: centralized and peripheral hardware equipment (488 million euros), switching systems (498 million euros), Mobile access and core (221 million euros), rented equipment (142 million euros), subscriber connections for renewal (121 million euros), poles (116 million euros), underground and aerial network (60 million euros) and FTTC and ADSL (29 million euros).

ASSETS HELD UNDER FINANCE LEASES

Assets held under finance leases to December 31, 2018, it amounted to 1,694 million euros.
Following the adoption of IFRS 16 (Leases), as of January 1, 2019 this amount was reclassified in the new item "Rights of use assets" to which reference is made.
As at December 31, 2018 the item was broken down as follows:

(millions of euros)	12/31/2017	Capital expenditures	Increases in finance leasing contracts	Depreciation and amortization	(Write-downs) /Reversals	Disposals	Other changes	12/31/2018
Land	**16**							**16**
Buildings (civil and industrial)	**1,768**	32	12	(159)		(9)	(279)	**1,365**
Plant and equipment	**99**	9		(4)			5	**109**
Other	**133**		46	(35)		(4)		**140**
Construction in progress and advance payments	**56**	32					(24)	**64**
Total	**2,072**	**73**	**58**	**(198)**	**–**	**(13)**	**(298)**	**1,694**

Amortization and impairment losses were recorded in the income statement as components of the operating result.

The gross carrying amount, accumulated impairment losses and accumulated depreciation at December 31, 2018 were summarized as follows:

		12/31/2018		
(millions of euros)	Gross carrying amount	Accumulated impairment losses	Accumulated depreciation	Net carrying amount
Land	16			**16**
Buildings (civil and industrial)	2,792	(13)	(1,414)	**1,365**
Plant and equipment	114		(5)	**109**
Other	230		(90)	**140**
Construction in progress and advance payments	64			**64**
Total	**3,216**	**(13)**	**(1,509)**	**1,694**

NOTE 6
RIGHTS OF USE ASSETS

Following the adoption of IFRS 16 (Leases), TIM S.p.A. has chosen to classify rights of use assets in a specific item in the statement of financial position.
The changes in rights of use assets during 2019 are provided below:

(millions of euros)	12/31/2018	Reclassifications IFRS 16	Adoption IFRS 16	Capital expendi-tures	Increases in finance leasing contracts	Depreciation and amortization	Disposals	Other changes	12/31/2019
Property	–	1,406	2,364	33	588	(567)	(44)	(11)	3,769
Plant and equipment	–	228	545	11	263	(80)	(1)	13	979
Equipment	–	–							–
Other	–	141	–		10	(32)	(2)		117
Construction in progress and advance payments	–	64	–	16				(39)	41
Total	–	**1,839**	**2,909**	**60**	**861**	**(679)**	**(47)**	**(37)**	**4,906**

The column IFRS 16 reclassifications refers to:

- Indefeasible Right of Use - IRU (120 million euros), previously recognized in Intangible assets with a finite useful life.
- Assets held under finance leases (1,694 million euros), previously recognized in Tangible assets;
- Improvements on rental (25 million euros), previously recognized in Tangible assets.

The Adoption of IFRS 16 column includes the effects of first-time adoption of IFRS 16.

Investments consisted of 11 million euros for the acquisition of IRU transmission capacity, 26 million euros for incremental and improvement expenses incurred for leased property and non-property assets and 7 million euros for incremental changes for allocations to the ARO-Asset Retirement Obligation provision. Investments on Assets under construction and advances totaling 16 million euros were made in connection with improvements in progress.

Increases in finance leasing contracts include the higher value of the rights of use recorded as a result of new leases, increases of lease payments and renegotiations of agreements existing both land and buildings for office use and industrial relationship over time, to infrastructure sites for the mobile telephone network infrastructure and network. In this regard, it should be noted that the adoption of the new IFRS16 (Leases) on January 1, 2019 lease agreements (that are not service contracts) are represented in accounting by recognizing a financial liability in the statements of financial position, represented by the current value of future rent charges, against recognition of a rights of use asset of the leased asset.
In particular, the increases - totaling 861 million euros - refer for around 708 million euros to higher rights of use for lease agreements under IFRS16 and for the remaining 153 million euros to higher rights of use for agreements previously measured as finance leases pursuant to IAS 17.

The item **Disposals** represents the book value of the assets from property lease contracts (and related improvements) issued in advance, net of the value of the residual financial debt.

The item **Other changes** includes the transfers during the year and the changes related to the lower value of rights of use recorded as a result of contractual changes during the year, mainly for lease liabilities under IFRS16.

Depreciation and **impairment** losses have been recorded in the income statement as components of EBIT.

The item **Property**) includes buildings and land under lease contracts and the related building adaptations; they decreased by 1 million euros compared to the overall value recognized as at January 1, 2019.

The item **Plant and equipment** mainly includes rights of use on infrastructures for telecommunications services. This increased by 206 million euros compared with the total value recognized as at January 1, 2019, essentially due to increases in leases during the year.

The item **Other** mainly comprises the finance leases on autovehicles.

The gross carrying amount, accumulated impairment losses and accumulated depreciation at December 31, 2019 can be summarized as follows:

(millions of euros)	12/31/2019			
	Gross carrying amount	Accumulated impairment losses	Accumulated depreciation	Net carrying amount
Property	5,882	(13)	(2,100)	**3,769**
Plant and equipment	1,146		(167)	**979**
Other	227		(110)	**117**
Construction in progress and advance payments	41			**41**
Total	**7,296**	**(13)**	**(2,377)**	**4,906**

NOTE 7
INVESTMENTS

Investments decreased 960 million euros compared to December 31, 2018 and included:

(millions of euros)	12/31/2019	*of which Financial Instruments*	12/31/2018	*of which Financial Instruments*
Subsidiaries	6,825		7,781	
Associates and joint ventures	3	–	7	–
Other investments	33	*33*	33	*33*
Total	**6,861**	*33*	**7,821**	*33*

Further details on Financial Instruments are provided in the Note "Supplementary disclosures on financial instruments".

As permitted by IFRS 9, TIM S.p.A. now measures all Other Investments at fair value through other comprehensive income (FVTOCI).

In 2019 the transactions with subsidiaries, associates, joint ventures and other equity investments of TIM S.p.A. were the following:

- June 24, 2019: sale of the 50% TIM S.p.A. shareholding in Alfiere S.p.A. to CDP Immobiliare S.r.l.;
- July 19, 2019: sale of the 0.01% TIM S.p.A. shareholding in Assicurazioni Generali;
- November 1, 2019: merger of Noverca S.r.l. with TIM S.p.A., with accounting and tax effects backdated to 1 January 2019;
- December 2, 2019: sale of the 70% TIM S.p.A. shareholding in Persidera S.p.A. to F2i TLC 2 S.p.A. and to EI Towers S.p.A.; As required by the agreements, Persidera was split into two separate entities: the first (Persidera S.p.A.), is the holder of the five digital terrestrial agreement frequencies and the related asset and employee contracts, was sold entirely to F2i TLC 2 S.p.A. and the second (NetCo S.p.A.), with the entire network infrastructure and its employees, was sold it its entirety to EI Towers S.p.A.;
- a December 31, 2019, following the outcome of the Company's Shareholders' Meeting which approved the merger by incorporation of Vodafone Towers S.r.l. into INWIT, a preparatory activity to create the first Italian Tower Operator with the consequent sale by the TIM Group of the controlling stake in INWIT, TIM S.p.A.'s ownership interest in the company has been reclassified among the "Discontinued operations/held for sale", with completion of the transaction by the end of 2020 considered highly likely.

Movements during 2019 for each investment and the corresponding amounts at the beginning and end of the year are reported below. The list of investments in subsidiaries, associates and joint ventures at December 31, 2019 is presented in compliance with Article 2427 of the Italian Civil Code and reported in the Note "List of investments in subsidiaries, associates and joint ventures".

Investments

(thousands of euros)	**Carrying amount at 12/31/2018**	Mergers/ Demergers	Acquisitions/ Subscriptions/ Payments to cover losses	Disposals/ Reimbursements	Impairment losses/ Reversals/ Fair value adjustments	Other changes and reclassifications	Total changes	**Carrying amount at 12/31/2019**
Investments in subsidiaries								
ADVANCED CARING CENTER (#)	4					(4)	(4)	-
CD FIBER	50						-	50
FLASH FIBER	163,224		39,200				39,200	202,424
HR SERVICES	570					5	5	575
INFRASTRUTTURE WIRELESS ITALIANE	828,494					(828,494)	(828,494)	-
NETCO	-	-		(83,561)		83,561	-	-
NOVERCA	18,691	(18,691)					(18,691)	-
OLIVETTI	11,984				(11,984)		(11,984)	-
PERSIDERA	133,186			(49,625)		(83,561)	(133,186)	-
TELECOM ITALIA CAPITAL	2,388						-	2,388
TELECOM ITALIA FINANCE	5,914,971						-	5,914,971
TELECOM ITALIA LATAM PARTICIPAÇÕES E GESTÃO ADMINISTRATIVA	-						-	-
TELECOM ITALIA SAN MARINO	7,565						-	7,565
TELECOM ITALIA SPARKLE	586,668					58	58	586,726
TELECOM ITALIA TRUST TECHNOLOGY	8,498						-	8,498
TELECOM ITALIA VENTURES	2,541				(324)		(324)	2,217
TELECONTACT CENTER	12,523					4	4	12,527
TELENERGIA	50						-	50
TELSY	14,517						-	14,517
TI AUDIT COMPLIANCE LATAM (in liquidation)	313						-	313
TI SPARKLE MED (#)	3					(3)	(3)	-
TIM BRASIL SERVIÇOS E PARTICIPAÇÕES	-						-	-
TIM RETAIL (ex 4 G RETAIL)	15,108						-	15,108
TIM TANK	19,175		2,663		(3,229)		(566)	18,609
TIMVISION	2,550				(1,789)	-	(1,789)	761
TN FIBER	38,498				(941)		(941)	37,557
	7,781,571	**(18,691)**	**41,863**	**(133,186)**	**(18,267)**	**(828,434)**	**(956,715)**	**6,824,856**

(#) Company indirectly controlled by TIM S.p.A. whose employees subscribed to the 2010 and/or 2014 Broad-Based Share Ownership Plans (BBSOP).

(thousands of euros)	**Carrying amount at 12/31/2018**	Mergers/ Demergers	Acquisi-tions/ Subscri-ptions/ Payments to cover losses	Disposals/ Reimbur-sements	Impairment losses/ Reversals/ Fair value adjustments	Other changes and reclassifi-cations	Total changes	**Carrying amount at 12/31/2019**
Investments in associates and joint ventures								
ALFIERE	-		1,326	(1,326)			-	-
AREE URBANE (in liquidation)	-						-	-
ASSCOM INSURANCE BROKERS	20						-	20
NORDCOM	2,143						-	2,143
TIGLIO I	4,835				(3,646)		(3,646)	1,189
TIGLIO II (in liquidation)	119						-	119
Consorzio EO (in liquidation)	-						-	-
	7,117	**-**	**1,326**	**(1,326)**	**(3,646)**	**-**	**(3,646)**	**3,471**

(thousands of euros)	**Carrying amount at 12/31/2018**	Mergers/ Demergers	Acquisi-tions/ Subscri-ptions/ Payments to cover losses	Disposals/ Reimbur-sements	Impairment losses/ Reversals/ Fair value adjustments	Other changes and reclassifi-cations	Total changes	**Carrying amount at 12/31/2019**
Investments in other companies								
ASSICURAZIONI GENERALI (**)	2,739			(2,739)			(2,739)	-
BANCA UBAE	4,116				(1,543)		(1,543)	2,573
FIN. PRIV.(**)	15,593				5,055		5,055	20,648
IST. ENCICLOPEDIA ITALIANA G. TRECCANI	3,832						-	3,832
ISTITUTO EUROPEO DI ONCOLOGIA	2,385				173		173	2,558
Other minor investments	3,950		282	(42)	(925)	-	(685)	3,265
	32,615	**-**	**282**	**(2,781)**	**2,760**	**-**	**261**	**32,876**
Total Investments	**7,821,303**	**(18,691)**	**43,471**	**(137,293)**	**(19,153)**	**(828,434)**	**(960,100)**	**6,861,203**

(**) Recognized investments measured at fair value through other comprehensive income (FVTOCI).

NOTE 8
FINANCIAL ASSETS (NON-CURRENT AND CURRENT)

Financial assets (non-current and current) were broken down as follows:

(millions of euros)		12/31/2019	12/31/2018
Non-current financial assets			
Financial receivables and other non-current financial assets			
Financial receivables from subsidiaries		491	306
Financial receivables from associates and joint ventures		–	–
Financial receivables from other related parties		–	–
Financial receivables for lease contracts		16	15
Receivables from employees		40	39
Hedging derivatives relating to hedged items classified as non-current assets/liabilities of a financial nature		530	385
Non-hedging derivatives		1,272	897
Other financial receivables		–	–
Total non-current financial assets	**(a)**	**2,349**	**1,642**
Current financial assets			
Securities other than investments			
Measured at amortized cost (AC)		–	–
Measured at fair value through other comprehensive income (FVTOCI)		–	466
Measured at fair value through profit or loss (FVTPL)		–	–
		–	**466**
Financial receivables and other current financial assets			
Liquid assets with banks, financial institutions and post offices (with maturity over 3 months)		–	–
Financial receivables for lease contracts		54	64
Receivables from employees		12	13
Hedging derivatives relating to hedged items classified as current assets/liabilities of a financial nature		48	79
Non-hedging derivatives		53	165
Financial receivables from parent companies		–	–
Financial receivables from subsidiaries		6	4
Financial receivables from associates and joint ventures			–
Other financial receivables		3	2
		176	**327**
Cash and cash equivalents		**829**	**885**
Total current financial assets	**(b)**	**1,005**	**1,678**
Total financial assets	**(c)=(a+b)**	**3,354**	**3,320**

Further details on Financial Instruments are provided in the Note "Supplementary disclosures on financial instruments".

Financial receivables for lease contracts (current and non-current) amounted to 70 million euros (79 million euros at December 31, 2018) and included the following contractual relationships recognized in accordance with the financial method envisaged by IFRS 16:

- new commercial offers for Consumer and Business customers involving the rental of ADSL routers (21 million euros, 37 million euros at December 31, 2018);
- contracts for the rental of products to TIM customers with ancillary services ("full rent formula") and leasing contracts entered into in prior years by Teleleasing with TIM customers (4 million euros, 8 million euros at December 31, 2018);

- agreements for the sale of network infrastructure in IRU with deferred collection over time (33 million euros at December 31, 2019, 34 million euros at December 31, 2018) recognized using the financial method envisaged by IFRS 16 given the contractual term substantially close to the economic life of the asset;
- contracts for the lease of commercial products to customers, for an amount of 12 million euros. For the financial receivables for lease assets are offset by the financial debt for the corresponding leases payable.

Receivables from employees (current and non-current) amounted to 52 million euros and included the remaining amount due on loans granted.

Hedging derivatives amounting to 578 million euros (464 million euros at December 31, 2018), consisted of:

- hedged items classified as non-current assets/liabilities of a financial nature (530 million euros), mainly pertaining to the mark-to-market spot valuation component of cash flow hedge derivative contracts (of which 150 million euros entered into with Telecom Italia Finance S.A.) and fair value hedge derivative contracts;
- hedged items classified as current assets/liabilities of a financial nature (48 million euros), relating to the accrued income component of cash flow hedges and fair value hedges.

Non-hedging derivatives amounted to 1,325 million euros (1,062 million euros at December 31, 2018) and included the asset value of transactions that TIM S.p.A. carries out on behalf of Group companies under centralized treasury arrangements. This item is offset by the corresponding item classified in financial liabilities. At December 31, 2019, non-hedging derivatives consisted of:

- items classified under Non-current financial assets (1,272 million euros), which refer to the mark-to-market *spot* valuation component of the non-hedging derivatives;
- items classified as current financial assets (53 million euros), relating to the accrued income component on non-hedging derivative contracts.

Further details are provided in the Note "Derivatives".

Cash and cash equivalents decreased by 56 million euros compared to December 31, 2018 and were broken down as follows:

(millions of euros)	12/31/2019	12/31/2018
Liquid assets with banks, financial institutions and post offices	828	881
Checks, cash and other receivables and deposits for cash flexibility	–	1
Receivables from subsidiaries	1	3
Total	**829**	**885**

The different technical forms of investing available cash can be analyzed as follows:

- maturities: investments have a maximum maturity of three months;
- counterparty risk: investments are made with leading banking and financial institutions with high credit quality and with a rating of at least BBB- according to Standard & Poor's or similar rating agencies;
- Country risk: deposits have been made mainly in major European financial markets.

NOTE 9
MISCELLANEOUS RECEIVABLES AND OTHER NON-CURRENT ASSETS

Miscellaneous receivables and other non-current assets at December 31, 2019 breaks down as follows:

(millions of euros)		12/31/2019	*of which Financial Instruments*	12/31/2018	*of which Financial Instruments*
Miscellaneous receivables (non-current)					
Miscellaneous receivables from subsidiaries		5	–	9	*5*
Miscellaneous receivables from associates		–	–	–	–
Other receivables		39	*2*	43	*5*
	(a)	**44**	*2*	**52**	*10*
Other non-current assets					
Deferred contract costs		1,680	–	1,631	
Other cost deferrals		22	–	21	
	(b)	**1,702**	–	**1,652**	–
Total	**(a+b)**	**1,746**	**2**	**1,704**	**10**

Further details on Financial Instruments are provided in the Note "Supplementary disclosures on financial instruments".

Miscellaneous receivables (non-current)

The item includes current income tax receivables of 37 million euros (substantially unchanged compared to December 31, 2018).

Other non-current assets

This item rose by 50 million euros compared to December 31, 2018 and includes:

- **Contract costs deferred** to 1,680 million euros (1,631 million euros at December 31, 2018): are mainly related to the deferral of costs connected to the activation and acquisitions of new contracts with customers. Contractual costs (mainly technical setup fees and commissions to the sales network) are deferred and recognized in the separate income statement according to the expected duration of the contractual relationship with customers (on average around 3 years for the mobile business and 7 years for the fixed business).
  Total deferred contract costs (non-current and current) amounted to 2,324 million euros; the breakdown of the total deferred contract costs (non-current and current) at December 31, 2019 is provided below.

(millions of euros)	12/31/2019	12/31/2018
Deferred contract costs		
Non-current deferred contract costs	1,680	1,631
Current deferred contract costs	644	655
Total	**2,324**	**2,286**

(millions of euros)	12/31/2018	Increase	Release to income statement	Other changes	12/31/2019
Contract acquisition costs	**1,253**	404	(370)	11	**1,298**
Contract execution costs	**1,033**	231	(238)	-	**1,026**
Total deferred contract costs	**2,286**	**635**	**(608)**	**11**	**2,324**

Other changes includes 11 million euros of contract acquisition costs acquired as a result of the merger of Noverca S.r.l. with TIM S.p.A.

Total deferred contract costs will be recognized in the income statement of future years of the Company and in particular approximately 640 million euros in 2020, based on the amount at December 31, 2019 without taking into account the new deferred portions; In particular:

(millions of euros)	12/31/2019	year of recognition in the income statement					
		2020	**2021**	**2022**	**2023**	**2024**	**After 2024**
Deferred contract costs							
Contract acquisition costs	**1,298**	393	303	216	155	115	116
Contract execution costs	**1,026**	250	227	200	162	113	74
Total	**2,324**	**643**	**530**	**416**	**317**	**228**	**190**

- **Other deferred costs** of 22 million euros (21 million euros at December 31, 2018): they mainly refer to rental costs.

NOTE 10
INCOME TAX EXPENSE (CURRENT AND DEFERRED)

CURRENT INCOME TAX RECEIVABLES

Non-current income tax receivables (classified as Miscellaneous receivables and other non-current assets) amounted to 37 million euros at December 31, 2019, basically unchanged compared to December 31, 2018; they relate to non-assigned receivables for taxes and interest resulting from the recognized deductibility from IRES tax of the IRAP tax calculated on labor costs, relating to years prior to 2012, following the entry into force of Italian Decree Law 16/2012.

Current income tax receivables amounted to 67 million euros, decreasing compared to December 31, 2018 (99 million euros) and include the IRES tax receivable for advance payments for the year 2019 of 63 million euros and TIM's IRAP tax receivable for advance payments of 4 million euros.

TAX ASSETS AND DEFERRED TAX LIABILITIES

The net balance is composed as follows:

(millions of euros)	12/31/2019	12/31/2018
Deferred tax assets	882	882
Deferred tax liabilities	(2)	(3)
Total	**880**	**879**

The presentation of deferred tax assets and liabilities in the financial statements takes account of offsets to the extent that such offsets are legally permitted. The composition of the gross amounts prior to offsetting is presented below:

(millions of euros)	12/31/2019	12/31/2018
Deferred tax assets	928	945
Deferred tax liabilities	(48)	(66)
Total	**880**	**879**

The temporary differences which made up this line item at December 31, 2019 and 2018, as well as the movements during 2019 were as follows:

(millions of euros)	12/31/2018	Recognized in profit or loss	Recognized in equity	Other changes	12/31/2019
Deferred tax assets:					
Provisions for pension fund integration Law 58/92	5				**5**
Provisions	345	(37)			**308**
Provision for bad debts	118	(17)			**101**
Financial instruments	320		39		**359**
Capital grants	-				**-**
Taxed depreciation and amortization	112	(11)			**101**
Discounting of provision for employee severance indemnities	20	(2)	10		**28**
Other deferred tax assets	25	1			**26**
Total	**945**	**(66)**	**49**		**928**
Deferred tax liabilities:					
Accelerated depreciation	(5)				**(5)**
Deferred gains	(2)	1			**(1)**
Financial instruments	(11)		9		**(2)**
Bond issue expense	(9)	2			**(7)**
Other deferred tax liabilities	(39)	8		(2)	**(33)**
Total	**(66)**	**11**	**9**	**(2)**	**(48)**
Total deferred tax assets net of deferred tax liabilities	**879**	**(55)**	**58**	**(2)**	**880**

The expirations of deferred tax assets and deferred tax liabilities at December 31, 2019 were the following:

(millions of euros)	Within 1 year	Beyond 1 year	Total at 12/31/2019
Deferred tax assets	342	586	**928**
Deferred tax liabilities	(9)	(39)	**(48)**
Total deferred tax assets net of deferred tax liabilities	**333**	**547**	**880**

INCOME TAX PAYABLES

Current income tax payables amounted to December 31, 2019 17 million euros (14 million euros at December 31, 2018), an increase of 3 million euros; **Non-current income tax payables** amounted to December 31, 2019 to 19 million euros (zero at December 31, 2018).
The increase was due to the reclassification from the provision for taxation and tax risks income tax liabilities related to direct taxes (21 million euros) carried out pursuant to IFRIC 23.

INCOME TAX EXPENSE

The **income tax expense** for the years ended December 31, 2019 and 2018 is detailed below.

(millions of euros)	2019	2018
IRAP taxes for current year	96	131
IRES taxes for current year	65	253
Expenses/(income) from tax consolidation	6	17
Current taxes of prior years	(32)	47
Total current taxes	**135**	**448**
Deferred income taxes	45	12
Deferred taxes of prior years	10	(26)
Total deferred taxes	**55**	**(14)**
Total income tax expense for the year	**190**	**434**

The current IRES tax rate is 24%, while the IRAP tax rate is set at 3.9%.
The income for previous years' current taxes (32 million euros) reflects the effects of the actual tax return with respect to the estimate made in the 2018 financial statements on the basis of the information available at the time.
The calculation takes into account the realignment of initial tax differences arising from the adoption of IFRS 16; however, since the latter have a negative balance, it was not necessary to pay substitute taxes, which in any case gave the phenomenon its fiscal significance.
The reconciliation between the theoretical tax charge, calculated on the basis of the IRES tax rate in effect at December 31, 2019 (24%), and the effective tax charge in the separate financial statements is as follows:

(millions of euros)	2019	2018
Profit (loss) before tax		
From continuing operations	572	(1.420)
Total profit (loss) before tax	**572**	**(1.420)**
Theoretical income tax	**137**	**(341)**
Income tax effect on increases (decreases) in variations:		
dividends recognized in income	(32)	(28)
impairment losses, gains and losses on non-deductible investments	(1)	13
non-deductible depreciation, amortization and impairments	4	646
non-deductible costs	37	21
other items (accelerated depreciation and amortization, economic growth aid (ACE), etc.)	(35)	(31)
IRES taxes for previous years	(19)	25
Effective income tax recognized in income statement, excluding IRAP tax	**91**	**305**
IRAP tax	99	129
Total effective income tax recognized in income statement	**190**	**434**

For a better understanding of the above reconciliation, the Regional Income Tax (IRAP tax) has been shown separately so as to avoid any distorting effect arising from the fact that this tax is calculated on a different tax base to the pre-tax profit.

NOTE 11
INVENTORIES

At December 31, 2019, these amounted to 155 million euros and mainly consisted of fixed and mobile telecommunications equipment and terminals and the related accessories.
This item decreased by 107 million euros compared to December 31, 2018 (262 million euros), mainly due to the reduction in the year by in both purchases and consumption, with reference to equipment and accessories for mobile telephony, in application of a more targeted commercial and procurement policy.
In 2019, write-downs of inventories amounted to 2 million euros.
No inventories are pledged as collateral.

NOTE 12
TRADE AND MISCELLANEOUS RECEIVABLES AND OTHER CURRENT ASSETS

Trade and miscellaneous receivables and other current assets at December 31, 2019 breaks down as follows:

(millions of euros)		12/31/2019	of which Financial Instruments	12/31/2018	of which Financial Instruments
Amounts due on construction contracts	**(a)**	**83**		**51**	
Trade receivables					
Receivables from customers		1,531	*1,531*	1,364	*1,364*
Receivables from other telecommunications operators		693	*693*	888	*888*
Receivables from subsidiaries		245	*245*	357	*357*
Receivables from associates and joint ventures		–	–	2	*2*
Receivables from other related parties		2	*2*	1	*1*
Customer collections pending credit		13	*13*	13	*13*
	(b)	**2,484**	*2,484*	**2,625**	*2,625*
Miscellaneous receivables (current)					
Receivables from subsidiaries		9	–	10	–
Receivables from associates and joint ventures		–	–	–	–
Receivables from other related parties		–	–	–	–
Other receivables		313	*112*	298	*121*
	(c)	**322**	*112*	**308**	*121*
Other current assets					
Contract assets		31	*31*	46	*46*
Deferred contract costs		644	–	655	
Other cost deferrals		167	–	165	
	(d)	**842**	*31*	**866**	*46*
Total	**(a+b+c+d)**	**3,731**	**2,627**	**3,850**	**2,792**

Further details on Financial Instruments are provided in the Note "Supplementary disclosures on financial instruments".

The analyses of the aging of the financial instruments included in Trade and miscellaneous receivables and other current assets at December 31, 2019 and 2018 are provided below:

(millions of euros)	12/31/2019	Total current	Total overdue	Overdue: 0-90 days	91-180 days	181-365 days	More than 365 days
Trade and miscellaneous receivables and other current assets	**2,627**	2,125	502	*129*	*54*	*76*	*243*

(millions of euros)	12/31/2018	Total current	Total overdue	Overdue: 0-90 days	91-180 days	181-365 days	More than 365 days
Trade and miscellaneous receivables and other current assets	**2,792**	2,281	511	*40*	*94*	*121*	*256*

Net trade and miscellaneous receivables include assets deriving from contracts with customers (Contract Assets) for 31 million euros; they decreased by 165 million euros compared to December 31, 2018. In particular:

- **current net receivables**: decreased by 156 million euros, due to the significant reduction in Wholesale receivables, as a result of repricing dynamics and higher sales without recourse, as well as the decline in Contract Assets. This trend was offset by the increase in Retail receivables not past due, mainly due to lower sales;
- **overdue net receivables**: decrease by 9 million euros, due to a reduction in the most overdue receivables (-99 million euros for receivables past due by more than 90 days), which were positively impacted by settlement agreements with Other Telecommunication Operators, offset by an increase in receivables due in the short term (+90 million euros), due to the combined effect of a reduction in retail sales, higher receivables for miscellaneous billing and receivables from Other Operators.

Amounts due on construction contracts

They amounted to 83 million euros (51 million euros at December 31, 2018): these include 5 million euros in receivables from the subsidiary Flash Fiber.
The increase compared to December 31, 2018 was mainly linked to higher receivables from network jobs for Public Administration bodies.

Trade receivables

Trade receivables amounted to 2,484 million euros (2,625 million euros at December 31, 2018) and are stated net of the provision for bad debts of 549 million euros (541 million euros at December 31, 2018).
Movements in the provision for bad debts were as follows:

(millions of euros)	12/31/2019	12/31/2018
At January 1	**541**	**530**
Provision charges to the income statement	193	172
Draw downs and other changes	(185)	(161)
At December 31	**549**	**541**

Trade receivables decreased by 141 million euros compared to December 31, 2018, mainly as a result of the changes in the receivables due from other operators, partially offset by the receivables from customers. In particular, we report:

- Receivables from customers: amounted to 1,531 million euros and rose by 167 million euros compared to December 31, 2018;
- Receivables from other operators: amounted to 693 million euros and fell by 195 million euros compared to December 31, 2018;
- Receivables from subsidiaries: amounted to 245 million euros and fell by 112 million euros compared to December 31, 2018; the main components of this item are the supply of TLC equipment and services to Flash Fiber (114 million euros), INWIT (33 million euros), TIM Retail (former 4G Retail) (28 million euros), Telecom

Italia Sparkle (24 million euros), TIM S.A. (18 million euros), Olivetti (13 million euros) and Telenergia (6 million euros).

Miscellaneous receivables (current)

Amounted to 322 million euros (net of a provision for bad debts of 49 million euros), increasing by 14 million euros compared to December 31, 2018. They include:

- **Receivables from subsidiaries**: these amounted to 9 million euros (10 million euros at December 31, 2018) and mainly were related to receivables from Group companies for the tax consolidation (primarily from INWIT);
- **Other receivables:** totaled 313 million euros and break down as follows:

(millions of euros)	12/31/2019	12/31/2018
Advances to suppliers	2	11
Receivables from employees	9	9
Tax receivables	35	3
Receivables for grants from the government and public entities	44	91
Sundry receivables	223	184
Total	**313**	**298**

Tax receivables amounted to 35 million euros are essentially represented by credit amounts resulting from tax returns, tax credits, as well as VAT credits on the acquisition of motor vehicles and related accessories requested for reimbursement pursuant to Law Decree no. 258/2006 converted with amendments by Law no. 278/2006.
Receivables for grants from the government and public entities (44 million euros) mainly relate to Ultra-Broadband-UBB and Broadband-BB projects. The grants are recognized to the income statement when the related plants become ready for use.
Sundry receivables mainly included:

- receivables for with-recourse assignments to factoring companies (38 million euros);
- receivables from social security and assistance agencies (34 million euros);
- miscellaneous receivables from OLOs (69 million euros), including receivables for the contribution of the dividends to the Universal Service;
- receivables for the repayment of the fine relating to Antitrust Case I761, following the ruling of the Council of State in December 2019 (21 million euros).

Other current assets

Other current assets amounted to 842 million euros and dropped by 24 million euros compared to December 31, 2018; they included:

- **Assets resulting from contracts with customers - Contract Assets** (31 million euros, 46 million euros at December 31, 2018): these refer to the advance recognition of revenues for those bundle contracts (such as product and service packages) with the individual Performance Obligations with different timing for their recognition, in which goods recognized "at point in time" are sold at a discounted price, or for those contracts which, envisaging a discount for a period of time less than the minimum contract duration, pursuant to IFRS 15 need the discount to be reallocated over the minimum contract duration. Contract Assets - net of the related bad debt provision of 2 million euros - decreased by 15 million euros, mainly due to the launch of commercial offers that no longer envisage duration restrictions and reversal to the income statement of the balance previously accumulated;
- **Deferred contract costs** (644 million euros, 655 million euros at December 31, 2018): contractual costs (mainly technical setup fees and commissions to the sales network) are deferred and recognized in the separate income statement according to the expected duration of the contractual relationship with customers (on average around 3 years for the mobile business and 7 years for the fixed business). For additional details on the deferred contract costs and their movement during the year, please refer to the Note "Miscellaneous receivables and other non-current assets";
- **Other cost deferrals:** amounted to 167 million euros and mainly related to:
    - 87 million euros for the deferral of costs related to rental fees and other lease and rental costs;
    - 18 million euros for the deferral of costs for the acquisition of products and services;
    - 14 million euros for insurance premiums;
    - 10 million euros for the deferral of after-sales expenses on application offers;
    - 5 million euros for the deferral of costs related to television rights and internet rights;
    - 4 million euros for maintenance fees.

NOTE 13
DISCONTINUED OPERATIONS / NON-CURRENT ASSETS HELD FOR SALE

Discontinued operations/Non-current assets held for sale totaling 828 million euros, relate to the carrying amount of the investment in the company INWIT S.p.A. classified in this line item following the outcome of the Shareholders' Meeting which approved the merger by incorporation of Vodafone Towers S.r.l. into INWIT, a preparatory activity for the creation of Italy's first Tower Operator with the resulting sale by the TIM Group of its controlling interest in INWIT, which is highly likely to be concluded by the end of 2020.

Specifically, on July 26, 2019, TIM and Vodafone signed agreements relating to extending the current passive infrastructure sharing agreement to INWIT and to share the active component of the mobile network, for a more efficient implementation of new 5G technology over a wider geographical area and at a lower cost. The agreement provides for a phased transaction aimed at consolidating Vodafone's passive network infrastructure within INWIT, creating the largest towerco in Italy with over 22,000 towers across the national territory, which also makes it the second largest towerco in Europe. Vodafone will transfer its passive network infrastructure to a new company, which will subsequently be incorporated into INWIT. After the merger, Vodafone and TIM will not exercise any direction or coordination over INWIT and will jointly control the company.

NOTE 14
EQUITY

Equity consisted of:

(millions of euros)	12/31/2019	12/31/2018
Share capital issued	**11,677**	**11,677**
less: Treasury shares	(21)	(21)
Share capital	**11,656**	**11,656**
Additional paid-in capital	**2,094**	**2,094**
Legal reserve	**2,294**	**2,294**
Other reserves:		
Merger surplus reserve	1,722	1,721
Other	(465)	(271)
Total other reserves	**1,257**	**1,450**
Retained earnings, including profit (loss) for the year	**873**	**644**
Total	**18,174**	**18,138**

Movements in share capital during 2019 are presented in the following tables:

Reconciliation between the number of shares outstanding at December 31, 2018 and at December 31, 2019

(number of shares)		At 12/31/2018	Share issues	At 12/31/2019	% of share capital
Ordinary shares issued	(a)	15,203,122,583		15,203,122,583	71.61
less: treasury shares	(b)	(37,672,014)		(37,672,014)	
Ordinary shares outstanding	(c)	15,165,450,569		15,165,450,569	
Savings shares issued and outstanding	(d)	6,027,791,699		6,027,791,699	28.39
Total shares issued	**(a+d)**	**21,230,914,282**		**21,230,914,282**	**100.00**
Total shares outstanding	**(c+d)**	**21,193,242,268**		**21,193,242,268**	

Reconciliation between the value of shares outstanding at December 31, 2018 and at December 31, 2019

(thousands of euros)		Share capital at 12/31/2018	Change in share capital	Share capital at 12/31/2019
Ordinary shares issued	(a)	8,361,718		8,361,718
less: treasury shares	(b)	(20,720)		(20,720)
Ordinary shares outstanding	(c)	8,340,998		8,340,998
Savings shares issued and outstanding	(d)	3,315,285		3,315,285
Total share capital issued	**(a+d)**	**11,677,003**		**11,677,003**
Total share capital outstanding	**(c+d)**	**11,656,283**		**11,656,283**

The **share capital** was unchanged compared to December 31, 2018.

Share capital information

The ordinary and savings shares of TIM S.p.A. are listed in Italy (FTSE index).
In the shareholder resolutions passed to increase share capital against cash payments, the pre-emptive right can be excluded to the extent of a maximum of ten percent of the pre-existing share capital, on condition that the issue price corresponds to the market price of the shares and that this is confirmed in a specific report issued by the firm charged with the audit of the Company.
The Company sources itself with the capital necessary to fund its requirements for business development and operations; the sources of funds are found in a balanced mix of equity, permanently invested by the shareholders, and debt capital, to guarantee a balanced financial structure and minimize the total cost of capital, with a resulting advantage to all the stakeholders.
Debt capital is structured according to different maturities and currencies to ensure an adequate diversification of the sources of funding and an efficient access to external sources of financing (taking advantage of the best opportunities offered in the financial markets of the euro, U.S. dollar and Pound sterling areas to minimize costs), taking care to reduce the refinancing risk.
The remuneration of equity is proposed by the board of directors to the shareholders' meeting, which meets to approve the annual financial statements, based upon market trends and business performance, once all the other obligations are met, including debt servicing. Therefore, in order to guarantee an adequate remuneration of capital, safeguard company continuity and business development, the Company constantly monitors the change in debt levels in relation to equity, the level of net debt and the operating margin of industrial operations.

Rights of savings shares

The rights of the TIM S.p.A. savings shares are indicated below:

- the profit shown in the duly approved separate financial statements, less the amount appropriated to the legal reserve, must be distributed to the holders of savings shares in an amount up to 5% of the 0.55 euros per share;
- after assigning preferred dividends to the savings shares, the distribution of which is approved by the shareholders' meeting, the remaining profit shall be assigned to all the shares so that the savings shares have the right to dividends that are higher, than the dividends to which the ordinary shares are entitled, by 2% of 0.55 euros per share;
- if in any one year dividends of below 5% of the 0.55 euros per share are paid to the savings shares, the difference is carried over and added to the preferred dividends for the next two successive years;
- in the case of the distribution of reserves, the savings shares have the same rights as ordinary shares. Moreover, when there is no profit or insufficient profit reported in the separate financial statements for the year to satisfy the rights of the savings shares, the shareholders' meeting called to approve those separate financial statements may choose to satisfy the dividend right and/or the additional right by distributing available reserves. The distribution of available reserves for such payments excludes the application of the mechanism extending the right to the preferred dividend not paid through the distribution of profits for the following two years;
- the reduction of share capital as a result of losses does not affect the savings shares except for the amount of the loss which is not covered by the portion of the share capital represented by the other shares;
- upon the wind-up of TIM S.p.A., the savings shares have a pre-emptive right in the reimbursement of capital up to the amount of 0.55 euros per share;
- in the event of the cessation of trading in the Company's ordinary or savings shares, the holder of savings shares may ask TIM S.p.A. to convert its shares into ordinary shares, according to the manner resolved by the special session of the shareholders' meeting called for that purpose within two months of being excluded from trading.

Share capital carries a restriction on tax suspension for an amount of 1,191 million euros.

Additional paid-in capital at December 31, 2019 amounted to 2,094 million euros, showing no change on December 31, 2018.
The **Legal reserve** at December 31, 2019, was 2,294 million euros, unchanged compared to December 31, 2018. The legal reserve carries a tax suspension restriction up to the amount of 1,835 million euros.
Other reserves totaled 1,257 million euros at December 31, 2019, decreasing by 193 million euros compared to December 31, 2018.
The Other reserves moved through the Statements of Comprehensive Income were broken down as follows:

- Reserve for remeasurements of employee defined benefit plans (negative 111 million euros): the reserve decreased by 30 million euros compared to December 31, 2018, following the recognition of employee severance indemnity actuarial losses for the year 2019, after the net fiscal impact (10 million euros);
- Reserve for cash flow hedges (a negative 1,140 million euros; a negative 992 million euros at December 31, 2018): this reserve is related to the accounting of cash flow hedge transactions. In particular, it refers to unrealized gains and losses, net of the related tax effect, on the fair value adjustment of a financial instrument designated as a cash flow hedge;
- Reserve for financial assets measured at fair value through other comprehensive income (12 million euros): this reserve decreased by 5 million euros compared to December 31, 2018.

The Other reserves also include:

- Merger surplus reserve (1,722 million euros) increased by one million euros compared to December 31, 2018, following the merger of Noverca S.r.l. with TIM S.p.A., which took place on November 1, 2019, with accounting and tax effects backdated to January 1, 2019;
- Reserve for other equity instruments: this reserve amounted to 200 million euros (up by 3 million euros compared to December 31, 2018) and consisted of:
    - the amount of the convertible bond maturing 2015-2022 (186 million euros);
    - the amount of the Special Award incentive plan, approved by the Shareholders' Meeting on May 25, 2016 (2 million euros);
    - the amount of the 2018-2020 Long Term Incentive Plan, approved by the Shareholders' Meeting on April 24, 2018 (6 million euros);
    - the value of the stock options granted under the 2014-2016 Stock Option Plan (6 million euros).

  For further details, please refer to the Note “Equity Compensation Plans”.
- Unavailable reserve originating from the application of Article 7, paragraph 7 of Italian Legislative Decree 38/2005 (521 million euros): unchanged from December 31, 2018;
- Miscellaneous reserves (53 million euros).

Retained earnings (accumulated losses), including profit for the year, was positive by 873 million euros at December 31, 2019, with a decrease of 229 million euros compared to December 31, 2018. The movement was connected to the following changes:

- increase of 382 million euros for the profit for 2019;
- reduction of 166 million euros as a result of the distribution of dividends referred to the 2018 financial statements, as approved by the Shareholders' Meeting of March 29, 2019;
- increase of 13 million euros following the partial coverage of the loss for 2018 as approved by the Shareholders' Meeting of 29 March 2019, through the use of the Reserve pursuant to Article 34, Italian Law 576/1975.

The following statement provides additional disclosure on equity and is prepared pursuant to Article 2427, number 7-bis, showing the items in equity separately according to their source, possibility of utilization and distribution, in addition to their utilization in the three-year period 2017-2019.

Statement according to Article 2427, 7-bis

Nature/Description (millions of euros)	Amount at 12/31/2019	Possibility of utilization	Amount available	Summary of the amounts utilized in the three-year period 2017-2019 for absorption of losses	for other reasons
Share capital	**11,656**				
Capital reserves:					
Additional Paid-in capital	2,095	A,B,C	2,095		
Legal reserve	1,953	B			
Reserve for other equity instruments	200	B			
Other	59	A,B,C	59		
Reserve for remeasurements of employee defined benefit plans	57	A,B,C	57		
Reserve pursuant to Article 7, paragraph 7, Italian Law Decree 38/2005	521	B			
Merger surplus reserve	1,679	A,B,C	1,679		
Profit reserves:					
Additional Paid-in capital	(1)	A,B,C	(1)		
Legal reserve	341	B			
Reserve pursuant to Article 34, Italian Law 576/1975	-	A,B,C	-	13	
Other	13	A,B,C	13		
Reserve for cash flow hedges and related underlyings	(1,140)	B	(1,140)		
Reserve for financial assets measured at *fair value* through other comprehensive income	12	B			
Reserve for remeasurements of employee defined benefit plans	(168)	A,B,C	(168)		
Merger surplus reserve	43	A,B,C	43		
Retained earnings	491	A,B,C	491	1,841	166
Total	**17,811**		**3,128**	**1,854**	**166**
Treasury shares			(40)		
Amount not distributable [(1)]			(41)		
Remaining amount distributable			**3,047**		

Key:
A = for share capital increase;
B = for absorption of losses;
C = for distribution to shareholders

(1) Represents the amount not distributable as the part of additional paid-in capital needed to supplement the legal reserve to reach 1/5 of the share capital.

Specifically, the amounts shown in the column "Summary of the amounts utilized in the three-year period 2017/2019 – for other reasons" relate to the distribution of dividends.

The table below shows the restrictions, pursuant to Article 109, paragraph 4, letter b) of TUIR, relating to off-book deductions effected for income tax purposes in past years:

(millions of euros)	
Off-book deductions at December 31, 2018	**23**
Reversal for taxation during the year	(1)
Off-book deductions at December 31, 2019	**22**
Deferred taxes (IRES and IRAP)	(5)
Restriction on equity at December 31, 2019	**17**

This regime imposes a restriction on all equity reserves, without distinction, for an amount equal to the off-book deductions net of the relative deferred taxes provided. This restriction remains until such time as the excess tax deductions and consequent taxation are recovered in the books.
More specifically, compared with the situation at December 31, 2018, the deductions decreased by 1 million euros as a result of taxation during the year.
Therefore, taking into account the residual deductions effected in prior years and not covered by the fiscal realignment carried out in accordance with Italian Law 244 dated December 24, 2007, the total restriction on equity in the separate financial statements amounts to 17 million euros.
At December 31, 2019, the Company had tax-suspended reserves of 1,835 million euros, subject to taxation in the event of distribution, on which deferred taxes had not been allocated as their distribution is not foreseen.

POTENTIAL FUTURE CHANGES IN SHARE CAPITAL

The table below shows future potential changes in share capital, based on the issuance of the convertible bond by TIM S.p.A. in March 2015, the authorizations to increase the share capital in place at December 31, 2019, and the options and rights granted under equity compensation plans, still outstanding at December 31, 2019:

	Number of maximum shares issuable	Share capital (thousands of euros)	Additional Paid-in capital (thousands of euros)	Subscription price per share (euros)
Capital increases already approved (ordinary shares)				
2014-2016 Stock Option Plan				
	133,042	73	80	1.15
	343,069	189	158	1.01
	893,617	492	393	0.99
	13,497,406	7,423	5,264	0.94
Stock Options	**14,867,134**	**8,177**	**5,895**	
2015 Convertible Bond (ordinary shares) (*)	1,082,485,386	2,000,000	n.a.	n.a.
Convertible bonds		**2,000,000**		
Total		**2,008,177**		

(*) The number of shares potentially issuable shown may be subject to adjustments.

Further information is provided in the Notes "Financial liabilities (non-current and current)" and "Equity compensation plans".

NOTE 15
FINANCIAL LIABILITIES (NON-CURRENT AND CURRENT)

Non-current and current financial liabilities (gross financial debt) were broken down as follows:

(millions of euros)		12/31/2019	12/31/2018
Non-current financial liabilities			
Financial payables (medium/long-term)			
Bonds		13,193	12,091
Convertible bonds		1,925	1,893
Amounts due to banks		3,832	2,854
Payables to other lenders		16	–
Payables to subsidiaries		4,285	4,174
		23,251	**21,012**
Finance lease liabilities (medium/long-term)			
Payables to subsidiaries		997	–
Payables to associates		–	–
Payables to others		3,005	1,445
		4,002	**1,445**
Other financial liabilities (medium/long-term)			
Hedging derivatives relating to hedged items classified as non-current assets/liabilities of a financial nature		1,659	1,423
Non-hedging derivatives		1,272	897
Deferred income		–	–
		2,931	**2,320**
Total non-current financial liabilities	**(a)**	**30,184**	**24,777**
Current financial liabilities			
Financial payables (short-term)			
Bonds		1,597	2,120
Convertible bonds		6	6
Amounts due to banks		687	1,459
Payables to other lenders		110	60
Payables to subsidiaries		1,281	3,572
Payables to associates		–	–
		3,681	**7,217**
Finance lease liabilities (short-term)			
Payables to subsidiaries		270	–
Payables to associates		–	–
Payables to others		396	159
		666	**159**
Other financial liabilities (short-term)			
Hedging derivatives relating to hedged items classified as current assets/liabilities of a financial nature		53	362
Non-hedging derivatives		53	165
Deferred income		–	–
		106	**527**
Total Current financial liabilities	**(b)**	**4,453**	**7,903**
Total financial liabilities (Gross Financial Debt)	**(a+b)**	**34,637**	**32,680**

Further details on Financial Instruments are provided in the Note "Supplementary disclosures on financial instruments".

Gross financial debt according to the original currency of the transaction is as follows:

	31.12.2019 (millions of foreign currency)	31.12.2019 (millions of euros)	31.12.2018 (millions of foreign currency)	31.12.2018 (millions of euros)
USD	2,506	2,231	2,506	2,189
GBP	389	457	1,267	1,416
JPY	20,031	165	20,034	159
EURO		31,784		28,916
		34,637		**32,680**

The breakdown of gross financial debt by effective interest-rate bands applicable to the original transaction is provided below, excluding the effect of any derivative hedging instruments:

(millions of euros)	12/31/2019	12/31/2018
Up to 2.5%	9,445	7,813
From 2.5% to 5%	14,654	11,590
From 5% to 7.5%	5,005	8,063
From 7.5% to 10%	1,829	1,794
Over 10%	77	59
Accruals/deferrals, MTM and derivatives	3,627	3,361
	34,637	**32,680**

Following the use of derivative hedging instruments, on the other hand, the gross financial debt by nominal interest rate bracket is:

(millions of euros)	12/31/2019	12/31/2018
Up to 2.5%	13,462	12,198
From 2.5% to 5%	11,183	7,740
From 5% to 7.5%	4,459	7,528
From 7.5% to 10%	1,829	1,794
Over 10%	77	59
Accruals/deferrals, MTM and derivatives	3,627	3,361
	34,637	**32,680**

The maturities of financial liabilities according to the expected nominal repayment amount, as defined by contract, are the following:

Details of the maturities of financial liabilities – at nominal repayment amount:

	maturing by 12/31 of the year:						
(millions of euros)	2020	2021	2022	2023	2024	After 2024	Total
Convertible bonds	1,267	564	3,089	2,441	3,335	5,670	16,366
Loans and other financial liabilities	752	1,383	1,346	1,202	142	4,491	9,316
Finance lease liabilities	633	624	599	428	339	2,012	4,635
Total	**2,652**	**2,571**	**5,034**	**4,071**	**3,816**	**12,172**	**30,317**
Current financial liabilities	1,276						1,276
Total	**3,928**	**2,571**	**5,034**	**4,071**	**3,816**	**12,172**	**31,593**

The main components of financial liabilities are commented below.

Bonds are broken down as follows:

(millions of euros)	12/31/2019	12/31/2018
Non-current portion	13,193	12,091
Current portion	1,597	2,120
Total carrying amount	**14,790**	**14,211**
Fair value adjustment and measurement at amortized cost	(424)	(362)
Total nominal repayment amount	**14,366**	**13,849**

The **convertible bonds** include the unsecured equity-linked bond for 2,000 million euros, with a coupon of 1.125%, issued by TIM S.p.A., convertible into newly-issued ordinary shares maturing in 2022.
This item was broken down as follows:

(millions of euros)	12/31/2019	12/31/2018
Non-current portion	1,925	1,893
Current portion	6	6
Total carrying amount	**1,931**	**1,899**
Fair value adjustment and measurements at amortized cost	69	101
Total nominal repayment amount	**2,000**	**2,000**

The nominal repayment amount of bonds and convertible bonds totaled 16,366 million euros, up by 517 million euros compared to December 31, 2019 (15,849 million euros) as a result of new issues and repayments in 2019.

The following table lists the bonds issued by TIM S.p.A., expressed at the nominal repayment amount, net of bond repurchases, and also at market value:

Currency	Amount (millions)	Nominal repayment amount (millions of euros)	Coupon	Issue date	Maturity date	Issue price (%)	Market price at 12/31/18 (%)	Market value at 12/31/18 (millions of euros)
Bonds issued								
Euro	719.5	719.5	4.000%	12/21/12	1/21/20	99.184	100.476	723
Euro	547.5	547.5	4.875%	9/25/13	9/25/20	98.966	103.825	568
Euro	563.6	563.6	4.500%	1/23/14	1/25/21	99.447	105.047	592
Euro	(a) 205	205	6 month Euribor (base 365)	1/1/02	1/1/22	100	100	205
Euro	883.9	883.9	5.250%	2/10/10	2/10/22	99.295	110.992	981
Euro	(b) 2,000	2,000	1.125%	3/26/15	3/26/22	100	100.431	2,009
Euro	1,000	1,000	3.250%	1/16/15	1/16/23	99.446	107.711	1,077
GBP	375	440.8	5.875%	5/19/06	5/19/23	99.622	111.419	491
Euro	1,000	1,000	2.500%	1/19/17	7/19/23	99.288	105.930	1,059
Euro	750	750	3.625%	1/20/16	1/19/24	99.632	110.325	827
Euro	1,250	1,250	4.000%	1/11/19	4/11/24	99.436	111.070	1,388
USD	1,500	1,335.2	5.303%	5/30/14	5/30/24	100	108.099	1,443
Euro	1,000	1,000	2.750%	4/15/19	4/15/25	99.320	106.211	1,062
Euro	1,000	1,000	3.000%	9/30/16	9/30/25	99.806	107.331	1,073
Euro	750	750	2.875%	6/28/18	1/28/26	100	105.639	792
Euro	1,000	1,000	3.625%	5/25/16	5/25/26	100	110.986	1,110
Euro	1,250	1,250	2.375%	10/12/17	10/12/27	99.185	102.422	1,280
Euro	670	670	5.250%	3/17/05	3/17/55	99.667	115.428	773
Total		**16,365.5**						**17,453**

(a) Reserved for employees.

(c) Bond convertible into newly-issued TIM S.p.A. ordinary treasury shares.

The regulations and/or Offering Circulars relating to the bonds described above are available on the corporate website at the address: www.telecomitalia.com.

The change in bonds during 2019 was as follows:

New issues

(millions of original currency)	Currency	Amount	Issue date
Telecom Italia S.p.A. 1,250 million euros 4.000% maturing 4/11/2024	Euro	1,250	1/11/2019
Telecom Italia S.p.A. 1,000 million euros 2.750% maturing 4/15/2025	Euro	1,000	4/15/2019

Repayments

(millions of original currency)	Currency	Amount	Repayment date
Telecom Italia S.p.A. 832 million euros 5.375% (1)	Euro	832	1/29/2019
Telecom Italia S.p.A. 850 million GBP 6.375%	GBP	850	6/24/2019

(1) Net of buy-backs totaling 418 million euros made by the company in 2015.

Medium/long-term **amounts due to banks** totaled 3,832 million euros (2,854 million euros at December 31, 2018). Short-term amounts due to banks totaled 687 million euros, down by 772 million euros (1,459 million euros at December 31, 2018) and included 296 million euros of the current portion of medium/long-term amounts due to banks.
Medium/long term payables to other lenders totaled 16 million euros while short-term payables totaled 110 million euros (60 million euros at December 31, 2018) and included 5 million euros representing the current portion of medium/long-term payables to other lenders.
Medium/long term payables to subsidiaries amounted to 4,285 million euros (4,174 million euros at December 31, 2018) and consisted of loans obtained from Telecom Italia Capital S.A. (3,121 million euros) and from Telecom Italia Finance S.A. (1,164 million euros), following the issues of bonds placed by the financial companies of the Group on the United States and Luxembourg markets.
Short-term payables to subsidiaries amounted to 1,281 million euros and decreased by 2,291 million euros compared to December 31, 2018 (3,572 million euros). They include:

- the current portion of medium/long-term loans to Telecom Italia Finance S.A. (485 million euros) and Telecom Italia Capital S.A. (13 million euros);
- short-term financing relationships entered into with Telecom Italia Finance S.A. (500 million euros);
- current account transactions as part of the treasury services which are conducted at market rates for a total of 283 million euros, particularly conducted with Telecom Italia Sparkle (177 million euros), Telecontact (34 million euros), TN Fiber (26 million euros), H.R. Services (19 million euros) and Telecom Italia Trust Technology (10 million euros).

Medium/long-term **finance lease liabilities** amounted to 4,002 million euros (1,445 million euros at December 31, 2018). Short-term finance lease liabilities amounted to 666 million euros (159 million euros at December 31, 2018) and referred to the current portion of medium/long-term finance lease liabilities.
Starting from January 1, 2019, the new accounting standard IFRS 16 was introduced (for more details, see the Note "Accounting standards"), whose application led at December 31, 2019 to the recognition of higher finance lease liabilities of 3,077 million euros out of a total of 4,668 million euros. The difference (1,591 million euros) essentially refers to property leases accounted for according to the financial method established by IAS 17.
With reference to the finance lease liabilities recognized following the adoption of IFRS 16, in 2019 the following is noted:

(millions of euros)	12/31/2019
Principal reimbursements	526
Cash out interest portion	36
Total	**562**

Hedging derivatives relating to hedged items classified as non-current liabilities of a financial nature amounted to 1,659 million euros (1,423 million euros at December 31, 2018). Hedging derivatives relating to hedged items classified as current liabilities of a financial nature amounted to 53 million euros (362 million euros at December 31, 2018).

Medium/long-term **non-hedging derivatives** amounted to 1.272 million euros (897 million euros at December 31, 2018). Short-term non-hedging derivatives amounted to 53 million euros (165 million euros at December 31, 2018). These line items include the measurement of transactions which TIM S.p.A. carries out with banking counterparts to service the companies of the Group in its exclusive role as the centralized treasury function, and are offset in full by the corresponding items classified as financial assets.
Further details are provided in the Note "Derivatives".

COVENANTS, NEGATIVE PLEDGES AND OTHER CONTRACT CLAUSES IN EFFECT AT DECEMBER 31, 2019

Bonds issued by the TIM Group do not contain financial covenants (e.g. ratios such as Debt/EBITDA, EBITDA/Interest, etc.) or clauses that result in the automatic early redemption of the bonds in relation to events other than the insolvency of the TIM Group[1]; furthermore, the repayment of the bonds and the payment of interest are not covered by specific guarantees nor are there commitments provided relative to the assumption of future guarantees, except for the full and unconditional guarantees provided by TIM S.p.A. for the bonds issued by Telecom Italia Finance S.A. and Telecom Italia Capital S.A..
Since the bonds were placed principally with institutional investors in major world capital markets (Euromarket and the U.S.A.), the terms which regulate the bonds are in line with market practice for similar transactions effected on these same markets. Consequently, they carry negative pledges, such as, for example, the commitment not to pledge the company's assets as collateral for loans.

With regard to loans taken out by TIM S.p.A. with the European Investment Bank (EIB), at December 31, 2019, the nominal amount of outstanding loans amounted to 950 million euros, of which 850 million euros at direct risk and 100 million euros secured.
EIB loans not secured by bank guarantees for a nominal amount equal to 850 million euros signed on December 14, 2015 and November 25, 2019 are subject to the following covenants:

- in the event the company becomes the target of a merger, demerger or contribution of a business segment outside the Group, or sells, disposes of or transfers assets or business segments (except in certain cases, expressly provided for), it shall immediately inform the EIB which shall have the right to ask for guarantees to be provided or changes to be made to the loan contract, or, only for certain loan contracts, the EIB shall have the option to demand the immediate repayment of the loan (should the merger, demerger or contribution of a business segment outside the Group compromise the Project execution or cause a prejudice to EIB in its capacity as creditor);
- TIM undertook to ensure that, for the entire duration of the loan, the total financial debt of the Group companies other than TIM S.p.A. – except for the cases when that debt is fully and irrevocably secured by TIM S.p.A. – is lower than 35% (thirty-five percent) of the Group's total financial debt.

In all EIB loans, both secured by guarantees issued by banks or subject to EIB approval and at direct risk, some covenants are envisaged, including:

- "Inclusion clause", under which, in the event TIM commits to uphold financial covenants in other loan contracts (and even more restrictive clauses for the 2015 direct risk loan, including, for instance, cross default clauses and commitments restricting the sale of goods) that are not present in or are stricter than those granted to the EIB, the EIB will have the right – if, in its reasonable opinion, it considers that such changes may have a negative impact on TIM's financial capacity – to request the provision of guarantees or an amendment of the loan contract in order to establish an equivalent provision in favor of the EIB;
- "Network Event", under which, in the event of the disposal of the entire fixed network or of a substantial part of it (in any case, more than half in quantitative terms) to third parties not controlled by the Company, or in the event of disposal of the controlling interest in the company in which the network or a substantial part of it has previously been transferred, TIM must immediately inform the EIB, which may then opt to demand collateral or an amendment of the loan contract or choose an alternative solution.

The loan agreements of TIM S.p.A. do not contain financial covenants (e.g. ratios such as Debt/EBITDA, EBITDA/Interests, etc.) which would oblige the Company to repay the outstanding loan if the covenants are not observed.
The loan agreements contain the usual other types of covenants, including the commitment not to pledge the Company's assets as collateral for loans (negative pledge) and the commitment not to change the business purpose or sell the assets of the Company unless specific conditions exist (e.g. the sale takes place at fair market value). Covenants with basically the same content are also found in export credit loan agreements.

In the Loan Agreements and the Bonds, TIM is required to provide notification of change of control. Identification of the occurrence of a change of control and the applicable consequences – including, at the discretion of the investors, the establishment of guarantees or the early repayment of the amount paid in cash or as shares and the cancellation of the commitment in the absence of agreements to the contrary – are specifically covered in the individual agreements.

(1) A change of control event can result in the early repayment of the convertible bond of TIM S.p.A., as further detailed below.

In addition, the outstanding loans generally contain a commitment by TIM, whose breach is an Event of Default, not to implement mergers, demergers or transfers of business, involving entities outside the Group. Such an Event of Default may entail, upon request of the Lender, the early redemption of the drawn amounts and/or the annulment of the undrawn commitment.

Finally, as at December 31, 2019, no covenant, negative pledge or other clause relating to the debt position, had in any way been breached or violated.

REVOLVING CREDIT FACILITY

The following table shows committed credit lines available at December 31, 2019.

(billions of euros)	12/31/2019		12/31/2018	
	Agreed	Drawn down	Agreed	Drawn down
Revolving Credit Facility – maturing January 2023	5.0	-	5.0	-
Total	**5.0**	**-**	**5.0**	**-**

At December 31, 2019, TIM had bilateral Term Loans for 1,750 million euros with various banking counterparties and overdraft facilities for 350 million euros, drawn down for the full amount.

On October 29, 2019, TIM entered into a Promissory Loan Agreement ("Schuldschein") for a total amount of 250 million euros, of which 229 million euros matures on October 29, 2023 and 21 million euros matures on October 29, 2025.

NOTE 16
NET FINANCIAL DEBT

The following table shows the **Net financial debt** at December 31, 2019 and December 31, 2018, calculated in accordance with the criteria indicated in the "Recommendations for the Consistent Implementation of the European Commission Regulation on Prospectuses", issued on February 10, 2005 by the European Securities & Markets Authority (ESMA), and adopted by Consob.
For the purpose of determining such figure, the amount of financial liabilities has been adjusted by the effect of the relative hedging derivatives recorded in assets and the receivables arising from financial subleasing.
This table also shows the reconciliation of the net financial debt determined according to the criteria indicated by the ESMA and net financial debt calculated according to the criteria of the TIM Group.

(millions of euros)		12/31/2019	12/31/2018
Non-current financial liabilities		**30,184**	**24,777**
Current financial liabilities		**4,453**	**7,903**
Total Gross financial debt	**(a)**	**34,637**	**32,680**
Non-current financial assets(°)			
Non-current financial receivables arising from lease contracts		(16)	(15)
Non-current hedging derivatives		(530)	(385)
	(b)	**(546)**	**(400)**
Current financial assets			
Securities other than investments		–	(466)
Current financial receivables arising from lease contracts		(54)	(64)
Financial receivables and other current financial assets		(122)	(263)
Cash and cash equivalents		(829)	(885)
	(c)	**(1,005)**	**(1,678)**
Net financial debt as per Consob communication DEM/6064293/2006 (ESMA)	**(d=a+b+c)**	**33,086**	**30,602**
Non-current financial assets (°)			
Other financial receivables and other non-current financial assets	(e)	(1,803)	(1,242)
Net financial debt (*)	**(f=d+e)**	**31,283**	**29,360**
Reversal of fair value measurement of derivatives and related financial liabilities/assets	*(g)*	*(1,543)*	*(1,307)*
Adjusted net financial debt	**(f+g)**	**29,740**	**28,053**

(°) At December 31, 2019 and at December 31, 2018, Non-current financial assets (b + e) amounted to 2,349 million euros and 1,642 million euros, respectively.

(*) As regards the effects of related party transactions on net financial debt, reference should be made to the specific table included in the Note "Related party transactions ".

The following additional disclosures are provided in accordance with IAS 7:

Additional cash flow information required by IAS 7

(thousands of euros)		31.12.2018	Cash movements: Receipts and/or issues	Cash movements: Payments and/or reimbursements	Non-cash movements: Differences exchange rates	Non-cash movements: Fair value changes	Non-cash movements: Other changes and reclassifications	31.12.2019
Financial payables (medium/long-term):								
Bonds		14,211	2,250	(1,784)	48	76	(11)	14,790
Convertible bonds		1,899					32	1,931
Amounts due to banks		3,778	1,290	(951)			11	4,128
Other financial payables		6,130		(1,362)	22		14	4,804
	(a)	**26,018**	**3,540**	**(4,097)**	**70**	**76**	**46**	**25,653**
of which short-term		*5,006*						*2,402*
Finance lease liabilities (medium/long-term):		**1,604**	274	(699)			3,489	**4,668**
	(b)	**1,604**	**274**	**(699)**	**–**	**–**	**3,489**	**4,668**
of which short-term		*159*						*666*
Other financial liabilities (medium/long-term):								
Hedging derivative liabilities relating to hedged items classified as non-current assets/liabilities of a financial nature		1,750			(302)	265	(1)	1,712
Non-hedging derivatives		1,062			(68)	333	(2)	1,325
Other liabilities		–						–
	(c)	**2,812**	**–**	**–**	**(370)**	**598**	**(3)**	**3,037**
of which short-term		*492*						*106*
Financial payables (short-term):								
Amounts due to banks		535					(144)	391
Other financial payables		1,676					(788)	888
Hedging derivative liabilities relating to hedged items classified as current assets/liabilities of a financial nature		35				2	(37)	–
	(d)	**2,246**	**–**	**–**	**–**	**2**	**(969)**	**1,279**
Total Financial liabilities (Gross financial debt)								
	(e=a+b+c+d)	**32,680**	**3,814**	**(4,796)**	**(300)**	**676**	**2,563**	**34,637**
Hedging derivative receivables relating to hedged items classified as current and non-current assets/liabilities of a financial nature	**(f)**	464			30	110	(26)	578
Non-hedging derivative receivables	**(g)**	1,062			(70)	335	(2)	1,325
Total	**(h=e-f-g)**	**31,154**	**3,814**	**(4,796)**	**(260)**	**231**	**2,591**	**32,734**

Additional Cash Flow Information

The value of the paid and collected interest expense reported in the Report on Operations takes into account the movements relating to transactions in CCIRS derivatives to hedge underlying assets in both the assets component (collections) and the liabilities component (payments) without netting the positions.

(millions of euros)	2019	2018
Interest expense paid	(1,689)	(2,034)
Interest income received	654	953
Net total	**(1,035)**	**(1,081)**

To consider the components of CCIRS derivatives as a single transaction, a representation is given with interest flows in and out shown net. This approach gives the following results:

(millions of euros)	2019	2018
Interest expense paid	(1,526)	(1,825)
Interest income received	491	744
Net total	**(1,035)**	**(1,081)**

NOTE 17
FINANCIAL RISK MANAGEMENT

FINANCIAL RISK MANAGEMENT OBJECTIVES AND POLICIES OF TIM S.p.A.

As reported in the Note "Financial Risk Management" of the consolidated financial statements of the TIM Group, TIM S.p.A. adheres to the Guidelines on "Management and control of financial risk" established for the Group.
The risk management policies of TIM S.p.A. observe the policies for the diversification of risks identified for the Group.
An optimum fixed-rate and variable-rate debt composition is defined for the entire Group and is not established for the individual companies.
As for the exchange rate risk on financial payables contracted by TIM S.p.A. denominated in currencies other than euro, such risk is hedged in full.
Derivative financial instruments are designated as fair value hedges for managing exchange rate and interest rate risk on instruments denominated in currencies other than euro and for managing interest rate risk on fixed-rate loans in euros. Derivative financial instruments are designated as cash flow hedges when the objective is to pre-set the exchange rate of future transactions and the interest rate.
All derivative financial instruments are entered into with leading banking and financial counterparts whose credit ratings are constantly monitored to reduce the credit risk.
TIM S.p.A. has current account transactions with subsidiaries, as part of its treasury services which are conducted at market rates, and multi-year loan agreements with them which are also at market rates.

INTEREST RATE RISK: SENSITIVITY ANALYSIS

The change in interest rates on the variable component of payables and liquidity may lead to higher or lower finance income and expenses, while the changes in the level of the expected interest rate affect the fair value measurement of TIM S.p.A. derivatives. In particular:

- with regard to derivatives that convert the liabilities contracted by TIM S.p.A. to fixed rates (cash flow hedging), in keeping with international accounting standards that regulate hedge accounting, the fair value (mark-to-market) measurement of such instruments is set aside in a specific unavailable Equity reserve. The combined change of the numerous market variables to which the mark-to-market calculation is subject between the transaction inception date and the measurement date renders any assumption about the trend of the variables of little significance. As the contract expiration date approaches, the accounting effects described will gradually be absorbed until they cease to exist;
- if, at December 31, 2019, the interest rates in the various markets in which TIM S.p.A. operates had been 100 basis points higher/lower compared to the actual rates, then higher/lower finance expenses, before the tax effect, would have been recognized in the income statement for 86 million euros (83 million euros at December 31, 2018).

Refer to Note 2 "Accounting Policies" for the potential risk generated by the reform of benchmark interest rates.

ALLOCATION OF THE FINANCIAL STRUCTURE BETWEEN FIXED RATE AND VARIABLE RATE

As for the allocation of the financial structure between the fixed-rate component and the variable-rate component, for both financial assets and liabilities, reference should be made to the following tables. They show the nominal repayment/investment amount (insofar as that amount expresses the effective interest rate exposure of the Group) and, as far as financial assets are concerned, the intrinsic nature (financial characteristics and duration) of the transactions under consideration rather than just the stated contractual terms alone. Bearing that in mind, a transaction whose characteristics (short or very short time frame and frequent renewal) are such that the interest rate is periodically reset on the basis of market parameters, even though the contract does not call for re-fixing the interest rate (such as in the case of bank deposits, Euro Commercial Papers and receivables on sales of securities), has been considered in the category of variable rate.

Total Financial liabilities (at the nominal repayment amount)

(millions of euros)	12/31/2019			12/31/2018		
	Fixed rate	Variable rate	Total	Fixed rate	Variable rate	Total
Bonds	11,827	4,539	16,366	11,312	4,537	15,849
Loans and other financial liabilities (*)	9,714	5,513	15,227	9,486	5,014	14,500
Total	**21,541**	**10,052**	**31,593**	**20,798**	**9,551**	**30,349**

(*) At December 31, 2019, current liabilities totaled 1,276 million euros, of which 784 million euros at variable rates (2,247 million euros at December 31, 2018, of which 1,451 million euros at variable rates).

Total Financial assets (at the nominal investment amount)

(millions of euros)	12/31/2019			12/31/2018		
	Fixed rate	Variable rate	Total	Fixed rate	Variable rate	Total
Cash and cash equivalents	-	829	829	-	885	885
Securities	-	-	-	431	-	431
Other receivables	691	589	1,280	779	361	1,140
Total	**691**	**1,418**	**2,109**	**1,210**	**1,246**	**2,456**

With regard to variable-rate financial instruments, the contracts provide for revisions of the relative parameters to take place within the subsequent 12 months.

Effective interest rate

As to the effective interest rate, for the categories where that parameter can be determined, such parameter refers to the original transaction net of the effect of any derivative hedging instruments. The disclosure, since it is provided by class of financial asset and liability, was determined, for purposes of calculating the weighted average, using the carrying amount adjusted by accruals, prepayments, deferrals and changes in *fair value*: this is therefore the amortized cost, net of accruals and any changes in fair value as a consequence of hedge accounting.

Total Financial liabilities

(millions of euros)	12/31/2019		12/31/2018	
	Adjusted carrying amount	Effective interest rate (%)	Adjusted carrying amount	Effective interest rate (%)
Bonds	16,220	3.79	15,677	4.06
Loans and other financial liabilities	14,789	2.73	13,642	3.15
Total	**31,009**	**3.28**	**29,319**	**3.64**

Total Financial assets

(millions of euros)	12/31/2019		12/31/2018	
	Adjusted carrying amount	Effective interest rate (%)	Adjusted carrying amount	Effective interest rate (%)
Cash and cash equivalents	829	0.01	885	0.02
Securities	-	-	431	3.36
Other receivables	619	1.33	440	1.51
Total	**1,448**	**0.57**	**1,756**	**1.21**

As for financial assets, the weighted average effective interest rate is not essentially influenced by the existence of derivatives. As for market risk management using derivatives, reference should be made to the Note "Derivatives".

CREDIT RISK

Credit risk represents TIM's exposure to possible losses arising from the failure of commercial or financial counterparties to fulfill their assumed obligations. To measure this risk over time for impairment of financial assets (trade receivables due from customers included), the introduction of IFRS 9 required switching from the incurred loss model pursuant to IAS 39 to the expected credit loss model.
Such risk stems principally from economic and financial factors, or from the possibility that a default situation of a counterpart could arise, or from factors more strictly technical, commercial or administrative.
TIM's maximum theoretical exposure to credit risk is represented by the carrying amount of the financial assets and trade receivables recorded in the financial statements, excluding guarantees received, described in the Note "Contingent liabilities, other information, commitments and guarantees".
Risk related to trade receivables is managed using customer scoring and analysis systems. For specific categories of trade receivables, the Group also makes use of factoring, mainly on a "non-recourse" basis.
In referring to the details indicated in the Note "Trade and miscellaneous receivables and other current assets", it should be pointed out that provision charges for bad debts are recorded on specific credit positions that present an element of individual risk. On credit positions that do not have such characteristics, provision charges are recorded by customer segment according to the average uncollectibility estimated on the basis of statistics.
Financial assets other than trade receivables are written down for impairment on the basis of a general model which estimates expected credit losses over the following 12 months, or over the residual life of the asset in the event of a substantial increase in its credit risk. The expected credit loss is calculated based on the default probability and the percentage of credit that cannot be recovered in the event of a default (the loss given default).
The model adopted to calculate the expected credit lossis based on the Bloomberg Credit Risk Model, a model developed by Bloomberg which, starting from Merton's distance-to-default ("DD") concept, estimates the probability of default together with the recovery rate. At the same time, the loss given default is defined as the non-recoverable component of post-default financial assets.
In particular, the DD - based on balance sheet data - is enriched with a series of additional information by country (macroeconomic, risk), business sector and individual company, as well as accounting adjustments aimed at ensuring uniformity of the model's outputs; finally, through a non-linear function of the DD, you get the default probability.

Moreover, again for the credit risk relating to the asset components which contribute to the determination of Net financial debt it should be noted that, as per Group policy, the management of the liquidity of TIM S.p.A. is guided by conservative criteria and is principally based on money market management. As part of this management, investments are made during the year with temporary excess cash resources, which are expected to turn around within the subsequent 12-month period.
In order to limit the risk of non-fulfillment of the obligations undertaken by the counterpart, deposits were made with banking and financial institutions with a rating no lower than the investment grade and non-negative outlook; moreover, the terms of deposits are shorter than three months.

As concerns the credit risk relating to the current asset components and with particular reference to the trade receivables, the risk is managed on two levels:

- operational management along the entire process chain, starting from the checks during acquisition and continuing to the internal management checks of still active customers and the subsequent service interruption stages, contractual termination and assignment to specific institutions specialized in credit collection
- management of specific securitization programs rather than of non-recurring disposals, most of which non-recourse in nature.

LIQUIDITY RISK

TIM S.p.A. pursues the Group's objective of achieving an adequate level of financial flexibility.
Current financial assets at December 31, 2019, together with unused committed bank lines, ensure complete coverage of debt repayment obligations for the next 24 months.
12% of gross financial debt at December 31, 2019 (nominal repayment amount) will become due in the next 12 months.
The following tables report the contractual cash flows, not discounted to present value, relative to gross financial debt at nominal repayment amounts and the interest flows, determined using the terms and the interest and exchange rates in place at December 31, 2019. The portions of principal and interest of the hedged liabilities included both the disbursements and the receipts of the relative hedging derivatives.

Financial liabilities – Maturities of contractually expected disbursements

(millions of euros)		maturing by 12/31 of the year: 2020	2021	2022	2023	2024	After 2024	Total
Convertible bonds	Principal	1,267	564	3,089	2,441	3,335	5,670	16,366
	Interest	562	506	469	411	293	1,353	3,594
Loans and other financial liabilities (*)	Principal	752	1,383	1,346	1,202	142	4,107	8,932
	Interest	251	247	237	230	243	2,911	4,119
Finance lease liabilities	Principal	633	624	599	428	339	2,012	4,635
	Interest	158	142	124	108	95	350	977
Non-current financial liabilities (*)	**Principal**	**2,652**	**2,571**	**5,034**	**4,071**	**3,816**	**11,789**	**29,933**
	Interest	**971**	**895**	**830**	**749**	**631**	**4,614**	**8,690**
Current financial liabilities (**)	**Principal**	**1,274**	**-**	**-**	**-**	**-**	**-**	**1,274**
	Interest	**-**	**-**	**-**	**-**		**-**	**-**
Total Financial liabilities	**Principal**	**3,926**	**2,571**	**5,034**	**4,071**	**3,816**	**11,789**	**31,207**
	Interest	**971**	**895**	**830**	**749**	**631**	**4,614**	**8690**

(*) These include hedging derivatives, but exclude non-hedging derivatives.
(**)These exclude non-hedging derivatives.

Derivatives on financial liabilities – Contractually expected interest flows

(millions of euros)	maturing by 12/31 of the year: 2020	2021	2022	2023	2024	After 2024	Total
Disbursements	**216**	**216**	**216**	**208**	**159**	**1,309**	2,324
Receipts	(177)	(177)	(177)	(166)	(96)	(327)	(1,120)
Hedging derivatives – net (receipts) disbursements	39	39	39	42	63	982	1,204
Disbursements	**299**	**298**	**298**	**303**	**303**	**3,362**	4,863
Receipts	**(299)**	**(298)**	**(298)**	(303)	**(303)**	(3,362)	(4,863)
Non-Hedging derivatives – net (receipts) disbursements	-	-	-	-	-	-	-
Total net receipts (disbursements)	**39**	**39**	**39**	**42**	**63**	**982**	**1,204**

In order to name the Parent as the sole counterparty of the banking system, all the derivatives of the Group, except for those relating to two banking counterparties, have been centralized under TIM S.p.A.. In the TIM S.p.A. separate financial statements, this centralization has resulted in the presence of two non-hedging derivatives for each centralized transaction (one with the bank and the other for the same amount and opposite sign with the company of the Group), while the hedging relationship remains with the subsidiary and the Group. The flows relating to the non-hedging derivatives that were placed under centralized management have therefore been excluded from the analysis of the maturities of contractually expected disbursements for financial liabilities and the analysis of the maturities of contractually expected interest flows for derivatives, because the positions are fully offset and, consequently, are not significant for the analysis of liquidity risk.

MARKET VALUE OF DERIVATIVES

In order to determine the fair value of derivatives, the TIM Group uses various valuation models. The mark-to-market calculation is determined by discounting to present value the interest and notional future contractual flows using market interest rates and exchange rates. The notional amount of IRS does not represent the amount exchanged between the parties and therefore does not constitute a measurement of credit risk exposure which, instead, is limited to the amount of the differential between the interest rates paid/received. The market value of CCIRSs, instead, also depends on the differential between the reference exchange rate at the date of signing the contract and the exchange rate at the date of measurement, since CCIRSs imply the exchange of the reference interest and principal, in the respective currencies of denomination. The options are measured according to the Black & Scholes or Binomial models and involve the use of various measurements factors, such as: time horizon of the life of the option, risk-free rate of return, current price, volatility and any cash flows (e.g. dividend) of the underlying instrument, and exercise price.

NOTE 18
DERIVATIVES

Derivative financial instruments are used by TIM S.p.A. to hedge its exposure to foreign exchange rate and interest rate risks and also to diversify the parameters of debt so that costs and volatility can be reduced to within predetermined operational limits.
Derivative financial instruments at December 31, 2019 are principally used to manage debt positions. They include interest rate swaps (IRS) to reduce interest rate exposure on fixed-rate and variable-rate bank loans and bonds, as well as cross currency and interest rate swaps (CCIRS), and currency forwards to convert the loans/receivables secured in different foreign currencies to the functional currency.
IRS transactions, at specified maturity dates, provide for the exchange of flows of interest with the counterparts, calculated on the notional amount, at the agreed fixed or variable rates.
The same also applies to CCIRS transactions which, in addition to the settlement of periodic interest flows, may provide for the exchange of principal, in the respective currencies of denomination, at maturity and possibly spot.
In carrying out its role as the Treasury function of the Group and with the aim of centralizing all exposures with banking counterparties in just one entity (i.e. TIM S.p.A.), TIM has derivative contracts signed with banks and analogous intercompany derivative contracts with Telecom Italia Capital S.A. and Telecom Italia Finance S.A., for a notional amount of 5,062 million euros. The balance of asset and liability measurements of these contracts is equal to zero.

HEDGES: ECONOMIC RELATIONSHIP BETWEEN THE UNDERLYING AND DERIVATIVES

The hedge relationships documented in hedge accounting at TIM S.p.A. belong to four categories: i) hedging of the fair value of bond issues denominated in euro and ii) hedging of the cash flows coming from the coupon flow of bond issues denominated in currencies other than euro, iii) hedging of the cash flows coming from the flow of floating interest on intercompany loans denominated in euro, iv) hedging of the cash flows coming from the flow of floating interest on intercompany loans denominated in foreign currency.
In the first case, the hedged risk is the fair value of the bond attributable to the interest rates and the hedging derivatives are IRSs, which allow all or part of the bond coupon flow to be received against a flow of floating interest.
The current value of both instruments, underlying and derivatives, depends on the structure of the Euro market interest rates at the foundation of the calculation of the discount factors and flows of floating interest of the derivative. In particular, oscillating rates will translate as changes in the discount factor of the fixed interest expense on the underlying; on the derivative, changes in the discount factor of interest income will occur, as well as changes in the nominal flow of variable interest (only partially corrected by the discounting effect). The effects on the derivative will be opposite, in accounting terms, to the effects on the underlying.
In the second case, the hedged risk is represented by the variability in cash flows (and the repayment of the nominal amount) generated by exchange rates; hedging comprises combinations of IRS and CCIRS that synthetically transform fixed rate coupon flows into currency into fixed rate flows in euro. In this case, exchange rate oscillations will usually produce contrary effects on the underlying and on the derivative as the asset leg of the latter faithfully reflects the underlying, while the liability leg is denominated in euros and is therefore insensitive to the exchange rate.
In the third case, the hedged risk is the variability of the cash flow against the performance of Euro market interest rates. It is hedged with IRSs that allow a varying flow of interest to be collected against payment of a flow of fixed rate interest. The current value of underlying and derivatives depends on the structure of the Euro market interest rates. The fluctuations of the rates generate an impact on the nominal amount of the flow of floating rate interest of the loan (only partially corrected by the discounting effect); on the derivative, there are changes in the discount factors of the passive flow of fixed interest and changes in the nominal flow of floating interest income (only partially corrected by the discounting effect). The effects on the derivative will be opposite, in accounting terms, to the effects on the underlying.
In the fourth case, the hedged risk is the variability of the cash flows (including the nominal repayment) induced by the exchange rate in addition to the market interest rates in foreign currency; the hedge consists of IRS and CCIRS derivatives which turn floating rate in foreign currency into Euro fixed rate. In this case, exchange rate oscillations (in addition to oscillations of the interest rates in foreign currency) will usually produce contrary effects on the underlying and on the derivative as the asset leg of the latter faithfully reflects the underlying, while the liability leg is denominated in euros and is therefore insensitive to the exchange rate (and to the interest rates in foreign currency). The impacts caused on the other hand by the Euro interest rates on the liability leg of the derivative are restricted to just discounting.

HEDGING: DETERMINATION OF THE HEDGE RATIO

The types of hedging adopted by the Group require a hedge ratio equal to 1:1, as the types of risk hedged (interest rate and exchange risks) are such as to generate economic effects on the underlying instruments that can only be offset by the same notional quantities of derivative instruments.

HEDGING: POTENTIAL SOURCES OF INEFFECTIVENESS

The contractualization of derivatives to hedge financial risks takes place at arm's length and aims to fully neutralize the effects of such risks.
However, in practice, both fair value hedges and cash flows hedges, although financially perfect, cannot guarantee absolute effectiveness due to the many banks involved, the particular nature of some derivatives attributable to fixing and/or the indexing of variable parameters, and the possible imperfect correspondence of critical terms.

The following table shows the total balances of the derivative financial instruments of TIM S.p.A. at December 31, 2019 and 2018; in compliance with IFRS 7 requirements, there was a switch from a representation of the summary notional hedging amounts to the current representation in which the notional amounts are shown with reference to all the derivative instruments involved in the hedges.
The following tables break down the financial derivatives by type of risk for each kind of hedging, separating financial assets and liabilities. For CCIRS, the notional amount refers to the contractual value in euros, for IRS in a currency other than the euro, the value is indicated at the market exchange rate.

Type	Hedged risk	Notional amount at 12/31/2019 (millions of euros)	Notional amount at 12/31/2018 (millions of euros)	Spot Mark-to-Market* (Clean Price) at 12/31/2019 (millions of euros)	Spot Mark-to-Market* (Clean Price) at 12/31/2018 (millions of euros)
Interest rate swaps	Interest rate risk	4,334	4,334	152	52
Cross Currency and Interest Rate Swaps	Interest rate risk and currency exchange rate risk	-	-	-	-
Total Fair Value Hedge Derivatives		**4,334**	**4,334**	**152**	**52**
Interest rate swaps	Interest rate risk	2,200	2,213	(876)	(679)
Cross Currency and Interest Rate Swaps	Interest rate risk and currency exchange rate risk	2,673	4,061	(444)	(754)
Total Cash Flow Hedge Derivatives		**4,873**	**6,274**	**(1,320)**	**(1,433)**
Total Non-Hedge Accounting Derivatives		**-**	**-**	**-**	**-**
Total TIM derivatives		**9,207**	**10,608**	**(1,168)**	**1,381**

(*) Spot Mark-to-market above represents the market measurement of the derivative net of the accrued portion of the flow in progress.

Fair value hedges (millions of euros)	**Accounting item**		**Notional value**	**Carrying amount**	**Change in fair value for the year**
Interest rate swaps	Hedging derivatives relating to hedged items classified as current assets/liabilities of a financial nature - Current / non-current assets.	a)	4,334	152	100
Assets				152	
Liabilities				-	
Cross Currency and Interest Rate Swaps	Hedging derivatives relating to hedged items classified as current assets/liabilities of a financial nature - Current / non-current assets.	b)	-	-	-
Assets				-	
Liabilities				-	
Derivative instruments (*spot value*)		a)+b)	**4,334**	**152**	**100**
Accruals				22	
Derivative instruments (*gross value*)				**174**	
Underlying instruments (1)	Bonds - Current / non-current liabilities		**4,334**	**(4,462)**	
of which the fair value adjustment	Fair value adjustment and measurements at amortized cost	c)		(148)	(90)
Ineffectiveness		a)+b)+c)			10
Fair value adjustment for hedging settled in advance (2)				(135)	

(1) Includes the amortized cost value of bonds currently hedged plus the fair value adjustment

(2) Referred to bonds no longer hedged, which are therefore not presented in the table.

Cash flow hedges (millions of euros)	**Accounting item**		**Notional value**	**Carrying amount**	**Change in fair value**	**Change in cumulative fair value**
Interest rate swaps	Hedging derivatives relating to hedged items classified as current assets/liabilities of a financial nature - Current / non-current assets.	a)	2,200	(876)	(197)	
Assets				59	(3)	
Liabilities				(935)	(194)	
Cross Currency and Interest Rate Swaps	Hedging derivatives relating to hedged items classified as current assets/liabilities of a financial nature - Current / non-current assets.	b)	2,673	(444)	310	
Assets				280	44	
Liabilities				(724)	266	
Derivative instruments (*spot value*)		a)+b)	**4,873**	**(1,320)**	**113**	
Accruals				13		
Derivative instruments (*gross value*)				**(1,307)**		
of which equity reserve gains and losses					166	
Determination of ineffectiveness						
Change in derivatives		c)				(847)
Underlying instruments (3)		d)				865
Ineffectiveness (4)	Positive fair value adjustment of financial derivatives - non-hedging	c)+d)				(8)
Equity reserve						
Equity reserve balance				(1,498)		
of which due to the fair value of hedging settled in advance				27		
Reclassification to P&L	Negative reversal of the reserve for the fair value adjustment of hedging derivatives (cash flow hedges)				(3)	

(3) Hypothetical derivatives used in measuring the effectiveness of cash flow hedges.

(4) The ineffectiveness, due to its nature and calculation, does not necessarily coincide with the difference in cumulative changes in the fair value of derivatives and the underlying; the effect due to the adoption of CVA/DVA is not considered

The transactions hedged by cash flow hedges will generate cash flows and produce economic effects in the income statement in the periods indicated in the following table:

Currency of denomination	Notional amount in currency of denomination (millions)	Start of period	End of period	Rate applied	Interest period	Notional in euro hedging (millions)	Rate in euro hedging
GBP	375	Jan-20	May-23	5.875%	Annually	552	5.535%
JPY	20,000	Jan-20	Oct-29	6 month JPY Libor + 0.94625%	Semiannually	174	5.940%
USD	1,000	Jan-20	Nov-33	3 month USD Libor + 0.756%	Quarterly	849	5.994%
USD	1,500	Jan-20	May-24	5.303%	Semiannually	1,099	4.226%
EURO	794	Jan-20	Sept-34	6 month Euribor + 0.8787%	Semiannually	794	4.332%
EURO	791	Jan-20	July-36	6 month Euribor + 1.45969%	Semiannually	791	5.884%

(*) Financial asset.

The method selected to test the effectiveness retrospectively and, whenever the principal terms do not fully coincide, prospectively, for Cash Flow Hedge derivatives, is the *Volatility Risk Reduction* (VRR) Test. This test assesses the ratio between the portfolio risk (where the portfolio means the derivative and the item hedged) and the risk of the hedged item taken separately. In essence, the portfolio risk must be significantly less than the risk of the hedged item.

NOTE 19
SUPPLEMENTARY DISCLOSURES ON FINANCIAL INSTRUMENTS

MEASUREMENT AT *FAIR VALUE*

For the purposes of the comparative information between the carrying amounts and fair value of financial instruments, required by IFRS 7, the majority of the non-current financial liabilities of TIM consist of bonds, whose fair value is directly observable in the financial markets, as they are financial instruments that due to their size and diffusion among investors, are commonly traded on the relevant markets (see the Note "Financial Liabilities (non-current and current)"). For other types of financing, however, the following assumptions have been made in determining *fair value*:

- for variable-rate loans: the nominal repayment amount has been assumed;
- for fixed-rate loans: fair value has been assumed to be the present value of future cash flows using market interest rates at December 31, 2019.

Lastly, for the majority of financial assets, their carrying amount constitutes a reasonable approximation of their fair value since these are short-term investments that are readily convertible into cash.

The fair value measurement of the financial instruments of TIM is classified according to the three levels set out in IFRS 7. In particular, the fair value hierarchy introduces the following levels of input:

- Level 1: quoted prices in active market;
- Level 2: prices calculated using observable market inputs;
- Level 3: prices calculated using inputs that are not based on observable market data.

The following tables set out, for assets and liabilities at December 31, 2019 and December 31, 2018 and in accordance with the categories established by IFRS 9, the supplementary disclosure on financial instruments required by IFRS 7 and the schedules of gains and losses.

Key for IFRS 9 categories

		Acronym
Financial assets measured at:		
Amortized cost	Amortized cost	AC
Fair value through other comprehensive income	Fair value through other comprehensive income	FVTOCI
Fair value through profit or loss	Fair value through profit or loss	FVTPL
Financial liabilities measured at:		
Amortized cost	Amortized cost	AC
Fair value through profit or loss	Fair value through profit or loss	FVTPL
Hedging Derivatives	Hedging Derivatives	HD
Not applicable	Not applicable	n.a.

Carrying amount and fair value hierarchy for each category/class of financial asset/liability and comparison with their fair value at 12/31/2019

(millions of euros)	IFRS 9 IFRS 9	note	Carrying amount at 31.12.2019	Amounts recognized in financial statements			Levels of hierarchy or			Carrying amount under IFRS 16	Fair Value at 12/31/2019
				Amortized cost	Fair value through other comprehensive income	Fair value through separate income statement	Level 1	Level 2	Level 3		
ASSETS											
Financial assets measured at amortized cost	AC		**4,010**	**4,010**	**–**	**–**					**4,010**
Non-current assets											
Receivables from employees		8)	*40*	40							
Other financial receivables		8)	*491*	491							
Miscellaneous receivables from		9)	*2*	2							
Current assets											
Receivables from employees		8)	*12*	12							
Other short-term financial		8)	*9*	9							
Cash and cash equivalents		8)	*829*	829							
Trade receivables		12)	*2,484*	2,484							
Miscellaneous receivables from		12)	*112*	112							
Contract assets		12)	*31*	31							
Financial assets measured at fair value through other comprehensive income	FVTOCI		**33**	**–**	**33**	**–**					**33**
Non-current assets											
Other investments		7)	*33*		33		–	21	12		
Securities other than		8)									
Current assets											
Trade receivables		12)	*–*		–						
Securities other than investments		8)	*–*		–		–				
Financial assets measured at fair value through profit or loss	FVTPL		**1,325**	**–**	**–**	**1,325**					**1,325**
Non-current assets											
Non-hedging derivatives		8)	*1,272*			1,272		1,272			
Current assets											
Securities other than investments		8)									
Non-hedging derivatives		8)	*53*			53		53			
Hedging Derivatives	HD		**578**	**–**	**404**	**174**					**578**
Non-current assets											
Hedging Derivatives		8)	*530*		378	152		530			
Current assets											
Hedging Derivatives		8)	*48*		26	22		48			
Financial receivables for lease contracts	n.a.		**70**	**–**	**–**	**–**				**70**	**70**
Non-current assets		8)	*16*							16	
Current assets		8)	*54*							54	
Total			**6,016**	**4,010**	**437**	**1,499**	**–**	**1,924**	**12**	**70**	**6,016**

The financial instruments belonging to hierarchy level 3 of fair value are represented by the following Other investments recognized as Non-current assets, for which directly or indirectly observable prices on the market are not available:

- Banca UBAE
- Istituto Europeo di Oncologia
- Other minor companies.

Banca UBAE, Istituto Europeo di Oncologia and the other minor companies were measured on the basis of an analysis, deemed reliable, of their main assets and liabilities.

In 2019, there were no effects on the income statement deriving from the measurement of financial instruments at fair-value hierarchy level 3.

The profit/(loss) recognized in Other components of the Statements of Comprehensive Income were recognized within the scope of the Reserve for financial assets measured at fair value through other comprehensive income.

(millions of euros)	IFRS 9 IFRS 9	note	Carrying amount at 31.12.2019	Amounts recognized in financial statements			Levels of hierarchy or of fair value			
				Cost cost	Fair value through other comprehensive income	Fair value through separate income statement	Level 1	Level 2	Carrying amount under IFRS IFRS 16	Fair Value at 12/31/2019
LIABILITIES										
Financial liabilities measured at amortized cost	FLAC/HD		**30,493**	**30,493**						**28,041**
Non-current liabilities										
Financial payables (medium/long-		15)	*23,251*	23,251						
Current liabilities										
Financial payables (short-term)		15)	*3,681*	3,681						
Trade and miscellaneous payables		23)	*3,413*	3,413						
Contract liabilities		23)	*148*	148						
Financial liabilities measured at fair value through profit or loss	FLHfT		**1,325**			**1,325**				**1,325**
Non-current liabilities										
Non-hedging derivatives		15)	*1,272*			1,272		1,272		
Current liabilities										
Non-hedging derivatives		15)	*53*			53		53		
Hedging Derivatives	HD		**1,712**		**1,712**					**1,712**
Non-current liabilities										
Hedging Derivatives		15)	*1,659*		1,659			1,659		
Current liabilities										
Hedging Derivatives		15)	*53*		53			53		
Finance lease liabilities	n.a.		**4,668**						**4,668**	**5,152**
Non-current liabilities		15)	*4,002*						4,002	
Current liabilities		15)	*666*						666	
Total			**38,198**	**30,493**	**1,712**	**1,325**	**–**	**3,037**	**4,668**	**36,230**

Carrying amount and fair value hierarchy for each category/class of financial asset/liability and comparison with their fair value at 12/31/2018

(millions of euros)	IFRS 9 IFRS 9	note	Carrying amount in financial statements at 12/31/2018	Amounts recognized in financial statements: Amortized cost	Fair value through other comprehensive income	Fair value through separate income statement	Levels of hierarchy or: Level 1	Level 2	Level 3	Carrying amount under IFRS IFRS 16	Fair Value at 12/31/2018
ASSETS											
Financial assets measured at amortized cost	AC		**4,051**	**4,051**	**–**	**–**					**4,051**
Non-current assets											
Receivables from employees		8)	*39*	39							
Other financial receivables		8)	*306*	306							
Miscellaneous receivables from		9)	*10*	10							
Current assets											
Receivables from employees		8)	*13*	13							
Other short-term financial		8)	*6*	6							
Cash and cash equivalents		8)	*885*	885							
Trade receivables		12)	*2,625*	2,625							
Miscellaneous receivables from		12)	*121*	121							
Contract assets		12)	*46*	46							
Financial assets measured at fair value through other comprehensive income	FVTOCI		**499**	**–**	**499**	**–**					**499**
Non-current assets											
Other investments		7)	*33*		33		3	16	14		
Securities other than		8)									
Current assets											
Trade receivables		12)	*–*		–						
Securities other than investments		8)	*466*		466		466				
Financial assets measured at fair value through profit or loss	FVTPL		**1,062**	**–**	**–**	**1,062**					**1,062**
Non-current assets											
Non-hedging derivatives		8)	*897*			897		897			
Current assets											
Securities other than investments		8)									
Non-hedging derivatives		8)	*165*			165		165			
Hedging Derivatives	HD		**464**	**–**	**391**	**73**					**464**
Non-current assets											
Hedging Derivatives		8)	*385*		333	52		385			
Current assets											
Hedging Derivatives		8)	*79*		58	21		79			
Financial receivables for lease contracts	n.a.		**79**	**–**	**–**	**–**				**79**	**79**
Non-current assets		8)	*15*							15	
Current assets		8)	*64*							64	
Total			**6,155**	**4,051**	**890**	**1,135**	**469**	**1,542**	**14**	**79**	**6,155**

(millions of euros)	IFRS 9 IFRS 9	note	Carrying amount in financial statements at 12/31/2018	Amounts recognized in financial statements			Levels of hierarchy or of fair value			
				Amortized cost	Fair value recognized in the statements of comprehensive income	Fair Value taken to separate income statements	Level 1	Level 2	Amounts recognized in the financial statements pursuant to IFRS 16	Fair Value at 12/31/2018
LIABILITIES										
Financial liabilities measured at amortized cost	FLAC/HD		**31,685**	**31,685**						**31,689**
Non-current liabilities										
Financial payables (medium/long-		15)	*21,012*	21,012						
Current liabilities										
Financial payables (short-term)		15)	*7,217*	7,217						
Trade and miscellaneous payables		23)	*3,267*	3,267						
Contract liabilities		23)	*189*	189						
Financial liabilities measured at fair value through profit or loss	FLHfT		**1,062**			**1,062**				**1,062**
Non-current liabilities										
Non-hedging derivatives		15)	*897*			897		897		
Current liabilities										
Non-hedging derivatives		15)	*165*			165		165		
Hedging Derivatives	HD		**1,785**		**1,785**	**–**				**1,785**
Non-current liabilities										
Hedging Derivatives		15)	*1,423*		1,423			1,423		
Current liabilities										
Hedging Derivatives		15)	*362*		362			362		
Finance lease liabilities	n.a.		**1,604**						**1,604**	**3,015**
Non-current liabilities		15)	*1,445*						1,445	
Current liabilities		15)	*159*						159	
Total			**36,136**	**31,685**	**1,785**	**1,062**	**–**	**2,847**	**1,604**	**37,551**

Gains and losses by IFRS 9 categories - Year 2019

(millions of euros)	IFRS 9 categories	Net gains/(losses) 2019[1]	of which interest
Assets measured at amortized cost	AC	(423)	10
Assets and liabilities measured at fair value through profit or loss	FVTPL	(40)	
Assets and liabilities measured at fair value recognized in the statements of comprehensive income	FVTOCI	6	
Financial Liabilities at Amortized Cost	AC	(958)	(893)
Total		**(1,415)**	**(883)**

(1) Of which 2 million euros relates to fees and expenses not included in the effective interest rate calculation on financial assets/liabilities other than those at fair value through profit or loss.

Gains and losses by IFRS 9 categories - Year 2018

(millions of euros)	IFRS 9 categories	Net gains/(losses) 2018 [1]	of which interest
Assets measured at amortized cost	AC	(405)	7
Assets and liabilities measured at fair value through profit or loss	FVTPL	24	
Assets and liabilities measured at fair value recognized in the statements of comprehensive income	FVTOCI	37	
Financial Liabilities at Amortized Cost	AC	(999)	(929)
Total		(1,343)	(922)

(1) Of which 4 million euros relating to fees and expenses not included in the effective interest rate calculation on financial assets/liabilities other than those at fair value through profit or loss.

NOTE 20
EMPLOYEE BENEFITS

Employee benefits decreased by 207 million euros compared to December 31, 2018. The breakdown and movements are as follows.

(millions of euros)	12/31/2017	Increase/ Present value	Decrease	12/31/2018
Provision for employee severance indemnities	**913**	(7)	(59)	**847**
Provision for termination benefit incentives and corporate restructuring	**837**	203	(334)	**706**
Total	**1,750**	**196**	**(393)**	**1,553**
of which:				
non-current portion	*1,661*			*1,502*
current portion (*)	*89*			*51*

(*) The current portion refers to the Provision for termination benefit incentives and corporate restructuring.

(millions of euros)	12/31/2018	Increase/ Present value	Decrease	12/31/2019
Provision for employee severance indemnities	**847**	42	(84)	**805**
Provision for termination benefit incentives and corporate restructuring	**706**	236	(401)	**541**
Total	-			
of which:	**1,553**	**278**	**(485)**	**1,346**
non-current portion	*1,502*			*1,106*
current portion (*)	*51*			*240*

(*) The current portion refers to the Provision for termination benefit incentives and corporate restructuring.

The **Provision for employee severance indemnities (T.F.R.)** down by a total of 42 million euros. The reduction of 84 million euros under "Decreases" refers to ordinary advances and uses paid during the year to employees who terminated employment. The higher costs under the item "Increase/Present value" mainly includes the following:

(millions of euros)	2019	2018
(Positive)/negative effect of curtailment	(8)	-
Finance expenses	10	12
Net actuarial (gains) losses recognized during the year	40	(21)
Total expenses (income)	**42**	**(9)**
Effective return on plan assets	there are no assets servicing the plan	

The positive impact of the curtailment, amounting to 8 million euros, was linked to the updated actuarial forecasts resulting from the review of the outflow estimates of the corporate restructuring plan of the Company (further details are provided in the Note "Employee benefits expenses").
The net actuarial losses recognized at December 31, 2019, totaling 40 million euros (net actuarial gains of 21 million euros in 2018) essentially related to the change in the discount rate to 0.77% from 1.57% used at December 31, 2018, while the expected inflation rate went from 1.5% as at December 31, 2018 to 1.2% as at December 31, 2019.

According to Italian law, the amount to which each employee is entitled depends on the period of service and must be paid when the employee leaves the company. The amount of severance indemnity due upon termination of employment is calculated on the basis of the period of employment and the taxable compensation of each employee. This liability is adjusted annually based on the official cost-of-living index and legally-set interest. The liability is not associated with any vesting condition or period or any funding obligation; accordingly, there are no assets servicing the provision. The liability is recognized net of the partial prepayments

of the fund and the payments of the amounts obtained by employees for the reasons permitted by the applicable regulations.
In accordance with IAS 19, this provision has been recognized as a “Defined benefit plan”, for the amounts due up to December 31, 2019.
Under the regulations introduced by Italian Legislative Decree 252/2005 and Law 296/2006 (the State Budget Law 2007), the severance indemnities accruing from 2008 are assigned to either the INPS Treasury Fund or to supplementary pension funds and take the form of a "Defined contribution plan". However, revaluations of the provision for the employee severance indemnities at December 31, 2006, made on the basis of the official cost-of-living index and legally-prescribed interest, are retained in the provision for employee severance indemnities.
In application of IAS 19, the employee severance indemnities have been calculated using the "Projected Unit Credit Method" according to which:

- the future possible benefits which could be paid to each employee registered in the program in the event of retirement, death, disability, resignation etc. have been projected on the basis of a series of financial assu mptions (cost-of-living increases, interest rate, increase in compensation etc.);
- the average present value of future benefits has been calculated, at the measurement date, on the basis of the annual interest rate adopted and the probability that each benefit actually has to be paid;
- the liability has been calculated as the average present value of future benefits that will be generated by the existing provision at the measurement date, without considering any future accruals.

The following assumptions have been made:

FINANCIAL ASSUMPTIONS	Executives	Non-executives
Inflation rate	1.20% per annum	1.20% per annum
Discount rate	0.77% per annum	0.77% per annum
Employee severance indemnities annual increase rate	2.40% per annum	2.40% per annum
Annual real wage growth:		
equal to or less than 40 years of age	1.0% per annum	1.0% per annum
over 40 but equal to or less than 55 years of age	0.5% per annum	0.5% per annum
over 55 years of age	0.0% per annum	0.0% per annum

DEMOGRAPHIC ASSUMPTIONS	Executives	Non-executives
Probability of death	RG 48 mortality tables published by "Ragioneria Generale dello Stato"	RG 48 mortality tables published by "Ragioneria Generale dello Stato"
Probability of disability	INPS tables divided by age and sex	INPS tables divided by age and sex
Probability of resignation:		
up to 40 years of age	2.00%	1.00%
From 41 to 50 years of age	2.00%	0.50%
From 51 to 59 years of age	1.00%	0.50%
From 60 to 64 years of age	None	0.50%
Over 65 years of age	None	None
Probability of retirement	100% om achievement of the AGO requirements aligned with D.L. 4/2019	
Probability of receiving at the beginning of the year an advance from the provision for severance indemnities accrued equal to 70%	1.5% per annum	1.5% per annum

The application of the above assumptions resulted in a liability for employee severance indemnities of 805 million euros at December 31, 2019 (847 million euros at December 31, 2018).

Reported below is a sensitivity analysis for each significant actuarial assumption adopted to calculate the liability as at year end, showing how the liability would have been affected by changes in the relevant actuarial assumption that were reasonably possible at that date, stated in amounts.

The weighted average duration of the obligation is 10.3 years.

CHANGES IN ASSUMPTIONS	Amounts (millions of euros)
Turnover rate:	
+ 0.25 p.p.	(2)
0.25 p.p.	2
Annual inflation rate:	
+ 0.25 p.p.	15
0.25 p.p.	(14)
Annual discount rate:	
+ 0.25 p.p.	(19)
0.25 p.p.	20

The **Provision for termination benefit incentives and corporate restructuring** decreased in total by 165 million euros, mainly as a result of redundancies and the reclassification to payables of amounts not yet paid, relating to plans already set aside in previous years (401 million euros). The increases, amounting to 236 million euros, were connected to the review of the estimate and effective date of the of the Company envisaged for 2020 (including through application of Article 4 of Italian Law 92 of June 28, 2012, as defined by the latest Trade Union Agreement of February 26 2019).

NOTE 21
PROVISIONS

Provisions increased by 182 million euros compared to December 31, 2018. The breakdown and movements are as follows:

(millions of euros)	12/31/2018	Increase	Taken to income	Used directly	Reclassifications/other changes	12/31/2019
Provision for taxation and tax risks	29	1		(1)	(22)	7
Provision for restoration costs	241	15		(6)		250
Provision for legal disputes	576	412		(236)	4	756
Provision for commercial risks	36	10		(22)		24
Provision for risks and charges on investments and corporate-related transactions	28	6				34
Other provisions	2	22		(1)		23
Total	**912**	**466**	**–**	**(266)**	**(18)**	**1.094**
of which:						
non-current portion	581					528
current portion	331					566

The non-current portion of provisions for risks and charges mainly related to the provision for restoration costs and some of the provision for legal disputes. More specifically, in accordance with the accounting standards, the total amount of the provision for restoration costs is calculated by re-measuring the amounts for which a probable outlay is envisaged, based on the estimated inflation rates for the individual due dates, and subsequently discounted to the reporting date based on the average cost of debt, taking into account cash outflow forecasts.

The provision for taxation and tax risks decreased by 22 million euros compared to December 31, 2018; The other changes include the reclassifications under "Income tax payables" of liabilities related to the direct taxation.

The **provision for restoration costs** related to the provision for restoration of leased real estate and sites used for mobile telephony and the dismantling of tangible assets (batteries, wooden poles). This provision increased by 9 million euros compared to December 31, 2018.

The **provision for legal disputes** increased 180 million euros compared to December 31, 2018; The figure includes provisions for disputes with employees (42 million euros) and third parties (714 million euros).

The **Provision for commercial risks** decreased by 12 million euros compared to December 31, 2018.

The **Provision for risks and charges on investments and corporate-related transactions** increased by 6 million euros compared to December 31, 2018.

Other provisions for risks and charges increased by 21 million euros compared to December 31, 2018.

NOTE 22
MISCELLANEOUS PAYABLES AND OTHER NON-CURRENT LIABILITIES

Miscellaneous payables and other non-current liabilities consisted of the following at December 31, 2019:

(millions of euros)		12/31/2019	12/31/2018
Miscellaneous payables (non-current)			
Payables to social security agencies		363	257
Payables to subsidiaries		11	21
Other payables to third parties		1,814	1,905
	(a)	**2,188**	**2,183**
Other non-current liabilities			
Deferred revenues from customer contracts (Contract liabilities)		92	107
Other deferred revenue and income		374	359
Capital grants		319	357
	(b)	**785**	**823**
Total	**(a+b)**	**2,973**	**3,006**

Miscellaneous payables (non-current)

This item rose by 5 million euros compared to December 31, 2018 and mainly includes:

- **Payables to social security agencies** amounted to 363 million euros (257 million euros at December 31, 2018): related to the remaining amount due to the INPS for the application of the 2015 arrangements and those subsequently signed in 2018 and 2019, relating to Article 4 paragraphs 1-7ter, of Italian Law 92 of June 28, 2012 (see the Note "Employee benefits expenses" for more details).
  Details are as follows:

(millions of euros)	12/31/2019	12/31/2018
Non-current payables		
Due from 2 to 5 years after the end of the reporting period	354	242
Due beyond 5 years after the end of the reporting period	9	15
	363	**257**
Current payables	**209**	**167**
Total	**572**	**424**

- **Payables to subsidiaries** amounted to 11 million euros (21 million euros at December 31, 2018): this item relates to the payables due for the adoption of the consolidated tax return in Italy;

- **Other payables to third parties** totaling 1,814 million euros (1,905 million euros at December 31, 2018). The item mainly refers to the non-current portion (110 million euros recognized as current payables) for the purchase - which took place in 2018 - of the rights-of-use for the frequencies in the 694-790 MHz, 3600-3800 MHz and 26.5-27.5 GHz bands, to be allocated on 5G mobile communication services. The breakdown of payments over time is as follows:
  - 55 million euros by September 2021;
  - 1,738 million euros by September 2022.

Other non-current liabilities

The item, amounting to 785 million euros, fell by 38 million euros compared to December 31, 2018 and consisted of:

- **Deferred revenues from contracts with customers (contract liabilities),** amounting to 92 million euros (107 million euros at December 31, 2018): the item is reversed to the income statement on the basis of the duration of the contractual obligations between the parties, equal to an average of 24 months; therefore, the balance as at December 31, 2019 will be reversed to the income statement generally by 2021. The item mainly included:
  - deferred revenues on activation and installation of new contracts with customers of 8 million euros (20 million euros at December 31, 2018): in this regard, it is noted that under IFRS 15 activation/installment revenue are allocated to other contract obligations and recognized throughout the period of performance of the contract, as they do not relate to separate performance obligations.
  - deferred revenues for subscription charges of access to the network of 30 million euros;
  - deferred revenues for subscription charges and rent and maintenance payments of 50 million euros.

- **Other deferred revenues and income**, amounting to 374 million euros (359 million euros at December 31, 2018): these refer to contract liabilities deriving from contracts for the sale of transmission capacity (operating asset leases);

- **Capital grants**, amounting to 319 million euros (357 million euros at December 31, 2018): the item represents the component still to be released to the income statement based on the remaining useful life (estimated at around 18 years) of the assets that the grants refer to and is mainly connected to the realization of the infrastructures on the Ultra-Broadband-UBB and Broadband-BB projects.

NOTE 23
TRADE AND MISCELLANEOUS PAYABLES AND OTHER CURRENT LIABILITIES

Trade and miscellaneous payables and other current liabilities at December 31, 2019 consisted of the following:

(millions of euros)		12/31/2019	of which Financial Instruments	12/31/2018	of which Financial Instruments
Payables on construction work	**(a)**	**20**		**18**	
Trade payables					
Payables to suppliers		2,678	*2,678*	2,610	*2,610*
Payables to other telecommunication operators		302	*302*	284	*284*
Payables to subsidiaries		250	*250*	242	*242*
Payables to associates and joint ventures		3	*3*	3	*3*
Payables to other related parties		30	*30*	28	*28*
	(b)	**3,263**	*3,263*	**3,167**	*3,167*
Miscellaneous payables					
Payables to subsidiaries		49		60	
Payables to other related parties		21		23	
Tax payables		97		108	
Payables to social security agencies		285		277	
Payables for employee compensation		142		96	
Other		303	*150*	169	*100*
Employee benefits (except for employee severance indemnities) for the current portion expected to be settled within 1 year		240		51	
Provisions for risks and charges for the current portion expected to be settled within 1 year		566		331	
	(c)	**1,703**	*150*	**1,115**	*100*
Other current liabilities					
Liabilities from customer contracts (Contract liabilities)		789	*148*	862	*189*
Other deferred revenue and income		68		76	
	(d)	**857**	*148*	**938**	*189*
Total	**(a+b+c+d)**	**5,843**	**3,561**	**5,238**	**3,456**

Further details on Financial Instruments are provided in the Note "Supplementary disclosures on financial instruments".

Trade payables

This item increased by 96 million euros compared to December 31, 2018, mainly as a result of the change in bills payable. In particular, we report:

- payables to subsidiaries that amounted to 250 million euros: these relate to amounts due to Telecom Italia Sparkle (43 million euros) for telecommunications services, Telenergia (43 million euros), Flash Fiber (35 million euros), Olivetti (26 million euros), TIM Retail – former 4G Retail (26 million euros), INWIT (31 million euros), HR Services (11 million euros), Telecontact (18 million euros) and Telecom Italia Trust Technologies (9 million euros) for supply contracts.
- payables to associates that amounted to 3 million euros: relate to supply arrangements mainly due from W.A.Y. S.r.l. and Movenda S.p.A.;

- payables to related parties that amounted to 30 million euros: relate mainly to amounts due to the Havas group.

Miscellaneous payables

Amounted to 1,703 million euros and increased by 588 million euros compared to December 31, 2018. They mainly include:

- tax payables, amounting to 97 million euros: these mainly refer to withholding tax payables to the tax authorities as withholding agent (75 million euros), payables for government concession tax (13 million euros) and VAT payable (3 million euros);
- payables to social security agencies: include the short-term portion of the amount payable due to INPS for the application of the 2015 and subsequent signed in 2018 and 2019, relating to article 4, paragraphs 1-7ter, of Italian Law 92 of June 28, 2012, as described in the Note "Miscellaneous payables and other non-current liabilities";
- payables to subsidiaries include 13 million euros for tax consolidation (mainly due to Olivetti, Telecom Italia Sparkle, INWIT and Flash Fiber);
- other payables included payables for government and European Union grants;
- employee benefits and provisions.

Other current liabilities

The item, amounting to 857 million euros, fell by 81 million euros compared to December 31, 2018 and consisted of:

- The **liability arising from contracts with customers (contract liabilities),** amounting to 789 million euros (862 million euros at December 31, 2018): The item shows the liabilities from customers linked to the Company's obligations to transfer goods and services for which received a price. Liabilities with customers are shown below, which generally have a maturity within 12 months; therefore, the figure at December 31, 2019 will be paid back substantially by December 31, 2020. In particular:
  - **Contract Liabilities** amounting to 53 million euros (114 million euros at December 31, 2018): the item includes bundle contracts (good and services packages) with performance obligations with different timing for the recognition of revenues and consequent deferral of the fees originally recognized. The decrease recognized in the year (61 million euros) was mainly linked to the launch of commercial offers that no longer require a fixed duration and the reversal to the income statement of the balance previously accumulated;
  - **Customer-related items** of 356 million euros (330 million euros at December 31, 2018): the item includes trade payables following contractual relationships, such as the payable for prepaid traffic and the subscription charges charged in advance;
  - **Advance receipts and payments** amounting to 100 million euros (121 million euros at December 31, 2018): the item includes trade payables following prepayments, such as deposits made by subscribers for phone calls;
  - **Deferred revenues from contracts with customers** of 280 million euros (297 million euros at December 31, 2018): the item refers to the deferral of revenues from customers contracts and mainly included:
    - deferred revenues on activation and installation of new contracts with customers (40 million euros);
    - deferred revenues for interconnection charges (118 million euros);
    - deferred revenues for rent and maintenance (93 million euros);
    - deferred revenues for subscription charges of other services (29 million euros).

- **Other deferred revenues and other income** amounted to 68 million euros (76 million euros at December 31, 2018): related for 46 million euros to deferred revenues from transmission capacity transfer contracts and for 22 million euros to deferred revenues from real estate leases (lease operating income).

NOTE 24
DISPUTES AND PENDING LEGAL ACTIONS, OTHER INFORMATION, COMMITMENTS AND GUARANTEES

A description is provided below of the most significant judicial, arbitration and tax disputes in which TIM S.p.A. was involved at December 31, 2019, as well as those that came to an end during the year.
TIM S.p.A. has posted liabilities totaling 915 million euros for those disputes described below where the risk of losing the case has been considered probable.
It should be noted that for some disputes described below, on the basis of the information available at the closing date of the present document and with particular reference to the complexity of the proceedings, to their progress, and to elements of uncertainty of a technical-trial nature, it was not possible to make a reliable estimate of the size and/or times of possible payments, if any. Moreover, in those cases in which disclosure of information on a dispute could seriously jeopardize the position of TIM or its subsidiaries, only the general nature of the dispute is described.
Lastly, as regards the proceedings with the Antitrust Authority, please note that based on Article 15, paragraph 1 of Italian Law 287/1990 ("Antitrust regulations"), the Authority has the right to impose an administrative sanction calculated on the turnover of the Group in cases of breaches considered serious.

A) SIGNIFICANT DISPUTES AND PENDING LEGAL ACTIONS

Administrative offense charge pursuant to Legislative Decree 231/2001 for the so-called TIM Security Affair

In December 2008 TIM received notification of the application for its committal for trial for the administrative offense specified in articles 21 and 25, subsections 2 and 4, of Legislative Decree 231/2001 in relation to the affairs that involved several former employees of the Security function and former collaborators of the Company charged – among other things – with offenses involving corruption of public officials, with the object of acquiring information from confidential files. In May 2010, TIM definitively ceased to be a defendant in the criminal trial, the Judge for the Preliminary Hearing having approved the motion for settlement of the proceedings (plea bargaining) presented by the Company. In the hearing before Section One of the Milan Court of Assizes, TIM acted in the dual role of civil party and civilly liable party. On the one hand, in fact, TIM was admitted as the civil party damaged by all the accused parties on all counts, and on the other it was charged with civil liability under Article 2049 of the Civil Code for the facts allegedly committed by the accused in relation to 32 civil parties. Telecom Italia Latam and Telecom Italia Audit & Compliance Services (now incorporated into TIM) also participated in the hearing as civil parties, having filed appearances since the Preliminary Hearing and brought charges against the defendants for hacking. After the lengthy evidence hearings, 22 civil parties filed claims for compensation, also against TIM as civilly liable party, for over 60 million euros (over 42 million euros of which requested by a single civil party). The Company itself, as civil party, also summarized its conclusions against the defendants, requesting that they be found liable for all the damages suffered as a result of the facts of the case. In February 2013, Section 1 of the Milan Court of Assizes issued the first instance judgment, sentencing the defendants to terms of imprisonment of between 7 years and 6 months and one year. The Court also recognized that there had been non-pecuniary damage to some of the civil parties as a consequence of the alleged facts, and sentenced the defendants, jointly and severally with civilly liable party TIM, to compensate said damages, totaling 270,000 euros (in part jointly and severally with Pirelli) plus legal fees; at the same time the Court also sentenced the defendants to pay compensation for pecuniary and non-pecuniary damages incurred by the Company, granting it a provisional sum of 10 million euros. The judgment also recognized the existence of non-pecuniary damage to the companies Telecom Italia Latam and Telecom Italia Audit & Compliance Services, sentencing the defendants to pay compensation for damages on an equitable basis of 20,000 euros for each company. In November 2013 the grounds for the judgment in the first instance were published (which, for its part, the Company decided not to contest). At the end of the appeal, which was brought by the convicted defendants, the judgment in the first instance was partly reversed. The appeal judge took note of the fact that the time-limit had expired on the majority of the charges, and made an order not to proceed against the defendants who had been convicted in the lower court, with the exception of two private investigators, who were found guilty of the offense of revealing information which was subject to a prohibition on disclosure. As for the civil judgments, the Court revoked those made by the judge of first instance and ruled in favor of three ministries, AGCM and the Revenues Agency. The Court also decided to revoke the provisional sum of 10 million euros awarded to the Company as civil party at the end of the proceedings in the court of first instance, making a generic ruling that the defendants should pay compensatory civil damages. Finally, the appeal judge also rejected all the demands for compensation advanced in the appeals by certain civil parties for a total of about 60 million euros, in respect of which the Company has the role of party liable for damages. At the end of the appeal, therefore, the civil rulings settled in the first instance were confirmed which TIM, as the party liable for damages, had already paid to the damaged requesting parties. The three defendants brought an appeal to the Court of Cassation against the judgment of the second instance issued by the Milan Appeal Court of Assizes. In April 2018 the Supreme Court confirmed the convictions of the defendants and canceled the civil rulings, referring the issue generically to the civil court, for a more careful assessment of the claims made, above all concerning the quantum of evidence. It also canceled and referred the confiscation in favor of the State, which will have to be reassessed by a different section of the Milan Court of Assizes of Appeal.

Golden Power Case

In August 2017 the Presidency of the Council of Ministers started formal proceedings against TIM (and also against Vivendi) to ascertain that TIM was indeed obliged to notify Vivendi's acquisition of corporate control of TIM and its strategic assets, pursuant to the 'Golden Power' law. In September 2017, the proceedings in question concluded by ascertaining that this obligation did exist for TIM with effect from May 4, 2017 (the date of the Shareholders' Meeting that renewed TIM's corporate bodies).
As a result of this decision by the Presidency of the Council of Ministers, new and separate administrative proceedings started for the imposition on TIM of a financial penalty laid down by the Golden Power law for non-compliance with the aforementioned obligation to notify. These proceedings ended on May 8, 2018 with the imposition of a financial penalty of 74.3 million euros.
The Company is convinced that it has the legal arguments to demonstrate that it was under no obligation to notify the control exercised over it by Vivendi, has already filed an extraordinary appeal to the President of the Republic to request the abrogation of the order of September 2017 and has appealed to the Lazio Regional Administrative Court (TAR) against the aforementioned order of May 8, 2018 which imposed a financial penalty, requesting its precautionary suspension. After granting in July 2018, the application of the Company and thereby suspending payment of the fine, the Regional Administrative Court of Lazio with its provisional ruling of May 2019: rejected the exception of inadmissibility of the appeal on the sanction of 74.3 million euros; suspended the ruling preliminarily as regards the extraordinary appeal concerning the obligation of notification pursuant to the Golden Power rules; further suspended execution of the challenged measure.
It should also be noted that in May 2018 a guarantee bond for 74.3 million euros was issued in favor of the Presidency of the Council. TIM had been requested to submit such a bond for its application to Lazio TAR for precautionary suspension of the collection of the fine imposed for alleged breach of Article 2 of Decree Law 21 of March 15, 2012 (the "Golden Power" law).
On the other hand, the Presidency of the Council of Ministers exercised the special powers prescribed in the Golden Power law through two specific rulings in October and November 2017 with which it imposed specific prescriptions and conditions on TIM S.p.A. and on the companies of the Telecom Italia Sparkle group and Telsy Elettronica e Telecomunicazioni.
The prescriptions, according to the Administrative Authority, are essentially connected to the circumstance that these companies, in part, perform activities that are relevant for national security and as far as TIM is concerned to the circumstance that it also owns the infrastructure and the systems used to provide access to end-users of services covered by the universal service obligation.
Any failure on the part of the recipients of the orders to execute the conditions and prescriptions is penalized in the same way as failure to notify significant acts for the purpose of the application of Golden Power law.
The companies subject to the prescriptions are required to send periodic reports to a special Monitoring Committee established at the office of the Prime Minister in order to verify compliance with the aforementioned prescriptions.
In December 2017 the Group sent to the Presidency of the Council of Ministers the first compliance report outlining all the proposals and activities put in place to carry out the prescriptions. This report is then followed by half yearly reports, as required by current legislation.
In this case too TIM has already submitted an extraordinary appeal to the President of the Republic to request abrogation of the orders in question.
As stated, the premise for exercising special powers was (erroneously, according to the Company) referred to the de facto control resulting from the outcome of the shareholders' meeting of May 4, 2017 and to the direction and coordination of TIM by Vivendi. Both these circumstances no longer apply, as:

- at the shareholders' meeting of May 4, 2018, the slate presented by the shareholders Elliott International LP, Elliott Associates LP and The Liverpool Limited Partnership received the majority vote;
- the Board of Directors was re-appointed with 13 independent directors out of a total of 15, with only 5 from the slate presented by Vivendi;
- thus, Vivendi no longer has direction and coordination, nor is there de facto control.

Consequently, the Company requested the Prime Minister's Office to revoke the two Decrees, stating, in any case that it was willing as an alternative to assist in rewording the requirements applicable to TIM in view of the changed situation.
In a decree of July 6, 2018, the Prime Minister's Office did not consider an additional exercise of special powers, upholding the validity of the two Decrees already issued and rejecting the request to revoke them.

The reason for the above is due to the alleged circumstance that the new governance structures of the Company would be highly variable; this would not allow for the rulings according to which the special powers were exercised to be overruled, save for the need to protect the public interest as regards network security and operation.
The Company has lodged an appeal, with additional reasons and as part of the appeals already lodged, against the Prime Minister's decrees of October 16 and November 2, 2017, and against the Prime Minister's resolution of July 6, 2018, rejecting the appeal for revocation presented by the company, on the outcome of the changed situation in corporate governance.

Italian Competition Authority Case A428

Case A428 was closed in May 2013 with the decision by the Italian Antitrust Authority (AGCM) to impose two administrative fines on TIM of 88,182,000 euros and 15,612,000 euros for abuse of a dominant position. The Company (i) allegedly hindered or delayed the activation of access services requested by OLOs through refusals made on unjustified and spurious grounds; (ii) allegedly offered its access services to end customers on economic and technical terms and conditions claimed to be unmatchable by competitors that purchase wholesale access services from TIM, solely in geographical areas of the country where access services are available unbundled from the local network and hence where other operators can compete more effectively with the Company.
TIM contested the decision with the Lazio Regional Administrative Court (TAR), requesting suspension of payment of the fine. Specifically, it was argued: that the right of defense in the proceeding had been infringed; that the alleged organizational arrangements disputed by the AGCM and purportedly at the basis of the infringement of provisioning processes for OLOs had been the subject of specific provisions by the Authority for the sector (AGCom); that a comparative analysis of internal/external provisioning processes in truth resulted in improved outcomes for the OLOs with respect to the Retail division of TIM and as such no form of inequality of treatment and/or opportunistic conduct by TIM existed; and (with reference to the second count of abuse) that the conduct challenged was structurally inapt to squeeze the margins of the OLOs.
In May, 2014, the Lazio TAR handed down its ruling rejecting TIM's appeal and upholding the fines imposed by the decision contested. In September 2014, the Company lodged an appeal against the ruling.
In May 2015, by ruling 2497/15, the Council of State found the judgment of first instance did not present the irregularities claimed by TIM and upheld the decision of the AGCM. The Company had already, at that date, paid the fines and relative interest.
In July 2015, TIM was served notice of the AGCM's decision to initiate an investigation for non-compliance to determine whether the Company had complied with the order not to engage in conduct having the same or similar object as the infringement identified by the decision that settled the A428 case in May 2013.
On January 13, 2017, TIM was served notice of AGCM's final assessment, which found that TIM had complied in full with the A428 decision and, as such, the conditions for the imposition of a fine for non-compliance were not present.
AGCM also acknowledged that the conduct of TIM following the 2013 decision was geared towards the continuous improvement of performance in the supply of wholesale access services, as concerns not only the services subject to investigation, but also new services for ultra-broadband access. In its assessment of compliance, AGCM acknowledged the positive impact of the roll-out, although not yet completed, of TIM's New Equivalence Model (NEM). The AGCM decision ordered TIM to: (i) continue with the roll-out of the NEM through to its completion, scheduled for April 30, 2017; (ii) inform the Authority of the performance levels of wholesale access service supply systems and of the completion of the relative internal reorganization project by the end of May 2017. TIM promptly complied with both orders, as positively assessed by the Authority by notice dated August 9, 2017.
Vodafone disputed the final decision adopted by the AGCM on the non-compliance investigation with the Lazio Regional Administrative Court (TAR). TIM filed an appearance, as in the other lawsuits filed in March 2017 by the operators CloudItalia, KPNQWest Italia and Digitel.

Vodafone (A428)

In August 2013, Vodafone, also in its capacity as acquiring entity of the operator Teletu, filed a major damages claim with the Court of Milan for alleged anti-competitive and abusive conduct (based primarily on the AGCM A428 decision) purportedly pursued by TIM over the period 2008–2013. The damages claim was quantified by Vodafone for an estimated amount between 876 million euros and 1,029 million euros.
Specifically, Vodafone alleged that a technical boycott had been put in place by refusing the activation of lines requested for Teletu customers (in the period from 2008 to June 2013) and that purportedly abusive pricing policies had been adopted for wholesale network access services (from 2008 to June 2013). In addition, the plaintiff complained of margin squeezing practices through the alleged application of higher than permitted discounts for business customers and the alleged implementation of unlawful and anti-competitive win-back practices (from the second half of 2012 to June 2013).
TIM filed an appearance challenging the substance and amount of the plaintiff's claims and lodging, in turn, a counterclaim. Following the ruling in August 2016 of the Italian Supreme Court of Cassation confirming the

jurisdiction of the Court of Milan to hear the dispute, the main proceedings were resumed with the hearing held in December 2016.

With writ of summons before the Milan Court served in May 28, 2015, Vodafone filed additional damages claims, all based on the same AGCM A428 decision and referring to alleged damages suffered between July 2013 and December 2014 (and hence over a period subsequent to that of the damages claim reported above), for a total amount of around 568.5 million euros.
In its claim, the plaintiff also reserved the right to quantify additional damages during the case for subsequent periods, on the grounds that TIM had continued to engage in the alleged abusive conduct. TIM filed an appearance challenging the substance and amount of the plaintiff's claims and lodging, in turn, a counterclaim.

By order of October 6, 2016, the judge approved Vodafone's application for the two A428 lawsuits brought by it to be joined. At the end of the hearing on December 21 reopening the proceeding, terms were set for the filing of preliminary pleadings and the hearing for the submission of means of proof was set for July 11, 2017. With the first preliminary pleading, filed after the favorable outcome for TIM of the A428-C case (which found the Company had not engaged in abusive conduct after 2011), Vodafone decided to file an additional and similar damages claim for the period 2015-2016, which revised the claim for a total of 1,812 million euros of damages, which TIM contested and refuted.

COLT TECHNOLOGY SERVICES

With writ of summons before the Milan Court served in August 2015, the operator Colt Technology Services filed a damages claim based on the A428 decision, requesting compensation for alleged damages suffered from 2009 to 2011 as a result of purportedly inefficient and discriminatory conduct by TIM in the wholesale service supply process. The damages claim was quantified in a total of 27 million euros for lost profits from the alleged non-acquisition of new customers and the claimed impossibility of providing new services to customers already acquired. The plaintiff also filed a damages claim for compensation for damages to its commercial image and reputation. The lawsuit follows on from an out-of-court claim for around 23 million euros made by Colt in June 2015, which the Company had rejected outright. TIM has filed an appearance, fully contesting the claims of the other party.

COMM 3000 S.p.A. (formerly KPNQWest Italia S.p.A.)

With writ of summons before the Rome Court, COMM 3000 S.p.A. (formerly KPNQWest Italia S.p.A.) filed a damages claim for a total of 37 million euros in compensation for alleged anticompetitive and abusive conduct over the period 2009-2011, in the form of technical boycotting (refusals to activate wholesale services - KOs); the claim was based on the contents of the decision of the Italian Antitrust Authority that settled the A428 case. TIM filed an appearance, contesting all of the plaintiff's allegations. In the judgment with ruling in April 2019, the Court of Rome partially granted the applications of COMM 3000 S.p.A. (formerly KPNQWest Italia S.p.A.), sentencing TIM to pay an amount significantly lower than the amount in the counterparty's damages claim. In June 2019, TIM filed an appeal against the ruling, requesting full rejection of the claims presented by COMM 3000 S.p.A. (formerly KPNQWest Italia S.p.A.) in the ruling of first instance and, in July, obtained the suspension of payment of a significant portion of the amount defined in the ruling.

TELEUNIT

With a writ of summons before the Rome Court, Teleunit claimed 35.4 million euros in compensation from TIM, based on the known decision of the Italian Competition Authority that settled the A428 case. Specifically, the other party complained that in the period 2009/2010 it had suffered abusive conduct on TIM's part in the form of technical boycotting (refusals to activate network access services - KOs), and anticompetitive practices in the form of margin squeezing (excessive squeezing of discount margins, considered abusive inasmuch as they cannot be replicated by competitors). TIM filed an appearance, contesting all of the plaintiff's allegations.
With a writ of summons issued in October 2009 before the Milan Appeal Court, Teleunit asked that TIM alleged acts of abuse of its dominant position in the premium services market be ascertained. The plaintiff quantified its damages at a total of approximately 362 million euros. TIM filed an appearance, contesting the claims of the other party.
After the ruling of January 2014 with which the Court of Appeal declared that it was not competent in this matter and referred the case to the Court, Teleunit reinstated the case before the Milan Court the following April. TIM filed an appearance in the reinstated proceedings challenging the plaintiff's claims.
In its judgment of May 2017, the Milan Court rejected Teleunit's claim in its entirety, and ordered the company to pay the legal costs of the case. This judgment was appealed by Teleunit, in June 2017, before the Milan Court of

Appeal. TIM filed an appeal challenging the arguments presented by the other party and asking that the judgment in the first instance be fully confirmed. With an order in March 2018 the Milan Court of Appeal declared Teleunit's appeal pursuant to Article 348-bis of the Italian Code of Civil Procedure to be manifestly without foundation, and hence inadmissible. In May 2018 Teleunit appealed the judgment of the Court of Appeal to the Court of Cassation. TIM lodged a counter-appeal seeking confirmation in full of the order being appealed (and thus of the judgment at first instance).

SIPORTAL

The lawsuit brought by Siportal against TIM is currently pending before the Rome Court, by which Siportal has sued for approximately 48.4 million euros of compensation for alleged damages from abusive conduct in the form of technical boycotting over the period 2009–2011 and from the knock-on effects of the abuse until 2015, with the loss of commercial partners and the non-acquisition of new customers (the latter quantified for 25 million euros of damages). The claims are based on the decision of the Italian Antitrust Authority that settled the A428 case. TIM has filed an appearance, fully contesting the claims of the other party. The Court of Rome decided in favor of Siportal on the *an* of the alleged plaintiff; the case will continue with the Court Appointed Expert. TIM reserves every right to protect its own interests.

MC-Link

With writ of summons before the Rome Court, MC-Link filed a damages claim for a total of 51 million euros in compensation for alleged anticompetitive and abusive conduct over the period 2009–2012, in the form of technical boycotting (refusals to activate wholesale services – KOs). The claim was based on the contents of the decision of the Italian Antitrust Authority that settled the A428 case. TIM filed an appearance, contesting all of the plaintiff's allegations.

Antitrust Case I761

By decision adopted on July 10, 2013, AGCM extended to TIM the investigation initiated in March that year into a number of companies engaged in the fixed-line network maintenance services sector, aimed at establishing whether an agreement was in place breaching Article 101 of the Treaty on the Functioning of the European Union. The investigation was initiated following two reports made by Wind informing AGCM that it had found, when inviting bids for the award of corrective maintenance services on the network, substantial uniformity among the prices applied by the aforementioned companies and a significant difference with the bids subsequently tendered by other various companies.
TIM was charged by AGCM with having played a role in coordinating the other parties investigated, both in the formulation of the bids invited by Wind and in relation to the positions taken by them before the Italian Communications Authority.
TIM challenged the decisions with the Regional Administrative Court (TAR) on the grounds that the Competition Authority lacked jurisdiction.
On July 7, 2014, notice was served of the AGCM's decision to extend the object of the investigation to determine whether the Company had abused its dominant position by taking initiatives apt to influence the bid terms and conditions for ancillary technical services in the preparation of the bids for Wind and Fastweb by the maintenance companies. With the extension decision, the Authority also extended the closing date of the investigation, originally set for July 31, 2014, to July 31, 2015. The extension decision was similarly challenged with the Lazio Regional Administrative Court on the grounds that the Competition Authority lacked jurisdiction.
In November 2014, for reasons of procedural economy, although convinced of the legitimacy of its actions, TIM submitted a proposed series of undertakings to AGCM to resolve the competition concerns under investigation. On December 19, 2014, AGCM issued its decision finding that the undertakings were not clearly unfounded and subsequently ordered their publication for market testing.
On March 25, 2015, AGCM definitively rejected the undertakings, finding them insufficient to resolve the anticompetition concerns under investigation.
On July 21, 2015, notice was served on the parties under investigation of the Investigation Findings, in which the offices of AGCM recommended (i) dismissing the charges of abuse of a dominant position and (ii) confirming, instead, the existence between TIM and the maintenance companies of an agreement aimed at coordinating the economic terms and conditions of the bids for Wind and Fastweb and preventing the disaggregated supply of ancillary technical services.
On December 16, 2015, a final decision was handed down confirming the conclusions of the Investigation Findings, asserting the existence, between 2012 and 2013, of an agreement restricting competition and imposing on the Company, as a result, a fine of 21.5 million euros, which was paid in March 2016. The relevant market is that for corrective maintenance (assurance) services, or, more precisely, troubleshooting on TIM ULL lines. The

objective of the conduct engaged in by the Company and the network companies was to restrict competition and prevent the development of disaggregated forms of supply of ancillary technical services.
TIM lodged an appeal against the decision with the Lazio Regional Administrative Court. In September 2016, the court dismissed the appeal in its judgment 09554/2016, which the Company has challenged in an appeal with the Council of State. On the outcome of the proceedings, with the ruling of December 2019, the Council of State, deciding in favor of TIM, annulled the AGCM I761 provision and referred the task of conducting a new investigation to AGCM, within the limits that decided by the Consiglio di Stato itself.

WIND (I761)

With writ of summons before the Milan Court, Wind filed a damages claim against TIM for approximately 57 million euros, recently increased during the case to approximately 58 million euros, in compensation for damages arising from alleged anticompetitive conduct which AGCM had fined in the I-761 case (concerning corrective maintenance). The other party alleged that such conduct had delayed and hindered its chances of obtaining more favorable terms and conditions on the disaggregated purchase of fault repair services on ULL access lines, the effects of which were initially claimed to have persisted until December 2015, but were then claimed by Wind to be still underway. TIM has filed an appearance, refuting the claims of the other party.

VODAFONE (I761)

With writ of summons before the Milan Court, Vodafone filed a damages claim against TIM and some network companies for approximately 193 million euros in compensation from the Company for damages arising from alleged anticompetitive conduct which AGCM had fined in the I-761 case (concerning corrective maintenance), over the period 2011–2017.
Vodafone claimed that TIM had allegedly infringed antitrust regulations in the wholesale markets for access to its fixed-line network (ULL lines; Bitstream; WLR) through the abuse of a dominant position and an unlawful agreement with maintenance companies to maintain a monopoly on the offer of corrective maintenance services on its network. Specifically, the restrictive agreement allegedly concerned the coordination, by the Company, of the economic terms and conditions contained in the bids for maintenance services prepared by the aforementioned companies for OAOs, with artificially high prices with respect to the cost of the maintenance included in the regulated access fee, with a view to discouraging the disaggregation of the service itself. The Company has filed an appearance, challenging all of the plaintiff's allegations.

Italian Competition Authority Case A514

In June 2017 the Italian Antitrust Authority (AGCM) started proceedings A514 against TIM, to ascertain a possible abuse of its dominant market position in breach of article 102 of the "Treaty on the Functioning of the European Union". The proceedings were started based on some complaints filed in May and June 2017, by Infratel, Enel, Open Fiber, Vodafone and Wind Tre, and concerns a presumed abuse of TIM's dominant position in the market for wholesale access services and for retail services using the broadband and ultra-broadband fixed network. In particular, the AGCM hypothesized that TIM had adopted conduct aimed at: i) slowing and hindering the course of the Infratel tender processes so as to delay, or render less remunerative the entry of another operator in the wholesale market; ii) preemptively securing customers on the retail market for ultra-broadband services by means of commercial policies designed to restrict the space of customer contendibility remaining for the competitor operators.
After the start of the proceedings, the Authority's officials carried out an inspection at some of TIM's offices in the month of July 2017. On November 2, 2017, TIM filed a defense brief in which, in support of the correctness of its actions, it challenged all the arguments that the conduct it had allegedly engaged in, and which was the subject of the case, was unlawful.
On February 14, 2018, AGCM resolved to extend the scope of the case to investigate further behavior concerning TIM's wholesale pricing strategy on the market for wholesale access to broadband and ultra-broadband, and the use of the confidential information of customers of the alternative operators.
On July 5, 2018 TIM filed proposed undertakings which, if accepted by the Authority, would close the investigation without any offense being established or sanction being administered. The undertakings were considered as admissible by the Authority, that market tested them in August and September.
On October 30, 2018, TIM replied to observations made by third parties and modified its proposed undertakings.
With its decision notified on December 4, 2018, the Italian Antitrust Authority once and for all rejected the proposed series of undertakings as it considered them unsuitable in light of the objections raised.
On March 4, 2019, TIM requested AGCM for an extension of the deadline for closing the proceedings (initially set for May 31, 2019).

On April 10, 2019, AGCM resolved to extend the deadline for conclusion of the proceedings until September 30, 2019. On May 17, 2019, AGCM notified TIM of the results of the investigation (CRI). In the CRI, AGCM essentially confirmed the case for the prosecution outlined in the start-up and extension of the proceedings orders.
On June 12, 2019 AGCM extended the deadline for deposit of TIM's final defense to September 20, 2019 and set the final hearing for September 25, 2019.
On September 18, 2019, AGCM resolved to extend the deadline for conclusion of the proceedings until February 28, 2020.
On March 6, 2020, TIM was notified of the decision to close the investigation, by which AGCM ruled that TIM had abused its dominant position, finding that TIM had put in place an anti-competitive strategy designed to hinder the competitive development of investment in ultra-broadband network infrastructure. The fine imposed on TIM for the anti-competitive offence is 116,099,937.60 euros. TIM intends to appeal. In addition, after notification of the AGCM measure, the Company received an action for damages based on the facts underlying AGCM's proceedings. The Company has just started the first examination of this act, convinced, also in this case, that it has all the legal arguments for its own protection.

Antitrust Case I799

At its meeting on February 1, 2017, AGCM initiated an investigation for possible breach of Article 101 of the TFEU (prohibition of agreements that restrict competition) against TIM S.p.A. and Fastweb S.p.A., following the signing of an agreement aimed at setting up a cooperative joint venture called Flash Fiber S.r.l.. TIM, in agreement with Fastweb, submitted some amendments to the agreements signed, in the form of proposed undertakings, aimed at closing the investigation without any breach being ascertained and, therefore, without any fine.
On March 28, 2018, AGCM resolved to approve the undertakings, making them binding on the Parties, and closed the case without imposing any fine.
On January 30, 2019, TIM sent the planned annual report on the provided coverage to AGCM, supplemented by a subsequent communication dated March 29, 2019. TIM transmitted further details to AGCM in July and AGCM acknowledged it on October 15, 2019. On January 31, 2020 TIM sent AGCM the third report on the implementation of the commitments made.
On June 11, 2018, Open Fiber S.p.A. and Wind Tre S.p.A. filed separate appeals to the Lazio Regional Administrative Court (TAR) against the order closing case I799 with the acceptance of the undertakings. They allege that this order has a series of procedural and substantial defects.
Open Fiber S.p.A. also asked for the precautionary suspension of the order. In a ruling of March 2020, the Regional Administrative Court rejected in full the appeal by Open Fiber S.p.A.. A hearing on the merits has not yet been scheduled for Wind Tre's appeal.

Vodafone

In June 2015, Vodafone filed a damages claim with the Milan Court for the alleged abuse of a dominant position by TIM in the market for NGA and VULA bitstream fiber access services, with the claim for damages initially set at approximately 4.4 million euros, and later raised to a range between 30 and 48.9 million euros.
The plaintiff complained that TIM allegedly had engaged in abusive conduct by way of aggressive price offers to win customers and by hindering its access to the fiber network to make it more difficult for the party to provide ultra-broadband services to its customers.
The Company has filed an appearance, challenging the claims of the plaintiff in full and, subsequently, the revised estimate of damages made in 2016 during the case.

EUTELIA and VOICEPLUS

In June 2009, Eutelia and Voiceplus asked that alleged acts of abuse by TIM of its dominant position in the premium services market (based on the public offer of services provided through so-called Non Geographic Numbers) be investigated. The complainants quantified their damages at a total of approximately 730 million euros.
The case follows a precautionary procedure in which the Milan Appeal Court prohibited certain behaviors of the Company relating to the management of some financial relations with Eutelia and Voiceplus concerning the Non Geographic Numbers, for which TIM managed the payments from the end customers, on behalf of such OLOs and in the light of regulatory requirements. After the ruling with which the Milan Court of Appeal accepted TIM's objections, declaring that it was not competent in this matter and referring the case to the Civil Court, Eutelia in extraordinary administration and Voiceplus in liquidation resubmitted the matter to the Milan Court. The first hearing took place in the month of March 2014. TIM filed an appearance challenging the claims of the other

parties. After the collapse of Voiceplus, the Milan Court declared the case suspended, in an order in September 2015. The case was later resumed by Voiceplus.

With a judgment issued in February 2018, the Milan Court accepted TIM's defense and rejected the plaintiffs' claim for compensation, ordering them, jointly and severally, to pay the legal costs. In March 2018 Eutelia and Voiceplus proposed an appeal against the judgment in the first instance.
TIM appealed against the claim, requesting confirmation in full of the judgment in the first instance. The appeal of Eutelia and Voiceplus was fully rejected with the judgment of August 5, 2019. In December 2019 Eutelia and Voiceplus appealed to the Court of Cassation over the judgment of the Court of Appeal. TIM notified a counterclaim asking confirmation of the ruling appealed against.

SKY

In 2016, TIM has started civil proceedings against SKY Italia in the Milan Court, asking the court to void the contract signed by the two companies in April 2014 for the delivery and marketing, between 2015 and 2019, of the SKY IPTV (Internet Protocol Television) offer on the TIM IPTV platform, due to abuse of dominant position by the other party.
As an alternative, the Company also asked the court to reduce to a fair level the amounts demanded by SKY by way of the so-called Guaranteed Minimums ("penalties") established to SKY's advantage and related to predetermined customer sign-up and churn-rate thresholds in the five years of the partnership.
SKY filed an appearance in February 2017, challenging TIM's claim and demanding payment of the Guaranteed Minimums it claimed to have accrued, a request which was opposed by the Company.
The suit was settled with the signing of a settlement agreement in August 2019.

28-day billing

Resolution 121/17/CONS introduced instructions on billing intervals for telephony, prescribing, for fixed telephony, that the interval should be monthly, or multiples thereof, and, for mobile telephony, that it should be at least four-weekly. TIM appealed Resolution 121/17/CONS to the Regional Administrative Court. The judgment rejecting the appeal was published in February 2018. TIM appealed this judgment to the Council of State on June 18, 2018 and the hearing is set for May 7, 2020.
With its Resolution 499/17/CONS, having confirmed the breach of Resolution 121/17/CONS, AGCom fined TIM 1,160,000 euros, ordering it to make provision – when the billing cycle was restored to monthly intervals or multiples thereof – to return the amounts corresponding to the fee for the number of days that, from June 23, 2017, had not been used by the users in terms of the supply of service due to the misalignment of the four-weekly and monthly billing cycles. TIM also appealed this second resolution to the Regional Administrative Court of Lazio, asking for its precautionary suspension which, on February 22, 2018, was accepted by the Regional Administrative Court of Lazio limited to the part relating to the reimbursement orders.
Subsequently, Law no 172 of December 4, 2017 decreed that contracts for the supply of electronic communications services should obligatorily prescribe that the renewal of offers and the billing of services be based on a month, or multiples thereof. TIM adapted to this order within the period of time prescribed by law, namely within 120 days of the date it came into force (April 5, 2018).
In March 2018, with Decision 112/2018/CONS AGCom (i) cautioned TIM, with regard to fixed-line voice services only, against postponing the starting date of invoices issued after the return to monthly invoicing by the same number of days as those presumably deducted starting from June 23, 2017 with the four-weekly invoicing cycle; and (ii) revoked the preceding resolution 499/17/CONS in the part in which TIM was ordered to repay the amounts presumably lost from June 23, 2017 onwards, with the four-weekly billing cycle. This resolution was also challenged by with an additional submission triggered as part of the appeal against resolution 499/17/CONS, with a request for single precautionary measures, which was provisionally granted until the hearing before the Council on April 11, 2018 with a Presidential Decree published on March 26, 2017.
Under Presidential Decree 9/18/PRES, AGCom amended the provisions of Decision 112/18/CONS requiring the deferment of billing once the billing cycle was restored to monthly intervals, or multiples thereof, while also ordering that the timescales for complying with the order would be identified after hearings with the operators and the main consumer protection associations. TIM and the other operators affected by the presidential decree waived the precautionary petition against Resolution 112/18/CONS. In May 2018, TIM therefore appealed AGCom Presidential Decree 9/18/PRES and Resolution 187/18/CONS which ratified this decree.
In July 2018, AGCom issued resolution 269/18/CONS, with which it set December 31, 2018 as the date by which the operators must return to their fixed network customers a number of days of service equal to those eroded as an effect of 28-day billing, or propose to the affected customers any alternative compensatory measures, after having notified them to AGCom. TIM, in keeping with actions taken and arguments made, intends to appeal this resolution.
In September 2018, TIM appealed Resolution 297/18/CONS in which AGCom imposed a fine of 696,000 euros for having continued to adopt – in violation of AGCom resolution 121/17/CONS – four-weekly billing and renewal of consumer offers as from February 16, 2018 (and until March 31, 2018).

With the judgment published in November 2018, the TAR canceled the pecuniary administrative sanction of 1.16 million euros imposed with Resolution 499/17/CONS, and confirmed the obligation of restitutio in integrum to the fixed-line customers by December 31, 2018. TIM submitted its preventive appeal before the Council of State to interrupt execution of said decision and, with its ruling of December 20, 2018, the Council of State, in upholding TIM's appeal, interrupted the effectiveness of the aforesaid decision for the reversal order only, until March 31, 2019.
In November, 2018, AGCom published resolution 521/18/CONS with which it imposed a sanction of 1,044,000 euros on TIM. The sanction was imposed for breach of the transparency rules and rights to withdraw in amending the contractual terms and conditions of the mobile offers applied to customers starting from April 8, 2018 following restoration of monthly billing. TIM appealed this resolution as well to the Regional Administrative Court in January 2019. Following a new application submitted by TIM, the Council of State, with its ruling published on March 20, 2019, extended the precautionary measure to suspend the effectiveness of the decision until May 21, 2019 while awaiting publication of the grounds for the judgment.
Having acknowledged the publication of the grounds of the ruling handed down on May 10, 2019, the Council on May 21, 2019 ordered postponement of discussion of the application for precautionary measures to the Council meeting of July 4, 2019 in order to allow TIM to finalize its additional grounds with a new application for precautionary measures. Following this hearing, the Council of State rejected TIM's application to suspend execution of the ruling of the Regional Administrative Court with its ruling published on July 5, 2019, so it is operational starting from May 21, 2019. The hearing to discuss the introductory appeal and additional grounds submitted by TIM in the meantime is still, as of writing, to be set. On July 12, 2019 the ruling mechanisms with which the Council of State rejected the similar appeals made by Vodafone, Wind Tre and Fastweb were published and in February 2020 the judgments containing the grounds for the appeals by Vodafone and Fastweb were published.
In September 2019, TIM also challenged resolution 221/19/CONS, before the Regional Administrative Court (TAR), with which the sanction pursuant to Resolution 499/17/CONS, canceled by the Regional Administrative Court of Lazio, was recalculated to the amount of 580,000.00 euros, with the maximum fine provided for by Art. 98, paragraph 16 of the CCE in force at the time of the events applied.
In August 2019, AGCom initiated new proceedings (CONT 12/19/DTC) for failure to comply with the order to refund the days eroded by billing every 28 days for fixed network and convergent customers, according to the procedures established with resolutions nos. 112/18/CONS and 269/18/CONS. TIM submitted its defense in the proceedings and their conclusion is expected by March 2020.
In the meantime, in June 2019, TIM had in any case decided to offer its fixed network customers, active prior to the March 31, 2018 and subjected to billing every 28 days, the possibility of accepting a compensatory solution, an alternative to refunding the eroded days pursuant to AGCom resolution no. 269/18/CONS. Subsequently, from September 2019, TIM decided to also accept requests for the refund of the eroded days. In both cases, TIM informed customers with several messages in the bill, on the web in the main newspapers. The initiatives just described were communicated to AGCom as part of the aforementioned penalty proceedings.

Antitrust Case I820

On February 19, 2018, AGCM initiated a I820 preliminary proceeding against the companies TIM, Vodafone, Fastweb and Wind Tre and the industry association ASSTEL to investigate the alleged existence of an agreement among the major fixed-line and mobile telephone operators to restrict competition by coordinating their respective commercial strategies, in breach of Article 101 of the TFUE.
The presumed coordination, according to the opening provision of the proceedings by AGCM, would take the form of implementation of the obligation introduced by Article 19-quinquiesdecies of Decree Law 148/2017 (converted by Law 172/2017) which requires operators of electronic communication services to send out monthly (or monthly multiples) bills and renewed offers for fixed and mobile services.
On March 21, 2018, AGCM issued a provisional precautionary measure against all the operators involved in the proceedings with which it ordered the suspension, pending the proceedings, of the implementation of the agreement concerning the determination of repricing communicated to users at the time of reformulating the billing cycle in compliance with Law 172/17 and to independently redetermine its commercial strategy. With its decision no. 27112 of April 11, 2018, AGCM confirmed the precautionary measure.
On June 12, 2018, TIM filed an appeal with the TAR for the quashing of said measure.
In its session on June 27, 2018, AGCM took note of the brief submitted by TIM regarding compliance with the precautionary measure.
On July 17, 2019, AGCM resolved to extend the deadline for conclusion of the proceedings until January 31, 2020.
In the findings of the preliminary inquiry (CRI) communicated by AGCM to TIM, the Offices confirm the existence of a unique, complex and continuos agreement restricting competition between Telecom, Vodafone, Fastweb and Wind Tre, with the facilitation of the Asstel category association.
On October 10, TIM filed its final brief, and the final hearing was held on October 15 at AGCM.

On January 31, 2020, TIM was notified of the decision to close the investigation, in which AGCM confirmed the existence of the agreement between Telecom, Vodafone, Fastweb and WindTre, but excluding Asstel from participation in the agreement. The fine imposed on TIM for participation in the anti-competitive agreement was 114,398,325 euros. TIM intends to appeal.

Data Protection Authority Case

On January 23, 2020, the Italian Data Protection Authority notified the Company of the final decision of the proceedings initiated in July 2019 following inspections carried out between November 2018 and February 2019 at the Company and some of its telesales channel partners.
The decision - which mainly concerned telemarketing activities, covering issues including the management of some apps, the TIM Party program and several data breaches - the Data Protection Authority ordered the definitive restriction of some processing, issued orders and imposed a fine of 27,802,949 euros, equal to 0.2% of the TIM S.p.A.'s 2018 turnover, indicating that the penalty would be reduced by half if TIM had decided to settle the dispute by making payment within thirty days.
The Company therefore promptly initiated consultations with the Authority in a spirit of full and effective cooperation, to ensure the correct interpretation of the organizational, procedural and technological measures that TIM has already implemented and those that it intends to adopt in light of the requirements of the decision.
On 13 February 2020, the Authority agreed the interpretations put forward by the Company and also accepted its request to extend the deadline for the implementation of some of the corrective measures.
The Company has therefore decided not to appeal the decision and has paid the penalty with a 50% discount.

Vodafone Dispute – Universal Service

In a decision published in July 2015, the Council of State rejected the appeal lodged by AGCom and TIM against the judgment of the Lazio Administrative Court (TAR) on the financing of the universal service obligations for the period 1999–2003. With this judgment the judge had granted the appeals by Vodafone, annulling AGCom decisions 106, 107, 109/11/CONS on the renewal of the related proceedings, which included Vodafone among the subjects required to contribute, for a sum of approximately 38 million euros. Essentially, the judgment confirms that the Authority has not demonstrated the particular degree of "replaceability" between fixed and mobile telephony for mobile operators to be included among the subjects required to repay the cost of the universal service, which means that AGCom needs to issue a new ruling.
TIM has filed an application with AGCom to renew the proceedings, and an appeal against the judgment of the Council of State to the Court of Cassation (which subsequently ruled that the appeal was inadmissible).
In April 2016 Vodafone appealed against the Ministry of Economic Development (MISE) and TIM to the Council of State, for non-compliance with the judgment of the Council of State. This appeal referred to AGCom decision 109/11/CONS (2003 yearly payment, on the basis of which Vodafone had paid the sum of approximately 9 million euros as contribution, restitution of which was requested).
In its judgment of November 2016, the Council of State rejected the appeal, referring to the Regional Administrative Court (TAR) the decision on the methods of compliance. In February 2017, Vodafone presented the Lazio Regional Administrative Court with four new appeals against the Ministry of Economic Development and TIM regarding observance of the ruling, upheld on appeal, countermanding the resolutions for the years 1999–2003 and repayment of the aforesaid amounts of around 38 million euros already paid to the Ministry of Economic Development as a contribution.
With a judgment issued in June 2018, the TAR rejected all of Vodafone's appeals for observance, and, as requested by TIM, expressly affirmed that AGCom must renew the proceedings, particularly with regard to the determination of the degree of replaceability between fixed and mobile telephony. Vodafone challenged the four judgments before the Council of State, which, with a decision of October 2019, upheld Vodafone's appeal and confirmed the restitutory obligation of the sums in question applicable to TIM.

Dispute on "Adjustments to license fees" for the years 1994–1998

In relation to lawsuits brought in past years concerning the demand for payment, by the Ministry of Communications, of adjustments to amounts paid for license fees for the years 1994–1998 (for a total of 113 million euros), the Lazio Regional Administrative Court (TAR) dismissed the Company’s appeal against the demand for payment of the adjustment for 1994 for a total of around 11 million euros, of which 9 million euros for revenues not received due to credit losses. TIM has appealed the judgment. On the outcome of proceedings, with the ruling of December 2019, the Council of State partially accepted TIM's position, establishing the principle, according to which, the receivables referring to 1994 not collected for reasons not attributable to the operator, could have been deducted from the tax base for calculating the concession fee.

In another two judgments, the Lazio TAR dismissed, on the same grounds set out previously, the Company's appeals against the demand for payment of adjustments to the license fees for the years 1995, 1996, 1997, and 1998, for a total of approximately 46 million euros. TIM has lodged appeals against the judgments with the Council of State.
With reference to the 1998 fee adjustment (equal to about 41 million), the Lazio TAR, by TAR order of December 2018, suspended the judgment, raising preliminary questions with the EU Court of Justice on the correct scope of EC Directive no. 97/13 (in the matter of general authorizations and individual licenses in the field of telecommunications services on the basis of the currently pending litigation on the 1998 license fee, currently pending before the Rome Court of Appeal and illustrated in a subsequent paragraph).
The referred questions were based, inter alia, on the question posed to the Court of Justice on the possible conflict between the aforementioned EC Directive 97/13 and national law, which extended the obligation for telecommunications license-holders to pay the license fee for 1998 (commensurate with a portion of turnover), despite the liberalization process underway. In its judgment of March 2020, the EU Court of Justice held that the EU regulatory system must be interpreted as not allowing national legislation to extend to 1998 the obligation imposed on a telecommunications undertaking that was previously the concession holder (such as TIM) to pay a fee calculated on the basis of turnover and not only the administrative costs connected with the granting, management, control and implementation of the general authorizations and individual licenses scheme. The Court held, inter alia, that the Council of State – having held in its judgment 7506/2009 that the fee imposed for 1998 on TIM, the holder of an authorization existing on the date of entry into force of Directive 97/13, was due – interpreted national law in a way that was incompatible with EU law, as interpreted by the Court in its judgment of February 21, 2008. The case concerning the adjustment of the '98 license fee will now continue before the Lazio Regional Administrative Court, which must make its decision based on the above-mentioned judgment of the EU Court of Justice.

Olivetti – Asbestos exposure

In September 2014 the Ivrea Public Prosecutor's Office closed the investigation on the presumed exposure to asbestos of 15 former workers from the companies "Ing. C. Olivetti S.p.A." (now TIM S.p.A.), "Olivetti Controllo Numerico S.p.A.", "Olivetti Peripheral Equipment S.p.A.", "Sixtel S.p.A." and "Olteco S.p.A." and served notice that the investigations had been concluded on the 39 people investigated (who include former Directors of the aforementioned companies).
On December 2014 the Ivrea Public Prosecutor's Office formulated a request for 33 of the 39 people originally investigated to be committed for trial, and at the same time asked that 6 investigations be archived.
During the preliminary hearing, which started in April 2015, TIM assumed the role of civilly liable party, after being formally summonsed by all 26 civil parties (institutions and natural persons) joined in the proceedings. At the end of the preliminary hearing, 18 of the original 33 persons accused were committed for trial. The trial started in November 2015, and, as the party liable for damages, the Company has reached a settlement agreement with 12 of the 18 individuals (heirs/injured persons/family members) who are civil parties to the dispute and they have, therefore, withdrawn the claim against TIM.
In the judgment of first instance, in July 2016, 13 of the 18 defendants were found guilty, with sentences ranging from 1 year to 5 years of imprisonment: four of the defendants were found not guilty, and one case was dismissed for health reasons. The defendants were also sentenced to pay compensation jointly and severally with the party liable for damages TIM, of an overall sum of approximately 1.9 million euros as a provisional payment to INAIL and 6 heirs who were not part of the settlement. A generic judgment to pay compensation for damages to the remaining damaged parties (entities/unions/associations) was issued, although they must in any case ask the civil court to quantify the damages. The Company challenged the rationale for the judgment in the first instance, and signed settlements, including with the final 6 heirs who constituted the civil party, before the judgment in the second instance was issued. So the only civil parties to the appeal were organizations and associations.
In April 2018, the Turin Appeal Court, overturning the judgment of the court of the first instance, found all the accused not guilty: "because there was no case to answer for all the charges".
In its considerations, filed in October 2018, the Court recognized that there was no causal link between the individual behavior of the accused persons and the death of the former workers.
The Public Prosecutor's Office at the Turin Appeal Court appealed to the Court of Cassation against said judgment. In October 2019 the Supreme Court rejected the appeal and definitively confirmed the acquittal handed down by the Turin Appeal Court.

Wind Tre

With writ of summons before the Milan Court, served in April 2019, Wind Tre S.p.A. filed a damages claim against TIM for approximately 255 million euros in compensation for damages arising from alleged anticompetitive conduct in the years 2014-2018. More specifically, according to Wind Tre, TIM allegedly illegally used information gained when supplying provisioning and wholesale services assurance through its sales division to convince customers to return to TIM or to activate the new user with TIM; carried out commercial promotion activity for TIM through its technical personnel when repairing failures or activating Wind Tre users; behaved unfairly in order to get Wind Tre customers to switch over to TIM. To support its arguments, Wind Tre also pleads some elements that emerged during the investigation for the AGCM A514 case. TIM has filed an appearance, fully contesting the claims of the other party and making a counterclaim, based on facts similar to those put forward by the plaintiff, reserving the right to quantify the damages suffered.

POSTE

Litigation is still pending for lawsuits brought at the end of the 1990s by Ing. C. Olivetti & C. S.p.A. (now TIM) against Poste for the non-payment of services provided under a series of supply agreements for IT goods and services. The judgments handed down on first instance ruled partially in favor of the former Olivetti, but were challenged by Poste in individual appeals.
In 2009, the Rome Court of Appeal confirmed one of the credit claims of TIM, however in another judgment the same Court declared one of the disputed agreements null and void. Following that judgment, Poste served a writ of execution for the reimbursement of around 58 million euros, which TIM rejected given that its appeal against the judgment was still pending before the Supreme Court of Cassation.
In 2012, the Italian Supreme Court of Cassation overturned the Appeal Court ruling on which the writ of execution was based, after which the Rome Court ruled that the enforcement procedure was devoid of purpose as there was no longer any basis for the writ of execution obtained by Poste. The case has been reinstated before another section of the Rome Court of Appeal. In ruling no. 563 of January 25, 2019, the Rome Court of Appeal at the time of proceedings, reversing the Company's previous unfavorable appeal, confirmed the contract's validity and, with it, the legitimacy of TIM's view of the amount already collected, of which Poste had requested reimbursement. This ruling was challenged by Poste with appeal filed with the Court of Cassation, notified on July 31, 2019, which TIM challenged with relevant counter appeal.

Elinet S.p.A. bankruptcy

In 2014, the trustees in the bankruptcy of Elinet S.p.A., and subsequently the trustees of Elitel S.r.l. and Elitel Telecom S.p.A. (the parent, at the time, of the Elitel group) appealed the judgment by which the Court of Rome dismissed the damages claim brought by the trustees of the Elinet-Elitel group, filing a new damages claim for a total of 282 million euros. The Company is alleged to have exercised management and control powers over the plaintiff, and, with it, over the Elitel group (an OLO in which TIM has never held any equity interest) through the management of trade receivables. TIM has filed an appearance, refuting the claims of the other party. The judgment on the appeal was handed down with ruling in July 2019, which with reference to TIM confirmed full legality of its conduct and total non-existence of any element of management and coordination. The receivers of Elinet S.p.A. and Elitel Telecom S.p.A. appealed to the Court of Cassation in January 2020 to obtain the annulment of the judgment in the second instance. the receiver of Elitel S.r.l. has not filed an appeal with the Court of Cassation and, consequently, the total claim for damages has been reduced to 244 million euros. TIM notified a counterclaim asking confirmation of the ruling appealed against.

Antitrust Proceedings PS11379 – mobile winback actions

Started on February 26, 2019 on the report of Iliad, the proceedings concern the alleged misconduct of mobile winback actions. The challenged aspects concern deceptive communication given to the target of reference and the aggressiveness of the conduct, since in the opinion of the AGCM Authority there would be pre-activated services in the offers made to customers. TIM believes that the commercial proposition of its mobile offers is fair, but to ensure ever-increasing transparency for its customers, during the course of the proceedings TIM gave commitments mainly aimed at improving the information relating to the components of the offer subject of the dispute. In spite of rejection of the commitments, TIM commenced the implementation of the proposed remedies as proof of good faith and of its fair conduct. Proceedings have also been started against the other major operators. The proceedings were concluded on December 20, 2019 with assessment of the unfairness of the conduct challenged, ordering TIM to pay to 4.8 million euros (VO ordered to pay 6 million euros and Wind/3 4.3 million euros). The decision will be challenged before the regional administrative court.

Antitrust Proceedings IP 312 - Fiber non-compliance

Proceedings began on February 18, 2019 on AGCM's own initiative, concerning the alleged failure to comply with the provisions of PS10696 on advertising fiber offers.
The disputed aspects relate to the lack of proof of the information available to consumers on the technical and geographic limits and on the performance tests. TIM also defined its defensive position with the presentation of

commitments. The proceedings were concluded on August 1, 2019 with a fine of 200 thousand euros, considering that AGCM appreciated the corrective conduct on transparency implemented by TIM. In August, AGCM concluded proceedings against the other operators.

Antitrust proceedings PS11532 – "TIM in Nave"

Launched on December 4, 2019 on the report of some consumers, the procedure concerns the "TIM in Nave" service with the challenge of Deceptiveness on customer information profiles and aggressiveness profiles. "TIM in Nave" is not an ancillary service, but, in full compliance with the sector regulations, a type of roaming tariff which is activated when the customer is under the maritime coverage network. Commitments have been presented consisting of improving the information aspects, thus making the consumer fully aware of the functioning of "TIM in Nave". Closure of the the proceedings is scheduled for May 2020 and in the event of acceptance there will be no fine. Similar proceedings have also been started against the other major operators.

Antitrust Case IP 327 - IBAN discrimination

Officially started on December 23, 2019 by the Authority, the proceedings concern the alleged non-compliance with the provisions of PV4 on Iban Discrimination, dated April 2019. In particular, AGCM disputes that the direct debit process on the web channel is not yet automated and therefore the customer is not autonomous in managing this activity. TIM has eliminated all forms of discrimination between Italian banks and SEPA area banks with the complete automation of the web domiciliation process. The proceedings are expected to end in April 2020. Similar proceedings have also been started against the other major operators.

Brazil – Opportunity Arbitration

In May 2012, TIM and Telecom Italia International N.V. (now merged in Telecom Italia Finance) were served with a notice of arbitration proceedings brought by the Opportunity group, claiming compensation for damages allegedly suffered for presumed breach of a settlement agreement signed in 2005. Based on the plaintiff's allegations, the damages relate to circumstances that emerged in the criminal proceedings pending before the Milan Court regarding, inter alia, unlawful activities engaged in by former employees of TIM.
The investigatory phase having been completed, the hearing for oral discussion took place in November 2014, after which the parties filed their concluding arguments in preparation for the decision on the case.
In September 2015, the Board of Arbitration declared the proceedings closed, as the award was going to be filed. Subsequently, the Board of Arbitration allowed the parties to exchange short arguments and the ICC Court extended the term for the filing of the award.
In September 2016 the ICC Court notified the parties of its judgment, based on which the Board of Arbitration rejected all the claims made by the Opportunity group and decided that the legal costs, administrative costs and costs for expert witnesses should be split between the parties.
In April 2017 the Opportunity group filed an appeal against the arbitration award before the Paris Court of Appeal.
In November 2017, TIM and Telecom Italia Finance received from the Secretariat of the ICC's International Court of Arbitration notice of a Request for Revision of the arbitration finding, filed by the Opportunity group, asking for a new ruling. A Board of Arbitration was subsequently established.
In October 2018, TIM and Telecom Italia Finance requested proceedings with the Paris Court of Appeal to be suspended, in the light of proceedings pending with the Court of Arbitration of the International Chamber of Commerce to review the same arbitration award. In November 2018, the Paris Court of Appeal suspended the proceedings until the decision is taken by the Court of Arbitration in the review proceedings.
As regards the proceedings to review the award, in October 2019 the ICC held the discussion hearing in Paris.

B) OTHER INFORMATION

Mobile telephony – criminal proceedings

In March 2012, TIM was served notice of the conclusion of preliminary enquiries, which showed that the Company was being investigated by the Public Prosecutor of Milan pursuant to Legislative Decree 231/2001, for the offenses of handling stolen goods and counterfeiting, committed, according to the Prosecution, by fourteen employees of the so-called "ethnic channel", with the participation of a number of dealers, for the purpose of obtaining undeserved commissions from TIM.
The Company, as the injured party damaged by such conduct, had brought two legal actions in 2008 and 2009 and had proceeded to suspend the employees involved in the criminal proceedings (suspension later followed by dismissal). It has also filed an initial statement of defense, together with a technical report by its own expert, requesting that the proceedings against it be suspended, and that charges of aggravated fraud against the Company be brought against the other defendants. In December 2012, the Public Prosecutor's Office filed a request for 89 defendants and the Company itself to be committed for trial.
During the preliminary hearing, the Company was admitted as civil party to the trial and, in November 2013, the conclusions in the interest of the civil party were filed, reaffirming TIM's total lack of involvement in the offenses claimed.
At the end of the preliminary hearing, which took place in March 2014, the Judge for the Preliminary Hearing committed for trial all the defendants (including TIM) who had not asked for their situation to be settled with alternative procedures, on the grounds that "examination in a trial" was needed. In April 2016, at the end of the trial, the Public Prosecutor asked for TIM to be sentenced to pay an administrative fine of 900 thousand euros, but decided not to ask for any of the purported profits from the offenses to be confiscated (quantified in the committal proceedings as totaling several million euros), based on the assumption that TIM had in any event remedied the presumed organizational inadequacies. While acknowledging the notable redimensioning of the accusations, the Company reiterated its total non-involvement in the facts at issue. In November 2016, the Court handed down its ruling acquitting the Company of the accusations. All the individuals standing trial were also acquitted, on various grounds.
The Public Prosecutor appealed the acquittal and appealed to the Court of Cassation "per saltum". In January 2019, the Italian Supreme Court of Cassation agreed to the appeal and therefore ordered that the deeds be sent to the Milan Court of Appeal.

Dispute concerning the license fees for 1998

TIM has summoned the Prime Minister's Office to appear in a civil suit for compensation for damages caused by the Italian State through appeal ruling 7506/09, handed down by the Council of State in breach, in the view of the Company, of Community law.
The primary claim brought by the action is founded on a precedent in Community case law which affirms the right to bring actions against a State for breach of rights recognized by Community law and infringed by a judgment that has become final, against which no other remedy can be sought. The Council of State ruling definitively denied TIM the right to the refund of the license fee for 1998 (equal to 386 million euros for Telecom Italia and 143 million euros for the former TIM, plus interest), which had already been denied by the Lazio TAR, despite the favorable and binding ruling of the Court of Justice of the European Union in February 2008. That ruling concerned the conflict between Directive 97/13/EC on a common framework for general authorizations and individual licenses in the field of telecommunications services and national law, which extended the obligation for telecommunications license-holders to pay the license fee for 1998, despite the liberalization process underway. Within the scope of the same action, the Company also filed an alternative claim for damages for tort within the meaning of Article 2043 of the Italian Civil Code. The damages claim was quantified for a total of around 529 million euros, plus legal interest and adjustment. The State Attorney's Office filed an appearance, presenting a counterclaim for the same amount. The action was assessed for its admissibility by the Court, which declared TIM's primary claim (action for damages for manifest breach of Community law under Law 117/88) to be inadmissible. The decision was overturned on appeal, in favor of the Company. In March 2015, the Rome Court handed down its judgment of first instance, ruling that the Company's claim was inadmissible. TIM has appealed the decision, and the case is now pending the hearing specifying the nature of the forms of order sought.

Vodafone (formerly TELETU)

The damages claim filed by TIM, with writ of summons in February 2012 against the operator TELETU (now merged into Vodafone) for having unduly impeded customers intending to return to TIM, is pending. The damages claim has been quantified for approximately 93 million euros.

C) COMMITMENTS AND GUARANTEES

Personal guarantees provided, totaling 5,248 million euros, refer mainly to guarantee financing provided by TIM on behalf of Subsidiaries (including 3,561 million euros for Telecom Italia Capital, 1,382 million euros for Telecom Italia Finance, 72 million euros for Flash Fiber, 68 million euros for Telecom Italia Sparkle, 65 million euros for Olivetti and 50 million euros for Telenergia).
Significant purchase commitments outstanding at December 31, 2019 for long-term contracts forming part of TIM S.p.A.'s business operations, totaling around 1.5 billion euros, mainly related to the commitments undertaken by the Company for supplies related to the operation of the telecommunications network.
The guarantees provided by third parties to Group companies, amounting to 3,719 million euros, related to guarantees provided by banks and other financial institutions for loans (173 million euros) and the proper performance of contractual obligations (3,546 million euros). In particular, we report:

- The Company issued six guarantees to the Ministry of Economic Development for a total of 1,922 million euros for the deferment of the payment of the amount due for the acquisition of the user rights to frequencies in the 694-790 MHz, 3600-3800 MHz and 26.5-27.5 GHz bands, which will be reserved for 5G mobile telecommunications services. At December 31, 2019, the remaining guarantee was €1,908 million;
- The insurance guarantees, which totaled 721 million euros, mainly refer to guarantee financing by TIM in applying legal provisions for contracts of Public Administrations and similar bodies.

In May 2018, as mentioned above, TIM issued a surety to the Prime Minister's Office for 74.3 million euros to secure an appeal to the Lazio Administration Court for a provisional stay of the administrative fine levied on TIM following the preliminary investigation connected with the penalty proceeding initiated under Article 2 of Decree Law 21 of March 15, 2012 (the "Golden Power rule") .
Lastly guarantees were provided during 2019 to INPS to support the application by some Group companies of Article 4, paragraph 1, of Law 92 of June 28, 2012, to incentivize the departure of workers meeting the necessary requirements; the total amount of guarantees is 878 million euros, of which 826 million euros for TIM and 52 million euros issued on behalf of Group companies (of which 20 million euros for Olivetti, 16 million euros for Telecom Italia Sparkle and 9 million euros for HRS Services).

Main guarantees for loans at December 31, 2019

Details of the main guarantees received for EIB financing at December 31, 2019 are as follows:

Issuer

(millions of euros)	Amount (1)
Intesa Sanpaolo	115
Commerzbank	58

(1) The amounts shown in the table relate to loans issued by the EIB for the TIM Broadband Digital Divide and TIM RDI for Broadband Service/B projects.

It is pointed out that the guarantee totaling 58 million euros of COMMERZBANK relating to the loan granted by the EIB for the TIM RDI FOR BROADBAND SERVICES / B Project, repaid upon maturity for the amount of 50 million euros, is still valid for 6 months following repayment, as set forth in the contract to protect against the clawback risk, i.e. until April 7, 2020.

NOTE 25
REVENUES

Revenues fell by 765 million euros compared to 2018. The figure breaks down as follows:

(millions of euros)	2019	2018
Equipment sales	1,408	1,455
Services	11,697	12,429
Revenues on construction contracts	32	18
Total	**13,137**	**13,902**

Revenues from services are mainly represented by voice and data services on fixed and mobile networks for retail customers (9,190 million euros) and for other wholesale operators (1,985 million euros).

Revenues are presented gross of amounts due to other TLC operators (593 million euros), which are included in "Costs of services".

NOTE 26
OTHER OPERATING INCOME

Other operating income fell by 54 million euros and the figure breaks down as follows:

(millions of euros)	2019	2018
Late payment fees charged for telephone services	48	49
Recovery of employee benefit expenses, purchases and services rendered	37	27
Capital and operating grants	27	33
Damages, penalties and recoveries connected with litigation	17	23
Partnership agreements and other arrangements with suppliers	–	22
Estimate revisions and other adjustments	36	73
Other	33	25
Total	**198**	**252**

NOTE 27
ACQUISITION OF GOODS AND SERVICES

Acquisition of goods and services decreased by 1,205 million euros compared to 2018. The figure breaks down as follows:

(millions of euros)		2019	2018
Acquisition of raw materials and merchandise	**(a)**	**1,076**	**1,643**
Costs of services			
Revenues due to other TLC operators		593	649
Costs for telecommunications network access services		100	113
Commissions, sales commissions and other selling expenses		792	720
Advertising and promotion expenses		134	131
Professional and consulting services		86	115
Utilities		381	329
Maintenance		251	293
Outsourcing costs for other services		428	486
Mailing and delivery expenses for telephone bills, directories and other materials to customers		38	42
Distribution and logistics		6	8
Travel and lodging costs		13	14
Insurance		30	30
Other service expenses		410	425
	(b)	**3,262**	**3,355**
Lease and rental costs			
Rent and leases		4	554
Other lease and rental costs		254	249
	(c)	**258**	**803**
Total	**(a+b+c)**	**4,596**	**5,801**

In application of IFRS 16, in 2019, leased asset costs mainly included lease fees for contracts relating to intangible assets (254 million euros, mainly for software licenses and royalties).

NOTE 28
EMPLOYEE BENEFITS EXPENSES

Employee benefits expenses decreased by 49 million euros compared to 2018. The figure breaks down as follows:

(millions of euros)		2019	2018
Ordinary employee expenses			
Wages and salaries		1,576	1,621
Social security expenses		590	614
Employee severance indemnities		(7)	1
Other employee benefits		87	82
	(a)	**2,246**	**2,318**
Costs and provisions for temp work	**(b)**	**–**	**–**
Miscellaneous expenses for personnel and other labor-related services rendered			
Charges for termination benefit incentives		7	8
Corporate restructuring expenses		236	212
Other		3	3
	(c)	**246**	**223**
Total	**(a+b+c)**	**2,492**	**2,541**

Ordinary employee expenses decreased by 72 million euros, mainly due to the decrease in the average number of employees paid, equal to a total of - 2,333 employees on average, of which -319 average employees related to the "solidarity agreement" that expired in June 2019 and to the subsequent expansion contract applied as from August 2019.

Corporate restructuring expenses amounted to 236 million euros (212 million euros in 2018); in particular, the allocations made during the year were related to the review of the estimate and effective date of terminations of the Company planned for 2020 (also through application of Article 4 of Law no. 92 of June 28, 2012, as last defined in the Trade Union Agreement of February 26, 2019).

The average salaried workforce stood at 38,473 employees at December 31, 2019 (40,806 at December 31, 2018). A breakdown by category is as follows:

(number)	2019	2018
Executives	426	496
Middle Management	3,374	3,489
White collars	34,673	36,821
Blue collars	-	-
Employees on payroll	**38,473**	**40,806**
Employees with temp work contracts	-	-
Total headcount	**38,473**	**40,806**

The headcount at December 31, 2019 amounted to 40,237 employees, a decrease of 2,419 compared to December 31, 2018 (42,656).

NOTE 29
OTHER OPERATING EXPENSES

Other operating expenses rose by 339 million euros compared to 2018 and breaks down as follows:

(millions of euros)	2019	2018
Write-downs and expenses in connection with credit management	402	370
Provision charges	414	112
TLC operating fees and charges	43	41
Indirect duties and taxes	63	66
Penalties, settlement compensation and administrative fines	64	73
Association dues and fees, donations, scholarships and traineeships	10	10
Other	65	50
Total	**1,061**	**722**
of which, included in the supplementary disclosure on financial instruments	*402*	*370*

Further details on Financial Instruments are provided in the Note "Supplementary disclosures on financial instruments".

NOTE 30
CHANGE IN INVENTORIES

This item was negative at 107 million euros (positive at 84 million euros as at December 31, 2018), mainly due to the significant decrease in the year of both purchases as well as consumption, with reference to equipment and accessories for mobile telephony, in application of a more targeted commercial and procurement policy.
The amount takes into account the write-downs made to adjust the value of their estimated realizable value of fixed and mobile devices on the market, of around 2 million euros.

NOTE 31
INTERNALLY GENERATED ASSETS

Internally generated assets amounted to 403 million euros, down by 31 million euros on 2018.
This performance was attributable to lower capitalization relating to both intangible assets for the development of network solutions, applications and innovative services (-11 million euros) and to tangible assets for the installation of access and carrier networks (-20 million euros). The lower capitalization of intangible assets resulted in lower external costs (-12 million euros) almost entirely due to the exclusion, from 2019, of space costs, only partly offset by higher labor costs; those relating to tangible assets, for the most part (-19 million euros), to lower labour costs due to a reduction in capitalized hours.
Internally generated assets in 2019 consisted of:

- cost of labor of 398 million euros;
- other external costs of 5 million euros.

They refer for 218 million euros to the item “tangible assets”, relating to the design, construction and testing of network installations, and for 185 million euros to the item “intangible assets with a finite useful life”, mainly concerning assets of software development and development of network solutions, applications and innovative services.

NOTE 32
DEPRECIATION AND AMORTIZATION

Depreciation and amortization increased 564 million euros compared to 2018 and was broken down as follows:

(millions of euros)		2019	2018
Amortization of intangible assets with a finite useful life			
Industrial patents and intellectual property rights		842	847
Concessions, licenses, trademarks and similar rights		380	297
Other intangible assets		–	2
	(a)	**1,222**	**1,146**
Depreciation of tangible assets owned			
Buildings (civil and industrial)		36	33
Plant and equipment		1,689	1,669
Manufacturing and distribution equipment		12	14
Other		81	95
	(b)	**1,818**	**1,811**
Depreciation of tangible assets held under finance leases			
Buildings (civil and industrial)			159
Plant and equipment			4
Other			35
	(c)		**198**
Depreciation of rights of use assets			
Property		567	
Plant and equipment		80	
Other		32	
	(d)	**679**	**–**
Total	**(a+b+c+d)**	**3,719**	**3,155**

For further details refer to the Notes "Tangible and intangible assets with finite useful lives", "Tangible assets" and "Right-of-use assets".

NOTE 33
GAINS/(LOSSES) ON DISPOSALS OF NON-CURRENT ASSETS

This item was broken down as follows:

(millions of euros)		2019	2018
Gains on disposals of non-current assets			
Gains on the retirement/disposal of intangible, tangible and user rights on rental		2	2
	(a)	**2**	**2**
Losses on disposals of non-current assets			
Losses on the retirement/disposal of intangible, tangible and user rights on rental		43	13
	(b)	**43**	**13**
Total	**(a-b)**	**(41)**	**(11)**

NOTE 34
IMPAIRMENT REVERSALS (LOSSES) ON NON-CURRENT ASSETS

The item **Impairment reversals (losses) on non-current assets** is absent in 2019, (negative for 2,683 million euros in 2018, following the goodwill impairment loss for 2,686 million euros).

NOTE 35
INCOME/(EXPENSE) FROM INVESTMENTS

Details are as follows:

(millions of euros)	2019	2018
Dividends	141	125
Net gains on disposals of investments	35	–
Losses on disposals of investments	(26)	–
Impairment losses on financial assets	(28)	(54)
Sundry expenses from investments	(5)	–
Total	**117**	**71**
of which, included in the supplementary disclosure on financial instruments	*1*	*11*

Further details on Financial Instruments are provided in the Note "Supplementary disclosures on financial instruments".

In particular, we report:

- Dividends mainly related to the subsidiaries INWIT S.p.A. (76 million euros), TI Finance (53 million euros) and Persidera (10 million euros). In 2018, dividends mainly referred to the subsidiaries INWIT S.p.A. (68 million euros), TI Finance (37 million euros) and Persidera (8 million euros), as well as the company Emittenti Titoli (10 million euros).
- the collection of 141 million euros, net of additional charges, from the sale of the equity investment of TIM S.p.A. in Persidera S.p.A. (equal to 70%) to F2i TLC 2 S.p.A. and EI Towers S.p.A., preceded by the split of Persidera into two entities (NetCo S.p.A. and Persidera), led to a net capital gain of 8 million euros. This amount represents the balance between the capital gain, net of ancillary charges, of 34 million euros following the sale of NetCo S.p.A. to EI Towers, and the loss of 26 million euros following the sale of Persidera to F2i TLC 2 S.p.A.;
- in addition to the above-mentioned capital gain on the sale of NetCo S.p.A., in 2019 a capital gain of 1 million euros was recognized following the sale of the investment in Alfiere S.p.A. to CDP Immobiliare S.r.l.;
- impairment losses mainly referred to the write-down of the investments held in the subsidiary Olivetti (18 million euros), Tim Tank (3 million euros), Timvision (2 million euros), Tn Fiber (1 million euros), as well as in the associate Tiglio I (4 million euros). In 2018, impairment losses mainly referred to the write-down of the investments held in the subsidiary Noverca (42 million euros), Persidera (4 million euros), and Olivetti (5 million euros), as well as in the associate Tiglio I (2 million euros).

NOTE 36
FINANCE INCOME AND EXPENSES

Finance income (expenses) show a net expense of 1,267 million euros, which breaks down as follows:

(millions of euros)	2019	2018
Finance income	1,195	1,177
Finance expenses	(2,462)	(2,427)
Total net financial income (expenses)	**(1,267)**	**(1,250)**

The items break down as follows:

(millions of euros)		2019	2018
Interest expenses and miscellaneous finance expenses			
Interest expenses and other costs relating to bonds		(608)	(642)
Interest expenses relating to subsidiaries		(269)	(271)
Interest expenses relating to associates		–	–
Interest expenses to banks		(54)	(47)
Finance expenses on liabilities for finance leasing		(163)	(129)
Interest expenses to others		–	–
		(1,094)	**(1,089)**
Commissions		(50)	(58)
Miscellaneous finance expenses (*)		(135)	(124)
		(185)	**(182)**
Interest income and other finance income:			
Interest income		39	6
Interest income from subsidiaries		1	1
Interest income from associates		–	–
Income from financial receivables, recorded in Non-current assets		–	–
Income from financial receivables from subsidiaries, recorded in Non-current assets		7	5
Income from financial receivables from associates, recorded in Non-current assets		–	–
Income from securities other than investments, recorded in Non-current assets		–	–
Income from securities other than investments, recorded in Current assets (*)		13	30
Miscellaneous finance income		17	13
		77	**55**
Total net finance interest/(expenses)	**(a)**	**(1,202)**	**(1,216)**
Other components of financial income and expense:			
Net exchange gains and losses		(1)	1
Net result from derivatives		(30)	(51)
Net fair value adjustments to fair value hedge derivatives and underlyings		10	(3)
Net fair value adjustments to non-hedging derivatives		(44)	19
Total other components of financial income and expense	**(b)**	**(65)**	**(34)**
Total net financial income (expenses)	**(c)=(a+b)**	**(1,267)**	**(1,250)**
of which, included in the supplementary disclosure on financial instruments		*(1,015)*	*(984)*

Further details on Financial Instruments are provided in the Note "Supplementary disclosure on financial instruments".

(*) of which IFRS 9 impact:

(millions of euros)	2019	2018
Income from negative adjustment of IFRS 9 impairment reserve on financial assets through FVTOCI	7	2
Expenses from positive adjustment of IFRS 9 impairment reserve on financial assets through FVTOCI	-	-
Reversal of IFRS 9 impairment reserve on financial assets through FVTOCI	-	-
Impairment losses on financial assets other than investments	-	-

For greater clarity of presentation, the net effects relating to derivative financial instruments are summarized in the following table:

(millions of euros)		2019	2018
Exchange gains		31	24
Exchange losses		(32)	(23)
Net exchange gains and losses		**(1)**	**1**
Income from fair value hedge derivatives		43	41
Charges from fair value hedge derivatives		–	–
Net result from fair value hedge derivatives	**(a)**	**43**	**41**
Positive effect of the reversal of the Reserve of cash flow hedge derivatives to the income statement (interest rate component)		180	213
Negative effect of the reversal of the Reserve of cash flow hedge derivatives to the income statement (interest rate component)		(253)	(305)
Net effect of the Reversal of the Reserve of cash flow hedge derivatives to the income statement (interest rate component)	**(b)**	**(73)**	**(92)**
Income from non-hedging derivatives		364	416
Charges from non-hedging derivatives		(364)	(416)
Net result from non-hedging derivatives	**(c)**	**–**	**–**
Net result from derivatives	**(a+b+c)**	**(30)**	**(51)**
Positive fair value adjustments to fair value hedge derivatives		100	50
Negative fair value adjustments to Underlying financial assets and liabilities of fair value hedge derivatives		(91)	(53)
Net fair value adjustments	**(d)**	**9**	**(3)**
Positive fair value adjustments to Underlying financial assets and liabilities of fair value hedge derivatives		1	–
Negative fair value adjustments to fair value hedge derivatives		–	–
Net fair value adjustments	**(e)**	**1**	**–**
Net fair value adjustments to fair value hedge derivatives and underlyings	**(d+e)**	**10**	**(3)**
Positive fair value to non-hedging derivatives	(f)	399	378
Negative fair value adjustments to non-hedging derivatives	(g)	(443)	(359)
Net fair value adjustments to non-hedging derivatives	**(f+g)**	**(44)**	**19**

NOTE 37
RELATED PARTY TRANSACTIONS

The following tables show the balances relating to transactions with related parties and the impact of those amounts on the separate income statement, statement of financial position and statement of cash flows of TIM S.p.A..

Related-party transactions, when not dictated by specific laws, were conducted at arm's length. They were performed in compliance with the internal procedure, which sets forth rules designed to ensure the transparency and fairness of the transactions in accordance with Consob Regulation 17221/2010. The current procedure is available on the website www.telecomitalia.com, under the Group section/Governance System channel.

For an analysis of transactions with subsidiaries and associates of TIM S.p.A. please refer to the Note "Investments".

The effects of related party transactions on the line items of the separate income statements for 2019 and 2018 are as follows:

SEPARATE INCOME STATEMENT LINE ITEMS 2019

(millions of euros)	Total	Related Parties						
		Subsidiaries	Associates, subsidiaries of associates and joint ventures	Other related parties (*)	Pension funds	Key managers	Total related parties	% of financial statement item
	(a)						(b)	(b/a)
Revenues	13,137	330	2	2	–	–	334	2.5
Other income	198	11	–	–	–	–	11	5.6
Acquisition of goods and services	4,596	828	5	80	–	–	913	19.9
Employee benefits expenses	2,492	–	–	–	66	18	84	3.4
Other operating expenses	1,061	6	–	–	–	–	6	0.6
Depreciation and amortization	3,719	274	–	–	–	–	274	7.4
Gains/(losses) on disposals of non-current assets	(41)	–	–	–	–	–	–	
Income (expenses) from investments	117	139	–	–	–	–	139	
Finance income	1,195	171	–	–	–	–	171	14.3
Finance expenses	2,462	1,005	–	–	–	–	1,005	40.8

(*) Vivendi group and Companies belonging to the group that it belongs to; other related parties through directors, statutory auditors and key managers.

SEPARATE INCOME STATEMENT LINE ITEMS 2018

(millions of euros)	Total	Related Parties						
		Subsidiaries	Associates, subsidiaries of associates and joint ventures	Other related parties (*)	Pension funds	Key managers	Total related parties	% of financial statement item
	(a)						(b)	(b/a)
Revenues	13,902	489	2	3	–	–	494	3.6
Other income	252	17	–	–	–	–	17	6.7
Acquisition of goods and services	5,801	1,069	5	81	–	–	1,155	19.9
Employee benefits expenses	2,541	–	–	–	69	10	79	3.1
Other operating expenses	722	16	–	–	–	–	16	2.2
Gains/(losses) on disposals of non-current assets	(11)	1	–	–	–	–	1	
Income (expenses) from investments	71	113	1	–	–	–	114	
Finance income	1,177	362	–	9	–	–	371	31.5
Finance expenses	2,427	857	3	7	–	–	867	35.7

(*) Vivendi group and Companies belonging to the group that it belongs to; other related parties through directors, statutory auditors and key managers.

The effects of related party transactions on the line items of the statements of financial position as at December 31, 2019 and December 31, 2018 are as follows:

STATEMENT OF FINANCIAL POSITION LINE ITEMS AT DECEMBER 31, 2019

(millions of euros)	Total	Related Parties					
		Subsidiaries	Associates, subsidiaries of associates and joint ventures	Other related parties (*)	Pension funds	**Total related parties**	% of financial statement item
	(a)					(b)	(b/a)
NET FINANCIAL DEBT							
Non-current financial assets	2.349	641	–	–	–	**641**	27.3
Securities other than investments (current assets)	–	–	–	–	–	–	-
Financial receivables and other current financial assets	176	17	–	–	–	**17**	9.7
Cash and cash equivalents	829	1	–	–	–	**1**	0.1
Current financial assets	1.005	18	–	–	–	**18**	1.8
Non-current financial liabilities	30.184	6.753	–	1	–	**6.754**	22.4
of which: Non-current financial liabilities for lease contracts	4.002	997	–	1	–	**998**	24.9
Current financial liabilities	4.453	1.600	–	–	–	**1.600**	35.9
of which: Current financial liabilities for lease contracts	666	270	–	–	–	**270**	40.5
Total net financial debt	31.283	**7.694**	**–**	**1**	**–**	**7.695**	24.6
OTHER STATEMENT OF FINANCIAL POSITION LINE ITEMS							
Right of use assets	4,906	1,293	–	1	–	**1,294**	26.4
Miscellaneous receivables and other non-current assets	1,746	139	–	–	–	**139**	8.0
Trade and miscellaneous receivables and other current assets	3,731	327	2	2	–	**331**	8.9
Miscellaneous payables and other non-current liabilities	2,973	141	–	–	–	**141**	4.7
Trade and miscellaneous payables and other current liabilities	5,843	326	4	31	21	**382**	6.5

(*) Vivendi group and Companies belonging to the group that it belongs to; other related parties through directors, statutory auditors and key managers.

STATEMENT OF FINANCIAL POSITION LINE ITEMS AT DECEMBER 31, 2018

(millions of euros)	Total	Related Parties					
		Subsidiaries	Associates, subsidiaries of associates and joint ventures	Other related parties (*)	Pension funds	**Total related parties**	% of financial statement item
	(a)					**(b)**	**(b/a)**
NET FINANCIAL DEBT							
Non-current financial assets	**1,642**	473	–	–	–	**473**	28.8
Securities other than investments (current assets)	**466**	214	–	–	–	**214**	45.9
Financial receivables and other current financial assets	**327**	17	–	–	–	**17**	5.2
Cash and cash equivalents	**885**	4	–	–	–	**4**	0.5
Current financial assets	**1,678**	235	–	–	–	**235**	14.0
Non-current financial liabilities	**24,777**	5,245	–	–	–	**5,245**	21.2
Current financial liabilities	**7,903**	3,767	–	–	–	**3,767**	47.7
Total net financial debt	**29,360**	**8,304**	**–**	**–**	**–**	**8,304**	28.3
OTHER STATEMENT OF FINANCIAL POSITION LINE ITEMS							
Miscellaneous receivables and other non-current assets	**1,704**	129	–	–	–	**129**	7.6
Trade and miscellaneous receivables and other current assets	**3,850**	437	3	2	–	**442**	11.5
Miscellaneous payables and other non-current liabilities	**3,006**	135	–	–	–	**135**	4.5
Trade and miscellaneous payables and other current liabilities	**5,238**	324	3	28	23	**378**	7.2

(*) Vivendi group and Companies belonging to the group that it belongs to; other related parties through directors, statutory auditors and key managers.

The effects of related party transactions on the significant line items of the statements of cash flows for 2019 and 2018 are as follows:

STATEMENT OF CASH FLOWS LINE ITEMS 2019

(millions of euros)	Total	Related Parties					
		Subsidiaries	Associates, subsidiaries of associates and joint ventures	Other related parties (*)	Pension funds	Total related parties	% of financial statement item
	(a)					(b)	(b/a)
Purchase of intangible assets, tangible assets and right of use assets on an accrual basis	3,398	313	2	–	–	315	9.3

(*) Vivendi group and Companies belonging to the group that it belongs to; other related parties through directors, statutory auditors and key managers.

STATEMENT OF CASH FLOWS LINE ITEMS 2018

(millions of euros)	Total	Related Parties					
		Subsidiaries	Associates, subsidiaries of associates and joint ventures	Other related parties (*)	Pension funds	Total related parties	% of financial statement item
	(a)					(b)	(b/a)
Purchase of intangible and tangible assets on an accrual basis	5,101	15	3	–	–	18	0.4

(*) Vivendi group and Companies belonging to the group that it belongs to; other related parties through directors, statutory auditors and key managers.

TRANSACTIONS WITH SUBSIDIARIES

The most significant amounts are summarized as follows:

SEPARATE INCOME STATEMENT LINE ITEMS

(millions of euros)	2019	2018	Type of contract
Revenues			
TIM Retail	75	102	Supply of products for sale to the public, voice and data transmission services and ICT services for company use, property leasing
Flash Fiber S.r.l.	118	180	Construction of the horizontal secondary network in FTTH mode following the joint investment arrangement of July 28, 2016 between TIM and Fastweb, voice services, data transmission equipment and services, administrative outsourcing
Tim Participações group	29	22	Roaming services, license support and provision as part of network operations, information technology, marketing & sales
H.R. Services S.p.A.	3	3	Assistance and advisory services for human resources management, property leasing and facility management services, outsourced telephone services, supply of products for the fixed-line and mobile network, administrative outsourcing
INWIT S.p.A.	39	31	Voice and data transmission services for company use, IRU transfer of Dark Optic Fiber and Local Infrastructure, Easy IP ADSL service, small cell design and construction services, property leasing, TLC equipment sales of mobile network, equipment rental, administrative outsourcing
Olivetti S.p.A.	6	25	Voice services, MPLS and on fiber services for the national data network, equipment sales, development projects, property leasing, administrative outsourcing
Persidera S.p.A.	2	3	Sale of network infrastructure for television broadcasting, access to the Internet via the IPG@TE service, national and international data services with outsourced assistance, voice devices and services, administrative outsourcing
Telecom Italia S.Marino S.p.A.	2	2	Connection and telecommunications services, in particular for the sale of data (bitstream) services, dark fiber contract, local loop unbundling
Telecom Italia Sparkle S.p.A.	47	66	Voice and data transmission services, services relating to the interconnection between Telecom Italia Sparkle and TIM communications networks with particular reference to accesses and international traffic, sale of IRU dark fiber, property leasing, administrative outsourcing
Telecom Italia Trust Technologies S.r.l.	2	3	Voice outsourced services, fixed network products, administrative outsourcing
Telecontact S.p.A.	4	3	Lease of properties and facility management services, supply of fixed and mobile network and IP connectivity telecommunications products and services, administrative outsourcing
Telefonia Mobile Sammarinese S.p.A.	1	1	Mobile telephone and telecommunications product sales
Telenergia S.p.A.	1	1	Outsourcing for company business, administrative outsourcing
Other minor companies	1	47	The amount shown in 2018 included, in addition to the minor companies, Noverca S.r.l. which in 2019 was merged into TIM S.p.A.
Total revenues	**330**	**489**	

(millions of euros)	2019	2018	Type of contract
Other income	**11**	**17**	Recovery of seconded personnel costs, refunds of costs for services, compensation for board positions, MSA ordinary maintenance fees from INWIT S.p.A., other income
Acquisition of goods and services			
TIM Retail	113	129	Supply of services for acquisition of new customers, information activities and post-sales assistance for TIM customers, activities for the promotion of TIM's image and distinctive brands through point-of-sale windows
A.C.C. S.r.l.	-	7	In 2018 call center and back office services, Customer Care services to customers. In 2019 this company was merged into Telecontact S.p.A.
Flash Fiber S.r.l.	-	2	In 2018 use of the network in GPON mode for the supply of the FTTH service
H.R. Services S.p.A.	41	45	Administration of personnel employed by TIM, training of TIM personnel, welfare service, and ASSILT and CRALT
INWIT S.p.A.	64	323	Supply of services for BTS sites, monitoring and security services, management and maintenance services
Telecom Italia Trust Technologies S.r.l.	17	13	Certification Authority service for TIM and within the TIM customer offering, archiving service according to PEC rules for the TIM S.p.A.'s Certified Electronic Mail box, management services for electronic invoicing, provision of digital identity services, tax consolidation payables
Olivetti S.p.A.	43	37	Supply's Cloud Printing service for software, maintenance and supply of customized services as part of TIM offerings to end customers, purchase of IT services, ICT product installation costs, after-sales marketing cases assistance, as part of TIM offerings to end customers, processing services, support, dispatching of IT flows related to debt collection activities and replacement storage of documentation in accordance with the law, Prepaid and Subscribed contract management services for fixed-line and mobile consumer customers for electronic and paper storage respectively, consumer contract management services to support the TIM CDA line, back office services as part of the “Postino Intelligente” project aimed at marketing the mobile offering remotely, evolutionary developments of projects and platforms, purchase of software platform licenses, software developments
Persidera S.p.A.	1	2	Supply of “contribution services” for linear channels, for the provision and sale of the TIMvision service by TIM to its customers
Telecom Italia Sparkle S.p.A.	156	174	Portion to be paid for telecommunications services and interconnection costs, telephone services, data transmission and international line lease
Telecontact S.p.A.	83	66	Customer Care services for TIM customers and for the Public Administration under the Consip Agreement, back office services relating to the billing services for customers of the paid service provided by TIM technicians, call center and back office services for the management of the information of technical and commercial front end of the public telephony
Telenergia S.p.A.	304	263	Power services
Telsy	3	-	Provision of equipment and licenses, as part of TIM offerings to end customers, and ICT solutions security services for TIM, maintenance services and licenses
TIM Vision S.r.l.	3	1	Purchase of television content relating to Serie TV viewing within the offering to end customers
Other minor companies	-	7	The amount indicated in 2018 includes, in addition to minor company, Noverca S.r.l., which merged into TIM S.p.A. in 2019.
Total acquisition of goods and services	**828**	**1,069**	

(millions of euros)	2019	2018	Type of contract
Employee benefits expenses	**-**	**-**	
Other operating expenses	**6**	**16**	Contractual penalties, other expenses
Depreciation of user rights on rental			
Flash Fiber S.r.l.	18	-	Amortization of rights of use related to the recognition of additional non-current assets mortised over the residual contractual term, following the adoption of IFRS 16
INWIT S.p.A.	255	-	Amortization of rights of use related to the recognition of additional non-current assets mortised over the residual contractual term, following the adoption of IFRS 16
TN Fiber S.r.l.	1	1	Depreciation of user rights connected to the acquisition of IRU transmission capacity recognized as finance leases
Total depreciation of user rights on rental	**274**	**1**	
Gains/(losses) on disposals of non-current assets	-	1	
Income (expenses) from investments			
INWIT S.p.A.	76	68	Dividends
Persidera S.p.A.	10	8	Dividends
Telecom Italia Finance S.A.	53	37	Dividends
Total income (expenses) from investments	**139**	**113**	
Finance income			
Flash Fiber S.r.l.	7	5	Income from receivables and financial commission income
Olivetti S.p.A.	1	-	Interest income on financial receivables, financial commission income
Telecom Italia Capital S.A.	124	322	Income from securities, income from derivatives, financial commission income, other financial income
Telecom Italia Finance S.A.	38	34	Income from securities, income from derivatives, and financial commission income
Telenergia S.p.A.	1	1	Interest income on financial receivables, financial commission income
Total finance income	**171**	**362**	
Finance expenses			
Flash Fiber S.r.l.	4	-	Finance expenses for interest due to the recognition of higher financial liabilities following the adoption of IFRS 16;
INWIT S.p.A.	17	-	Finance expenses for interest due to the recognition of higher financial liabilities following the adoption of IFRS 16;
Telecom Italia Capital S.A.	845	731	Interest on financial payables, charges on derivatives, miscellaneous finance expenses
Telecom Italia Finance S.A.	139	126	Interest on financial payables, charges on derivatives, financial commissions payables, other finance expenses
Total finance expenses	**1,005**	**857**	

STATEMENT OF FINANCIAL POSITION LINE ITEMS

(millions of euros)	12/31/2019	12/31/2018	Type of contract
Net financial debt			
Non-current financial assets			
Flash Fiber S.r.l.	491	306	Loans
Telecom Italia Finance S.A.	150	167	Derivatives
Total non-current financial assets	**641**	**473**	
Securities other than investments (current assets)	**-**	**214**	In 2018, securities held in portfolio by TIM S.p.A., as a result of the buyback offer on bonds of Telecom Italia Capital
Financial receivables and other current financial assets			
Flash Fiber S.r.l.	1	1	Short-term financial receivables
Telecom Italia Capital S.A.	7	10	Derivatives
Telecom Italia Finance S.A.	3	3	Derivatives
Tim Vision S.r.l.	6	3	Short-term financial receivables
Total financial receivables and other current financial assets	**17**	**17**	
Cash and cash equivalents			Treasury current account transactions
Olivetti Scuola Digitale S.r.l.	-	1	In 2019 the company was merged into Olivetti S.p.A.
Olivetti S.p.A.	-	3	
Telenergia S.p.A.	1	-	
Total Cash and cash equivalents	**1**	**4**	
Non-current financial liabilities			
Flash Fiber S.r.l.	388	-	Non-current financial liabilities related to the recognition of rights of use arising from lease agreements following the adoption of IFRS 16
INWIT S.p.A.	608	-	Non-current financial liabilities related to the recognition of rights of use arising from lease agreements following the adoption of IFRS 16
Telecom Italia Capital S.A.	4,335	3,407	Hedging derivatives and financial payables
Telecom Italia Finance S.A.	1,422	1,838	Hedging derivatives and financial payables
Total Non-current financial liabilities	**6,753**	**5,245**	

(millions of euros)	12/31/2019	12/31/2018	Type of contract
Current financial liabilities			
A.C.C. S.r.l.	-	2	Financial payables. In 2019 the company merged into Telecontact S.p.A.
H.R. Services S.p.A.	20	13	Payables for current account transactions
INWIT S.p.A.	258	3	Current financial liabilities related to the recognition of rights of use arising from lease agreements following the adoption of IFRS 16 Payables for current account transactions
Telecom Italia Trust Technologies S.r.l.	10	10	Payables for current account transactions
Olivetti S.p.A.	1	-	Payables for current account transactions
Flash Fiber S.r.l.	18	5	Current financial liabilities related to the recognition of rights of use arising from lease agreements following the adoption of IFRS 16 Payables for current account transactions
Persidera S.p.A.	-	6	In 2018 payables for current account transactions
Telecom Italia Capital S.A.	56	2,110	Financial payables, derivatives
Telecom Italia Finance S.A.	991	1,371	Financial payables, payables for current account transactions, derivatives
Telecom Italia Sparkle S.p.A.	177	156	Payables for current account transactions
Telecontact S.p.A.	34	27	Payables for current account transactions
Telenergia S.p.A.	-	20	In 2018, payables for current account transactions
Telsy S.p.A.	3	5	Payables for current account transactions
Tim Vision S.r.l.	5	1	Payables for current account transactions
TN Fiber S.r.l.	26	24	Payables for current account transactions
Other minor companies	1	14	The amount indicated in 2018 includes, in addition to minor company, Noverca S.r.l., which merged into TIM S.p.A. in 2019.
Total Current financial liabilities	**1,600**	**3,767**	

(millions of euros)	12/31/2019	12/31/2018	Type of contract
Other statement of financial position line items			
Right of use assets			
Flash Fiber S.r.l.	422	-	Rights of use related to the recognition of additional non-current assets mortised over the residual contractual term, following the adoption of IFRS 16
INWIT S.p.A.	860	-	Rights of use related to the recognition of additional non-current assets mortised over the residual contractual term, following the adoption of IFRS 16
TN Fiber S.r.l.	11	10	The user rights resulting from the acquisition of IRU transmission capacity recognized as finance leases
Total right of use assets	**1,293**	**10**	
Miscellaneous receivables and other non-current assets	**139**	**129**	Deferred contractual and other deferred costs for transactions with Telecontact (customer care services) and TIM Retail (new activations), receivables for tax consolidation

(millions of euros)	12/31/2019	12/31/2018	Type of contract
Trade and miscellaneous receivables and other current assets			
TIM Retail	58	61	Supply of products for sale to the public, voice and data transmission services and ICT services for company use, property leasing, tax consolidation receivables
Flash Fiber S.r.l.	121	168	Construction of the horizontal secondary network in FTTH mode following the joint investment arrangement of July 28, 2016 between TIM and Fastweb, voice services, data transmission equipment and services, administrative outsourcing
Tim Participações group	18	20	Roaming services, license support and provision as part of network operations, information technology, marketing & sales
H.R. Services S.p.A.	2	2	Assistance and advisory services for human resources management, property leasing and facility management services, outsourced telephone services, supply of products for the fixed-line and mobile network, administrative outsourcing
INWIT S.p.A.	38	54	Voice and data transmission services for company use, IRU assignments of dark optic fiber and local infrastructure, Easy IP ADSL service, small cell design and production services, property leasing, sales of mobike network TLC products, product rental, tax consolidation receivables
Olivetti S.p.A.	14	26	Telephone services, MPLS and fiber services for the national data network, product sales, property leasing, project development, administrative outsourcing
Telecom Italia Trust Technologies S.r.l.	2	3	Outsourced voice services, fixed network products, administrative outsourcing, receivables for tax consolidation
Persidera S.p.A.	-	4	In 2018, sale of network infrastructure for television broadcasting, access to the Internet via the IPG@TE service, national and international data services with outsourced assistance, voice devices and services, administrative outsourcing, tax consolidation receivables
Telecom Italia S.Marino S.p.A.	1	1	Connection and telecommunications services, in particular for the sale of data (bitstream) services, dark fiber contract, local loop unbundling
Telecom Italia Sparkle S.p.A.	24	30	Voice and data transmission services, services relating to the interconnection between Telecom Italia Sparkle and TIM communications networks with particular reference to accesses and international traffic, sale of IRU dark fiber, property leasing, administrative outsourcing
Telecontact S.p.A.	30	30	Lease of properties and facility management services, supply of fixed and mobile network and IP connectivity telecommunications products and services, administrative outsourcing, deferred contract costs, tax consolidation receivables
Telenergia S.p.A.	7	5	Outsourcing for company business, administrative outsourcing, tax consolidation receivables
Tim Vision S.r.l.	8	5	Deferment of costs for the purchase of TV content relating to the viewing of TV series as part of offers for end customers
TN Fiber S.r.l.	1	1	Telephone services, administrative outsourcing, property leasing and facility services
Other minor companies	3	27	The amount indicated in 2018 includes, in addition to minor company, Noverca S.r.l., which merged into TIM S.p.A. in 2019.
Total trade and miscellaneous receivables and other current assets	**327**	**437**	

(millions of euros)	12/31/2019	12/31/2018	Type of contract
Miscellaneous payables and other non-current liabilities			
Flash Fiber S.r.l.	120	104	tax consolidation payables, deferred revenues deriving from contracts for the sale of transmission capacity
INWIT S.p.A.	2	1	Deferred subscription charges revenues
Olivetti S.p.A.	3	4	Tax consolidation payables
Telecom Italia S.Marino S.p.A.	1	1	Deferred revenues for connection and telecommunications services contracts
Telecom Italia Sparkle S.p.A.	14	13	Deferred revenues from interconnection contracts, tax consolidation payables
TN Fiber S.r.l.	-	1	Tax consolidation payables
Other minor companies	1	11	The amount indicated in 2018 includes, in addition to minor company, Noverca S.r.l., which merged into TIM S.p.A. in 2019.
Total miscellaneous payables and other non-current liabilities	**141**	**135**	
Trade and miscellaneous payables and other current liabilities			
TIM Retail	27	22	Supply of services for acquisition of new customers, information activities and post-sales assistance for TIM customers, activities for the promotion of image and distinctive brands TIM through point-of-sale windows, tax consolidation payables
A.C.C. S.r.l.	-	1	In 2018 call center and back office services, Customer Care services for customers, tax consolidation payables. In 2019 the company merged into Telecontact S.p.A.
H.R. Services S.p.A.	11	18	Administration of personnel employed by TIM, training of TIM personnel, welfare services, and ASSILT and CRALT
Flash Fiber S.r.l.	64	51	Use of network in GPON mode for the supply of the FTTH service, deferred revenues, tax consolidation payables
INWIT S.p.A.	41	26	Supply of services for BTS sites, monitoring and security services, management and maintenance services, tax consolidation payables
Telecom Italia Trust Technologies S.r.l.	10	11	Certification Authority service for TIM and within the TIM end customer offering, archiving service according to PEC rules for the TIM S.p.A.'s Certified Electronic Mail box, management services for electronic invoicing, provision of digital identity services, tax consolidation payables
Olivetti S.p.A.	37	43	Provision of Cloud Printing service for software, maintenance and supply of customized services as part of TIM offerings to end customers, purchase of IT services, ICT product installation costs, after-sales marketing cases assistance, as part of TIM offerings to end customers, processing services, processing services, support, dispatching of information flows related to debt recovery and archiving of documentation according to the law, Prepaid and Subscription contract management services for fixed-line and mobile consumer customers for electronic and paper storage respectively, consumer contract management services in support of the TIM CDA line, back office services as part of the “Postino Intelligente” project aimed at marketing the mobile offering remotely, evolutionary developments of projects and platforms, purchase of software platform licenses, software developments, payables for tax consolidation, etc
Telecom Italia Sparkle S.p.A.	57	73	Portion to be paid for telecommunications services and interconnection costs, telephone services, data transmission and international line lease, tax consolidation payables
Telecontact S.p.A.	19	16	Customer Care services for TIM customers and for the Public Administration under the Consip Agreement, back office services relating to the billing services for customers of the paid service provided by TIM technicians, call center and back office services for the management of the information of technical and commercial front end of the public telephony, tax consolidation payables

(millions of euros)	12/31/2019	12/31/2018	Type of contract
Telenergia S.p.A.	51	43	Power services
Telsy S.p.A.	5	3	Provision of equipment, as part of TIM offerings to end customers, and ICT solutions security services for TIM, maintenance services and licenses
Tim Vision S.r.l.	-	5	Purchase of television content relating to Serie TV viewing within the offering to end customers, tax consolidation payables
TN Fiber S.r.l.	3	2	Disposal of Indefeasible Rights of Use (IRU) to the NGAN fiber-optic network in the town of Trento, tax consolidation payables
Other minor companies	1	10	The amount indicated in 2018 includes, in addition to minor company, Noverca S.r.l., which merged into TIM S.p.A. in 2019.
Total trade and miscellaneous payables and other current liabilities	**326**	**324**	

STATEMENT OF CASH FLOWS LINE ITEMS

STATEMENT OF CASH FLOWS LINE ITEMS (millions of euros)	2019	2018	Type of contract
Purchase of intangible assets, tangible assets and right of use assets on an accrual basis			
Flash Fiber S.r.l.	231	-	Higher value of rights of use recognized as a result of new contracts or changes in existing lease contracts, in accordance with IFRS16
INWIT S.p.A.	67	-	Higher value of rights of use recognized as a result of new contracts or changes in existing lease contracts, in accordance with IFRS16
Olivetti S.p.A.	7	6	Purchase of products for resale and lease under the offering to end customer, development and implementation on platforms
Telecom Italia Trust Technologies S.r.l.	2	4	Digital Identity and Certification Authority
Telenergia S.p.A.	1	1	Connections for power supply of local NGAN cabinets
TN Fiber S.r.l.	2	2	Higher value of the rights of use resulting from the acquisition of IRU transmission capacity recognized as finance leases
Other minor companies	3	2	
Total purchase of intangible, tangible and right of use assets on an accrual basis	**313**	**15**	

TRANSACTIONS WITH ASSOCIATES, SUBSIDIARIES OF ASSOCIATES AND JOINT VENTURES

The most significant amounts are summarized as follows:

SEPARATE INCOME STATEMENT LINE ITEMS

(millions of euros)	2019	2018	Type of contract
Revenues			
Asscom S.r.l.	1	1	Insurance brokerage
Nordcom S.p.A.	1	1	Fixed and mobile voice services, equipment, data network connections and outsourcing
Total revenues	**2**	**2**	
Other income	**-**	**-**	
Acquisition of goods and services			
W.A.Y. S.r.l.	4	4	Supply, installation and technical assistance services for geolocation equipment provided as part of offers to TIM customers, developments of the CCS software platform dedicated to TIM's Company Car Sharing service
Other minor companies	1	1	
Total acquisition of goods and services	**5**	**5**	
Other operating expenses	**-**	**-**	
Income/(expenses) from investments	**-**	**1**	Dividends
Finance income	**-**	**-**	
Finance expenses	**-**	**3**	In 2018, write-down of financial receivable due from Alfiere S.p.A.

STATEMENT OF FINANCIAL POSITION LINE ITEMS

(millions of euros)	12/31/2019	12/31/2018	Type of contract
Trade and miscellaneous receivables and other current assets			
Alfiere S.p.A.	-	1	Contracts for project management, administration, corporate and compliance services, and sundry chargebacks
W.A.Y. S.r.l.	2	1	Deferred costs for the provision of customized platforms, application offers and fixed and mobile voice services
Other minor companies	-	1	
Total trade and miscellaneous receivables and other current assets	**2**	**3**	

(millions of euros)	12/31/2019	12/31/2018	Type of contract
Trade and miscellaneous payables and other current liabilities			
Movenda S.p.A.	1	1	Supply and certification of SIM CARDS, software systems
W.A.Y. S.r.l.	2	1	Supply, installation and technical assistance services for geolocation equipment provided as part of offers to TIM customers, developments of the CCS software platform dedicated to TIM's Company Car Sharing service
Other minor companies	1	1	
Total trade and miscellaneous payables and other current liabilities	**4**	**3**	

STATEMENT OF CASH FLOWS LINE ITEMS

(millions of euros)	2019	2018	Type of contract
Purchase of intangible assets, tangible assets and right of use assets on an accrual basis			
Movenda S.p.A.	1	2	Supply and development systems software
Other minor companies	1	1	
Total purchase of intangible, tangible and right of use assets on an accrual basis	**2**	**3**	

The shareholder loan of 11 million euros (fully written down) and trade receivables of 1 million euros to the joint venture Alfiere S.p.A., present as at December 31, 2018, were fully used to cover the losses for 2018. On 24 June 2019 the sale was completed to CDP Immobiliare S.r.l. of 4,625 ordinary shares of Alfiere S.p.A., equal to 50% of the share capital, held by TIM S.p.A.; at the same time, the guarantee provided for TIM was terminated.

TIM S.p.A. has also issued guarantees on behalf of subsidiaries, associates and joint ventures for a total of 5,288 million euros, net of back-to-back guarantees received (5,914 million euros at December 31, 2018).
In particular, the following is noted: 3,561 million euros on behalf of Telecom Italia Capital S.A. (4,367 million euros at December 31, 2018); 1,382 million euros on behalf of Telecom Italia Finance S.A. (1,352 million euros at December 31, 2018); 68 million euros on behalf of the Sparkle group (38 million euros at December 31, 2018); 106 million euros on behalf of Olivetti S.p.A. (62 million euros at December 31, 2018); 50 million euros on behalf of Telenergia S.p.A. (60 million euros at December 31, 2018).

TRANSACTIONS WITH OTHER RELATED PARTIES (BOTH THROUGH DIRECTORS, STATUTORY AUDITORS AND KEY MANAGERS AND AS PARTICIPANTS IN SHAREHOLDER AGREEMENTS PURSUANT TO ARTICLE 122 OF THE CONSOLIDATED LAW ON FINANCE)

Details are provided below of the transactions with:

- Vivendi Group and the companies of the group that it belongs to (as a result of the resolutions of the Board of Directors of TIM S.p.A. of May 3 and June 1, 2017);
- Related companies through Directors appointed on May 4, 2018;
- Related companies through Directors whose term of office ended on May 4, 2018;

SEPARATE INCOME STATEMENT LINE ITEMS

(millions of euros)	2019	2018	Type of contract
Revenues			
Other Directors or through	1	1	Fixed-line and mobile voice services and devices
Havas Group	1	-	Fixed-line and mobile voice services
Mediobanca group	-	1	Telephone services, sale of equipment, data network services and Internet accesses
Other minor companies	-	1	
Total revenues	**2**	**3**	
Acquisition of goods and services			
Other Directors or through	-	2	In 2018, amounts recognized for telephone services to be paid back
Havas Group	76	72	Purchase of media space on behalf of TIM and, to a lesser extent, development and delivery of advertising campaigns
Vivendi group	4	7	Purchase of musical and television digital content (TIMmusic, TIMvision) and supply of D&P cloud-based games (TIMgames).
Total acquisition of goods and services	**80**	**81**	
Income/(expenses) from investments	**-**	**-**	
Finance income			
Mediobanca group	-	9	Income from derivatives
Total finance income	**-**	**9**	

(millions of euros)	2019	2018	Type of contract
Finance expenses			
Mediobanca group	-	7	Expenses from derivatives, interest expenses
Total finance expenses	**-**	**7**	

STATEMENT OF FINANCIAL POSITION LINE ITEMS

(millions of euros)	12/31/2019	12/31/2018	Type of contract
Net financial debt			
Non-current financial liabilities			
Other Directors or through	1	-	Non-current financial liabilities related to the recognition of rights of use arising from lease agreements following the adoption of IFRS 16
Total Non-current financial liabilities	**1**	**-**	
Current financial liabilities	**-**	**-**	

(millions of euros)	12/31/2019	12/31/2018	Type of contract
Other statement of financial position line items			
Right of use assets			
Other Directors or through	1	-	Rights of use resulting from the recognition of higher non-current assets mortised over the residual contractual term, following the adoption of IFRS 16
Total right of use assets	**1**	**-**	
Trade and miscellaneous receivables and other current assets			
Other Directors or through	1	1	Fixed-line and mobile voice services and devices
Vivendi group	-	1	In 2018, TIM Show 2018 service, TV series rights
Other minor companies	1	-	
Total trade and miscellaneous receivables and other current assets	**2**	**2**	
Trade and miscellaneous payables and other current liabilities			
Havas Group	30	27	Purchase of media space on behalf of TIM and, to a lesser extent, development and delivery of advertising campaigns
Vivendi group	1	1	Purchase of musical and television digital content (TIMmusic, TIMvision) and supply of D&P cloud-based games (TIMgames).
Total trade and miscellaneous payables and other current liabilities	**31**	**28**	

TRANSACTIONS WITH PENSION FUNDS

The most significant amounts are summarized as follows:

SEPARATE INCOME STATEMENT LINE ITEMS

(millions of euros)	2019	2018	Type of contract
Employee benefits expenses			Contributions to pension funds
Fontedir	6	7	
Telemaco	60	62	
Total Employee benefits expenses	**66**	**69**	

STATEMENT OF FINANCIAL POSITION LINE ITEMS

(millions of euros)	12/31/2019	12/31/2018	Type of contract
Trade and miscellaneous payables and other current liabilities			Payables for contributions to pension funds
Fontedir	2	3	
Telemaco	19	20	
Total trade and miscellaneous payables and other current liabilities	**21**	**23**	

REMUNERATION TO KEY MANAGERS

In 2019, the total remuneration recorded on an accrual basis by TIM S.p.A. in respect of key managers amounted to 18 million euros (10 million euros at December 31, 2018). The figure breaks down as follows:

(millions of euros)	2019	2018
Short-term remuneration	11	6
Long-term remuneration	-	-
Employment termination benefit incentives	5	3
Share-based payments (*)	2	1
Total	**18**	**10**

(*) These refer to the fair value of the rights, accrued to December 31, 2019, under the share-based incentive plans of TIM S.p.A. (Long Term Incentive 2018 and Plans of Subsidiaries).

Short-term remuneration is paid during the period it pertains to, and, at the latest, within the six months following the end of that period. As at December 31, 2018, they do not include the effects of the reversal of the accruals related to the 2017 costs amounting to -1.25 million euros.

Long-term remuneration, at December 31, 2019, does not include the effects of the reversal of the accruals related to the costs 2018 of around 500 thousand euros.

The indemnities for early termination of employment, as at December 31, 2019, do not include the effects of the reversal of the accruals relating to 2018 costs amounting to approximately 200 thousand euros.

The share-based payments at December 31, 2019, do not include the effects of the reversal of the accruals related to the 2018 costs of the LTI 2018/2020 of around 400 thousand euros.

In 2019, the contributions paid in to defined contribution plans (Assida and Fontedir) by TIM S.p.A. or by subsidiaries of the Group on behalf of key managers, amounted to 141 thousand euros (119 thousand euros at December 31, 2018).

With regard to the remuneration of directors and statutory auditors due for the year 2019, pursuant to Article 2427, no. 16 of the Italian Civil Code, reference should be made to the Compensation Report, available at the Company's headquarters and on the Company's website at the following address: www.telecomitalia.com /Assemblea.

In 2019, “Key managers”, i.e. those who, directly or indirectly, have the power and responsibility for the planning, management and control of TIM Group operations, including directors, were the following:

Directors:		
Luigi Gubitosi		Managing Director and Chief Executive Officer of TIM S.p.A.
		General Manager of TIM S.p.A.
Managers:		
Sami Foguel	(1)	Diretor Presidente Tim Participações S.A.
Pietro Labriola	(2)	Diretor Presidente Tim Participações S.A.
Stefano Azzi	(3)	Chief Consumer Officer
Mario Di Mauro	(4)	Innovation and Customer Experience Manager
Lorenzo Forina	(3)	Chief Business & Top Clients Officer
	(5)	Chief Revenue Officer
Michele Gamberini	(6)	Chief Technology & Information Officer
Stefano Grassi	(7)	Head of Security
Riccardo Meloni	(8)	Head of Human Resources, Organization & Real Estate
Luciano Sale	(9)	Head of Human Resources, Organization & Real Estate
Giovanni Gionata Massimiliano Moglia	(7)	Chief Regulatory Affairs & Wholesale Market Officer
Carlo Nardello	(10)	Chief Strategy, Customer Experience & Transformation Officer
Agostino Nuzzolo		Head of Legal and Tax
Piergiorgio Peluso	(11)	Chief Financial Officer
Giovanni Ronca	(12)	Chief Financial Officer
Elisabetta Romano	(13)	Chief Technology and Innovation Officer
	(6)	Chief Innovation & Partnership Officer
Anna Spinelli	(14)	Head of Procurement
Federico Rigoni	(15)	Head of Procurement
Stefano Siragusa		Chief Operations Officer

(1) to April 2, 2019;
(2) from April 3, 2019;
(3) to January 17, 2019;
(4) to February 28, 2019; on March 8, 2019 the Department Innovation & Customer Experience has been replaced;
(5) from January 18, 2019;
(6) from November 12, 2019;
(7) From 27 June 2019
(8) to February 4, 2019;
(9) from February 5, 2019;
(10) from February 22, 2019
(11) until June 2, 2019;
(12) from June 3, 2019;
(13) until November 11, 2019;
(14) to March 31, 2019;
(15) from April 1, 2019.

NOTE 38
EQUITY COMPENSATION PLANS

Equity compensation plans in force at December 31, 2019 are used for *retention purposes* and as a long-term incentive for the managers and employees of the Group.
A summary is provided below of the plans in place at December 31, 2019. For more information on the plans in place at December 31, 2018, see the Separate Financial Statements of TIM S.p.A. at that date.

DESCRIPTION OF STOCK OPTION PLANS

2014-2016 Stock Option Plan

The objective of the 2014–2016 Stock Option Plan, introduced following its approval by the Board of Directors of the Company on June 26, 2014, was to encourage management holding organizational positions that are crucial to the company business to focus on the medium/long-term growth in value of company shares. It was aimed at the then Chief Executive Officer, Top Management (including Key Officers) and select TIM Group managers.
Please refer to the Financial Statements at December 31, 2017 for a description of the plan.
The three-year exercise period (March 24, 2017 - March 24, 2020) commenced following the approval of the financial statements for 2016 by the Board of Directors on March 23, 2017.
Based on final data approved, the number of exercisable options is 20% of the total options assigned to targets. The exercise price was set, by the Board of Directors meeting that initiated the plan at 0.94 euros per option (strike price). For the allocations made in 2015 and 2016, the strike price was determined as the higher of the price established upon initial allocation and the price resulting from the application of the above criteria at the time of allocation of the options. Below is the situation at December 31, 2019:

- 133,042 shares at a unit price of 1.15 euros;
- 343,069 shares at a unit price of 1.01 euros;
- 893,617 shares at a unit price of 0.99 euros;
- 13,497,406 shares at a unit price of 0.94 euros.

DESCRIPTION OF OTHER EQUITY COMPENSATION PLANS

Long Term Incentive Plan 2018-2020

The Plan, approved by the Shareholders' Meeting of Telecom Italia S.p.A. of April 24, 2018, provides for a three-year vesting period (2018-2020) and the bonus allocation of Telecom Italia S.p.A. ordinary shares subject to the achievement of two performance conditions, as assessed by the Board of Directors when approving the TIM Group's consolidated financial statements at December 31, 2020:

- average performance of TIM ordinary shares versus the average market performance of a peer basket in the quarters preceding the start and the end of the period (70% weighting). The peer basket consists of the following Companies: Deutsche Telekom AG, Vodafone Group PLC, Telefonica SA, Orange SA, BT Group PLC, Telenor ASA, Swisscom AG, Telia Co AB, Koninklijke KPN NV, Proximus SADP, Elisa OYJ;
- cumulative equity free cash flow over the period 2018-2020 (30% weighting). This parameter is linked to the generation of cash flow, understood as net cash flow before dividends and investments in frequencies. This amount represents the available free cash flow for the payment of dividends, the repayment of debt, the impact of IAS 17 (finance leases) and the investment in frequencies, and does not include the financial impact of acquisitions or disposals of investments (M&A), if any;

The Plan envisages two grants: a first grant reserved to the Chief Executive Officer, serviced by a maximum of 30,000,000 shares; a second grant for a select number of Group management (serviced by a maximum of 55,000,000 shares).

Following assignment, all shares will be subject to the lock-up clause for two years.
The operating terms and conditions of the Plan are set forth in the Plan Rules, approved by the Board of Directors on July 24, 2018, which resolved its start-up.

Special Award 2016 - 2019

For the description of the Special Award 2016-2019, launched in 2016, see the Consolidated financial statements at December 31, 2017.

At December 31, 2019 the Key Managers, recipients of that bonus, were assigned a total amount of 250,000 euros (represented for 200,000 euros of 256,410 ordinary shares of TIM S.p.A.). The payment is scheduled for after the approval of the Financial Statements for the year 2019.

NOTE 39
SIGNIFICANT NON-RECURRING EVENTS AND TRANSACTIONS

The impact of **non-recurring events and transactions** on equity, profit, net financial debt and cash flows is set out below in accordance with Consob Communication DEM/6064293 dated July 28, 2006:

(millions of euros)		Equity	Profit (loss) for the year	Net financial debt	Cash flows (*)
Carrying amount	**(a)**	**18,174**	**382**	**31,283**	**261**
Revenues - adjustments from previous years		(15)	(15)	–	–
Other income - Reimbursement of fine I761		21	21	–	–
Acquisition of goods and services - Expenses related to agreements and the development of non-recurring projects		(11)	(11)	11	(11)
Employee benefits expenses - Charges related to corporate reorganization/restructuring and other charges		(177)	(177)	258	(258)
Other operating expenses - Expenses related to disputes and regulatory sanctions and potential liabilities related to them, and expenses related to disputes with former employees and liabilities with customers and/or suppliers		(323)	(323)	13	(13)
Other operating expenses - Sundry expenses		(12)	(12)	1	(1)
Net gains/losses on disposals of other investments		9	9	(145)	145
Miscellaneous finance expenses		(7)	(7)	–	–
Total non-recurring effects	**(b)**	**(515)**	**(515)**	**138**	**(138)**
Figurative amount	**(a-b)**	**18,689**	**897**	**31,145**	**399**

(*) Cash flows refer to the increase (decrease) in Cash and cash equivalents during the year.

The impact of non-recurring items on the separate income statement line items is as follows:

(millions of euros)	2019	2018
Operating revenues and other income	**6**	**(62)**
Revenue adjustments of previous years	(15)	(62)
Other income	21	–
Acquisition of goods and services	**(14)**	**(13)**
Professional expenses, consulting services and other costs	(14)	(13)
Employee benefits expenses	**(248)**	**(221)**
Expenses related to corporate reorganization/restructuring and other processes	(248)	(221)
Other operating expenses	**(412)**	**(108)**
Expenses related to disputes and regulatory sanctions and potential liabilities related to them, and expenses related to disputes with former employees and liabilities with customers and/or suppliers	(396)	(87)
Sundry expenses	(16)	(21)
Impact on EBITDA	**(668)**	**(404)**
Impairment reversals (losses) on non-current assets	**–**	**(2,686)**
Goodwill impairment loss	–	(2,686)
Impact on EBIT	**(668)**	**(3,090)**
Other income (expenses) from investments	**5**	**–**
Other finance income (expenses)	**(10)**	**(9)**
Impact on profit (loss) before tax	**(673)**	**(3,099)**
Income taxes on non-recurring items	158	75
Impact on profit (loss) for the year	**(515)**	**(3,024)**

NOTE 40
POSITIONS OR TRANSACTIONS RESULTING FROM ATYPICAL AND/OR UNUSUAL OPERATIONS

In accordance with Consob Communication DEM/6064293 of July 28, 2006, a statement is made to the effect that in 2019 no atypical and/or unusual transactions, as defined by that Communication, were pursued.

NOTE 41
OTHER INFORMATION

RESEARCH AND DEVELOPMENT

Expenditures for research and development activities are represented by external costs, labor costs of dedicated staff and depreciation and amortization. Details are as follows:

(millions of euros)	2019	2018
Research and development costs expensed during the year	55	44
Capitalized development costs	1,058	1,121
Total research and development costs (expensed and capitalized)	**1,113**	**1,165**

The decrease recognized in the 2019 financial year was mainly due to the completion of the engineering and deployment and development activities conducted on the LTE and NGAN networks, which have now reached maturity, partially offset by greater implementation activities related to the new generation 5G network.
In the 2019 separate income statement, amortization charges totaling 876 million euros were recorded for development costs capitalized during the year and in prior years.
Research and development activities conducted by TIM S.p.A. are detailed in the Report on Operations ("Research and Development" section).

LEASE INCOME

TIM has entered into lease agreements for land and buildings for office use and industrial use, infrastructure sites for the mobile network and network infrastructures; at December 31, 2019, the lease installments at nominal value still to be collected totaled:

(millions of euros)	12/31/2019
Within 1 year	59
From 1 to 2 years after the end of the reporting period	52
From 2 to 3 years after the end of the reporting period	45
From 3 to 4 years after the end of the reporting period	43
From 4 to 5 years after the end of the reporting period	41
Beyond 5 years after the end of the reporting period	42
Total	**282**

For further details on the application of the new IFRS 16 accounting standard, see the Note "Accounting Policies".

PUBLIC FUNDS

Italian Law 124/2017 requires that information on subsidies, contributions, paid assignments and economic benefits of any kind received from public administrations be provided. In relation to this, funds received are shown in the following table:

Distributing entity	Area of intervention	Received in 2019 (millions of euros)	Received in 2018 (millions of euros)
Fondimpresa/ Fondirigenti	training	4	6
Infratel	construction of ultrabroadband infrastructure	28	106
MIUR	research and energy efficiency projects	2	1
Sundry income (*)		-	3
Total		**34**	**116**

(*) Ministry of Economic Development (MISE); Ministry of Economiy and Finance (MEF); Lazio, Piedmont and Veneto Region; Autonomous Province of Trento.

SUMMARY SCHEDULE OF FEES DUE TO THE AUDIT FIRM AND OTHER FIRMS IN ITS NETWORK

The following schedule reports the fees due to EY S.p.A. and to the other firms in the EY network for the audit of the 2019 financial statements, and the fees referring to the year 2019 for other audit and review services, and for other services besides audit rendered to TIM by EY and other firms in the EY network. Out-of-pocket expenses incurred in 2019 for such services are also included herein.

(in euros)	TIM S.p.A.		
	EY S.p.A.	Other firms of the EY network	Total EY network
Audit services:			
audit of the separate financial statements	1,103,000		1,103,000
audit of the consolidated financial statements	167,000		167,000
revision of the internal control system that supervises the process of preparation of the consolidated financial statements and statutory audit limited to the financial disclosure as at March 31 and September 30	983,000		983,000
limited review of the half-year condensed consolidated financial statements	195,000		195,000
other	65,000		65,000
Verification services with issue of certification			
Attestation of compliance of the Consolidated Non-Financial Statement	72,000		72,000
Other services		43,000	43,000
Total 2019 fees due for audit and other services to the EY network	**2,585,00**	**43,000**	**2,628,000**
Out-of-pocket expenses			73,269
Total			**2,701,269**

NOTE 42
EVENTS SUBSEQUENT TO DECEMBER 31, 2019

TIM AND SANTANDER CONSUMER BANK S.P.A. LAUNCH JOINT VENTURE TO OFFER CONSUMER CREDIT TO TIM CUSTOMERS

On February 17 2020 agreements were signed between Santander Consumer Bank S.p.A. and TIM S.p.A. signal the start of a partnership to offer a consumer credit delivery platform for TIM customers, as announced by the two companies in November 2019.

Thanks to the partnership, instalment plan financing for product purchases will be progressively rolled out in all TIM stores. They will subsequently also offer personal loans, credit cards and insurance products designed to meet customers' needs, with a high degree of innovation and digitalisation, both of which have always been hallmarks of the two companies.

The launch of the consumer credit service is the first phase of the new joint venture, which will begin operating once the necessary authorizations have been obtained. The deal will allow TIM to further reduce debt and optimize credit costs, and give Santander Consumer Bank access to a larger pool of customers, consolidating its leading position in the consumer credit market. TIM customers will also gain quick and easy access to customised and transparent financial and insurance solutions, strengthening and improving the continuity of customer relationships.

The joint venture company – 51% owned by Santander and 49% by TIM – is unique in the consumer credit market and will be based in Turin.

TIM was advised in the transaction by the law firm Bonelli Erede and assisted by ValeCap and JPMorgan. Santander Consumer Bank was advised by the law firm Clifford Chance and assisted by KPMG.

TIM AND GOOGLE CLOUD LAUNCH STRATEGIC PARTNERSHIP

On March 4, 2020,TIM and Google Cloud announced the signing of the official agreement that will launch a joint technology collaboration, following the Memorandum of Understanding (MoU) signed in November 2019 between the two companies. TIM and Google Cloud have agreed to work together to create innovative public, private and hybrid cloud services to expand TIM's technology services offering. TIM intends to extend its leadership in Cloud and Edge Computing services as a result of this collaboration. TIM is aiming to accelerate the growth of its revenues from technology services, with the objective of reaching 1 billion euros in revenues and 0.4 billion euros in EBITDA by 2024.

To accelerate the development of new products for customers, TIM and Google Cloud engineers will work closely together to create highly innovative solutions for the Italian market. This close collaboration will bring give Italian companies access to the latest innovations for digital transformation and other emerging technologies, helping them to become truly digital.

TIM's planned investments in innovation and the creation of new and modern Data Centers have been confirmed, as well as the development of new cloud-related capabilities, including through new hires and an extensive training plan involving 6,000 people in the commercial, pre-sales and technical areas.

To confirm its commitment to Italy, Google Cloud will also work with TIM on the opening of new Cloud regions. The new regions will see Google Cloud and TIM customers in Italy benefit from low-latency, high-performance cloud services and data.

The partnership with Google Cloud will also allow TIM to consolidate its key role in supporting the technological innovation of Italian businesses, where innovative technologies – such as Cloud, 5G, Internet of Things (IoT) and artificial intelligence (AI) – will play an increasingly pivotal role for the competitiveness of companies and the development of the national economy as a whole.

EUROPEAN COMMISSION CLEARS MERGER OF INWIT AND VODAFONE ITALY TOWERS

On March 6, 2020 the European Commission has cleared the combination of INWIT's passive network infrastructure with Vodafone Italy's towers (the "Combination"), creating Europe's second largest listed tower company with over 22,000 towers.

Following constructive talks with the European Commission, TIM and Vodafone have offered commitments to support access to INWIT's passive infrastructure by all market participants. Under the commitments, INWIT will make space available to third parties on 4,000 of its towers in more urbanized areas while committing to preserving existing tenancies. The commitments ensure that INWIT can maximize tower utilization while preserving the ability of Vodafone and TIM to efficiently roll out their respective 5G networks.

The European Commission has confirmed that it is supportive of TIM and Vodafone's plans to share active network equipment outside of major cities, allowing a faster deployment of 5G over a wider geographic area, at a lower cost, and with a lower environmental impact. The active sharing partnership will exclude municipalities with populations of over 100,000 inhabitants, as well as their more densely populated suburbs.
As a result of the Combination - which was approved with 99.9% of the votes by INWIT minority shareholders in favor, and that is expected to take place by the end of March – Vodafone will receive proceeds of 2,140 million euros, as announced in July 2019, and both Vodafone and TIM will each hold a 37.5% shareholding in INWIT. INWIT will then pay a special dividend of 0.5936 euro to holders of the company's post-merger ordinary shares, as already approved by INWIT's shareholders on December 19, 2019. Assuming the Combination completes by the May 19th record date, the ordinary dividend for 2019 (to be approved by INWIT's shareholders on April 6 of this year) will be 0.132 euro per share.

NOTE 43
LIST OF INVESTMENTS IN SUBSIDIARIES, ASSOCIATES AND JOINT VENTURES

(thousands of euros)	Head office		Share capital (1)	Equity (1) (2)	Profit/ (loss) (1)	% Ownership	Share of equity (A) (3)		Carrying amount (B) (4)	Difference (B-A)
Investments in subsidiaries										
CD FIBER	Rome	Euro	50	44	(1)	100.00%	44	(5)	50	6
FLASH FIBER	Milan	Euro	30	231,021	(6,104)	80.00%	184,817		202,424	17,607
HR SERVICES	L'Aquila	Euro	500	12,334	(198)	100.00%	12,334		575	(11,759)
OLIVETTI	Ivrea (TO)	Euro	10,000	(6,209)	(17,717)	100.00%	(6,209)		-	6,209
TELECOM ITALIA CAPITAL	Luxembourg	Euro	2,336	186	54,842	100.00%	186		2,388	2,202
TELECOM ITALIA FINANCE	Luxembourg	Euro	1,818,692	6,478,916	125,518	100.00%	6,404,016		5,914,971	(489,045)
TELECOM ITALIA LATAM PARTIC. E GESTÃO ADMIN.	SanPaolo (Brazil)	R$	118,926	(30,648)	(3,389)					
		Euro	26,264	(6,768)	(748)	100.00%	(6,768)	(5)	-	6,768
TELECOM ITALIA SAN MARINO	San Marino	Euro	1,808	6,840	1,215	100.00%	6,840		7,565	725
TELECOM ITALIA SPARKLE	Rome	Euro	200,000	672,034	(3,543)	100.00%	768,903	(6)	586,726	(182,177)
TELECOM ITALIA TRUST TECHNOLOGY	Pomezia (RM)	Euro	7,000	14,055	417	100.00%	14,055		8,498	(5,557)
TELECOM ITALIA VENTURES	Milan	Euro	10	2,217	(220)	100.00%	2,217		2,217	-
TELECONTACT CENTER	Naples	Euro	3,000	32,021	6,974	100.00%	32,021		12,526	(19,495)
TELENERGIA	Rome	Euro	50	34,855	2,354	100.00%	34,855		50	(34,805)
TELSY	Turin	Euro	390	22,394	3,585	100.00%	22,394		14,517	(7,877)
TI AUDIT COMPLIANCE LATAM (in liquidation)	Rio de Janeiro (Brazil)	R$	1,500	1,828	(110)					
		Euro	331	404	(24)	69.9996%	282	(5)	313	31
TIMVISION	Rome	Euro	50	761	(576)	100.00%	761		761	-
TIM BRASIL SERVIÇOS E PARTICIPAÇÕES	Rio de Janeiro (Brazil)	R$	7,169,030	11,091,031	599,465					
		Euro	1,583,238	2,449,389	132,388	0.00000001%	-		-	-
4G RETAIL	Milan	Euro	2,402	72,261	5,162	100.00%	72,261		15,108	(57,153)
TIM TANK	Milan	Euro	18,600	18,610	(116)	100.00%	18,610		18,610	-
TN FIBER	Trento	Euro	55,918	37,557	(953)	100.00%	37,557		37,557	-
									6,824,856	**(774,320)**

(thousands of euros)	Head office		Share capital (1)	Equity (1) (2)	Profit/ (loss) (1)	% Ownership	Share of equity (A) (3)	Carrying amount (B) (4)	Difference (B-A)
Investments in associates and joint ventures									
AREE URBANE (in liquidation)	Milan	Euro	100	(92,175)	(1,185)	32.62%	(30,067)	-	30,067
ASSCOM INSURANCE BROKERS	Milan	Euro	100	1,520	690	20.00%	304	20	(284)
NORDCOM	Milan	Euro	5,000	12,572	518	42.00%	5,280	2,143	(3,137)
TIGLIO I	Milan	Euro	5,256	2,605	(8,933)	47.80%	1,245	1,189	(56)
TIGLIO II (in liquidation)	Milan	Euro	10	215	6	49.47%	106	119	13
Consorzio EO (in liquidation)	Rome	Euro	31	-	(31)	50.00%	-	-	-
								3,471	**26,603**

(1) Figures taken from the latest approved financial statements. For subsidiaries, the data used are taken from the IFRS-prepared financial statements.

(2) Includes profit (loss)

(3) Net of dividends to be paid

(4) Includes investment account payments

(5) Covered by the provision for losses of subsidiaries and associates

(6) Figures taken from the consolidated financial statements

LIST OF EQUITY INVESTMENTS IN COMPANIES CLASSIFIED UNDER DISCONTINUED OPERATIONS/NON-CURRENT ASSETS HELD FOR SALE

(thousands of euros)	Head office		Share capital (1)	Equity (1) (2)	Profit/ (loss) (1)	% Ownership	Share of equity (A) (3)	Carrying amount (B) (4)	Difference (B-A)
Investments in subsidiaries									
INFRASTRUTTURE WIRELESS ITALIANE	Milan	Euro	600,000	1,561,192	139,313	60.03%	861,146	828,494	(32,652)

(1) Figures taken from the latest approved financial statements. For subsidiaries, the data used are taken from the IFRS-prepared financial statements.

(2) Includes profit (loss)

(3) Net of dividends to be paid

(4) Includes investment account payments

CERTIFICATION OF THE SEPARATE FINANCIAL STATEMENTS PURSUANT TO ARTICLE 81-TER OF CONSOB REGULATION 11971 DATED MAY 14, 1999, WITH AMENDMENTS AND ADDITIONS

1. We, the undersigned, Luigi Gubitosi, as Chief Executive Officer, and Giovanni Ronca, as Manager responsible for preparing TIM S.p.A. financial reports, certify, having also considered the provisions of Article 154-bis, paragraphs 3 and 4, of Italian Legislative Decree 58 of February 24, 1998:
   - the adequacy in relation to the characteristics of the company and
   - the effective application

   of the administrative and accounting procedures used in the preparation of the separate financial statements for the 2019 fiscal year.

2. TIM has adopted the Internal Control – Integrated Framework Model (2013), issued by the Committee of Sponsoring Organizations of the Treadway Commission, as its framework for the establishment and assessment of its internal control system, with particular reference to the internal controls for the preparation of the financial statements.

3. The undersigned also certify that:
   - 3.1 The separate financial statements at December 31, 2019:
     - a) are prepared in conformity with international accounting standards endorsed by the European Union pursuant to EC Regulation 1606/2002 of the European Parliament and of the Council of July 19, 2002 (International Financial Reporting Standards – IFRS) as well as the legislation and regulations in force in Italy with particular reference to Article 154-ter of Legislative Decree 58 of February 24, 1998 and the measures enacted for the implementation of Article 9 of Legislative Decree 38 of February 28, 2005;
     - b) agree with the results of the accounting records and entries;
     - c) provide a true and fair view of the financial position, financial performance and cash flows of the Company;
   - 3.2 the report on operations contains a reliable operating and financial review of the Company, as well as the description of its exposure to the main risks and uncertainties. The Report on Operations also contains a reliable analysis of information concerning significant related party transactions.

March 10, 2020

Chief Executive Officer	**Manager Responsible for Preparing the Corporate Financial Reports**
/ signed /	/ signed /
________________________	________________________
Luigi Gubitosi	Giovanni Ronca

INDEPENDENT AUDITORS' REPORT

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Independent auditor's report pursuant to article 14 of Legislative Decree n. 39, dated 27 January 2010 and article 10 of EU Regulation n. 537/2014
(Translation from the original Italian text)

To the Shareholders of
TIM S.p.A.

Report on the Audit of the Separate Financial Statements

Opinion

We have audited the separate financial statements of TIM S.p.A. (the Company), which comprise the statement of financial position as at December 31 ,2019, and the separate income statement, the statement of comprehensive income, statement of changes in equity and statement of cash flows for the year then ended, and notes to the separate financial statements, including a summary of significant accounting policies.

In our opinion, the separate financial statements give a true and fair view of the financial position of the Company as at December 31, 2019, and of its financial performance and its cash flows for the year then ended in accordance with International Financial Reporting Standards as adopted by the European Union and with the regulations issued for implementing art. 9 of Legislative Decree n. 38/2005.

Basis for Opinion

We conducted our audit in accordance with International Standards on Auditing (ISA Italia). Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Separate Financial Statements section of our report. We are independent of the Company in accordance with the regulations and standards on ethics and independence applicable to audits of separate financial statements under Italian Laws. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Other matters

The separate financial statements of TIM S.p.A. for the year ended December 31, 2018, were audited by another auditor who expressed an unmodified opinion on those statements on March 8, 2019.

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the separate financial statements of the current period. These matters were addressed in the context of our audit of the separate financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

We identified the following key audit matters:

Key Audit Matter	Audit Response
Impairment test of goodwill	
As of December 31, 2019 goodwill amounts to Euro 24,340 million and refers to the Domestic cash generating unit ("CGU"). The processes and methodologies used by the Company to evaluate and determine the recoverable amount of each CGU, in terms of value in use, are based on assumptions that are in some cases complex and that, due to their nature, imply the use of judgement by Management, in particular with reference to the forecast of future cash flows and to the estimate of the long-term growth and discount rates applied to the future cash flow forecasts. Considering the level of judgment required and the complexity of the assumptions applied in estimating the recoverable amount of goodwill, we considered that this area represents a key audit matter. Disclosures related to the assessment of goodwill are reported in note 3 "Goodwill" and in note 2 "Accounting policies" in the paragraphs "Impairment of intangible and tangible assets" and "Use of estimates".	Our audit procedures in response to the key audit matter included, among others: ▶ the assessment of the processes implemented by the Company with reference to the criteria and methodology of the impairment test; ▶ the validation of the CGUs perimeter and test of the allocation of the carrying value of the Company's assets to each CGU; ▶ the assessment of the future cash flow forecasts, including comparisons with sector data and forecasts; ▶ the assessment of the consistency of the future cash flow forecasts of each CGU with the business plan; ▶ the assessment of forecasts in light of their historical accuracy; ▶ the assessment of the reasonableness of long-term growth rates and discount rates. The procedures referred to in the previous points also concerned the analysis of the assessments performed by the independent experts appointed by the Company. In performing our analysis, we involved our experts in valuation techniques, who performed an independent recalculation and carried out sensitivity analyses on the key assumptions in order to determine which changes in the assumptions could materially affect the recoverable amount. Lastly, we reviewed the adequacy of the disclosure provided in the notes to the separate financial statements with regards to the valuation of goodwill.
Revenue recognition	
TIM's revenues amounted to € 13,137 million	Our audit procedures in response to the key

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as of December 31, 2019 and refer almost entirely to the telecommunications services rendered to retail and wholesale customers (other telecommunications operators). Procedures over the accounting of revenues required significant focus in the context of our audit procedures due to i) a highly complex accounting process due to the number of commercial offers, the number of underlying application systems and the related reconciliation processes and ii) the presence of certain manual phases in the revenue recognition process, in particular for services provided to large customers. The Company provides the relative disclosure in Note 25 "Revenues" of the separate financial statements.	audit matter included, among others: ► an understanding of the processes underlying the revenue recognition; ► the understanding and verification of the design and operation of the relevant controls over the revenue recognition process; ► the analysis of the application systems supporting the revenue recognition process; ► the assessment that the accounting policy adopted for the main commercial offers is consistent with the provisions of the reference accounting standard; ► the analysis, on a sample basis, of some significant transactions relating to invoices issued and invoices to be issued, in order to verify that the contractual data and the evidence supporting the actual service rendered and / or goods transferred were consistent with the accounting policy adopted; ► the reconciliation of the management account with the accounting records in connection with the main balance sheet items related to customer relations; ► the analysis of the manual journal entries. We also required external confirmations for a sample of customers and transactions. Lastly, we reviewed the adequacy of the disclosure provided in the notes to the separate financial statements with regard to the revenue recognition process.
Regulatory disputes	
As of December 31, 2019, TIM is involved in several regulatory disputes in progress, many of which are characterized by significant counterparty requests. The main disputes concern (i) the so-called 'follow-on' A428 proceedings, which arose following claims for compensation made by other Italian telco operators after certain fines had been imposed by the AGCM to TIM	Our audit procedures in response to the key audit matter included, among others: ► an understanding of the process put in place by Management for assessing disputes, accompanied by test of the effectiveness of the internal controls relevant for this process; ► inquiries with Management regarding the

for market abuse of a dominant position, (ii) the 28-day billing proceeding, in which AGCOM ordered TIM to reimburse customers for unused service days, (iii) the I820 proceeding, started by AGCM against TIM and other telco operators, to ascertain a possible conduct restricting market competition and (iv) the A514 procedure in which the AGCM charged TIM with conduct aimed at hindering the entry on the market of a new operator.

The assessment of the disputes was carried out by Management, as of 31 December 2019, based on the opinion of the external lawyers, as well as considering the latest information available.

The estimation of the risks connected to the disputes in which the Company is involved, requires a high degree of judgment by the management and, also considering the complexity of the regulatory framework, we considered that this area represents a key audit matter.

Disclosure related to the assessment of the risks relating to the regulatory disputes in which the Company is involved is reported in note 24 "Disputes and pending legal actions, other information, commitments and guarantees".

main assumptions made in connection with disputes;

- the analysis of the legal opinions prepared by external consultants, based on which Management has based its assessments;
- the analysis of the letters received from external lawyers following our external confirmations procedures.

Lastly, we reviewed the adequacy of the disclosure provided in the notes to the separate financial statements with regard to the disputes in which the Company is involved, based on their compliance with the international accounting standards and their consistency with the results of our audit procedures.

First time adoption of IFRS 16 – Leases

Starting from January 1, 2019 the new International Financial Reporting Standard 16 - Leasing (‘’ IFRS 16’’), relating to the accounting of lease contracts, is fully enacted.

The new standard provides that, for passive lease contracts, a lessee shall recognize a right-of-use assets and a lease liability, measuring the lease liability at the present value of the lease payments that are not paid at that date.

In accordance with the provisions of IFRS 16, the TIM has disclosed the information pertaining to the impacts of the first-time adoption starting from January 1, 2019.

As of January 1, 2019, the Company has

Our audit procedures in response to the key audit matter included, among others:

- the analysis of accounting policies and assumptions used by Management in connection with the adoption of the standard;
- the assessment of the effectiveness of the internal control system put in place by Management;
- the assessment of the correct determination of the discount rate used;
- the assessment of addition occurred during the year, as well as the changes in the perimeter that have occurred.

Lastly, we reviewed the adequacy of the

recorded rights of use assets and financial liabilities for total amount of Euro 2,903.

The high degree of judgment required by IFRS 16 in estimating the assumption necessary for the adoption of the standard, together with the significance of the impacts on the Company's separate financial statements, represented for us a key audit matter.

disclosure provided in the notes to the separate financial statements with regards to their compliance with the provisions of IFRS 16.

Responsibilities of Directors and Those Charged with Governance for the Separate Financial Statements

The Directors are responsible for the preparation of the separate financial statements that give a true and fair view in accordance with International Financial Reporting Standards as adopted by the European Union and with the regulations issued for implementing art. 9 of Legislative Decree n. 38/2005, and, within the terms provided by the law, for such internal control as they determine is necessary to enable the preparation of separate financial statements that are free from material misstatement, whether due to fraud or error.

The Directors are responsible for assessing the Company's ability to continue as a going concern and, when preparing the separate financial statements, for the appropriateness of the going concern assumption, and for appropriate disclosure thereof. The Directors prepare the separate financial statements on a going concern basis unless they either intend to liquidate the Company or to cease operations, or have no realistic alternative but to do so.

The statutory audit committee ("Collegio Sindacale") is responsible, within the terms provided by the law, for overseeing the Company's financial reporting process.

Auditor's Responsibilities for the Audit of the Separate Financial Statements

Our objectives are to obtain reasonable assurance about whether the separate financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with International Standards on Auditing (ISA Italia) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these separate financial statements.

As part of an audit in accordance with International Standards on Auditing (ISA Italia), we have exercised professional judgment and maintained professional skepticism throughout the audit. In addition:

- we have identified and assessed the risks of material misstatement of the separate financial statements, whether due to fraud or error, designed and performed audit procedures responsive to those risks, and obtained audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the

override of internal control;
- we have obtained an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control;
- we have evaluated the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the Directors;
- we have concluded on the appropriateness of Directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the separate financial statements or, if such disclosures are inadequate, to consider this matter in forming our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Company to cease to continue as a going concern;
- we have evaluated the overall presentation, structure and content of the separate financial statements, including the disclosures, and whether the separate financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We have communicated with those charged with governance, identified at an appropriate level as required by ISA Italia, regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We have provided those charged with governance with a statement that we have complied with the ethical and independence requirements applicable in Italy, and we have communicated with them all matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, we have determined those matters that were of most significance in the audit of the separate financial statements of the current period and are therefore the key audit matters. We have described these matters in our auditor's report.

Additional information pursuant to article 10 of EU Regulation n. 537/14

The shareholders of TIM S.p.A., in the general meeting held on March 29, 2019, engaged us to perform the audits of the separate and consolidated financial statements for each of the years ending December 31, 2019 to December 31, 2027.

We declare that we have not provided prohibited non-audit services, referred to article 5, par. 1, of EU Regulation n. 537/2014, and that we have remained independent of the Company in conducting the audit.

We confirm that the opinion on the separate financial statements included in this report is consistent with the content of the additional report to the audit committee (Collegio Sindacale) in their capacity as audit committee, prepared pursuant to article 11 of the EU Regulation n. 537/2014.

Report on compliance with other legal and regulatory requirements

Opinion pursuant to article 14, paragraph 2, subparagraph e), of Legislative Decree n. 39 dated 27 January 2010 and of article 123-bis, paragraph 4, of Legislative Decree n. 58, dated 24 February 1998

The Directors of TIM S.p.A. are responsible for the preparation of the Report on Operations and of the Report on Corporate Governance and Ownership Structure of TIM S.p.A. as at December 31, 2019, including their consistency with the related separate financial statements and their compliance with the applicable laws and regulations.

We have performed the procedures required under audit standard SA Italia n. 720B, in order to express an opinion on the consistency of the Report on Operations and of specific information included in the Report on Corporate Governance and Ownership Structure as provided for by article 123-bis, paragraph 4, of Legislative Decree n. 58, dated 24 February 1998, with the separate financial statements of TIM S.p.A. as at December 31, 2019, and on their compliance with the applicable laws and regulations, and in order to assess whether they contain material misstatements.

In our opinion, the Report on Operations and the above mentioned specific information included in the Report on Corporate Governance and Ownership Structure are consistent with the separate financial statements of TIM S.p.A. as at December 31, 2019, and comply with the applicable laws and regulations.

With reference to the statement required by art. 14, paragraph 2, subparagraph e), of Legislative Decree n. 39, dated 27 January 2010, based on our knowledge and understanding of the entity and its environment obtained through our audit, we have no matters to report.

Statement pursuant to article 4 of Consob Regulation implementing Legislative Decree n. 254, dated 30 December 2016

The Directors of TIM S.p.A. are responsible for the preparation of the non-financial information pursuant to Legislative Decree n. 254, dated 30 December 2016. We have verified that non-financial information has been approved by Directors.

Pursuant to article 3, paragraph 10, of Legislative Decree n. 254, dated 30 December 2016, such non-financial information is subject to a separate compliance report signed by us.

Rome, March 25, 2020

EY S.p.A.
Signed by: Massimo Antonelli, Auditor

This report has been translated into the English language solely for the convenience of international readers.

Other information

REPORT BY THE BOARD OF STATUTORY AUDITORS TO THE SHAREHOLDERS' MEETING PURSUANT TO ARTICLE 153 OF ITALIAN LEGISLATIVE DECREE NO. 58/1998

To the Shareholders,

this report (hereinafter "Report") is an account of the supervisory activity carried out by the Company's Board of Statutory Auditors during 2019 and up to today, as prescribed by law, the recommended Board of Statutory Auditors conduct standards of the Consiglio Nazionale dei Dottori Commercialisti e degli Esperti Contabili [association of chartered accountants], the Consob provisions on corporate controls and the provisions in the Code of Corporate Governance.

The Board of Statutory Auditors obtained the information necessary for carrying out the supervisory tasks assigned to it by attending meetings of the Board of Directors and the board's internal committees, hearings of the Company's management, meetings with the statutory auditor and the corresponding bodies of control of the TIM Group companies and through the analysis of information flows provided by the relevant company departments, as well as other control activities.

This Report has been prepared in accordance with the requirements of Consob Communication no. DEM/1025564 of April 6, 2001 as amended.

1. **Considerations on the most significant economic, financial and equity transactions carried out by the Company and on their compliance with the law and the articles of association**

On the basis of the information received and as a result of the analyses conducted, it has become clear that the transactions carried out by the Company in 2019, which have major impact on revenues, finances and assets, including transactions performed through companies in which the Company has a direct or indirect stake, were essentially made up as follows:

- the sale on December 2, 2019, of Persidera S.p.A. (Domestic Business Unit) after being split into two separate entities: the first (Persidera), which retained ownership of the 5 digital terrestrial frequencies, related assets and personnel contracts, was sold entirely to F2i TLC 2 S.p.A., and the second (NetCo SpA), which merged the entire network infrastructure and related staff was sold entirely to EI Towers;
- the merger of Noverca S.r.l. (Domestic Business Unit) into TIM S.p.A. (hereafter also "TIM") on November 1, 2019 with retroactive accounting and tax effects from January 1, 2019;
- the approval by the Shareholders' meeting of the merger by incorporation of Vodafone Towers S.r.l. into Inwit Infrastrutture Wireless Italiane S.p.A. (hereafter also "INWIT") (Domestic Business Unit) which took place on December 19, 2019. This operation, preparatory to the establishment of the leading Italian Tower Operator, entailed the sale by the TIM Group of the exclusive controlling stake in INWIT. Therefore, as of December 31, 2019, considering that completion of transaction by 2020 was highly probable, INWIT was presented as an "*Asset held for sale*";
- the issue by TIM S.p.A. of two bonds for an amount respectively (i) of 1,250 million euros, with a 4.00% coupon and maturity on April 11, 2024 and (ii) of 1,000 million euros with a 2.750% coupon and maturity on April 15, 2025.

The above transactions are listed in the notes to the TIM Group consolidated financial statements and TIM's separate financial statements, as well as in the 2019 management report.

The Board of Statutory Auditors has verified that the above transactions comply with the law, the Company Bylaws and the principles of correct administration, and has made sure that they were not manifestly imprudent or hazardous, contrary to the resolutions adopted by the Shareholders' Meeting or likely to compromise the integrity of the corporate assets.

It should also be noted that the following significant events occurred subsequent to the closing of the year:

1) agreements between Santander Consumer Bank S.p.A. and TIM S.p.A. were signed on February 17, 2020, to begin the partnership to offer a consumer credit delivery platform for TIM customers. The launch of consumer credit services offer is the first step following the development of the new corporate Joint Venture, which will operate after the necessary authorizations have been obtained and which will allow TIM to gain further debt reduction and optimize the cost of credit, and Santander Consumer Bank to access a wider customers audience, consolidating its role as leader in the consumer credit market. 51%

of the corporate joint venture will be controlled by Santander Consumer Bank with TIM taking the remaining 49% and will be based in Turin;

2) on March 4, 2020, TIM S.p.A. and Google Cloud announced the signing of the official agreement to begin a joint technology collaboration, following the memorandum of understanding (MoU) signed in November 2019, between the two companies;

3) on March 6, 2020, the European Commission authorized the integration of the passive network infrastructures of INWIT and Vodafone Italia, establishing the second largest listed towerco in Europe, with a portfolio of over 22,000 towers. Following a constructive discussion with the European Commission, TIM and Vodafone made commitments to promote access to INWIT's passive infrastructure for all market players, with INWIT making space available to third parties on 4,000 of its towers in the largest urban centers, keeping existing lease contracts unchanged. These commitments will allow INWIT to maximize use of the towers, while allowing TIM and Vodafone to efficiently implement their respective 5G networks. The European Commission positively assessed TIM and Vodafone plans for sharing active equipment outside the main cities, allowing for faster implementation of 5G over a wider geographical area, at a lower cost and with a lower environmental impact. Vodafone and TIM S.p.A. will each hold 37.5% of INWIT as a result of the integration, having joint control.

2. Notes on the possible existence of atypical and/or unusual transactions, including intragroup or with related parties

During the course of 2019, the Board of Statutory Auditors did not encounter atypical and/or unusual corporate transactions with third parties or related parties (including the companies within the Group).

Transactions with Directors' interests or with other related parties, were subjected to the transparency procedure set out in the applicable regulations.

Information relating to the principal intragroup transactions and with other related parties executed in the financial year 2019, and the description of their characteristics and related economic effects is contained in the notes to the separate financial statements of TIM and to the consolidated financial statements of the TIM Group.

3. Assessment of the adequacy of the information provided, in the Directors' Report on Operations, regarding atypical and/or unusual transactions including intragroup and related party transactions.

The Board of Statutory Auditors believes that the information relating to intragroup and related party transactions, reported in the notes to the TIM separate financial statements and the TIM Group consolidated financial statements, is to be considered adequate.

4. Comments and proposals on disclosure findings and references contained in the Independent Auditors' Report.

On March 25, 2020, the independent auditor Ernst & Young S.p.A. (hereinafter also "EY") released the reports pursuant to Article 14 of Legislative Decree no. 39/2010 and Article 10 of EU Regulation no. 537/2014, which certify that the separate financial statements of TIM and the TIM Group consolidated financial statements at December 31, 2019 comply with the International Financial Reporting Standards adopted by the European Union, as well as with the provisions issued in implementation of Article 9 of Legislative Decree of February 28, 2005, no. 38, are clearly drawn up and truthfully and correctly represent the financial position, the economic result and the cash flow for the year ended at that date.

On March 25, 2020, EY released the additional Report for the Internal Control and Audit Committee on the results of the statutory audit of the accounts, which includes the declaration relating to the independence of the same statutory auditor.

In essence, the aforementioned report revealed that "*During the review of the Company's financial statements and the Group's consolidated financial statements closed on December 31, 2019, no significant issues were identified relating to cases of actual or presumed non-compliance with laws and regulations or statutory provisions*".

The Board of Statutory Auditors will inform the Company's Board of Directors on the results of the statutory audit, sending the additional report for this purpose, accompanied by any comments.

The independent auditor also believes that the report on operations and the information in the Report on Corporate Governance and Ownership Structures indicated in Article 123-*bis*, paragraph 4, of the CLFI (Consolidated Finance Act) are consistent with the financial statements of TIM and the TIM Group consolidated financial statements as at December 31, 2019 and drawn up in compliance with the law.

The Board of Statutory Auditors and the Independent auditor continuously exchanged information despite operational difficulties during the final stages of auditing activities as a consequence of the worsening of Covid-19 health emergency. In particular, the Board of Statutory Auditors supervised the impact connected with "remote" working methods implemented by the Auditor, supported by the corporate structures, to monitor the progress of auditing activities.

5. Notes of any complaints pursuant to Article 2408 of the Italian Civil Code, any initiatives taken and related outcomes

From the date of the previous report (March 8, 2019) and up to the date of this Report (March 31, 2020), no reports have been received from the Company's shareholders pursuant to Article 2408, paragraph 3, of the Italian Civil Code.

6. Notes of any complaints, any initiatives taken and related outcomes

Following the completion of the delisting and deregistration procedure of the Company's ordinary and savings shares (listed on the New York Stock Exchange through ADR programs) from the US market, the Board of Statutory Auditors no longer carries out the duties of Audit Committee pursuant to the Sarbanes Oxley Act US (hereinafter "SOX").

However, the new situation did not entail significant changes to the TIM Group's internal control system, the Company having - on the recommendation of the Board of Statutory Auditors - approved the voluntary activation of specific agreed upon procedures with the appointed auditor to "*replace" the certification on internal control over financial reporting* pursuant to SOX, so as to guarantee the Company and its bodies a corresponding level of external monitoring, and therefore an assurance on the robustness and functioning of internal controls for correct financial disclosure.

It should be noted that TIM Brasil was not involved in the delisting/deregistration process and therefore continues to remain subject to the SOX discipline.

The Board of Statutory Auditors has adopted a procedure to regulate the management of reports to the control body. Instructions are available for forwarding reports to the Company's Board of Statutory Auditors on the Company's website, in the Group section (Corporate Bodies - Board of Statutory Auditors - Role and activities).

The Company has adopted the "Whistleblowing" Procedure, updated in light of the new regulatory provisions introduced by Law no. 179/2017, which provides for the establishment of suitable information channels to guarantee the reception, analysis and processing of reports relating to internal control issues, corporate disclosure, the Company's administrative liability, fraud or other matters, forwarded by employees, members of the corporate bodies or third parties including in confidential or anonymous form.

The Board of Statutory Auditors carried out constant monitoring activities in relation to the management of reports received by TIM. In particular, from the date of the previous report (March 8, 2019) and up to March 31, 2020, there were no. 14 reports, mostly complaints relating to technical and commercial, accounting and administrative failures.

The Board of Statutory Auditors investigated these complaints appropriately, with the support of the Audit Department and the competent Company departments, but no irregularities to be reported to the Shareholders' Meeting emerged.

The related investigations for no. 4 reports are in progress.

7. Notes of any further assignments to the independent auditor and related costs

During 2019, in the period between January 1 and March 28, 2019, TIM S.p.A. conferred on PricewaterhouseCoopers S.p.A. - Outgoing auditor, whose mandate expired with the revision of the Financial Statements as of December 31, 2018 - assignments other than the revision of the financial statements, the fees for which, excluding out-of-pocket expenses and VAT, are summarized below:

PricewaterhouseCoopers S.p.A.	(in euros)
Assessment assignment relating to leases agreed by TIM S.p.A. (agreed procedures on the application of IFRS 16 at March 31, 2019)	50,000.00
Assignment for carrying out verification procedures agreed on the Statement of sales made in the year ended December 31, 2018 by the TIM S.p.A. company store located inside the "Leonardo da Vinci" Airport of Rome - Terminal 1 domestic departures, prepared in the context of the contractual relationships between TIM S.p.A. and Aeroporti di Roma S.p.A. regulated by the agreement for the sub-lease for the use of the premises and state-owned areas located in Fiumicino airport signed on December 12, 2012	8,500.00
Agreed procedures related to the Euro Medium Term Note Program (EMTN): ✓ Comfort Letter in relation to the Issuance of 1.25 billion euros 4.000 per cent. notes. due 04/11/2024 - € 24,000 ✓ Comfort Letter in relation to the Issuance of 1 billion euros 2.750 per cent. notes. due 04/15/2025 - € 24,000 ✓ 2019 EMTN Program renewal - € 33,000	81,000.00
Total (A)	**139,500.00**

Furthermore, during the same year, and specifically in the period between March 29, 2019 and December 31, 2019, TIM S.p.A. conferred on EY S.p.A. - company appointed as new Statutory Auditor for the nine-year period 2019-2027 by the Shareholders' Meeting of March 29, 2019, on proposal of the Board of Statutory Auditors - assignments other than the revision of the financial statements, the fees for which, excluding out-of-pocket expenses and VAT, are summarized below:

EY S.p.A.	(in euros)
Limited audit of the consolidated non-financial statement for the nine year period 2019-2027	72,000.00
Verification of compliance with IFRS standards of accounting criteria and policies, in relation to the transaction relating to a possible agreement with Vodafone Italia and Inwit, for the aggregation of related Telecommunications towers and the related review of the service contract with Inwit	25,000.00
Additional audit service carried out by EY in relation to INWIT S.p.A. whose financial statements are audited by a third party auditor (PwC). In short, this is an assignment to be conferred to comply with the relevant regulatory provisions (Article 10-quinquies of Legislative Decree no. 39/2010 and International Auditing Standard no. 600). The assignment was assigned as follows: ✓ for the purposes of the Tim Consolidated Report at 06/30/2019 for a value of € 25,000 and; ✓ for the purposes of the Tim Consolidated financial statements at 12/31/2019 for a value of € 45,000	70,000.00
assignment to be entrusted to an independent third party to request an examination of the Revenue Assurance Model in TIM Italia according to ISAE 3000 revised ("reasonable assurance engagement").	110,000.00
Total (B)	**277,000.00**
Total sum (A+B)	**416,500.00**

Furthermore, in the period between January 1, 2020 and the date of this Report, TIM S.p.A. conferred the following additional assignments on EY S.p.A., other than the audit of the financial statements, the fees for which, excluding out-of-pocket expenses and VAT, are summarized below:

EY S.p.A.	(in euros)
Assignment for carrying out agreed verification procedures for the confirmation of sales made in 2019 by the TIM S.p.A. company store located inside Leonardo da Vinci Airport in Rome. This assignment was conferred under the contractual relationship between TIM S.p.A. and Aeroporti di Roma S.p.A. regulated by the agreement for the sub-lease for the use of the premises and state-owned areas located at Fiumicino airport signed on December 12, 2012.	8,500.00
Limited audit assignment on a voluntary basis in relation to the examination of the "Social Responsibility Governance pursuant to UNI ISO 26000:2010" document for 2019, to obtain, from an independent third party, a certificate of conformity to benefit from the reduction of the average INAIL welfare rate.	15,000.00
Total	**23,500.00**

Pursuant to the current "Guidelines for the assignment of Independent Auditors", conferment of the aforementioned assignments was previously approved by the Board of Statutory Auditors.

The Board of Statutory Auditors also monitored on a voluntary basis compliance with the 70% limit for fees relating to services other than auditing provided to public-interest entities in the previous three-year period.

8. Notes of any further assignments to subjects linked to the company entrusted with the audit through ongoing relationships and related costs

During 2019, TIM S.p.A. conferred assignments to subjects linked with EY S.p.A. and/or to companies belonging to the network of the same through ongoing relationships, the fees for which, excluding VAT, are summarized below:

EY Advisory S.p.A.	(in euros)
Analysis of the Italian Wholesale Market and the performance of main competitors	43,000.00
Total	**43,000.00**

Pursuant to the current "Guidelines for the assignment of Independent Auditors", conferment of the aforementioned assignments was previously approved by the Board of Statutory Auditors.

For completeness, it should be noted that, during 2019 (for the period 1 January - 28 March 2019), TIM S.p.A. did not assign assignments to subjects linked through ongoing relationships to the previous auditor PricewaterhouseCoopers S.p.A. and/or companies belonging to the PricewaterhouseCoopers S.p.A. network.

Furthermore, in the period between January 1, 2020 and the date of this Report, TIM S.p.A. has not conferred further assignments to subjects linked by ongoing relationships with EY S.p.A. and/or to companies belonging to its network.

9. Notes of the existence of opinions issued pursuant to the law during the year

The Board of Statutory Auditors expressed a favorable opinion, pursuant to Article 2389, paragraph 3, of the Italian Civil Code:

- on the ex novo conferment on the previous Chairman Fulvio Conti, with the revocation of the resolution passed on July 24, 2018, of an end-of-mandate on/off conditioned bonus on the assessment of not less than 4/5 for his effectiveness for each of the remaining financial years of his mandate (2019 and 2020), as ascertained during the annual Board review, and with the express exclusion of the possibility of further review of the measure during the same mandate;

- on the CEO's variable renumeration functional objectives scorecard (MBO 2019) and, subsequently, on its partial revision (rendered necessary by the impact on the plan targets of the application of the new IFRS 9 and IFRS 15 accounting standards), as well as to exclude from service revenues;
- on the financial bonus for the Chairman of the Board of Directors Salvatore Rossi with effect from the time of appointment; and
- during 2020, on the CEO's variable remuneration functional objectives scorecard (MBO 2020).

The Board of Statutory Auditors also expressed a favorable opinion, pursuant to Article 2386, paragraph 1, of the Italian Civil Code on the appointment by co-option of Directors Franck Cadoret and Salvatore Rossi, to replace the outgoing Amos Genish and Fulvio Conti respectively.

The Board of Statutory Auditors also expressed, pursuant to Article 13 of the Bylaws and Article 154-bis, paragraph 1, of Legislative Decree no. 58/1998 of the CLFI, a favorable opinion on the appointment of Giovanni Ronca, formerly Chief Financial Officer of TIM, as Executive Manager responsible for drafting the Company's accounting documents.

In addition, the Board of Statutory Auditors, in accordance with the Company's Corporate Governance Principles, expressed:

- a favorable opinion of the functional objectives scorecards for the short term incentive scheme (2019 MBO) for the Heads of the Audit Department, Compliance Department and IT & Security Compliance Function control departments; and
- a favorable opinion on the appointment of Gianfranco Cariola as Head of the Audit Department.

Finally, in accordance with the Borsa Italiana Code, the Board of Statutory Auditors expressed a favorable opinion on the 2020 Internal Audit plan.

10. Indication of the frequency and number of meetings of the BoD, the Executive Committee and the Board of Statutory Auditors

In 2019, the Company's Board of Directors held no. 13 meetings, at which the Board of Statutory Auditors was always present.

The Control and Risk Committee met no. 12 times (of which two meetings were held jointly with the Board of Statutory Auditors), the Appointments and Remuneration Committee met nine times, the Related parties Committee met no. 11 times and the Strategic Committee met five times. The Board of Statutory Auditors attended the meetings of all the board committees through the participation of the Chairman and/or another Auditor, supervising the related activities.

During 2019, there were no. 46 meetings of the Board of Statutory Auditors, of which no. 10 were in the exercise of the functions of the Supervisory Body pursuant to Legislative Decree no. 231/2001, a role attributed by board resolution of May 7, 2018, as permitted by Legislative Decree no. 231/2001 and pursuant to the Company's governance principles. During 2020, (and up to the date of this Report) there were 10 meetings, of which 3 were in the exercise of the functions of the Supervisory Body pursuant to Legislative Decree no. 231/2001.

The Statutory Auditors participated in the Company's Shareholders' Meeting of March 29, 2019.

11. Comments on compliance with the principles of correct administration

The Board of Statutory Auditors supervised compliance with the principles of correct administration by attending meetings of the Board of Directors and the board committees, holding meetings with the Executive Manager responsible for drafting the Company's accounting documents, the Head of the Audit Department, Group Compliance Officer, the Head of IT & Security Compliance, the company management hearings and by acquiring information.

The Board of Statutory Auditors believes that the governance arrangements and tools adopted by the Company on the whole constitute a valid supervisory framework to ensure that the principles of correct administration are respected in operational practice. The Board of Statutory Auditors supervised the decision-making processes of the Board of Directors and verified that the management choices were in compliance with the applicable substantive legitimacy discipline, adopted in the interest of the Company, compatible with the company's resources and assets and adequately supported by information, analysis and audit – also involving consultation with the board committees and external professionals, when necessary.

The Board of Statutory Auditors monitored the change of the Head of the Audit Department, verifying compliance with the Company's Governance Principles.

In this regard, the Board of Statutory Auditors verified the organizational and corporate reasons underlying this change and the consequent proposal for the appointment of the new head of the Internal Audit function, whose credentials and professional profile were analytically illustrated and commented upon. The Board of Statutory Auditors would like to point out that the Internal Audit function has always been adequately organized and effectively performed its duties and that the change for organizational-corporate reasons in the function in question was justified by the desire to continue with the previously started improvement path.

12. Comments on the adequacy of the organizational structure

The Board of Statutory Auditors monitored the changes in the TIM Group's organizational structure (also pursuant to the Golden Power regulations, as per the provisions of the Prime Ministerial Decrees of October 16, 2017 and November 2, 2017), defined in compliance with, on one hand, the organizational and managerial autonomy of the Parent Company and its subsidiaries and, on the other, the exercise of management and coordination by TIM for directly or indirectly controlled companies.

In particular, the Board of Statutory Auditors monitored the main changes in the organizational structure of TIM and the TIM Group through meetings with the Head of the Human Resources, Organization & Real Estate Functions, the Managers of the main corporate structures and by acquiring organizational communications that had an impact on the first and second level reporting to TIM's top management or on the macro structure of the Group companies.

In relation to this, the following is noted:

a. the new approach adopted for the management of the country, unifying activities for fixed line and mobile, for efficiency and synergy reasons and to better control network deployment costs, entrusting the responsibility to the Chief Operating Officer;

b. the reallocation of the wholesale structure (in charge of relationships with olos) to the Regulatory Department, confirming its separation from the technical-commercial functions;

c. the split of the Chief Technology and Innovation Office into two separate entities, focused respectively on innovation and partnership and on technology and IT;

d. the relocation of the Enterprise Risk Management structure to the Chief Financial Office;

e. the recent appointment of a new Head of the Chief Revenue Office and the Procurement Department.

13. Comments on the adequacy of the internal control system, in particular activities carried out by individuals in charge of internal control, and highlighting of any corrective actions taken and/or those still to be undertaken

The Board of Statutory Auditors has acknowledged the overall assessment of the internal control and risk management system by the Audit Department, the conclusions of which are set out below: "*On the basis of the audits carried out and taking into account the circumstances identified in terms of areas for improvement and the consequent initiatives taken, no significant situations or critical issues emerged such as to render TIM's Internal Control and Risk Management System inadequate as a whole*".

The Board of Statutory Auditors shared the assessment of overall adequacy of the internal control and risk management system as formulated by the *Audit* Department.

To counteract the phenomenon of rescheduling corrective activities identified following audit activities, on the recommendation of the Board of Statutory Auditors, the Company adopted a specific procedure for "*Management of corrective activities following Audit activities and related rescheduling*" which, since its first application, has resulted in a considerable decrease in rescheduled activities.

The Board of Statutory Auditors supervised the maintenance of the internal control system and monitored the activities carried out by the main actors of the internal control and risk management system, also in relation to specific disciplines, such as that relating to the so-called Golden Power. In particular, within its remit, the Board of Statutory Auditors supervised the implementation of the obligations deriving from the decree on cyber security (no. 105 of 2019), legislation which provides for the establishment of the so-called "*national cyber security perimeter*" and that extends the powers of the Government's Golden Power to the 5G sector. It monitored the implementation of risk improvement and mitigation actions identified and, in some cases, prompting further specific interventions to strengthen the controls. The Board of Statutory Auditors also acknowledged that from the results of the first and second level controls, by virtue of the powers and verification functions attributed by Prime Ministerial Decree 11/06/2015 no. 5 coordinated with the Prime Ministerial Decree 02/10/2017 no. 3 (in particular, see Article 14), TIM's Security Officer stated that in 2019, with reference to the function's 3 sectors of activity (Industrial Security, Communication and Information System Security and Classified Communications Security and Procedures for the Cifra Service) full compliance emerged: (i) in the keeping and management of classified documentation, (ii) in the protection and safeguarding of classified materials and (iii) in carrying out confidential activities.

The Board of Statutory Auditors exchanged information with the corresponding control bodies of the main national subsidiaries, taking note of the assessments of the overall adequacy of the related internal control system. It also met with the TIM Participações *Comitê de Auditoria Estatutário* and the TI Capital and TI Finance Audit Committee, taking note of the overall adequacy assessment of the internal control systems of the Brazilian and Luxembourg companies.

The internal control and risk management system also incorporates the so-called "Organizational Model 231", i.e. a model of organization and management adopted pursuant to Legislative Decree No. 231/2001, aimed at preventing offenses that can result in liability for the Company. In addition to TIM, the Organizational Model 231 is also adopted by the Group's national subsidiaries.

The functions of Supervisory Body were assigned (from 2012) to the Board of Statutory Auditors, which as such monitors the operation and compliance with the 231 Organizational Model, and reports to the Board of Directors in regard to monitoring and audit operations carried out, and the related results of such. The Board of Statutory Auditors is supported by the Compliance Department.

The Supervisory Body has periodically received regulatory and legal updates and in-depth notes on 231 issues, useful for the purpose of carrying out the consultative and proposing activities within its remit.

During 2019, with the coordination of the Compliance Department and the support of external consultants, the Supervisory Body launched an overall revision process of the Company's Organizational Model 231, to update it in relation to new crime-risks included in the regulation of corporate responsibility and in relation to organizational changes that had occurred, to extend and make the Special Part of the Model more uniform, making it even more effective and usable by its recipients.

During 2019 the Supervisory Body met ten times, while during 2020 and up to the date of this Report three times.

In relation to this, it should be noted that, following a process also shared with the undersigned Board of Statutory Auditors and such as to entail updating the corporate regulatory body concerned, on the occasion of the approval of the new 231 Organizational Model prepared by the Board of Statutory Auditors in its role as the Supervisory Body ("SB") and in accordance with the contents of the same Model in relation to the composition of the SB, the Board of Directors, with the availability offered by the members of the Board of Statutory Auditors in this sense and subject to revocation of the resolution taken on May 7, 2018, pursuant to Article 6, paragraph 1 of Legislative Decree no. 231/2001, it will be motioned that the supervisory functions be attributed to a specifically set up body other than the Board of Statutory Auditors, of which a member of the Board of Statutory Auditors will also be part.

The TIM Group has adopted an Enterprise Risk Management (ERM) model that allows the identification, assessment and management of risks in a uniform way within Group companies, highlighting potential synergies between the actors involved in the assessment of the internal control and risk management system. The process is governed by the ERM Steering Committee which ensures the governance of the Group's risk management, aimed at containing the level of risk exposure within acceptable limits and ensuring the operational continuity of the company business by monitoring the effectiveness of adopted countermeasures. The Board of Statutory Auditors acknowledged that the Board of Directors on March 10, 2020 defined the acceptable Risk Appetite for the Group and the acceptable Risk Tolerance levels for the main corporate objectives. As previously explained, please note that the Enterprise Risk Management function has recently been relocated to the Chief Revenue Office Department.

The Board of Statutory Auditors monitored compliance of the Related party transactions procedure adopted by the Company with provisions of law and regulations and its effective implementation and actual functioning.

The Board of Statutory Auditors was kept constantly informed on the execution of related party transactions and verified the Company's compliance with the applicable discipline. In relation to this, it is important to note that the supervisory body held that a situation should be recognized in which, without prejudice to the independence of the Directors, the representation of the shareholder Elliott on Board makes it a related party because in any case, at least potentially, it is able to exert significant influence. This correlation with Elliott had been excluded by the Board of Directors with its resolution of May 6, 2019, on the basis of the investigation carried out by the Related Parties Committee. The Board of Statutory Auditors, having acknowledged the direction taken by the Company, decided to make a specific communication to Consob. Pending the publication of the new Consob rules, for the transposition of the so-called Shareholder's Right II Directive in Italy, and pending a reassessment of the Board of Directors downstream of the new regulation, the Company has begun a monitoring activity on the relationships with Elliott vehicles who hold a shareholding in TIM (currently: none).

TIM, as a public interest entity (PIE) and large Group, is required to report non-financial information starting from 2018, in accordance with the provisions of Legislative Decree 254/2016 issued in implementation of the Directive 2014/95/EU (hereafter "Decree"), which entered into force on January 25, 2017.

In compliance with the aforementioned regulations, the TIM Group NFS contains a description of issues relating to: the corporate management model, corporate governance, stakeholder engagement, the materiality matrix and risk management, the results achieved by the company in relation to relevant environmental issues, the value chain and human rights.

The NFS is published together with the documents relating to the 2019 Annual Financial Report and filed with the competent Company Register.

The independent auditor verified the preparation of the NFS and also issued the report on the compliance of the information provided within it with the reference standards and reporting standards used. The declaration is contained in a special report separate from the audit report, attached to the NFS and published jointly with it, which was issued by EY on March 25, 2020 which, based on the work carried out, concludes that "*no factors emerged to suggest that the TIM Group NFS relating to the year ended December 31, 2019 was not drawn up, in all significant respects, in accordance with the requirements of articles 3 and 4 of the Decree and the GRI Standards*".

The Board of Statutory Auditors obtained periodic updates on the preparatory activities for the preparation of the NFS and supervised compliance with the provisions of the aforementioned Decree in the context of the functions attributed to it by the law and, in particular, on the adequacy of the procedures, processes and structures that govern the production, reporting, measurement and representation of results and information of this nature.

It should be noted that in 2019, the Compliance Department was assigned the role of Anti-corruption compliance function and the new version of the Group Anti-corruption Policy was also approved.

See the TIM S.p.A. 2019 Report on Corporate Governance and Ownership Structures for information on the Company's internal control and risk management system.

14. Comments on the adequacy of the administrative-accounting system and its reliability to correctly represent management events

TIM, including to guarantee compliance with Italian regulations, manages a structured and documented model for detecting and monitoring risks connected to financial reporting, which is based on the 2013 CoSO framework. This model, managed with the support of a specific application, relates to the internal controls associated with risks identified for financial reporting and the consequent assessment activities, with precise attribution of responsibility, in compliance with the accountability principle.

The Board of Statutory Auditors evaluated and supervised the adequacy of the administrative and accounting system of the Company and its reliability to fairly represent operations, also by collecting information from Company management, examining company documents and analyzing the results of the activities undertaken by the External Auditor.

It also supervised the financial reporting process.

The Board of Statutory Auditors has acknowledged the statements issued by the CEO and by the Executive Manager responsible for drafting the Company's accounting documents, in regard to the adequacy in relation to the Company's nature and the actual application of the administrative and accounting procedures required for the drafting of the financial statements and consolidated financial statements during 2019.

In TIM, the goodwill impairment test is carried out according to a consolidated and structured process, coordinated by the Chief Financial Office Function, with the involvement of independent external experts of recognized professionalism. The implementation of the process is also analyzed and discussed in special joint meetings involving the Control and Risk Committee and Board of Statutory Auditors, that precede the Board of Directors meetings to approve the financial reports to which the impairment test must be applied. It should be noted in this regard that, during 2019, the Telecom Italia Sparkle group underwent a market repositioning which at the end of the year allowed the progressive and significant integration of the Sparkle group's business with that of Core Domestic. This integration is connected to the Sparkle group's transformation path to renew traditional business by focusing more on innovation, capable of meeting the challenges of the new Gigabit Society. Therefore, as of the end of 2019, within the Domestic Business Unit, the distinction between the Core Domestic Cash Generating Unit and the International Wholesale Cash Generating Unit was overcome.

The Board of Statutory Auditors verified that the impairment test process for the 2019 financial statements was carried out in terms consistent with the procedure most recently approved by the Board of Directors on December 18, 2019 and with the applicable IFRS standards.

See the contents of the "*Goodwill*" Note of the TIM Group Consolidated financial statements at December 31, 2019.

Regarding the provisions of Article 15, subsection 1, letter c, ii) of the Market Regulations (conditions for the listing of shares of controlling companies and of companies registered in and regulated by the laws of States that are not members of the European Union), the Board of Statutory Auditors has not ascertained facts and circumstances that would indicate that the administrative-accounting system of the controlled companies is not adequate to ensure that the data on the revenues, finances and assets of the companies needed for the preparation of the consolidated financial statements regularly reaches the management and auditor of the controlling company.

15. Comments on the adequacy of the provisions imparted by the company to subsidiaries, pursuant to Article 114, paragraph 2, Legislative Decree 58/1998

The Board of Statutory Auditors believes the instructions imparted by the Company to its subsidiaries, pursuant to Article 114, section 2 of the CLFI, to be adequate to comply with the obligations regarding communication established by the law. In this respect it should be noted that the Company regulates the flow of information it receives from its subsidiary companies on transactions of particular impact, with specific procedures.

16.Comments on any relevant aspects that emerged during the meetings held with the auditors pursuant to Article 150, paragraph 2, of Legislative Decree 58/1998

During 2019, the Board of Statutory Auditors held periodic meetings with the outgoing auditor (PricewaterhouseCoopers) and then with the incoming auditor (EY), during which the figures and information relevant for the performance of their respective duties were exchanged.

The Board of Statutory Auditors: (i) analyzed the activity carried out by the auditing company, with particular reference to the approach and strategy of auditing for the 2019 financial year, as well as the definition of the audit plan. The key audit matters and related business risks were shared, thereby allowing the adequacy of the response planned by the auditor to be assessed.

The Board of Statutory Auditors has ascertained, from information obtained from Independent Auditor EY and from the management of the Company, that the IAS/IFRS principles, and the other legal and regulatory provisions that apply to the preparation and presentation of the separate financial statements, the consolidated financial statements and the accompanying report on operations were complied with.

The Board of Statutory Auditors took note through the statutory auditor that significant deficiencies identified in 2018 concerning (i) some privileged administrative-accounting system users of TIM Brasil, (ii) some misalignments between management data and accounting liabilities relating to the management of prepaid traffic were substantially resolved, and (iii) of the functioning of the application used to calculate the impact deriving from the application of IFRS 15.

Significant shortcomings did not emerge during 2019.

In accordance with the provisions of Article 19 of Legislative Decree no. 39/2010, the Board of Statutory Auditors verified and monitored the independence of the independent auditor, in particular in relation to the adequacy of the provision of services other than the audit provided for TIM.

Taking into account EY's declaration of independence (contained in the additional Report for the Internal Control and Audit Committee), and the further assignments conferred by TIM and the Group companies on EY and the companies belonging to its network, the Board of Statutory Auditors believes that the conditions exist to certify the independence of the independent auditor EY.

17. Notes of the company's compliance with the Code of Corporate Governance of the Corporate Governance Committee for listed companies

The Company complies with the Borsa Italiana Code of Corporate Governance, approved by the Corporate Governance Committee in July 2018.

The Board of Statutory Auditors oversaw the methods of actual implementation of the corporate governance rules contained therein.

In particular, TIM adopted the criteria of the Code of Corporate Governance for the qualification of Directors as independent. In the same way and on the basis of the information made available by the interested parties pursuant to the Code of Corporate Governance and the Consob Issuers' Regulation, or in any event on that available to the Company, the assessment of the requirements was made in the first Board meeting following the appointment, later renewed on February 20, 2019 and January 29, 2020. Of the current 15 Directors in office, 12 possess the independence requirements: the Directors Altavilla, Bonomo, Capaldo, Cappello, Ferrari, Giannotti de 'Ponti, Moretti, Morselli, Roscini, Sabelli, Valensise and the Chairman of the Board of

Directors,Director Rossi. With respect to the latter, the Board of Directors has expressly ruled out that his *prominent position* within the Issuer may, given the governance structure adopted, affect of his independence of judgment, thereby undermining his independence as director.

On March 9, 2020, the Board of Statutory Auditors verified the correct application of the assessment criteria and procedures adopted by the Board of Directors to assess the independence of its members. As a result of the supervision of the process in question, the Board of Statutory Auditors believed that was carried out correctly and therefore shared the decisions of the Board of Directors.

On March 9, 2020, the Board of Statutory Auditors carried out, pursuant to Article 148, paragraph 3, of the CLFI and the Code of Corporate Governance, a verification that each Auditor had the requirements of integrity, professionalism and independence.

The Lead Independent Director, a role held by Director Dante Roscini, is the point of reference and coordination for the issues and contributions of the independent Directors and the non-executive Directors in general.

The Lead Independent Director has the right to make use of the corporate structures to carry out his related tasks and to convene specific meetings of only Independent Directors for the discussion of issues on the functioning of the Board of Directors or on the management of the company.

See the Report on the corporate governance and share ownership of TIM S.p.A. for 2019 for information on the corporate governance of the Company, which the Board of Statutory Auditors evaluates positively on the whole.

18. Final assessments regarding the supervisory activity carried out, as well as any omissions, culpable facts or irregularities found during the same

From the supervisory and control activity carried out by the Board of Statutory Auditors, as described above, no significant facts emerged to be mentioned in the Report to the Shareholders' Meeting.

19.Notes of any proposals to be made at the meeting pursuant to Article 153, paragraph 2, of Legislative Decree 58/98

Having taken note of TIM's 2019 financial statements, the Board of Statutory Auditors has no objections regarding the resolution motions of the Board of Directors relating to:

- the setting aside of 5% of year's profit in the legal reserve;
- the allocation of the 2019 profit for distribution on the basis of the recognition to Shareholders of a total dividend calculated on the basis of the following amounts, which will be applied to the number of ordinary and savings shares that they own on the record date (therefore excluding the treasury shares in the Company's portfolio):
  - € 0.0100 (gross of withholding taxes) for each ordinary share;
  - € 0.0275 (gross of withholding taxes) for each saving share;
- to make the dividend payable starting on June 24, 2020, with a coupon date of June 22, 2020 (record date June 23, 2020); and
- to carry forward the residual profit.

The Board of Statutory Auditors also has no comments to make regarding the Board of Directors' resolution motion to appoint Franck Cadoret and Salvatore Rossi as Directors for the residual term of the mandate of the current Board of Directors, and therefore until the approval of the financial statements at December 31, 2020.

In relation to the resolution motion by the Board of Directors to approve the Long Term Incentive Plan 2020-2022, the Board of Statutory Auditors has no objections to make.

The Board of Statutory Auditors has no objections to make relating the Board of Directors' resolution motion to approve the “2020 Broad-Based Share Ownership Plan”, reserved for employees of the TIM Group.

The Board of Statutory Auditors acknowledges that the motion to amend Article 9 of the Company's Bylaws will be submitted to the Shareholders' Meeting to comply with the provisions of the law on gender balance in the composition of the administrative and control bodies of listed companies.

The Board of Statutory Auditors acknowledged that the Shareholders' Meeting had been convened, in relation to the COVID-19 emergency, in a manner consistent with the exceptional rules contained in the Decree Law no. 18 of March 17, 2020.

Milan, March 31, 2020

For the Board of Statutory Auditors

The Chairman

Roberto Capone

MOTIONS FOR RESOLUTIONS

SHAREHOLDERS' MEETING OF TIM S.p.A.

April, 23 2020: shareholders' meeting of TIM S.p.A. – single call

Medium

Ordinary session

- Financial statements as at 31 December 2019 – approval of the financial statements documentation - allocation of profit for the year and distribution of dividends
- Decisions following the termination of two Directors
- Report on the remuneration policy and remuneration paid - Approval of the first section (remuneration policy for the year 2020) - Non-binding vote on the second section (remuneration paid in the year 2019)
- Long Term Incentive Plan 2020-2022– approval of the remuneration plan based on financial instruments, related and consequential resolutions

Extraordinary session

- Long Term Incentive Plan 2020-2022 – share issues to service the initiative, amendment of Art. 5 of the Bylaws, related and consequential resolutions
- 2020 Employee Share Ownership Plan – issue of shares to service the plan, amendment to art. 5 of the Bylaws, related and consequent resolutions
- New provisions concerning gender balance - amendment to Article 9 of the Bylaws

FINANCIAL STATEMENTS AS AT 31 DECEMBER 2019 – APPROVAL OF THE FINANCIAL STATEMENTS DOCUMENTATION - ALLOCATION OF PROFIT FOR THE YEAR AND DISTRIBUTION OF DIVIDENDS

Dear Shareholders,

The draft financial statements for the year ended 31 December 2019 mark the return to a net profit of euro 382,071,655.59 for TIM S.p.A. This profit of the Parent Company is accompanied, at the consolidated level, by a reduction in Adjusted Net Debt, beyond that announced when presenting the 2019-2021 business plan, TIMe to deliver and delever, to the financial community.

This increasingly positive situation overall, confirmed in the guidance for the new 2020-2022 planning cycle, brings the Company to propose a return to distributing dividends to both of its categories of shares, in advance with respect with respect to that already envisaged.

The proposal is therefore, following the allocation of 19,103,582.78 euros to the legal reserve, to proceed with the distribution of a dividend of 0.0100 euros per ordinary share and 0.0275 per savings share, in compliance with rights contemplated for the category by Article 6 of the Bylaws. To this end, the 2019 profit will be used.

The amount of the total dividend distributed, given the unit amounts indicated above, will vary based on the number of shares outstanding at the time, taking into account the capital increases in progress and the number of treasury shares held by the Company, as of the date of this report equal to 37,672,014 ordinary shares.

The amounts by way of dividend will be paid to those entitled, based on the share deposit account records at the close of business on 23 June 2020 (record date), starting from 24 June 2020, while the coupon date will be 22 June 2020.

In light of the above, the Board of Directors submits the following proposals for your approval

Proposal 1: approval of the financial statements documentation

The Shareholders' Meeting of TIM S.p.A.,

- having examined the annual financial report of TIM S.p.A.;
- having taken note of the reports of the Board of Statutory Auditors and of the Independent Auditors EY S.p.A.;

resolves

- to approve the 2019 financial statements of TIM S.p.A.

Proposal 2: allocation of profit for the year and distribution of dividends

The Shareholders' Meeting of TIM S.p.A.,

- having regard to the 2019 financial statements of TIM S.p.A.;
- taking into account the outstanding amount of the legal reserve;

resolves

- to allocate 5% of the profit for the year to the legal reserve;
- to allocate to distribution the remaining 2019 profit for payment to Shareholders of an overall dividend calculated based on the following amounts, that will be applied to the number of ordinary and savings shares held by the same at the record date (excluding therefore treasury shares held by the Company):
  - 0.0100 euros (gross of withholding taxes) for each ordinary share,
  - 0.0275 euros (gross of withholding taxes) for each savings share,
- to pay the dividend payable starting from 24 June 2020, with coupon date on 22 June 2020 (record date 23 June 2020).
- to carry forward the residual profits.

DECISIONS FOLLOWING THE TERMINATION OF TWO DIRECTORS

Dear Shareholders,

Following the resignation firstly of Amos Genish (27 June 2019) and then Fulvio Conti (26 September 2019), the Board of Directors, at its meetings held on 27 June 2019 and 21 October 2019 respectively, co-opted as Directors Franck Cadoret and Salvatore Rossi, appointing the latter as Chairman, a position previously held by Mr. Conti. Both - as per the law - will remain in office until the Shareholders' Meeting.

Given that, in this case, the list voting mechanism, provided for in the Bylaws for the sole case of full renewal of the Board of Directors, does not apply, it is proposed that you appoint the aforementioned Franck Cadoret and Fulvio Conti (whose curricula vitae are available on the Company's website) as Directors of TIM for the remaining term of office of the Board of Directors in office, and therefore until approval of the financial statements as at 31 December 2020.

In light of the above, the Board of Directors submits the following proposals for your approval

Proposal 1: replacement of Fulvio Conti

The Shareholders' Meeting of TIM S.p.A.,

- given the termination of the office of Director of Fulvio Conti (and considering expiry of office of Salvatore Rossi, already co-opted by the Board of Directors, to replace Fulvio Conti);
- considering that the term of office of the Board of Directors in office will expire with the approval of the financial statements as at 31 December 2020 (as per the ad-hoc resolution by the Shareholders' Meeting of 4 May 2018),

resolves

to appoint Salvatore Rossi as a Director of the Company, expiring together with the Directors in office and therefore with a term of office until approval of the financial statements at 31 December 2020.

Proposal 2: replacement of Amos Genish

The Shareholders' Meeting of TIM S.p.A.,

- given the termination of the office of Director of Amos Genish (and considering the expiry of office of Franck Cadoret, already co-opted by the Board of Directors, to replace Amos Genish);
- considering that the term of office of the Board of Directors in office will expire with the approval of the financial statements as at 31 December 2020 (as per the ad-hoc resolution by the Shareholders' Meeting of 4 May 2018),

resolves

to appoint Franck Cadoret as a Director of the Company, expiring together with the Directors in office and therefore with a term of office until approval of the financial statements at 31 December 2020.

REPORT ON THE REMUNERATION POLICY AND REMUNERATION PAID - APPROVAL OF THE FIRST SECTION (REMUNERATION POLICY FOR THE YEAR 2020) - NON-BINDING VOTE ON THE SECOND SECTION (REMUNERATION PAID IN THE YEAR 2019)

Dear Shareholders,

In view of the Shareholders' Meeting of 23 April 2020, based on a regulatory framework still without the rules delegated to Consob by the primary legislation transposing Directive 2007/36/EC (known as the Shareholders' Rights II Directive) into national law, the report on the remuneration policy and remuneration paid has been prepared.

The document is divided into two sections:

- the first illustrates the Company's policy on the remuneration of Directors, Statutory Auditors and Key Management Personnel with reference to the 2020 financial year, and is subject to a binding resolution of the Shareholders' Meeting;
- the second provides a representation of the items that make up the remuneration of the persons mentioned above, with an analytical illustration of the remuneration paid to them in 2019 and is subject to a non-binding resolution of the Shareholders' Meeting for or against. Starting from next year, this part of the document will also illustrate how the Company has taken into account the vote cast the previous year on the second section of the report.

In the light of the above, you are asked to vote separately on the first and second sections of the report, in the terms described above, and for this purpose the Board of Directors submits the following proposals for your approval:

Proposal 1: approval of the first section of the report on the remuneration policy and remuneration paid

The Shareholders' Meeting of TIM S.p.A., having regard to the provisions applicable to the report on the remuneration policy and remuneration paid,

resolves

the approval of the first section of the report on the remuneration policy and remuneration paid by the Company

Proposal 2: non-binding vote on the second section of the report on the remuneration policy and remuneration paid

The Shareholders' Meeting of TIM S.p.A., having regard to the provisions applicable to the report on the remuneration policy and remuneration paid,

resolves

in favour of the second section of the report on the remuneration policy and remuneration paid by the Company.

LONG TERM INCENTIVE PLAN 2020-2022– APPROVAL OF THE REMUNERATION PLAN BASED ON FINANCIAL INSTRUMENTS, RELATED AND CONSEQUENTIAL RESOLUTIONS

Dear Shareholders,

You are been convened to discuss and resolve on the proposed "Long Term Incentive Plan 2020-2022" (hereinafter, the "LTI Plan").

As described in the information document (made available on the website www.telecomitalia .com and to which reference is made for any details), the LTI Plan consists of the allocation of shares free of charge to part of the managerial population of the Telecom Italia Group, according to different terms for the Chief Executive Officer of TIM and for the remaining beneficiaries (hereinafter, together with the Chief Executive Officer of TIM, the "Beneficiaries").

More specifically, the key terms of the LTI Plan can be summarised as follows:

Purpose

The purpose of the LTI Plan is to incentivate the Beneficiaries

- in the pursuit of the sustainable success of TIM, i.e. achievement of the strategic objectives defined by the Board of Directors in the business planning process in terms of economic-financial and ESG objectives, as well as
- in the growth in share value in the medium to long term,

aligning the economic interests of management holding organizational positions considered crucial for the company's business with the interests of the Company's main stakeholders.

At the same time, the LTI Plan aims to retain qualified management and increase the attractiveness of the company's remuneration policy from outside the company. In the current transformation and change management phase, it is essential that TIM is able to acquire talents from the labour market, by offering competitive remuneration packages in terms of the qualitative mix of the remuneration tools used, as well as from a quantitative point of view.

Recipients

The LTI Plan is restricted to the Chief Executive Officer of TIM and part of the managerial staff of TIM or its subsidiaries based in Italy, selected by the Board of Directors at the proposal of the Chief Executive Officer, for a maximum of approx.150 people.

Architecture

In order to ensure

- consistency of the tool with the purpose of incentivating Beneficiaries on the strategic priorities identified over time by the Board, as well as
- alignment over time of the same target of Beneficiaries with the evolution of the management team,

unlike TIM's previous long-term incentive measures, the LTI Plan will be divided into three successive and separate three-year incentive cycles (2020-2022, 2021-2023, 2022-2024), homogeneous in time frame and instrumental to the goals (as defined from time to time) of the corresponding business planning cycles, it being understood that the inclusion of managerial resources will take place separately for each incentive cycle.

Object

The LTI Plan consists of offering Beneficiaries:

- Performance Shares, i.e. rights to the free-of-charge allocation of TIM ordinary shares in variable numbers upon achievement of predetermined performance conditions (and in particular, with reference to the 2020-2022 cycle, Net Financial Position/EBITDA ratio: weight 40%; price performance of the ordinary share compared to a basket of peers: weight 60%), subject to an access condition represented by the circumstance that the normal value of the ordinary share at the end of the vesting period of the specific incentive cycle is greater than or equal to the normal value of the ordinary share at the start of the same cycle. Normal value equals to the arithmetic average of the official prices of ordinary shares recorded from the trading day prior to the relevant date up to the thirtieth day of the previous ordinary calendar (both terms included) on the Mercato Telematico Azionario organised and managed by Borsa Italiana S.p.A., using as a divider only the days to which the quotations taken as the basis for the calculation refer, with truncation to the second decimal place;

- Attraction/Retention Shares, i.e. rights of free-of-charge allocation of TIM ordinary shares subject to maintenance of the employment relationship with TIM or its subsidiaries.

In particular, TIM's Chief Executive Officer will be the beneficiary of Performance Shares only, where 70% of the pay opportunity at target level for the remaining beneficiaries will be represented by Performance Shares and 30% by Attraction/Retention Shares.

The on-target pay opportunity of the Chief Executive Officer will be equal to 125% of his gross annual fixed remuneration, while for the remaining Beneficiaries there will be three bands based on the importance of the position held and on a qualitative evaluation of the resource, with pay opportunities corresponding to 100%, 75% and 50%, respectively, of the gross annual remuneration net of variable components. The number of rights allocated will correspond to the quotient between pay opportunity and the normal value of the ordinary share at the time of the launch of each incentive cycle.

The payout curve for the Performance Shares component will be different for the Chief Executive Officer (minimum 75%, target 125%, maximum 200% of his fixed remuneration) and the remaining beneficiaries (for whom a range of linear variability is envisaged 50%-100%-150% of the number of shares subject to Performance Shares). Obviously the payout of the Attraction/Retention Share component will be flat.

With regard to both the Performance Share and Attraction/Retention Share components, a payout correction factor of +/-4% will be applied, linked to appropriate ESG objectives set out in the business planning cycle corresponding to the vesting period of the individual incentive cycle. With reference to the 2020-2022 cycle, the correction factor will be parametrised to the targets during the period of use of renewable energy on the total energy (weight: 50%) and the reduction of CO_2 emissions (weight: 50%).

Limits and restrictions on shares

The shares assigned at maturity of each incentive cycle will have regular dividend and the same characteristics as the ordinary shares outstanding at the time.

They will be subject to

- a lock-up of 24 months from the time of transfer to the Beneficiaries, subject to application of the "sell to cover" option, with sale on maturity of a sufficient number of shares to pay the taxes due, and
- a claw-back, for which the Company reserves the right, in the three years following the allocation, to request the beneficiary to return all or part of the allocated shares (less those sold in order to pay the tax charges arising from the LTI Plan) or their countervalue at the date of delivery, if they were allocated on the basis of data that later turned out to be incorrect, with consequent restatement of the financial statements, or in cases of fraud or other malicious or gross negligent conduct.

Implementation procedures

To service this initiative, the issue of a maximum of 180,000,000 new ordinary shares with no par value, with regular dividend, pursuant to Article 2349 of the Italian Civil Code and without a share capital increase, is proposed.

It is also proposed to empower the Board of Directors, where deemed necessary or appropriate, to satisfy the LTI Plan, in whole or in part, by using the Company's treasury shares in the Company's portfolio at any time. The Board of Directors therefore also requests authorisation from the Shareholders' Meeting to be able to use the above-mentioned treasury shares.

In light of the above, the Board of Directors submits the following proposal for your approval.

The Shareholders' Meeting of TIM S.p.A.,

- having examined the illustrative report of the Board of Directors and the information document relating to the Long Term Incentive Plan 2020-2022,

resolves

- to approve the Long Term Incentive Plan 2020-2022, under the terms indicated in the information document published in accordance with applicable regulations;

- to confer on the Board of Directors all the necessary or appropriate powers to implement the initiative with reference to each of its cycles, and make any changes and/or additions necessary for implementation of the resolution, also for the purposes of compliance with the applicable regulatory provisions, including adoption of the rules governing the plan and authorization to possibly dispose of the ordinary treasury shares, as present in the Company's portfolio from time to time, free of charge, for the benefit of the beneficiaries of the Long Term Incentive Plan 2020-2022, by December 31, 2025.

LONG TERM INCENTIVE PLAN 2020-2022 – SHARE ISSUES TO SERVICE THE INITIATIVE, AMENDMENT OF ART. 5 OF THE BYLAWS, RELATED AND CONSEQUENTIAL RESOLUTIONS

Dear Shareholders,

Assuming that the Shareholders' Meeting in ordinary session approves the proposed "Long Term Incentive Plan 2020-2022" (hereinafter, the "LTI Plan"), with respect to which, for any appropriate details, please refer to the information document, available on the website www.telecomitalia.com), it is proposed to issue a maximum of 180,000,000 new ordinary shares with no par value, with regular dividend, pursuant to Article 2349 of the Italian Civil Code (as art. 5 of the Company's bylaws allows) and without a capital increase.

The issuance of the above shares will take place in due course in separate tranches, based on the actuals of the 2020-2022, 2021-2023 and 2022-2024 incentive cycles, as set forth in the LTI Plan, from profits or profit reserves as per the latest approved financial statements, for an amount equal to the product of the number of ordinary shares to be allocated to the beneficiaries of the LTI Plan and accounting parity at the time of issue. In order to identify the profits or profit reserves, it is proposed to confer a mandate on the Board of Directors, which will ensure appropriate evidence of this is provided in the accounting documentation, so that the relevant items used cannot be used again for the purposes of Article 2349 of the Italian Civil Code, without further restrictions on allocation and/or availability.

In relation to the proposed resolution to issue shares pursuant to Article 2349 of the Italian Civil Code, without an increase in share capital (for a maximum theoretical total dilutive effect of 0.85% with respect to the total existing shares at 31 December 2019 and 1.18% with respect to ordinary shares alone), there is no right of withdrawal on the part of shareholders who do not approve it.

The share issue resolution involves the introduction of a specific paragraph in Article 5 of the Bylaws, following the current text, which remains unchanged.

In light of the foregoing, the Board of Directors submits the following proposal for your approval

The Shareholders' Meeting of TIM S.p.A.,

- given the approval of the Long Term Incentive Plan 2020-2022 (hereinafter, the "LTI Plan")
- having examined the illustrative report of the Board of Directors and the information document relating to the LTI Plan;
- given the certification of the Board of Statutory Auditors that the current share capital is fully paid up;

resolves

- to issue by December 31, 2025 a maximum of 180,000,000 ordinary shares with no par value, with the same characteristics as the ordinary shares outstanding at the time, regular dividend, pursuant to Article 2349 of the Italian Civil Code and without a capital increase, on the basis of the free-of-charge allocation of ordinary shares to the beneficiaries of the LTI Plan, under the terms and conditions and in accordance with the procedures set forth therein;
- to confer on the Board of Directors all necessary or appropriate powers to execute the individual share issue tranches referred to in the previous point and therefore, inter alia: (i) to define the amount of ordinary shares to be issued and allocated free of charge to the beneficiaries of the LTI Plan, under the terms and conditions and according to the procedures set forth therein; (ii) to identify the profits or profit reserves as per the latest duly approved financial statements on the basis of which the individual share issue will take place, with a mandate to provide the appropriate accounting evidence following the issue transaction;
- to amend Article 5 of the Company Bylaws by introducing the following paragraph to follow the current text: "*The Shareholders' Meeting of 23 April 2020, having approved the Long Term Incentive Plan 2020-*

2022 and to service the same, resolved to issue on one or more occasions, within the deadline of 31 December 2025, a maximum of 180,000,000 new ordinary shares with no par value, having the same characteristics as the ordinary shares outstanding at the time, with regular dividend, pursuant to Art. 2349 of the Italian Civil Code and without a capital increase, on the basis of the free-of-charge allocation to the beneficiaries of the Long Term Incentive Plan 2020-2022, under the terms and conditions and according to the procedures set forth therein";

- to confer on the Board of Directors, and on its behalf the pro tempore legal representatives, also severally among the same, all powers to:
  - case by case, make changes to Article 5 of the Bylaws as a result of the resolutions, execution and completion of the above share issue, to this end ensuring all the formalities and publicity provided for by law;
  - comply with all the formalities necessary for the adopted resolutions to be entered in the Company Register, accepting and introducing in the same the non-material amendments, additions or deletions that may be required by the competent authorities, as well as all powers to carry out the legal and regulatory requirements resulting from the adopted resolutions.

2020 EMPLOYEE SHARE OWNERSHIP PLAN – ISSUE OF SHARES TO SERVICE THE PLAN, AMENDMENT TO ART. 5 OF THE BYLAWS, RELATED AND CONSEQUENT RESOLUTIONS

Dear Shareholders,

We submit the "2020 Employee Share Ownership Plan" (the "2020 Plan") for your approval.

As described in the information document made available on the website www.telecomitalia.com, the 2020 Plan, like the previous plan launched by the Company in 2014, consists of the offer to subscribe to Telecom Italia ordinary shares, for cash, at a discount from the market price, reserved to employees of the Telecom Italia Group, followed by the free allocation of ordinary shares, subject to retention of ownership of the subscribed shares for one year and continuing employment with a Telecom Italia Group company.

More specifically, the essential terms of the 2020 Plan may be summarised as follows:

Purpose

The purpose of the 2020 Plan is to give Group employees the option to invest in Company shares, to increase their motivation to achieve corporate objectives and to strengthen their feeling of being part of the business.

Beneficiaries

The 2020 Plan is reserved to people who are employees of TIM or its subsidiaries based in Italy with a permanent contract, with the exclusion of Top Managers (the "Employees").

Object

The 2020 Plan consists in offering Employees TIM ordinary shares at a discount of 10% off the average market price of the previous month, up to a investment ceiling of 10,000 euros per person, subject to a maximum total amount of 127,500,000 ordinary shares. In the event that the number of shares offered should be insufficient to satisfy all subscription requests, the newly issued shares shall be distributed proportionately among all the subscribers, ensuring them fully equal treatment.

Subscribers who have held the subscribed shares for a period of one year, subject to their retaining the status of Employee, shall be allotted free of charge, ordinary shares of the Company, in the ratio of 1 free share (the "Bonus Share") for every 3 subscribed shares, and therefore for a total maximum number of 42,500,000 ordinary shares.

Limits and restrictions on shares

The shares subscribed and the Bonus Shares shall have full entitlement to dividends as of the time of issuance. There is no lock-up period, on the understanding that the 2020 Plan will observe the conditions for access to the favourable tax regime pursuant to article 51 of the Consolidated Income Tax Act, as provided for employee share ownership plans, and that sale of the shares within three years of the subscription (of the shares for cash) or of the allocation (of the Bonus Shares) shall entail forfeiture of the respective benefit by the Employee.

Implementation procedures

To service the 2020 Plan, we propose the following:

- the issue of a maximum of 127,500,000 new ordinary shares without par value, with regular dividend entitlement, to be offered for subscription with exclusion of pre-emption rights pursuant to article 2441, paragraph 8, of the Italian Civil Code, reserved for Employees, without a capital increase and allocating the entire subscription price to the share premium account, and then, subsequently
- the issue of a maximum of 42,500,000 new ordinary shares without par value, with regular dividend entitlement, pursuant to article 2349 of the Italian Civil Code (as permitted by art. 5 of the Bylaws), without a capital increase, for the allocation of 1 Bonus Share for every 3 ordinary shares subscribed for cash, as described above, subject to the terms and conditions and according to the procedures specified in the 2020 Plan,

subject to the possibility for the Board of Directors, if it is deemed necessary or appropriate, to satisfy the demand for matching shares, in whole or in part, by utilising the Company's treasury shares in the Company's portfolio. The Board of Directors therefore also requests authorisation from the Shareholders' Meeting to be able to use the above-mentioned treasury shares by December 31, 2021.

With respect to the issue of shares to be offered for subscription, the Board of Directors asks instead for authorisation to execute the transaction in accordance with the terms described in the information document, to determine the offer period, that will take place applying a discount of 10% with respect to the “normal value” of the ordinary share: the arithmetic mean of the closing prices of the ordinary shares recorded on the Italian Stock Exchange starting on the trading day prior to the opening of the subscription period until the prior thirtieth calendar day (both terms included) on the electronic share market (MTA) organised and managed by Borsa Italiana S.p.A., calculated using as denominator only those days to which the prices used for the basis of the calculation apply, truncated at the second decimal place.

The issuance of the Bonus Shares will be carried out in due course out of the profits or profit reserves as shown in the last approved financial statements, for an amount equal to the product between the number of ordinary shares to be allocated and the accounting par value at the time of issue. The identification of the profits or profit reserves will be the subject of the authorisation for the execution of the transaction which we propose to be granted to the Board of Directors, which will take care of providing appropriate evidence in the accounting documents, so that the items used cannot be again used for the purposes of art. 2349 of the Italian civil code, without further restrictions on use and/or availability.

In relation to the proposed resolutions regarding the issue of shares to be offered for subscription pursuant to art. 2441, subsection 8 of the Italian civil code and the issue of shares pursuant to art. 2349, subsection 1 of the Italian civil code, both without an increase in the share capital (which result in a maximum theoretical dilution of 0.80% with respect to the total of the shares issued as at December 31, 2019 and 1.11% with respect to the ordinary shares), shareholders who do not vote in favour of these proposals do not have the right of withdrawal.

While you are invited to refer to the information document analytically explaining the initiative, the proposed resolution for the Shareholders’ Meeting to approve the 2020 Broad-based Share Ownership Plan and the related transactions regarding share capital is provided below, with the introduction of a specific paragraph in article 5 of the Bylaws, to follow the current text, which remains unchanged.

In light of the above, the Board of Directors submits the following proposal for your approval

The Shareholders’ Meeting of TIM S.p.A.

- having examined the explanatory report of the Board of Directors (the “Report”) and the information document on the 2020 Employee Share Ownership Plan;
- given the certification of the Board of Statutory Auditors that the current share capital is fully paid up;

resolves

- to approve the 2020 Employee Share Ownership Plan in the general terms set out in the Report, as well as the information document (the “2020 Plan”) reserved to people who are employees of TIM S.p.A. or its subsidiaries based in Italy with a permanent contract, with the exclusion of Top Managers (the “Employees”);
- to increase the share capital by December 31, 2020, divisible, through the issue of a maximum of 127,500,000 new ordinary shares, without par value, having the same characteristics as the ordinary shares outstanding at the time, with regular dividend entitlement, to offer for subscription to Employees, with exclusion of pre-emption rights pursuant to article 2441, subsection 8, of the Italian Civil Code, without a capital increase, and on the basis of a subscription price, that will be defined applying a

discount of 10% to the arithmetic mean of the closing prices of the ordinary shares recorded on the Italian Stock Exchange starting on the trading day prior to the opening of the subscription period until the prior thirtieth calendar day (both terms included) on the electronic share market (MTA) organised and managed by Borsa Italiana S.p.A., calculated using as denominator only those days to which the prices used for the basis of the calculation apply, truncated at the second decimal place;

- to issue by December 31, 2021 a maximum of 42,500,000 new ordinary shares without par value, having the same characteristics as the ordinary shares outstanding at the time, with regular dividend entitlement, pursuant to article 2349 of the Italian Civil Code, without a capital increase, for the allocation free of charge to Employees of 1 ordinary share for every 3 ordinary shares subscribed for cash, as described above, subject to the terms and conditions and according to the procedures specified in the 2020 Plan;
- to give the Board of Directors all powers necessary or appropriate to:
    - to implement the 2020 Plan, making any changes and/or additions that may be necessary to implement the resolution passed, also for the purposes of compliance with any applicable regulatory provisions, including the authorisation to carry out by December 31, 2021, disposal procedures free of charge in due time on ordinary treasury shares in the Company's portfolio;
    - to execute the issue of the ordinary shares referred to in point 2 above and therefore, inter alia, establish, in accordance with the aforesaid ceiling, specific deadlines for the subscription thereof by Employees in compliance with the conditions, procedures and time limits set out in 2020 Plan;
    - to execute the issue of ordinary shares referred to in point 3 above and therefore, inter alia: (i) define the amount of ordinary shares to be issued and allocated free of charge to Employees subscribing to the paid capital increase, in compliance with the conditions, procedures and time limits set out in 2020 Plan; (ii) identify the profits or profit reserves shown in the last duly approved financial statements out of which the shares will be issued, with mandate to provide suitable accounting records subsequent to the issue transaction;
- to amend Article 5 of the Company Bylaws by introducing the following paragraph to follow the current text:
  "The Shareholders' Meeting of April 23, 2020, in approving the 2020 Employee Share Ownership Plan and in servicing it, resolved:
    - *to issue no later than December 31, 2020, a maximum of 127,500,000 new ordinary shares, without par value, having the same characteristics as the ordinary shares outstanding at the time, with regular dividend entitlement, with exclusion of pre-emption rights pursuant to article 2441, paragraph 8, of the Italian Civil Code, to offer for subscription to employees who are beneficiaries of the 2020 Employee Share Ownership Plan, without an increase in the share capital and allocating the entire subscription price to the share premium account, calculated in compliance with the provisions set out in the above plan. Where the aforementioned shares are not fully subscribed within the deadline for subscription established by the Board of Directors within the maximum time limit specified above, shares will be issued in number equal to the subscriptions received by said date;*
    - *to issue by December 31, 2021 a maximum of 42,500,000 new ordinary shares without par value, having the same characteristics as the ordinary shares outstanding at the time, with regular dividend entitlement, pursuant to article 2349 of the Italian Civil Code, without a capital increase, for the allocation of 1 ordinary share to Employees for every 3 ordinary shares subscribed for cash, as described above, subject to the terms and conditions and according to the procedures specified in the 2020 Employee Share Ownership plan ;*
- to give to the Board of Directors and, on its behalf, to the legal representatives pro tempore, also acting severally, all powers necessary to:
    - make changes from time to time to Article 5 of the Bylaws as a result of the resolutions, execution and completion of the share issues as approved above, to this end ensuring all the formalities and publicity provided for by law;
    - to complete all the necessary formalities for the adopted resolution to be entered in the Company Register, accepting and introducing the non substantial amendments, additions or deletions to them, which may be required by the competent authorities, as well as all the powers necessary for legal and regulatory compliance consequent on the resolution adopted.

NEW PROVISIONS CONCERNING GENDER BALANCE - AMENDMENT TO ARTICLE 9 OF THE BYLAWS

Dear Shareholders,

Law no. 160 of December 27, 2019, which took effect on January 1, 2020, has introduced changes to gender quotas in the composition of the Board of Directors and the Board of Auditors of listed companies, requiring for six consecutive terms starting from the first renewal after January 1, 2020 the presence of representatives of both genders, so that the least represented gender represents at least two fifths of the total.

For this reason, the provisions laid down in the By-Laws of TIM concerning the Board of Directors need to be adapted as they currently provide for a gender balance of at least one third. Conversely, no changes need to be made to the clauses on the Board of Statutory Auditors, which already require three auditors of one gender and two auditors of the other gender.

It is therefore proposed to adapt article 9 of the Bylaws, concerning the composition and appointment of the Board of Directors, changing the quantitative references and updating the mechanisms for ensuring compliance with the requirement, where the application of voting by slates does not automatically allow the appointment of a board, in line with the new gender quotas. The proposed changes also have the aim to better coordinate the principle of gender balance (which is known to be stable at TIM, regardless of the "sunset clause" established by the legislator) with that of independence of at least half of those elected from each slate. This is also an opportunity to align the text of the Bylaws with the new name of the Code of best practises prepared by the Italian Corporate Governance Committee established by Borsa Italiana.

It should be noted that shareholders who do not approve of the proposed amendments to the Bylaws do not have the right of withdrawal. Below is the proposed resolution presenting the current version and the proposed amended version.

In light of the above, the Board of Directors submits for your approval the following proposal

The Shareholders' Meeting of TIM S.p.A.

- having examined the report of the Board of Directors;

resolves

- to change article 9 as per the text below, highlighting the amendments introduced:

  <u>Article 9 - current text</u>

  9.1 The Company shall be managed by a Board of Directors consisting of not less than seven and not more than nineteen members, at least one third of whom shall be of the less represented gender, rounding any fractions up to the next whole number. The Shareholders' Meeting shall establish the number of members of the Board of Directors, which shall remain unchanged until a different number is established.

  9.2 The Board of Directors shall be appointed, in accordance with the applicable laws and regulations, on the basis of slates presented by the shareholders or by the outgoing Board of Directors.

  9.3 Each shareholder may present or participate in the presentation of only one slate and each candidate may appear on only one slate on pain of ineligibility. The slates must ensure the presence of candidates who fulfil the requirements of independence established by Article 148 of Legislative Decree 58/1998 and/or the Corporate Governance Code for listed companies, in such a way that at least one half of the members chosen from each slate, at the outcome of the vote, possesses such requirements. Slates that contain a number of candidates greater than or equal to three must also ensure that both genders are present, in such a way that candidates of the less represented gender are at least one third of the total. For the purpose of applying the independence and gender requirements, fractions will be rounded up to the nearest whole number.

  9.4 Slates may be submitted only by shareholders who alone or together with other shareholders hold a total number of shares representing at least 0.5% (or such lower amount established by Consob regulations) of the share capital entitled to vote at the Ordinary Shareholders' Meeting.

  9.5 Together with each slate, it is necessary to file individual candidates' acceptance of their candidacy and declarations in which they attest, on their own responsibility, that there are no grounds for ineligibility or incompatibility, and that they meet any requirements, as well as any other information requested by applicable law or regulation or the bylaws. Together with the declarations, a curriculum vitae shall be filed for each candidate setting out their main personal and professional data with an indication of the positions held in management and control bodies of other companies and of the grounds for their qualifying as independent in accordance with the criteria established by law and the Company. Any changes that occur up to the day the Shareholders' Meeting is held must be promptly notified to the Company.

9.6 Each person entitled to vote may vote for only one slate.

9.7 The Board of Directors shall be elected as specified below:

a) from the slate which has obtained the majority of the votes (the so-called Majority Slate) two thirds of the Directors to be elected shall be chosen from the slate that obtains the majority of the votes (the Majority Slate), in the order in which they are listed on the slate, rounding any fractions down to the nearest whole number. At least one half of the Directors chosen from the Majority Slate (with fractions rounded up to the nearest whole number) must possess the independence requirements envisaged in art. 148 of Legislative Decree 58/1998 and/or the Corporate Governance Code for listed companies; if this is not the case, the last candidate chosen from the Majority Slate who does not fulfil such requirements shall be replaced by the first of those not elected from the same slate who possesses these requirements. In the absence of independent candidates on the Majority Slate in sufficient number to proceed with the replacement, the Shareholders' Meeting shall supplement the board with the majorities required by law, thus ensuring that the requirement is met;

b) without prejudice to compliance with the applicable laws and regulations concerning the limits to the link with the Majority Slate, the remaining directors shall be taken from the other slates; to that end, the votes obtained by the various slates shall be divided successively by whole numbers from one up to the number of directors to be chosen. The quotients obtained shall be assigned to the candidates on each slate in the order specified thereon. On the basis of the quotients assigned, the candidates on the various slates shall be arranged in a single decreasing ranking. Those who have obtained the highest quotients shall be elected, provided that at least one half of the candidates chosen from each slate (with fractions rounded up to the nearest whole number) possesses the independence requirements envisaged in art. 148 of Legislative Decree 58/1998 and/or the Corporate Governance Code for listed companies, proceeding, if this is not the case, to replace the last candidate elected who does not fulfil such requirements with the first of those not elected from the same slate who possesses these requirements. In the absence of independent candidates on the Majority Slate in sufficient number to proceed with the replacement, the candidates with the next largest number of votes and fulfilling the independence requirements, according to the order as per the single ranking as set forth above, shall be elected. If this is not the case, the Shareholders' Meeting shall supplement the board with the majorities required by law, thus ensuring that the requirement is met.

If more than one candidate obtains the same quotient, the candidate from the slate that has not yet elected any director or that has elected the smallest number of directors shall be elected.

If none of such slates has yet elected a director or all of them have elected the same number of directors, the candidate from the slate that obtained the largest number of votes shall be elected. If the different slates have received the same number of votes and their candidates have been assigned the same quotients, a new vote shall be held by the entire Shareholders' Meeting and the candidate obtaining the simple majority of the votes shall be elected.

If the composition of the resulting board does not reflect gender balance, taking into account their ranking order on the slate, the necessary number of the last candidates of the more represented gender elected from the Majority Slate shall forfeit their post to ensure compliance with this requirement, and shall be replaced by the first candidates not elected from the same slate who are of the less represented gender. In the absence of candidates of the less represented gender on the Majority Slate in sufficient number to proceed with the replacement, the Shareholders' Meeting shall supplement the board with the majorities required by law, thus ensuring that the requirement is met. The elected members of the more represented gender who possess the independence requirements specified by Article 148 of Legislative Decree no. 58/1998, and/or the Corporate Governance Code for listed companies, shall in all cases be replaced with nominees who similarly possess these requirements.

9.8 In appointing directors who for any reason have not been appointed pursuant to the procedure specified above, the Shareholders' Meeting shall vote on the basis of the majorities required by law, ensuring that the requirements of the law and the Bylaws regarding the composition of the board are respected.

9.9 If in the course of the financial year one or more vacancies occur on the Board, the procedure specified in Article 2386 of the Civil Code shall be followed, ensuring that the requirements of the law and the Bylaws regarding the composition of the board are respected.

9.10 Should a majority of the seats on the Board of Directors become vacant for any cause or reason, the remaining directors shall be deemed to have resigned and they shall cease to hold office from the time the Board of Directors has been reconstituted by persons appointed by the Shareholders' Meeting.

Article 9 – Proposed text

9.1 The Company shall be managed by a Board of Directors consisting of not less than seven and not more than nineteen members, at least two fifths ~~one third~~ of whom shall be of the less represented gender, rounding any fractions up to the next number. The Shareholders' Meeting shall establish the number of members of the Board of Directors, which shall remain unchanged until a different number is established.

9.2 The Board of Directors shall be appointed, in accordance with the applicable laws and regulations, on the basis of slates presented by the shareholders or by the outgoing Board of Directors.

9.3 Each shareholder may present or participate in the presentation of only one slate and each candidate may appear on only one slate on pain of ineligibility. All ~~The~~ slates must ensure the presence of candidates who fulfil the requirements of independence established by Article 148 of Legislative Decree 58/1998 and/or the Corporate Governance Code for listed companies, ~~so that at least one half of the members chosen from each slate, at the outcome of the vote, possesses such requirements~~ . Slates that contain a number of candidates greater than or equal to three must also ensure that both genders are present, ~~in such a way that candidates of the less represented gender are at least one third of the total~~. ~~For the purpose of applying the independence and gender requirements, fractions will be rounded up to the nearest whole number~~ .

9.4 Slates may be submitted only by shareholders who alone or together with other shareholders hold a total number of shares representing at least 0.5% (or such lower amount established by Consob regulations) of the share capital entitled to vote at the Ordinary Shareholders' Meeting.

9.5 Together with each slate, it is necessary to file individual candidates' acceptance of their candidacy and declarations in which they attest, on their own responsibility, that there are no grounds for ineligibility or incompatibility, and that they meet any requirements, as well as any other information requested by applicable law or regulation or the bylaws. Together with the declarations, a curriculum vitae shall be filed for each candidate setting out their main personal and professional data with an indication of the positions held in management and control bodies of other companies and of the grounds for their qualifying as independent in accordance with the criteria established by Article 148 of Italian Legislative Decree no. 58/1998 and / or the Corporate Governance Code of Borsa Italiana ~~and those established by the Company~~. Any changes that occur up to the day the Shareholders' Meeting is held must be promptly notified to the Company.

9.6 Each person entitled to vote may vote for only one slate.

9.7 The Board of Directors shall be elected as specified below:

a) from the slate which has obtained the majority of the votes (the so-called Majority Slate) two thirds of the Directors to be elected shall be chosen from the slate that obtains the majority of the votes (the Majority Slate), in the order in which they are listed on the slate, rounding any fractions down to the nearest whole number. At least one half of the Directors chosen from the Majority Slate (with fractions rounded up to the nearest whole number) must possess the independence requirements envisaged in art. 148 of Legislative Decree 58/1998 and/or the Corporate Governance Code of Borsa Italiana. If ~~listed companies; if~~ this is not the case, the last candidate chosen from the Majority Slate who does not fulfil such requirements shall be replaced by the first of those not elected from the same slate who possesses these requirements~~. In the absence of independent candidates on the Majority Slate in sufficient number to proceed with the replacement, the Shareholders' Meeting shall supplement the board with the majorities required by law, thus ensuring that the requirement is met;~~

b) without prejudice to compliance with the applicable laws and regulations concerning the limits to the link with the Majority Slate, the remaining directors shall be taken from the other slates; to that end, the votes obtained by the various slates shall be divided successively by whole numbers from one up to the number of directors to be chosen. The quotients obtained shall be assigned to the candidates on each slate in the order specified thereon. On the basis of the quotients assigned, the candidates on the various slates shall be arranged in a single decreasing ranking. Those who have obtained the highest quotients shall be elected, provided that at least one half of the candidates chosen from each slate (with fractions rounded up to the nearest whole number) possesses the independence requirements envisaged in art. 148 of Legislative Decree 58/1998 and/or the Corporate Governance Code of the Borsa Italiana for listed companies , proceeding, if this is not the case, to replace the last candidate elected who does not fulfil such requirements with the first of those not elected from the same slate who possesses these requirements. ~~In the absence of independent candidates on the Majority Slate in sufficient number to proceed with the replacement, the candidates with the next largest number of votes and fulfilling the independence~~

~~requirements, according to the order as per the single ranking as set forth above, shall be elected. If this is not the case, the Shareholders' Meeting shall supplement the board with the majorities required by law, thus ensuring that the requirement is met~~ .

If more than one candidate obtains the same quotient, the candidate from the slate that has not yet elected any director or that has elected the smallest number of directors shall be elected.

If none of such slates has yet elected a director or all of them have elected the same number of directors, the candidate from the slate that obtained the largest number of votes shall be elected. If the different slates have received the same number of votes and their candidates have been assigned the same quotients, a new vote shall be held by the entire Shareholders' Meeting and the candidate obtaining the simple majority of the votes shall be elected.

c) if the composition of the board resulting from the application of the criteria specified above does not respect the gender quota, as provided for in point 9.1, each candidate is assigned the quotient resulting from the division of the number of votes obtained from his or her list for the order number in which he or she is entered, with the creation of a single decreasing ranking list. Candidates of the more represented gender with the lowest quotients are replaced, starting from the last and in the number required to ensure gender quota compliance in the composition of the board, by the candidates of the less represented gender indicated in the same list of the replaced candidate, following the order in which they are listed. Candidates of the more represented gender who possess the independence requirements specified by art. 148 of Italian Legislative Decree 58/1998 and/or the Corporate Governance Code of the Borsa Italiana shall in all cases be replaced with nominees who similarly possess these requirements;

d) if there is no candidates with the characteristics required to ensure the correct composition of the body as set out in point 9.1, the Shareholders' Meeting shall supplement the board with the majorities required by law, thus ensuring that the requirement is met.

~~If the composition of the resulting board is not in compliance with the gender quota, taking into account their ranking order on the slate, the necessary number of the last candidates of the more represented gender elected from the Majority Slate shall forfeit their post to ensure compliance with this requirement, and shall be replaced by the first candidates not elected from the same slate who are of the less represented gender. In the absence of a sufficient number of candidates of the less represented gender in the Majority Slate, the Shareholders' meeting shall appoint the missing directors according to the majority established by law, ensuring that this requirement is met. The elected members of the more represented gender who possess the independence requirements specified by Article 148 of Legislative Decree no. 58/1998, and/or the Corporate Governance Code for listed companies, shall in all cases be replaced with nominees who similarly possess these requirements.~~

9.8 In appointing directors who for any reason have not been appointed pursuant to the procedure specified above, the Shareholders' Meeting shall vote on the basis of the majorities required by law, ensuring that the requirements of the law and the Bylaws regarding the composition of the board are respected.

9.9 If in the course of the financial year one or more vacancies occur on the Board, the procedure specified in Article 2386 of the Civil Code shall be followed, ensuring that the requirements of the law and the Bylaws regarding the composition of the board are respected.

9.10 Should a majority of the seats on the Board of Directors become vacant for any cause or reason, the remaining directors shall be deemed to have resigned and they shall cease to hold office from the time the Board of Directors has been reconstituted by persons appointed by the Shareholders' Meeting.

- to give to the Board of Directors and, on its behalf, to the legal representatives pro tempore, also acting severally, the broadest powers to complete all the necessary formalities for the adopted resolution to be entered in the Business Register, accepting and introducing the non substantial amendments, additions or deletions to them, which may be required by the competent authorities, as well as all the powers necessary for legal and regulatory compliance consequent on the resolution adopted.

GLOSSARY

The following explanations are not intended as strict definitions, but to assist readers to understand certain terms as used in this Annual Report.

2G (second-generation Mobile System)

Second-generation mobile systems using digital encoding and including GSM, D-AMPS (TDMA) and CDMA. 2G networks are in current use all over Europe and other parts of the world. These systems support voice and limited data communications, as well as auxiliary services such as fax and SMS.

3G (third-generation Mobile System)

Third-generation wireless system, designed to provide high data speeds, always-on data access, and greater voice capacity. 3G networks allow the transfer of both traditional communication services (telephony, messaging) and data (such as downloading Internet information, exchanging email, and instant messaging). The high data speeds, measured in Mbps, are significantly higher than 2G. 3G networks technology enable mobile video, high-speed Internet access. The standards of the 3G technology include UMTS, based on WCDMA technology (quite often the two terms are often used interchangeably) and CDMA2000.

4G (fourth-generation Mobile System)

Fourth-generation systems are designed to provide, in addition to legacy services, mobile broadband Internet access to several kinds of devices such as laptops with wireless modems, smartphones, tablets, and other mobile devices. Current and future applications include mobile web access, IP telephony, gaming services, high-definition mobile video, video conferencing, Internet of Things and cloud computing applications. 4G standards include LTE e LTE-A (LTE-Advanced). LTE offers a higher spectral efficiency in bits per Hertz and download bandwidth up to 150 Mbit/s per cell reducing the latency time. LTE enables services that require high interactivity (e.g. gaming, video conferencing). A further development of LTE, called “LTE Advanced,” is being implemented and will allow reaching even higher bitrates in download.

5G (fifth-generation Mobile System)

5G indicates the fifth-generation wireless systems that will be introduced on market soon. International standard fora like 3GPP (3rd Generation Partnership Project) and ITU (International Telecommunication Union) are defining characteristics and standards of 5G future connectivity and the first field trials have already been carried out.The main elements of the 5G network will be:

- bit-rate significantly higher than 4G in larger spectrum bandwidth (up to tens of Gbit/s over hundreds of MHz) to ensure greater quality of service, for innovative services such as video download and live streaming;
- ultra-low latency in the order of milliseconds;
- possibility of connecting simultaneously hundreds of thousands of objects (Internet of Things): wearable technologies, automatic systems for traffic control, assisted driving for vehicles, home automation;
- ability to connect moving vehicles at higher speeds.

Amount charged by national operators for the use of their network by other operators’ customers. It is also known as an “interconnection charge”.

5G NR

5G New Radio. It is the new 5G Radio Access Technology (RAT). See 5G SA and NSA.

5G NSA

The non-standalone (NSA) mode refers to a 5G deployment option where NR works in cooperation with an LTE access.

5G SA

The standalone (SA) mode refers to a 5G deployment option based only on one 5G RAT (i.e. NR or LTE) without cooperation with another RAT), connected to a 5G Core Network.

ADS (American Depositary Shares)/ ADR (American Depositary Receipt)

Equity shares used for the listing of TIM ordinary and savings shares on the NYSE (The New York Stock Exchange). Each ordinary ADS corresponds to 10 TIM ordinary shares.

ADSL (Asymmetric Digital Subscriber Line)

Technology that transforms through a modem the traditional copper fixed line into a high-speed digital connection for the transfer of multimedia data. ADSL is an asymmetrical technology used to achieve broadband transmission.

Agile

In software engineering, the expression Agile (or agile software development) refers to a set of software development methods that are opposed to traditional models such as cascade models (e.g. waterfall model); Agile methods propose a less structured approach focused on the objective of delivering to the customer quickly and frequently software that is functional and with best quality. Among the practices promoted by agile methods, today in general referred to the Project Management of products (not exclusively software), there are: the setup of small, poly-functional and self-organized development teams, iterative and incremental development, adaptive planning, and the direct and continuous involvement of the customer in the product development process.

AI (Artificial Intelligence)

Ability of a technological system to solve problems and carry out tasks and activities typical of the mind and human behavior. In the computer science field, it is the discipline that deals with creating machines (hardware and software) able to "act" autonomously (solve problems, perform actions, etc.).

API (Application Programming Interface)

An API is a set of procedures used to interact with other programs and expand their functionalities. APIs are software libraries available for a given programming language that extend some functionality of the platforms making them interoperable and open to different implementations.

ATM (Asynchronous Transfer Mode)

A network protocol through which the transfer of data is achieved using the encapsulation of fixed length (53 bytes) data units, called cells, instead of variable-length packets as is the case in packet-switched networks.

Automation

This term identifies technologies for automated equipment, systems and processes automation, reducing the need for human intervention and simplifying network setup and maintenance activities.

Backbone

Portion of the telecommunication network that supports long-distance connections and aggregates large amount of traffic and from which the connections for serving specific local areas depart.

Backhauling

It refers to the interface between the radio access node and the core network.

Big Data

Big data is a term used to describe the set of technologies and methods for massive data analysis. The term indicates the ability to extrapolate, analyze and relate a huge amount of heterogeneous, structured and unstructured data, to discover the links between different phenomena and predict the future ones.

Bit-stream access

Wholesale interconnection services which consist in the supply by a dominant telecommunications operator (incumbent) of access transmission capacity between an end customer and an interconnection point of another operator (OLO).

Blockchain

The Blockchain represents an innovative technology for structuring data and information with sharing on the network; a blockchain system is like a distributed database or virtual register, structured as a chain of blocks (hence the term blockchain) containing the transactions, and whose validation is entrusted to a consensus mechanism distributed on all the nodes of the network participating to the chain. The main characteristics of blockchain are the immutability of the registry, the traceability of transactions and the security based on advanced cryptographic techniques. Blockchain technologies are currently used to support global supply chains, financial transactions (e.g. BitCoin), accounting assets and distributed social networks.

BRAS (Broadband Access Server)

Also named BNG, it is an equipment that handles the access sessions of fixed broadband users. It authenticates the users, terminates the logical links originated at users' premises, produces user accounting data, may apply policies and QoS techniques.

Broadcast

Simultaneous transmission of the same information to all nodes and terminal equipment of a network.

BSC (Base Station Controller)

Control node of the 2G radio access network and interface with the MSC switching node. It has the task of supervising and controlling radio resources, for both call or data setup and maintenance.

BSS (Business Support System)

The system used by network operators to manage business operations such as billing, sales management, customer-service management and customer databases.

BTS (Base Transceiver Station)

Radio base station transmitting and receiving the GSM radio signal to cover an area , split in one or more cells) by using one or more radio transceivers (TRX). BTS performs also GSM communications ciphering/deciphering.

Bundle

Commercial offer including multiple telecommunications services (voice, broadband internet, IPTV, other) by an operator under the same commercial brand. Dual Play bundle includes fixed telecommunication services and broadband Internet; Triple Play bundle is the "dual play bundle" integrated with IPTV; Quadruple Play bundle is the "bundle triple play" integrated with mobile telecommunication services.

Bypass

Opposite of COLT; these are Central Offices that don't contain active equipments for NGA customers; in long term plans will be released, not before migrating all legacy services.

Caching

Web contents caching (videos, HTML pages, images, etc.) is a technology that allows to reduce bandwidth usage and content access time. A cache stores copies of documents requested by users in location closer to the users than the originating sites, so that subsequent requests can be satisfied by the cache itself, under appropriate conditions.

Carrier

Telecommunication services operator, providing a transport of communication services by means of its physical telecommunication network.

Carrier Aggregation

Technology used to aggregate more radio carriers to increase the transmission speed over a wireless network.

CCA (Current Cost Accounting)

A method of accounting that values assets at their current replacement cost rather than their original cost.

CDMA (Code Division Multiple Access)

CDMA is a channel multiple access method used in radio communication. First radio systems based on CDMA were developed by Qualcomm, and commercially introduced in 1995. It enables the simultaneous transmission on the same channel of multiple signals, each of which is uniquely coded to distinguish it from the other messages.

CDN (Content Delivery Network)

Content Delivery Networks), are content distribution systems (especially large multimedia contents, such as IPTV) managed by a Service Provider for the provision of audio streaming services and video, with better quality towards customers.

CDP (Carbon Disclosure Project)

International initiative that encourages companies to focus on the management of the risks and opportunities emerging from climate change.

Cell

Geographical portion of territory illuminated by a radio base station.

Central Office

A building where the copper wires or optical fibers that make up the access network, reaching the customers, originate from. It hosts equipment for telephony services ('Stadio di Linea' in TIM terms), broadband services (DSLAM) and possibly ultrabroadband services (OLT). Some COs also host equipment of higher hierarchical rank (SGU for telephony, router for data services), and those COs also collect traffic from the other COs which are not so equipped.

Central Unit (CU)

It is a logical node hosting PDCP, RRC and SDAP protocol layers and other control functions based on a higher layer functional split.

Channel

The portion of a communications system that connects a source to one or more destinations by means of transmission media and optical, electric, electromagnetic signals.

Closed User Group

Group of customers who can make and receive calls or messages within the group at special conditions (restricted access, dedicated pricing).

Cloud

The term Cloud is used as an abbreviation of the concept of "Cloud Computing, i.e. a model of consumption of processing resources (for example networks, servers, memory, applications and services) through the network; with the Cloud, the end customer, otherwise defined as cloud consumer, is allowed to access, widespread, easy and on-demand to a shared and configurable set of resources that can be quickly acquired and released with minimal management or interactions with the service provider. The Cloud model is made up of five essential features: 1) Self Service on customer request, 2) broad-network access, 3) resource sharing, 4) elasticity/automation in resource demand, 5) certified SLAs, three service models (see also SaaS, PaaS and IaaS) and four distribution/deployment models (private, public, hybrid and communities).

Cloud native

Cloud native refers to an approach to build applications in a way that allows the full exploitation of the cloud paradigm (see Cloud).

Cogeneration

Cogeneration is the combined production of electrical (or mechanical) energy and useful heat from the same primary source. By using the same fuel for two different purposes, cogeneration aims at a more efficient use of primary energy, with associated cost savings especially in production processes where there is a strong overlap between the use of electricity and heating.

Cognitive Computing

Advanced artificial intelligence system in which the machines have part of the typical functions of a human brain. Cognitive computing technologies are able to process enormous amounts of information, learn autonomously, interact in human language and reproduce human thought models.

COLT (Central Office Long Term)

It refers to Central Offices that remain also for long term plans, connecting NGA customers with Fiber Optic.

Community

A group of people who have some interests in common and communicate via Internet (i.e. via social network).

Connected Cars

A connected car is a vehicle with an internet access and sensors for sending and receiving signals, perceiving the surrounding environment and to get in touch with other vehicles and services.

Co-siting

Agreements to share technological sites (for Telecommunications, specifically, sites of access to the network and passive infrastructure) by several operators in order to achieve a more efficient use of network infrastructure in urban and rural areas.

CO2 - Carbon Dioxide

Carbon dioxide is one of the major greenhouse gases. It is linked to industrial processes and is the product of combustion especially as the result of the use of fossil fuels.

CPE (Customer Premise Equipment)

The Customer Premise Equipment is an electronic device (terminal, telephone, modem) for telecommunications used on the user's side that is able to connect directly to the geographic transmission network through appropriate interfaces. The connection between the CPE and the network can be realized on physical carrier (optical fiber, telephone twisted pair) or on radio (wireless) carrier.

CPS (Carrier Pre-selection)

Within the framework of the Equal Access policy guaranteed to all operators, the CPS (Carrier Pre-Selection) is a feature of the telephone network that allows to permanently specify the call routing to the chosen operator. This function must be implemented by the access operators in their own plants.

C-RAN

It refers to a Centralized Cloud RAN, a paradigm addressing centralized processing, collaborative radio, real-time cloud computing, and power efficient infrastructure. It is an architecture that aggregates Base Stations computational resources into a central pool by enabling improved radio coordination. C-RAN exploits software-defined networking (SDN) and Network Functions Virtualization (NFV) techniques as well as data center processing capabilities to enable the separation of the control and data planes and to achieve high flexibility by allowing network resource sharing in a dynamic way.

Cybersecurity

It deals with the analysis of threats, vulnerabilities and the risk associated to internet-connected systems, including hardware, software and data, to protect them from the attempt to expose, alter, disable, destroy, steal or gain unauthorized access or make unauthorized use of an asset.

DAS (Distributed Antenna System)

It is a network of distributed antennas connected to a signal source in order to provide wireless services in a geographical area or indoor. The Radiofrequency signal is combined and distributed through an antenna system.

Data Center

The Data Center is the department of a company that hosts and manages back-end IT systems and data repositories: so, its mainframes, servers, databases, etc. In the past, this type of management and control was in a single physical place, hence the name of data center. The development of new distributed computing technologies has inaugurated new management criteria that see more data centers located/distributed at both a physical and virtual level.

DCC (Digital Contact Center)

It is a set of platforms used to connect customers to most appropriate human and virtual Customer Care agents, via different channels (voice, web, apps, mail, chat, sms) and to support agents in the interaction with customers (e.g. Verbal Ordering, Back Office).

DDoS (Distributed Denial of Service)

A distributed denial-of-service (DDoS) is an attack to a target, such as a server, website or other network resource, and cause a denial of service for users of the targeted resource. A flood of incoming messages, connection requests or malformed packets to the target system forces it to slow down or even crash and shut down, thereby denying service to users or systems.

Decommissioning

The term decommissioning means the disposal of the oldest technological solutions (legacy or obsolete) in order to rationalize and simplify the current Telecommunication networks with the aim of optimizing investments and improving the quality and time-to-market of services.

DevOps

In computer science, with DevOps (from the English contraction of Development and Operations) we mean an agile method of software development that aims at communication, collaboration and integration between developers and operations operators. DevOps is therefore an approach to the development and implementation of applications in a company, that has as its objective the release of the product, the testing of the software, the evolution and maintenance (correction of bugs and minor releases) to increase reliability and security and speed up development and release cycles.

Digital divide

The gap between people with effective access to digital and information technology and those with very limited or no access at all. The term encompasses among other things: gaps in ownership of or regular access to a computer, or internet access due to being located in geographical areas with no broadband connectivity.

Distributed Unit (DU)

It is a logical node hosting RLC/MAC/High-PHY protocol layers based on a lower layer functional split.

DLA (Data Layered Architecture)

It is an architecture for real-time management of user data in telecoms networks (such as user profiles, etc.). It introduces a separation between a logically centralized data storage layer, taking care of data consistency and availability, and a front-end layer which handles requests coming from network elements.

DNS
The register containing the numeric IP addresses (for example 123.456.789.0) associated with the alphanumeric addresses (name.surname@dominio.com) commonly used to identify a website or e-mail address.

DPI (Deep Packet Inspection)

It is a technology for analysis of live traffic packets which looks 'deeply' into packets payload, i.e. up to application level, rather than just at IP/TCP/UDP headers level. It enables advanced traffic management.

Dsl Network (Digital Subscriber Line Network)

It is a network technology family that provides wide bandwidth digital transmission at short distances, through the traditional twisted copper pairs from the first switching office to the end user.

DSLAM (Digital Subscriber Line Access Multiplexer)

DSLAM denotes equipment multiplier of digital access lines able to process digital signals of various clients with xDSL lines and multipliy them in a high rate data link to the nodes of the Internet.

DTT (Digital Terrestrial TV)

Digital Terrestrial Television Broadcasting is a type of broadcasting technology that provides a more effective way of transmitting television services (in terms of number of channels and images quality) using a digital system.

DVB-H (Digital Video Broadcasting-Handheld)

DVB-H was a standard for the transmission of digital video optimized for mobile networks and handheld devices such as smartphones and cellular phones.

DWDM (Dense Wavelength Division Multiplexing)

It is a technology for multiplying and transmitting at the same time optical signals with different wavelengths in a single optical fiber in order to increase the available amount of bandwidth.

EDGE (Enhanced Data for GSM Evolution)

It is a technology that increases the speed of data transmission of the GPRS the standard from 30-40 Kbit /s to 400 Kbit / s in the best radio transmission condition.

Edge (Network Edge)

It is a segment of the network lying between access and core, wherein service functions are located (such as, e.g. those performed by BRAS). Depending on the context, it may be quite distributed e.g. to the level of mobile Base Station, or less distributed e.g. at the edge of the backbone.

Edge cloud.

It refers to a cloud infrastructure deployed at the network edge. An Edge Cloud architecture is used to decentralize (processing) power to the edges (clients/devices) of the network.

EEB (Energy Efficiency in Buildings)

International initiative promoted by the WBCSD (World Business Council for Sustainable Development) for research in energy efficiency in buildings in order to reduce the environmental impact and the energy costs.

EFFC (Extraction Full Free Cooling)

A cooling system for the reduction of consumption without the use of greenhouse gases. The EFFC is based on the principle of free cooling (forced ventilation without the use of air-conditioning), combined with a system to extract the hot air produced by the apparatus and further cooling (adiabatic) of incoming air obtained by exploiting a zone with a high concentration of nebulized water.

EMF limits (ElectroMagnetic Field limits)

Electromagnetic fields are present everywhere and are generated both by natural sources (thunderstorms, earth magnetism) and human-made ones such as power lines, TV antennas, mobile base stations, microwave ovens. They are known to affect human body in ways that depend on their frequency. For radiofrequency fields, such as those produced by mobile base stations and mobile handsets, the major biological effect is heating of the body tissues. The current view of scientific community, as outlined by World Health Organization, is that while exposure to high levels of EMF are harmful to health, there is no evidence that prolonged exposure to low levels of EMF might be harmful. The definition of what is meant to be a level low enough to be harmless is left to individual Countries, however guidelines have been defined by the International Commission on Non-Ionizing Radiation Protection (ICNIRP).

Regarding Italy, the exposure limit is 20 V/m. Moreover, in homes, schools, playgrounds and places where people may stay for longer than 4 hours per day, an 'attention value' of 6 V/m is applied and averaged over any 24 hour period.

EMS (Environmental Management Systems)

Environmental management systems contribute to the sustainable management of production and support processes and are a stimulus to the continual improvement of environmental performance as they are tools to ensure effective management, prevention and the continuous reduction of the environmental impact in work processes.

eNB (Evolved Node B)

It is the Radio Base Station in 4G technology, which implements LTE radio interface and manages its radio resources.

EPC (Evolved Packet Core)

It is the core segment of a 4G network. It performs management of user mobility, routing of traffic (which in 4G is only packet traffic), policy enforcement, production of accounting data, interconnection with IP networks.

EPS (External Power Supplies)

External power supplies of equipment.

eSIM (embedded SIM)

It represents the evolution of the SIM: it is an integrated circuit embedded directly inside a device and consequently not extractable and not replaceable, but remotely managed through the functionality of the device itself.

Ethernet

Family of computer networking technologies for local area networks (LANs) and metropolitan area networks (MANs).

EuP (Energy-using Products)

The Eco-Design Directive for Energy-using Products (2005/32/EC) establishes a regulatory framework that manufacturers of energy-using products (EuPs) must follow, from the design phase onward, to increase energy efficiency and reduce the negative environmental impact of products.

Feeder

Carrier class IP routers that perform the function of collecting and concentrating fixed and mobile network traffic as well as commercial one, originating from a basin of Central Office Areas. The traffic collected by the Feeders is delivered in double homing to the Metro nodes on physically diversified routes.

FFC – Full Free Cooling

Cooling system based on the use of forced ventilation to reduce energy consumption.

Fronthaul

In the functional split of a Base Station, it refers to the interface between the Remote Unit (RU) and the Distributed Unit (DU).

FSC (Forest Stewardship Council)

The Forest Stewardship Council is an international non-profit NGO. The FSC represents an internationally recognized forest certification system. The purpose of certification is correct forest management and traceability of forestry products. The FSC logo guarantees that a product has been made with raw materials deriving from forests correctly managed according to the principles of the two main standards: forest management and chain of custody. FSC certification is an independent, third-party scheme.

FTTx (Fiber To The x)

It is the term used to indicate any network architecture that uses fiber optic cabling in telecommunications access networks to replace, partially or totally, traditional copper cables. The various technological solutions differ in the point of the distribution network where the fiber connection is made, with respect to the end-user's location. In the case of FTTC (Fiber to the Cabinet) the fiber connection reaches the equipment (distribution cabinet) located on the sidewalk, from where copper connections are run to the customer; in the case of FTTB (Fiber to the Building) the fiber arrives at the base of the building to a distribution box from where the vertical copper connection starts; in the case of FTTH (Fiber to the Home), the fiber connection terminates inside the customer premises.

FWA (Fixed Wireless Access)

Fixed Wireless Access refers to a set of transmission systems developed to exploit specific frequencies of the radio spectrum in order to provide fixed broadband connectivity services (with nominal connection speeds equal to 1 Gbps).

Gateway

An interconnection node between networks. A Gateway node may be used to separate networks belonging to different Domains or make functionally different networks interwork through protocol interworking.

G-FAST

G.FAST (Fast Access to Subscriber Terminal, group "G" of the ITU-T recommendations) is a DSL standard, fourth generation on copper, adopted by ITU-T starting from 2014 that allows to reach aggregate Downstream speeds + Up Stream of about 500 Mbit / s up to 100m and about 800-900 Mbit / s up to 50m.

It is therefore a technology with a speed higher than VDSL2 and eVDSL but, being optimized for very short distances, it requires the network devices to be positioned even closer to the customer than the cabinets line, or rather in distribution boxes at or at the base of buildings.

GPRS (General Packet Radio System)

Packet switched system to efficiently transmit data over 2G cellular networks.

GPON (Gigabit capable Passive Optical Network)

A passive optical network (PON) is a network architecture that brings fiber cabling and signals to the home using a point-to-multipoint scheme that, by unpowered fiber optic splitters, enables a single optical fiber to serve multiple premises.

GRX (GPRS Roaming eXchange for Mobile Operators)

The GRX service allows Mobile Operators to globally interconnect GPRS networks around the world enabling global GPRS roaming coverage.

GRI (Global Reporting Initiative)

The Global Reporting Initiative (GRI) is a leading organization in the field of sustainability. GRI promotes sustainability reporting as a way for organizations to become more sustainable and contribute to sustainable development.

GSM (Global System for Mobile Communication)

A worldwide standard for digital cellular telephony working on the 900MHz and 1800MHz bands. It belongs to the Second Generation (2G) of mobile systems.

HCFC (Hydrochlorofluorocarbons)

Chemical compounds used mainly in cooling systems to replace chlorofluorocarbons (CFCs) which were banned by the Montreal Protocol. They have a more limited effect in depleting the ozone layer (approximately 10% of the ozone-depleting potential of CFCs).

HFC (Hydrofluorocarbons)

Compounds used in cooling systems. They belong to the family of greenhouse gases. They do not harm the ozone layer.

HDSL (High-bit-rate Digital Subscriber Line)

Technology of xDSL family, standardized in 1994. It provides up to 8 Mb/s symmetrical over copper.

HLR (Home Location Register)

Database where customer data are recorded. It is part of 2G and 3G systems.

Home Access Gateway – Access Gateway – Home Gateway – Residential Gateway

Home networking device that is used to concentrate voice/data/video traffic of customers for private TLC networks and to connect devices in the home to the Internet or other WAN.

Housing

Leasing of physical space to customers, which is managed within a data center for the installation of their own equipment or servers.

HSPA (High Speed Packet Access)

Evolution of UMTS, which enables broadband mobile data both in Downstream (HSDPA) and Uplink (HSUPA), up to 42 Mb/s and 5.76 Mb/s, respectively.

IaaS (Infrastructure as a Service**)**

Through a Cloud IaaS offer (Infrastructure as a Service, see also Cloud models), a consumer acquires from a Cloud Provider in a flexible and dynamic way computing, memory, network resources and other fundamental calculation resources, through which the customer can develop and run arbitrary software, including operating systems and applications. The consumer does not manage or control the underlying Cloud infrastructure, but controls operating systems, memory, applications and possibly, in a limited way, some network components (e.g. firewalls).

ICT (Information and communication(s) technology)

Broad area concerned with information technology, telecommunications networks and services and other aspects of managing and processing information, especially in large organizations.

IEEE (Institute of Electrical and Electronics Engineers)

An organization of professional scientists aiming at promoting technology science and research in the field of electrical and electronics engineering and related fields. IEEE also works as a publishing house and standardization body.

IMS (IP Multimedia Subystem)

It is the architecture for providing IP Multimedia services, i.e. voice/video/text/etc communications over IP networks. It comprises all the network elements related to signaling and media flow handling.

IMSI (International Mobile Subscriber Identity)

The International Mobile Subscriber Identity is a unique identifier associated with a SIM card in cellular networks.

Interconnection

Interconnection refers to the physical and logical connection among public telecommunication networks belonging to different operators, in order to enable users of an operator to communicate with users of the same or a different operator, or to access services provided by another operator.

Internet

Global network for networks interconnection based on a common protocol suite, i.e. TCP/IP, which is the language by which connected equipment (hots) are able to communicate.

Internet of Things

The Internet of Things refers to the extension of Internet to the world of objects (devices, equipment, systems,..), which become recognizable and acquire intelligence thanks to the fact that they can communicate data about themselves and access aggregate information from part of others. There are many fields of applicability: from industrial applications (production processes), logistics and infomobility, to energy efficiency, remote assistance and environmental protection.

IP (Internet Protocol)

A connectionless data routing protocol, used for data transmission on both public and private networks, in particular over the Internet.

IPCC (IP Contact Center)

See DCC.

IP/MPLS (Internet Protocol/Multi Protocol Label Switching)

A packet switching protocol to optimize network behaviors of mapping Layer3 (IP) end-to-end data flow to Layer2 traffic between adjacent network nodes.

IPTV (Internet Protocol Television)

A system that utilizes the Internet Protocol infrastructure to transmit digital television content over a network and deliver it via a broadband Internet connection.

ISDN (Integrated Services Digital Network)

A narrowband system in which several services (e.g., voice and data) may be simultaneously transmitted end to end in digital form.

ISPs (Internet Service Provider)

A vendor who provides access to the Internet and World Wide Web.

ITU (International Telecommunication Union)

An international organization that aims to set telecommunications standards and in the use of radio waves. Founded in 1865 in Paris, it is one of the specialized agencies of the United Nations and its head office is in Geneva.

Jitter

In electronics and telecommunications jitter indicates the variation of one or more characteristics of a signal such as, amplitude, frequency, phase, transmission delay. The causes leading to jitter must be kept at the center of the design of electronic systems and components in which signal integrity is a strict constraint.

KVAR (kilovolt–amperes reactive)

Measurement system, expressed in kilovolt, of electric current lost in an AC electrical system.

LAN (Local Area Network)

A private network that covers a local geographic area and provides telecommunications services as well as interconnection between personal computers.

Lambda

Represents the single optical channel on which a signal is transmitted in fiber-optic networks.

Latency

The latency of a system can be defined as the time interval between the time the input arrives to the system and the time when its output is available. In other words, latency is nothing more than a measure of the speed of response of a system.

LCA (Life Cycle Analysis)

Analysis methodology for the evaluation and quantification of environmental impacts associated with a product/process/activity along the entire life cycle from the extraction and acquisition of raw materials to the end of its life.

LLU (Local Loop Unbundling)

Service by which operators other than TIM can lease the local loop, i.e., the wire connection between the TIM local exchange and the customer's premises.

Local Loop (Twisted Pair)

Twisted pair of copper wires through which the telephone connection reaches users; it is the foundation of traditional telephone lines and it is often called the “last mile”.

LTE (Long Term Evolution)

See 4G.

Machine Learning

It is the ability of computers to learn without having been explicitly and preventively programmed.

mMTC (Massive machine type communication)

mMTC, also known as massive machine communication (MMC) or massive Machine to Machine communication, is a type of communication between huge number of machines over wireless networks where data generation, information exchange and actuation takes place with minimal or no intervention from humans.

MEMS (Micro-Electro-Mechanical Systems)

MEMS are miniaturized devices ranging in size from a few micrometers to a few millimeters, which execute one or more monitoring, processing or actuation functions by deploying a combination of electronic, mechanical, optical, chemical or biological components integrated on a usually silicon hybrid circuit.

MGCP (Media Gateway Control Protocol)

An Internet Engineering Task Force (IETF) signaling protocol allowing a bridge between classic telephone networks and Internet (i.e., IP-based) infrastructures.

MGW (Media GateWay)

Equipment that processes voice and video traffic adapting codings between different technologies (e.g. from circuit to packet).

Microservices

In the development of modern software applications, when the term micro-services is used, a specific architectural model for the development of a single application as a suite of small services is indicated; each micro-service is identified as a specialized processing process (e.g. a web server, a storage application, etc.) and is able to communicate with fast and lean mechanisms, often based on API interfaces for the description of HTTP resources. These services provide capabilities for the development of a company's business and are particularly suitable for the creation of software products according to agile methodologies; each micro-service can be implemented and managed independently using fully automated implementation algorithms, thus ensuring maximum flexibility in the development and maintenance of applications.

Midhauling

In the functional split of a Base Station, it refers to the interface between the Distributed Unit (DU) and the Central Unit (CU).

MIMO (Multiple Input Multiple Output)

It is a set of techniques aimed to increase the overall bitrate of radio access through simultaneous transmission of two (or more) different data signals on two (or more) colocated antennas, using the same frequency resources. The receiving side, also equipped with two or more antennas, is able to discriminate the different data signals by exploiting the differences in time and direction of arrival of the simultaneous signals that are caused by multipath propagation. Actually, multipath propagation i.e. the fact that a signal from A reaches a point B via multiple paths due to reflection and scattering from objects (such as buildings, trees) is a natural phenomenon affecting radio communications, which used to be seen as an impairment. Conversely, MIMO techniques exploit (using suitable signal coding) this multiplicity of paths to increase capacity.

MSC (Mobile Switching Center)

Executes functions such as controlling calls, switching traffic, billing, controlling and authentication and acts as an interface with other networks.

Multimedia

A service involving two or more communications media (e.g., voice, video, text, etc.) and hybrid services created through their interaction.

Multicast ABR (Multicast Adaptive Bit Rate)

Technology that encodes the video multicast traffic in different streams at different bitrates, used according to the channel conditions, allowing to optimize the use experience the use of network resources.

MVNO (Mobile Virtual Network Operator)

MVNO is a mobile communications service provider that does not own the radio spectrum or wireless network infrastructure over which the MVNO provides services to its customers.

NaaS (Network as a Service)

The term NaaS (Network as a Service) refers to the provision of virtual network services by a Network Provider to a third party, such as a Service Provider not equipped with geographically networked resources, or a medium/large customer that requires basic or advanced connectivity resources on a public or shared network infrastructure. Some examples of services that refer to the NaaS model are VPNs (Virtual Private Networks, Dynamic Bandwidth Services (BoD, Bandwidth on Demand) and Mobile Network Virtualization. Today, the spread of NaaS offers is increasingly supported by flexible network virtualization models and the use of network programming and automation technologies, such as Software Defined Networking (SDN).

Naked

A digital subscriber line without an analog or ISDN telephony service. It is a line dedicated to data services.

NB IoT (NarrowBand Internet of Things)

It is a 3GPP specification enabling the Internet of Things, based on the optimization of narrowband radio access aimed at the application of LTE technology to sensor networks: few and small messages per day, high coverage range (e.g. to reach the counters in the basements), very high battery life (target 10 years), high number of connections per cell (tens of thousands) and very low cost of the modules.

Net Neutrality

Net neutrality is the principle that Internet service providers should treat all data equally and not discriminate or charge differently based on user, content, website, platform, application, type of equipment, or method of communication.

Network

An interconnected system of elements. In a telephone network, these consist of switches connected to each other and to customer equipment. The transmission equipment may be based on fiber optic or metallic cables or radio connections.

Network cap

See Price cap.

Network Slicing

Network Slicing referred to 5G. Creation of multiple ad hoc logical networks segregated from each other on the same physical network infrastructure. Each network slice is an isolated end-to-end network tailored to fulfil different requirements requested by a particular application.

NFV (Network Function Virtualization)

The NFV paradigm allows both fixed and mobile network functions to become software applications, called VNF (Virtual Network Function), which the operator can instantiate on commercial servers, exploiting virtualization technologies, separating the link between hardware and software present in the current network devices.

NGAN (New Generation Access Network)

It can be realized with different technological solutions, typically fiber optic and VDSL pairs.

NGCN (Next Generation Core Network)

TIM's own name for the IP backbone.

NGDC (Next Generation Data Center)

A major rethink of the IT and Data Center architecture through the physical concentration and virtualization of servers to reduce the costs of maintenance/management and energy consumption, and to improve efficiency.

NGN (Next Generation Network)

New generation network created by TIM to meet the demands of corporations, public administrations and citizens. The new network architecture guarantees an infrastructure designed to cover multiple offers by increasing customization levels and bandwidth availability, removing bandwidth limits and providing a huge capacity along with a wide selection of access systems.

NGNs (Non-Geographic Numbers)

Non-geographic numbers are unique as they are by definition not associated with any particular geographic location (e.g. premium rate services, toll free, directory assistance services).

Node

Topological network junction, commonly a switching center or station.

Node B (similar to BTS in GSM)

This is the Radio Base Station in UMTS technology which, via an antenna, sends the UMTS radio signal that creates cell coverage (typically 3 cells for Node B). It also performs functions that are strictly linked to managing the radio connection.

N-play offering

Offerings to customers which bundle two or more of the following mobile and fixed services: voice, broadband and ultrabroadband data, video and TV, mobile.

NYSE

The New York Stock Exchange.

OAO (Other Authorised Operator)

Operators other than the incumbent one that provide services to their customers exploiting the fixed access network of the incumbent.

OHSAS (Occupational Health and Safety Assessment Series)

International Standard that sets the requirements that a management system for the protection of workers' health and safety must meet.

OLOs (Other Licensed Operators)

Companies other than the incumbent operator that operate telecommunications systems in a national market.

OLT (Optical Line Termination)

Optical element of the PON network (Passive Optical Network) that acts as an interface between the PON itself and the Backbone network. OLT is located in the central office.

ONU (Optical Network Unit)

Optical element of the PON network (Passive Optical Network) which acts as an interface with the user access device or the distribution network to users. ONU is located in the distribution cabinet.

OPB (Optical Packet Backbone)

It is the multiservice IP backbone for national transport. It is made up of interconnected nodes which are called OPB nodes, and of the very high capacity connections existing between them.

OPM (Optical Packet Metro)

It is a metro-regional network that provides Ethernet and IP connectivity for fixed and mobile network traffic, as well as for Retail or Wholesale customers. It consists of IP routers distributed on three hierarchical aggregation levels: Remote Feeder, Feeder and Metro, interconnected in double homing by physically diversified (where possible) double-way links.

Open Source

Open Source is a computer software in which source code is released under a license in which the copyright holder grants users the rights to study, change, and distribute the software to anyone and for any purpose. Open-source software may be developed in a collaborative public manner.

Optical fiber

Thin glass, silica or plastic wires, building the base infrastructure for data transmission. An optical fiber cable contains several individual fibers, and each of them is capable of delivering a signal (light impulse) at almost unlimited bandwidth. Optical fibers are usually employed for long-distance communication: they can transfer "heavy" data loads protected from possible disturbances along the way. The driving capacity of optical fibers is higher than the traditional cable and copper twister-pair lines.

ORAN

It refers to Open RAN, an architecture for building the virtualized RAN on open hardware, with embedded AI-powered radio control. Such an architecture is based on well-defined, standardized interfaces to enable an open, interoperable supply chain ecosystem in full support of and complimentary to standards promoted by 3GPP and other industry standards organizations.

OSS (Operations Support System)

Methods and procedures (whether automatized or not) that directly support the daily operation of the telecommunications infrastructure.

OTN (Optical Transport Network)

It is a technology designed to enable multiplexing of digital signals for transport over WDM links, and to achieve OAM capabilities for these signals similar to those available in SDH.

This allows a better utilization of WDM links, since it allows to fill lambdas with high rate signals (e.g. 100 Gb/s), which may contain several lower rate signals (e.g. 10 Gb/s), rather than devoting a lambda for each lower rate signal.

OTT (Over the Top) players

Operators offering contents and services on the Internet without owning the proprietary TLC network infrastructure.

Outsourcing

Entrusting an external party carrying out services and business operations. For example, it can be outsourced the planning, construction and hosting services of a telecommunications management system and, ultimately, the management of the entire telecommunications system.

PaaS (Platform as a Service)

The PaaS (Platform as a Service) represents one of the three Cloud offer service models; through a PaaS offer of a Cloud Provider, the consumer is given the opportunity to distribute applications created on their own, or acquired by third parties on the cloud infrastructure, using programming languages, libraries, services and tools supported by the supplier. The consumer does not manage or control the underlying cloud infrastructure, including network, servers, operating systems, memory, but has control over the applications and possibly the configurations of the environment that hosts them.

Packet-Switched Services

Telecommunications services provided by telcos and long-distance carriers that route packets of data between local area networks (LANs) in different geographical locations to form a wide area network (WAN). Packet-switching services are used to connect multiple LANs into a point-to-multipoint configuration, usually called a multipoint WAN.

Pay-Per-View or PPV

A system by which the viewer pays to see a single program (such as a sporting event, film or concert) at the moment at which it is transmitted or broadcast.

Pay TV

Subscription TV channels. To receive Pay TV or Pay-Per-View programs, a decoder must be connected to the television set, and a conditional access system is needed.

PCS (Personal Communications Services)

Set of wireless communications functionalities, voice and/or data, which provide similar services such as mobile ones.

Peering

Peering is the voluntary interconnection of Internet networks, that refer to different Internet Service Providers, which allows users to exchange traffic between different networks.

Penetration (market penetration)

It represents the number of people (or subscriber) who acquires goods / services of a particular brand or a particular category, divided by the population where the service is available.

Platform

It's an execution environment that includes hardware, software, application servers and other supporting tools, for the execution of programs.

PON

PON stands for "passive optical network" referring to the optical network composed by non-active components in all stages between the origin (local exchange) and the external sides (subscriber or clients).

POP (Point Of Presence)

The POP is a point of access to the network (router), provided by an Internet Service Provider (ISP), able to route traffic to end users connected to POP.

POTS (Plain Old Telephone Service)

Refers to the basic telephony service, (single-line telephones, fixed-line services and access to public voice telephony network).

Price-cap

Identifies the maximum price limit set by a regulator at which a service /product can be sold.

PSTN (Public Switched Telephone Network)

PSTN, also known as the Public Switched Telephone Network, is the first-generation telephone network and provides basic telephone service.

PTN (Packet Transport Network)

It is a class of equipment that implement natively both SDH and Ethernet technologies, i.e. it is able to transport and switch separately both kinds of traffic. It is used to connect smaller, peripheral Central Offices to larger ones, that is a use case where aside packet traffic (e.g. backhauling of broadband access and mobile sites) also legacy circuit traffic (e.g. voice, 2G backhauling) may be found.

RAN (Radio Access Network)

It is the part of mobile network that implements the radio technologies, comprising data transport functions over air interface and control functions.

RAN Sharing

Is the most comprehensive form of access network sharing. It involves the sharing of all access network equipment, including the antenna, tower and backhaul equipment. Each of the RAN access networks is incorporated into a single network, which is then split into separate networks at the point of connection to the core.

Refarming

Reassignment of frequency band of an operator of mobile networks from one technology to another for optimization reasons (examples: UMTS900 instead of GSM900 or LTE1800 instead of GSM1800).

Remote Feeder

Carrier class IP router that perform the function of collecting and concentrating fixed and mobile network traffic as well as commercial one, for a single Central Office Area. The traffic collected by the Remote Feeders is delivered in double homing to the Feeder nodes, possibly on physically diversified routes.

Remote Unit (RU)

It is a logical node hosting Low-PHY protocol layer and RF processing based on a lower layer functional split.

RNC (Radio Network Controller—counterpart of BSC in GSM)

RNC is the equipment (or node) for the control and aggregation of 3G network.

ROADM

A ROADM (Reconfigurable Optical Add-Drop Multiplexer) is a remotely reconfigurable optical multiplexer capable of switching traffic in a WDM (Wavelength-Division Multiplexing) system. Its use in a transmission network increases the efficiency of the transport allowing to transmit up to over 90 high bitrate channels (today up to 200Gbit/s) on a single pair of fibers.

Roaming

Agreement among two or more Mobile Operators from different Countries, under which Users can use the mobile network of other Operators participating in the agreement.

The roaming service is activated for example when the terminal is used overseas and enables a mobile user to access a different network from the one to which he subscribes.

RoHS (Restriction of Hazardous Substances)

European Directive No. 95/2002 that regulates the use of hazardous substances in electrical and electronic equipment, in order to contribute to the protection of human health and environment.

RTG (Rete Telefonica Generale)

RTG, also known as the Public Switched Telephone Network, is the first-generation telephone network and provides basic telephone service.

SaaS (Software as a Service)

As part of the Cloud offer service models (see also Cloud entry), the SaaS (Software as a Service) model expresses the faculty provided to the consumer to use a supplier's applications and services, operating on a cloud infrastructure. The applications are accessible from different devices through a light interface (e.g. a thin client), such as an email application on a browser, or from programs with a specific interface. The consumer does not manage or control the underlying cloud infrastructure, including network, servers, operating systems, memory, and even the capabilities of individual applications, except for limited configurations intended for him.

SAR (Specific Absorption Rate)

SAR is a measure of the percentage of electromagnetic energy absorbed by the human body when it is exposed to the action of an electromagnetic field at radio frequency (RF). See also EMF limits.

SDH Standard (Synchronous Digital Hierarchy)

The European standard for high-speed digital transmission.

It's a protocol of the physical layer used for multiplexing in time division and the subsequent digital transmission of telephony and data, in geographic networks on optical fiber, electric cable or radio link.

SDN (Software Defined Networking)

Software Defined Networking is a paradigm based on network virtualization whose aim is to transform traditional networks into flexible and intelligent platforms to satisfy in real time the bandwidth requirements and the dynamic nature of digital applications.

SD WAN (Software Defined WAN)

In Networking topic, the SD-WAN (Software Defined WAN) solutions are an innovation of the traditional Wide Area Network solutions and of the Edges IP Networking, developed to offer advanced connectivity services addressed to Business customers. SD-WAN solutions work agnostically with respect to the access technology, the WAN transport network, they use dynamic routing of data on an application basis and in strong integration with Multi-Cloud solutions, to link connectivity to some added-value services such as WAN optimization, application monitoring and advanced security.

Service Exposure

The Service Exposure is an infrastructure to expose functionalities, called API (Application Programming Interface), both to Third Parties (eg Business Partner), both for internal use.

Service Orchestration

Service orchestration means a single centralized business process that can be performed by an orchestrator (e.g. a SW platform) that coordinates the interaction between various services and is responsible for their invocation and composition, as well as the management of transactions between the individual services. Service orchestration is often compared to Service Choreography, which instead makes a decentralized approach to the composition of services, where each of the services participating in the choreography implements a self-consistent process / workflow.

Service Provider

The Service Provider offers to the Users (Residential or Business) that subscribe his offer, a range of contents and services.

SGU (Local exchange interconnection level for telephone traffic)

Local Exchange for telephone traffic carriage, routing and transmission. See also Central Office.

SIP Trunking

Session Initiation Protocol (SIP) Trunking is a service offered by a communications service provider that uses the protocol to provision voice over IP (VoIP) connectivity between an on-premises phone system and the public switched telephone network (PSTN). SIP is used for call establishment, management and teardown.

SL (Distribution Frame level for telephone traffic)

See Central Office.

Shared Access

Shared access to the user's twisted pair with another TLC service provider by using separately voice and non-voice band frequency spectrum. This mode allows keeping voice telephony with an Operator (TIM or others) and ADSL service on the proprietary network of the shared access operator (i.e. not passing over the TIM network but directly through the DSLAM of the operator).

SLA (Service Level Agreement)

Service Level Agreements are contractual instruments through which service metrics are defined (eg quality of service) that must be respected by a service provider (provider) towards their customers / users.

SLU (Sub Loop Unbundling)

It consists in providing access to the local sub-section of the Operator copper network, in particular the section of the network between the user site and the distribution cabinet or an intermediate concentration point.

Small Cells

Small cells are low energy consumption access nodes to the radio spectrum. . Smaller than the antennas, Small Cells are usually used in mobile telephony, both for the coverage of outdoor areas (squares, pedestrian streets, etc.) and for the coverage of indoor hot spots (airports, stadiums, shopping centers, stations, hospitals, university campuses, etc.).

SME (Small Medium Enterprise)

Market segment of small- and medium-size enterprises (from 3 to 50 employees).

SMART CITY

The term Smart City refers to an urban area that uses integrated ICT technologies to optimize resources in key areas: mobility, communication, economy, work, environment, administration and construction. From an infrastructural point of view, the use of available resources on the web improves economic and political efficiency and can allow social, cultural and urban development.

Smartphone

Electronic device that combines the functions of a mobile phone and a handheld computer equipped with a complete operating system.

SMART TV

The term Smart TV identifies the new generation of televisions which allows us to enjoy multimedia audio-video content (movies, TV series, music videos, gaming,..) through an internet connection.

SMS (Short Message Service)

Short text messages that can be received and sent through GSM-network connected cellular phones. The maximum text length is 160 alpha-numerical characters.

SOHO (Small Office / Home Office)

Market segment consisting of businesses that use telephone lines to connect to the Internet, as opposed to dedicated lines, and is made up of small businesses, generally with one or two employees, and businesses conducted out of the home.

SON (Self-Organizing Network)

It is a set of technologies and architectures that allows Operators to introduce, in the context of radio-mobile networks, the technological enablers for the automation of network configuration, optimization and assurance processes.

Switch

- (Telephone switch) Synonymous of Telephone Exchange, i.e. network equipment used to set up and route telephone calls to the number called possibly through other switches. They may also record information for billing and control purposes;
- (Network switch) Data networking equipment able to receive and forward packets using information at layer 2 of OSI (Open Systems Interconnection) model (i.e. hardware addresses of other equipment).

Synchronous

Type of data transmission in which there is permanent synchronization between the transmitter and receiver.

STB (Set-Top Box)

It is a customer device able to receive TV signals from a communication network (such as broadband/ultrabroadband access network, terrestrial broadcast, satellite broadcast, etc) and output them to TVs and other display devices (monitors, projectors, etc.). It may include Conditional Access functions to handle paid content.

Tablet

Portable computer with compact dimensions whose screen can be used to write or give commands with the touch of your fingers or using a specially designed stylus.

TAL (Tele Alimentation for Remote Power Feeding)

Technique for power feeding roadside network equipment (such as ultrabroadband equipment located in street cabinets in Fiber to the Cabinet architecture) from the local exchange.

TCO (Total Cost of Ownership)

The TCO represents the global cost of an asset (eg an IT equipment) during its life cycle. The TCO takes into account both direct costs (hardware costs, network infrastructure, licenses) and indirect costs (management, maintenance, energy consumption).

TDMA (Time Division Multiple Access)

A technology for digital transmission of radio signals between, for example, a mobile phone and a radio base station. TDMA breaks signals into sequential pieces of defined length, places each piece into an information channel at specific intervals and then reconstructs the pieces at the end of the channel.

ToIP (Telephony over IP)

The term is often used as synonymous of VoIP, however it has a wider meaning since it includes advanced telephony services (such as video, messaging, possibly some call handling, etc) beyond the basic voice communication.

TRX

Radio transceivers located in BTS.

UltraBroadBand

Includes all network technologies that offer connectivity from 30Mbit/s to over 1Gbit/s, referring in particular to the peak rate and not to the average available. The definition is related to the characteristics of the fixed and mobile access network. By increasing the capacity and the speed, Ultra Broadband technologies allow quicker access from multiple users to the content available on the net, also on the move, and to take advantage of high quality video up to Ultra HD and interactive gaming.

URLLC (Ultra-Reliable Low-Latency Communication)

URLLC is a set of features that provide low latency and ultra-high reliability for mission critical applications such as industrial internet, smart grids, remote surgery and intelligent transportation systems.

UMTS (Universal Mobile Telecommunications System)

See 3G.

Unbundling

It is the service offered by the incumbent to the alternative operator which consists of the rental of the local loop i.e. the wire connection between the local exchange and the customer’s premises, so that the alternative operator is able to connect the twisted pair from the customer to its own equipment.

Universal Service

The obligation to supply basic service at an affordable price, or at special rates solely for subsidized users.

UPS (Uninterruptible Power Supply)

Electrical equipment that provides continuous powering to users in case of power outage.

VAS (Value-Added Services)

Value Added Services provide a higher level of functionality than the basic transmission services offered by a telecommunications network. In PSTN and first generation mobile networks the basic service was telephony (switched voice calls, initially analog and later digital ones) while VAS could include data and fax transmission services, as well as call handling features such as call waiting, call forwarding, etc..

As time passed VAS based on call handling grew with further features such as toll free calling, voice virtual private networks, etc. A new class of VAS also developed in mobile networks, including message handling services such as SMS and MMS. In parallel, development of data networks turned data transmission services (initially X25, then Frame Relay, ATM, Ethernet, IP) into basic services of those networks, on top of which there may be VAS such as address translation, data virtual lines and virtual networks, traffic priority, encryption, etc..

A further category of VAS is those based on contents of Service Providers linked to the network, beginning with contents provided on telephony network, going on with contents delivered via SMS (news, meteo, etc) and contents provided via browsing from mobile and fixed terminals, and arriving to video streaming contents.

VDSL (Very - high – data – rate Digital Subscriber Line)

Access technology that allows providers to give clients, by means of an apparatus installed in their homes, access to voice and TV services on the traditional telephone line with speeds of up to 50 Mbps in downstream.

VDSL2 (Very - high – data – rate Digital Subscriber Line 2)

"2nd generation" VDSL, able to achieve downstream speed in the range of hundreds of Mbps. Actual data rate however is largely dependent upon the distance between customer equipment and network equipment, e.g. for distances of some hundred meters the achievable rate is about 100 Mbps. For this reason, network equipment is typically located in street cabinets, so to be closer to customers. A VDSL2 evolution named eVDSL (enhanced VDSL) yields achievable rates around 200 Mbps; it has been recently deployed in TIM network.

Vectoring

Transmission technology that removes mutual interference (crosstalk) between copper lines bundled in the same cable. Of particular interest is the use on VDSL / VDSL2 / eVDSL lines in view of the growing penetration of ultrabroadband services, which would make interference more perceptible. In this perspective, the use of vectoring allows to maintain the typical performances of the aforementioned technologies. The technology is placed in the ONU apparatus where to be effective it is applied on all the lines of a cable; this means that in case of SLU (Sub Loop Unbundling), that is the presence of ONUs of several operators serving the lines of the same cable, a more complex implementation is required, the MOV (Multi-Operator Vectoring) that coordinates the vectoring of the different ONUs.

Virtualization

An approach to implementation of functionality resorting only to software running on general purpose hardware generally not dedicated, as opposed to approaches resorting also to special purpose and/or dedicated hardware.

VOD (Video On Demand)

TV-program offering on user's request, with payment of a fee for each purchased program (a movie, a soccer match, etc.). Broadcast specifically for cable and satellite TV.

VoIP (Voice Over IP)

A technology that allows transmission of voice communication over an Internet connection or another dedicated network using the Internet Protocol (IP) data networks (such as IP-based LANs, Intranets or the Internet) instead of a conventional phone line.

VoLTE/ViLTE (Voice over LTE / Video over LTE)

A service providing voice and video calls over IP via LTE radio access, controlled by standard ToIP architecture named IMS (IP Multimedia Subsystem). The mated naming VoLTE/ViLTE is used since the service is essentially the same for voice and video, differing only in the type of media streams that are set up. Since it is standard based, it achieves interoperability among user terminals and between terminals and networks.

VPN (Virtual Private Network)

A network designed for a business customer or government agency, using the infrastructures of a carrier and providing customized services, and which operates in such a manner as to appear dedicated to the user thereof.

VRAN (Virtual Radio Access Network)

It is an architecture applied in 4G/5G networks which implies a split of the Base Station between a Centralized Unit and a Remote or Distributed Unit. The CU is typically placed in a more centralized site than antennas and deals with baseband signal processing, so also the terminology BBU (BaseBand Unit) is used, while the Remote Unit is left at antenna sites to provide radio coverage and is also termed RRU (Remote Radio Unit). Given this split the CUs may be implemented as Virtual Network Functions on a suitable hardware infrastructure, from which the 'virtual' title.

For the viability of the architecture a key issue is the choice of the partition of Base Station functions between CUs and DUs, which affects the requirements on communication links CU-DU (referred to as midhaul). In the 5G development efforts this issue has been addressed by identifying split options that are candidate for standardization.

VULA (Virtual Unbundling Local Access)

A wholesale service provided by incumbent providers to alternative operators, where the incumbent provides – over its broadband access network – the transport of data traffic (a 'bitstream') between the end customer and an interconnection point where the alternative operator receives said traffic. In TIM's case, the interconnection point is located at local exchange level, aside the OLT (Optical Line Termination) i.e. the head end of optical access network.

WAN (Wide Area Network)

A private network that covers a wide geographic area using public telecommunications services.

WEEE (Waste Electrical and Electronic Equipment)

Waste from electrical and electronic equipment which the holder intends to dispose of as it is faulty, unused or obsolete.

White, gray and black areas

The distinction between white, gray and black areas is relevant for the assessment of state aid to support the development of ultrabroadband networks, in terms of the compatibility of the aid with respect to Community legislation. This classification is contained in the European Union Guidelines:

- white areas are areas without ultrabroadband (UBB) networks (connectivity), where private investors do not intend to invest in the next three years;
- gray areas are areas in which an ultrabroadband (UBB) network (connectivity) is present or will be developed in the next three years by a single private operator;
- black areas are areas in which at least two ultrabroadband (UBB) networks (connectivity) of different operators are present or will be developed over the next three years.

Wi-Fi

Wireless technology enabling data links in a limited area, generally in some hundred meters range, with speed up to tens of Mbps. Typical applications are in homes and offices as alternative to wired LAN, as well as in public services for Internet access, and also to create link between devices (e.g. between a laptop and a smartphone linked to Internet).

Wi – Max (Worldwide Interoperability for Microwave Access)

A technology that allows wireless access to broadband telecommunications networks, initially defined in order to work on ranges up to tens of kilometers and speed in the tens of Mbps.. It was defined by the Wi—MAX Forum, a global consortium formed in 2001 that brings together major companies in the field of fixed and mobile telecommunications and whose purpose is to develop, test and promote the interoperability of systems based on IEEE standards.

WDM (Wavelenght Division Multiplexing)

Technology by means of which it is possible to transport on a single optical fiber different flows of information which correspond to distinct and separable wavelengths.

WLL (Wireless Local Loop)

The means of providing a local loop equivalent (e.g. connection from customer premises to local exchange) without the use of wiring, resorting instead to wireless technologies.

WLR (Wholesale Line Rental)

It is a telephony only wholesale service provided by the incumbent to alternative operators, whereby the alternative operator gets an ULL-like service without the need to physically deploy equipment at local exchange sites. It is technically similar to Carrier PreSelection (CPS),and differs from CPS on the commercial side since the end customer is not subscribed to the incumbent's access service, nor billed for it; in this way alternative operators are able to provide to customers both access and traffic services and to produce a single bill covering both services.

WTTX (Wireless To The X)

WTTx is a 4G and 4.5G-based broadband access solution, which uses wireless to provide fiber-like broadband access for household.

xDSL (Digital Subscriber Line)

It is a technology that makes use of standard telephone lines and it includes different categories including ADSL (Asymmetric DSL), HDSL (High-data-rate DSL), VDSL (Very high bit rate DSL) and eVDSL (enhanced Very high bit rate DSL). This technology uses a digital signal at very high frequencies in order to achieve high data transfer rates.

XGS-PON

XGS-PON is an updated standard for Passive Optical Networks (PON) that can support higher speed 10 Gbps symmetrical data transfer and is part of the family of standards known as Gigabit-capable PON, or G-PON.

USEFUL INFORMATION

The 2019 Annual Financial Report can be consulted by accessing the telecomitalia.com/investitors website.

The Annual Corporate Governance Report and the Remuneration Report can be viewed by accessing the telecomitalia.com/about us website.

It is also possible to receive information on TIM at www.telecomitalia.com and information on products and services at www.tim.it.

Finally, the following numbers are available:

- Free Number 800.020.220 (for calls from Italy) or +39 011 2293603 (for calls from abroad) available for information and assistance to shareholders.

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