

TIM PARTICIPACOES SA  
Form 20-F  
April 06, 2018

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

**FORM 20-F**

**.. REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR (g) OF THE SECURITIES EXCHANGE ACT OF 1934**

**OR**

**x ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

**For the fiscal year ended December 31, 2017**

**OR**

**.. TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

**For the transition period from \_\_\_\_\_ to \_\_\_\_\_**

**OR**

**.. SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

**Date of event requiring this shell company report**

Commission file number: 001-14491

**TIM PARTICIPAÇÕES S.A.**

(Exact name of Registrant as specified in its charter)

**TIM HOLDING COMPANY**  
(Translation of Registrant's name into English)

**THE FEDERATIVE REPUBLIC OF BRAZIL**  
(Jurisdiction of incorporation or organization)

**João Cabral de Melo Neto Avenue, 850 – North Tower – 2<sup>nd</sup> floor**  
**22775-057 Rio de Janeiro, RJ, Brasil**  
(Address of principal executive offices)

**Adrian Calaza**  
**Chief Financial Officer and Investor Relations Officer**  
**TIM Participações S.A.**  
**João Cabral de Melo Neto Avenue, 850 – North Tower – 12<sup>th</sup> floor**  
**22775-057 Rio de Janeiro, RJ, Brazil**  
**Tel: 55 21 4009-6048**  
**ri@timbrasil.com.br**

(Name, Telephone, E-mail and/or Facsimile Number and Address of Company Contact Person)

**Securities registered or to be registered pursuant to Section 12(b) of the Act:**

<b>Title of each class</b>	<b>Name of each exchange on which registered</b>
Common Shares, without par value*	New York Stock Exchange
American Depositary Shares, as evidenced by American Depositary Receipts, each representing five Common Shares	New York Stock Exchange

\* Not for trading, but only in connection with the listing of American Depositary Shares on the New York Stock Exchange

Securities registered or to be registered pursuant to Section 12(g) of the Act: **None**

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act: **None**

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the annual report.

<b>Title of Class</b>	<b>Number of Shares Outstanding</b>
Common Shares, without par value	2,421,032,479

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.  
x Yes     No

If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934.     Yes     No

Note – Checking the box above will not relieve any registrant required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 from their obligations under those sections.

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. x Yes     No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).     Yes     No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or an emerging growth company. See the definitions of “large accelerated filer,” “accelerated filer,” and “emerging growth company” in Rule 12b-2 of the Exchange Act.

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Large accelerated filer  growth company

Accelerated filer

Non-accelerated filer

Emerging

If an emerging growth company that prepares its financial statements in accordance with U.S. GAAP, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards<sup>†</sup> provided pursuant to Section 13(a) of the Exchange Act.

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† The term “new or revised financial accounting standard” refers to any update issued by the Financial Accounting Standards Board to its Accounting Standards Codification after April 5, 2012.

Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing:

U.S. GAAP                       International Financial Reporting Standards as issued by the International Accounting Standards Board     Other

If “Other” has been checked in response to the previous question, indicate by check mark which financial statement item the registrant has elected to follow.

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If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act)

Yes

No

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## PRESENTATION OF INFORMATION

In this annual report, TIM Participações S.A., a publicly held company (*sociedade anônima*) organized under the laws of the Federative Republic of Brazil, is referred to as “TIM,” “TIM Participações,” the “Company” or the “Holding Company.” References to “we,” “us” and “our” are to TIM together with, where the context so requires and as explained more fully below, one or more of TIM Sul S.A. (“TIM Sul”), TIM Nordeste Telecomunicações S.A. (“TIM Nordeste”), TIM Celular S.A. (“TIM Celular”) and TIM S.A. (formerly known as Intelig Telecomunicações Ltda.) (“Intelig”), each a directly or indirectly wholly owned operating subsidiary of the Holding Company and a corporation organized under the laws of the Federative Republic of Brazil.

References in this annual report to the “common shares” are to the common shares of TIM. References to the “American Depositary Shares” or “ADSs” are to TIM’s American Depositary Shares, each representing five common shares. The ADSs are evidenced by American Depositary Receipts, or “ADRs,” which are listed on the New York Stock Exchange, or the NYSE, under the symbol “TSU.”

### Market Share Data

We calculate market share information based on information provided by Brazil’s National Telecommunications Agency (*Agência Nacional de Telecomunicações*), or Anatel. We calculate penetration data based on information provided by the Brazilian Institute of Geography and Statistics (*Instituto Brasileiro de Geografia e Estatística*), or IBGE.

### Presentation of Financial Information

We maintain our books and records in *reais*. The consolidated financial statements included in this annual report were prepared in accordance with International Financial Reporting Standards, or IFRS, as issued by the International Accounting Standards Board, or IASB. As a complement to the IFRS principles, the Company also applies accounting practices established under Brazilian corporate law and rules issued by the Brazilian Securities Commission (*Comissão de Valores Mobiliários*), or CVM, for the Brazilian Stock Market Exchange and Anatel to comply with the regulatory requirements. The selected financial information for the Company included in “Item 3. Key Information—A. Selected Financial Data” should be read in conjunction with, and is qualified in its entirety by, the IFRS financial statements of the Company and “Item 5. Operating and Financial Review and Prospects” appearing elsewhere in this annual report.

The preparation of financial statements in conformity with IFRS requires the use of certain critical accounting estimates. It also requires management to exercise its judgment in the process of applying our accounting policies. Those areas involving a higher degree of judgment or complexity, or areas where assumptions and estimates are significant to the consolidated financial statements, are disclosed in Note 3 to our consolidated financial statements.

All references herein to the “*real*,” “*reais*” or “R\$” are to the Brazilian *real*, the official currency of Brazil. All references to “U.S. dollars,” “dollars” or “U.S.\$” are to United States dollars.

Solely for the convenience of the reader, we have translated some amounts included in “Item 3A. Key Information—A. Selected Financial Data” and elsewhere in this annual report from *reais* into U.S. dollars using the commercial selling exchange rate as reported by the Central Bank of Brazil (*Banco Central do Brasil*), or Central Bank, at December 31, 2017 of R\$3.3080 to U.S.\$1.00. These translations should not be considered representations that any such amounts have been, could have been or could be converted into U.S. dollars at that or at any other exchange rate. Such translations should not be construed as representations that the *real* amounts represent or have been or could be converted into U.S. dollars as of that or any other date. See “Item 3. Key Information—A. Selected Financial

Data—Exchange Rates” for information regarding exchange rates for the Brazilian currency.

Certain figures included in this annual report have been subject to rounding adjustments. Accordingly, figures shown as totals in certain tables may not be an arithmetic aggregation of the figures that precede them.

The “Technical Glossary” at the end of this annual report provides definitions of certain technical terms used in this annual report and in the documents incorporated in this annual report by reference.

## FORWARD LOOKING INFORMATION

This annual report contains statements in relation to our plans, forecasts, expectations regarding future events, strategies and projections, which are forward-looking statements and involve risks and uncertainties and are therefore, not guarantees of future results. Forward-looking statements speak only as of the date they were made, and we undertake no obligation to update publicly or revise any forward-looking statements after we file this annual report because of new information, future events and other factors. We and our representatives may also make forward-looking statements in press releases and oral statements. Statements that are not statements of historical fact, including statements about the beliefs and expectations of our management, are forward-looking statements. Words such as “anticipate,” “believe,” “estimate,” “expect,” “forecast,” “intend,” “plan,” “predict,” “project” and “target” and similar intended to identify forward-looking statements, which necessarily involve known and unknown risks and uncertainties. Our actual results and performance could differ substantially from those anticipated in our forward-looking statements. These statements appear in a number of places in this annual report, principally in “Item 4. Information on the Company” and “Item 5. Operating and Financial Review and Prospects,” and include, but are not limited to, statements regarding our intent, belief or current expectations with respect to:

- Brazilian wireless industry conditions, size and trends;
- characteristics of competing networks’ products and services;
- estimated demand forecasts;
- the size of our subscriber base, particularly any increase in our postpaid subscribers;
- development of additional sources of revenue;
- strategy for marketing and operational expansion;
- achieving and maintaining customer satisfaction;
- development of higher profit margin activities, attaining higher margins, and controlling customer acquisition and other costs; and
- capital expenditures forecasts, funding needs and financing resources.

Because forward-looking statements are subject to risks and uncertainties, our actual results and performance could differ significantly from those anticipated in such statements and the anticipated events or circumstances might not occur. The risks and uncertainties include, but are not limited to:

- our ability to successfully implement our business strategies;
- economic conditions in Brazil and hindrance of growth due to ongoing corruption investigations nationally;
- an increase in competition from other players and services in the telecommunications industry, particularly global and local Over The Top, or OTT, players (operators such as mobile virtual network operators or branded resellers offering content and services on the Internet without owning their own proprietary telecommunications network infrastructure);
- increased consolidation in the Brazilian wireless telecommunications market;



- our ability to develop and introduce new and innovative technologies that are received favorably by the market, and to provide Value-Added Services, or VAS, which are services and applications that provide additional functionality to the basic transmission services offered by a telecommunications network, to encourage the use of our network;
- our ability to expand our services while maintaining the quality of services provided;
- system technology failures, which could negatively affect our revenues and reputation;

- our ability to operate efficiently and to refinance our debt as it comes due, particularly in consideration of political and economic conditions in Brazil and uncertainties in credit and capital markets;
- performance of third party service providers and key suppliers on which we depend;
- government policy and changes in the regulatory environment in Brazil, particularly as an economic group classified as having significant market power in some markets;
- our dependence on authorizations granted by the Brazilian government;
- the effect of inflation and exchange rate fluctuations; and
- other factors identified or discussed under “Item 3. Key Information—D. Risk Factors” and elsewhere in this annual report.

**PART I**

**Item 1. Identity of Directors, Senior Management and Advisers**

Not applicable.

**Item 2. Offer Statistics and Expected Timetable**

Not applicable.

**Item 3. Key Information**

**A. Selected Financial Data**

The selected financial data presented below should be read in conjunction with our consolidated financial statements, including the notes thereto. Our consolidated financial statements included herein, the consolidated balance sheets as of December 31, 2017 and 2016, and the results of operations and cash flows for each of the three years in the period ended December 31, 2017 have been audited by PricewaterhouseCoopers Auditores Independentes. The reports of PricewaterhouseCoopers Auditores Independentes on the consolidated financial statements appear elsewhere in this annual report.

The following table presents a summary of our historical consolidated financial and operating data for each of the periods indicated. Solely for the convenience of the reader, *real* amounts as of and for the year ended December 31, 2017 have been translated into U.S. dollars at the commercial market rate in effect on December 31, 2017 (as reported by the Central Bank of R\$3.3080 to U.S.\$1.00). See “—Exchange Rates” for information regarding exchange rates for the Brazilian *real*. You should read the following information together with our consolidated financial statements and the notes thereto included elsewhere in this annual report and with “Item 5. Operating and Financial Review and Prospects.”

## As of and for the Year Ended December 31,

	2017 U.S.\$	2017 R\$	2016 R\$	2015 R\$ (1)	2014 R\$ (1)	2013 R\$ (1)
<b>(thousands of reais or U.S. dollars, unless otherwise indicated)</b>						
<b>Income Statement Data:</b>						
Revenue	4,907,485	16,233,959	15,617,413	17,142,265	19,502,116	20,025,629
Cost of services provided and goods sold	(2,339,828)	(7,740,150)	(7,693,406)	(8,306,857)	(10,083,920)	(10,822,203)
Gross income	2,567,657	8,493,809	7,924,007	8,835,408	9,418,196	9,203,426
Operating income (expenses)						
Selling expenses	(1,383,064)	(4,575,177)	(4,719,029)	(4,822,974)	(5,029,870)	(4,916,395)
General and administrative expenses	(430,660)	(1,424,623)	(1,258,722)	(1,195,277)	(1,130,754)	(1,012,556)
Other income (expenses), net	(169,479)	(560,636)	(522,060)	434,283	(775,031)	(738,194)
Operating income	584,447	1,933,352	1,424,196	3,251,440	2,482,541	2,536,281
Financial income (expenses)	(150,495)	(497,836)	(410,880)	(250,407)	(280,642)	(290,548)
Income before income and social contribution taxes	433,953	1,435,516	1,013,316	3,001,033	2,201,898	2,245,733
Income and social contribution taxes	(60,765)	(201,009)	(262,889)	(915,591)	(652,795)	(672,775)
Net income for the year	373,188	1,234,507	750,427	2,085,442	1,549,102	1,572,958
Basic earnings per share	0.15	0.51	0.31	0.86	0.64	0.65
Diluted earnings per share	0.15	0.51	0.31	0.86	0.64	0.65
<b>Number of shares outstanding:</b>						
Common shares (in millions)	2,421	2,421	2,421	2,421	2,421	2,418
Dividends per share	0.03	0.11	0.06	0.19	0.15	0.15
<b>Balance Sheet Data:</b>						
Property, plant, equipment and intangibles assets	6,696,196	22,151,015	21,717,105	20,626,541	18,237,563	14,643,423
Total assets	9,855,008	32,600,365	34,655,680	35,556,388	32,489,192	28,072,632
Borrowing and financing	1,988,547	6,578,115	6,719,782	7,926,436	6,754,419	4,746,656
Shareholders' equity	5,487,057	18,151,184	17,187,513	16,577,332	14,952,014	14,221,936
Capital stock	2,982,557	9,866,298	9,866,298	9,866,298	9,866,298	9,839,770
<b>Cash Flow Data:</b>						
<b>Operating Activities:</b>						
Net cash from operations	1,633,649	5,404,112	4,992,248	4,278,184	6,441,018	5,269,502
<b>Investing Activities:</b>						
Net cash from investment activities	(1,330,283)	(4,400,575)	(4,288,299)	(2,804,934)	(6,840,750)	(3,566,943)
<b>Financing Activities:</b>						
	(958,587)	(3,171,005)	(1,736,166)	(605,839)	345,082	(844,697)

## Net cash from financing activities

Increase (decrease) in cash and cash equivalents, net	(655,220)	(2,167,468)	(972,217)	867,411	(54,650)	857,862
Cash and cash equivalents at the beginning of the year	1,550,238	5,128,186	6,100,403	5,232,992	5,287,642	4,429,780
Cash and cash equivalents at end of the year	895,018	2,960,718	5,128,186	6,100,403	5,232,992	5,287,642

(1) Revised figures reported on our annual report on Form 20-F issued on April 10, 2017, as explained in Note 2(e) of our consolidated financial statements presented therewith.

## Brazilian Economic Environment

Our business, prospects, financial condition and results of operations are dependent on general economic conditions in Brazil. The table below sets forth data regarding gross domestic product, or GDP, inflation, interest rates and *real*/U.S. dollar exchange rates in the periods indicated:

	2017	2016	2015	2014	2013	
GDP growth (contraction) (%) <sup>(1)</sup>		1.0	(3.6)	(3.8)	0.5	3.0
Inflation (deflation) - IGP-M (%) <sup>(2)</sup>		(1.91)	7.17	10.54	3.67	5.53
Inflation (deflation) – IPCA (%) <sup>(3)</sup>		2.95	6.29	10.67	6.41	5.91
SELIC (%) <sup>(4)</sup>		7.00	13.75	14.25	11.75	10.00
DI Rate (%) <sup>(5)</sup>		6.99	13.63	14.14	11.51	9.78
TJLP (%) <sup>(6)</sup>		7.00	7.50	7.00	5.00	5.00
Appreciation (devaluation) of the real against the U.S. dollar (%)		(1.50)	16.54	(47.01)	(13.39)	14.64
Exchange rate (closing) - R\$ per U.S.\$1.00		3.3080	3.2591	3.9048	2.6562	2.3426
Average exchange rate - R\$ per U.S.\$1.00 <sup>(7)</sup>		3.1925	3.4872	3.3329	2.3541	2.1607

(1) Brazilian GDP was calculated using the new procedures adopted by the IBGE.

(2) Inflation (IGP-M) is the general market price index as measured by Fundação Getúlio Vargas, or FGV, and represents data accumulated over the 12 months in each year ended December 31.

(3) Inflation (IPCA) is a consumer price index measured by IBGE, and represents data accumulated over the 12 months in each year ended December 31.

(4) The SELIC rate is the average adjusted rate of daily financing determined in the Special Settlement and Custody System (*Sistema Especial de Liquidação e Custódia*) for federal securities (end of period).

(5) The DI rate is the end of period interbank deposit rate in Brazil.

(6) Represents the interest rate applied by the Brazilian Development Bank (*Banco Nacional de Desenvolvimento Econômico e Social*), or BNDES, in long-term financings (end of the period).

(7) Average exchange rate of each year.

Sources: BNDES, Central Bank, Bloomberg, FGV and IBGE.

The year 2017 marked the improvement of the Brazilian economy with the recovery of GDP, which grew by 1.0% after two consecutive years of decline, mainly driven by domestic consumption and trade balance surplus. The trade balance closed the year with a surplus of U.S.\$67 billion, representing a growth of 40.49% compared to 2016. Of note was the 17.55% increase in exports, which more than offset the 9.59% increase in imports. Inflation, measured by the IPCA, was under strict control and, by the end of 2017, it was at 2.95%, below the minimum target set by the Central Bank. The performance is explained by reduced demand, plentiful harvests which reduced the prices of food, the reduction in the price of beverages, and the relatively high figures for 2016 which serve as a comparative base. The SELIC, or basic interest rate, was consistently reduced throughout 2017 and closed the year at a historical low of

7.00%, a significant reduction of 6.75 percentage points compared to the closing of 2016. This movement is explained by the still modest economic recovery of the country and the lower expectation of inflation.

Despite the overall positive result, instability continued to mark the political environment, leading to uncertainties regarding the approval of fiscal and political reforms, in particular the public pension reform. The upcoming presidential elections in 2018 also contribute towards reduced visibility regarding the direction of the country's economy.

Internationally, the continuous military posturing, especially between the United States and North Korea, brought volatility to the markets, generating strong fluctuations in securities trading markets. In Europe, levels of economic activity are improving in the Eurozone, even as discussions regarding Brexit continue. In the United States, some government proposals and the U.S. Federal Reserve Board's monetary policy have set a tone of uncertainty about the sustainability of global economic growth in the years to come.

**Exchange Rates**

The following table shows the selling rate for U.S. dollars for the periods and dates indicated. The information in the “Average” column represents the annual average of the exchange rates during the periods presented.

<b>Year</b>	<b>Reais per U.S. dollar</b>			<b>Year End</b>
	<b>High</b>	<b>Low</b>	<b>Average</b>	
2013	2.4457	1.9528	2.1605	2.3426
2014	2.7403	2.1974	2.3547	2.6562
2015	4.1949	2.5754	3.3387	3.9048
2016	4.1558	3.1193	3.4833	3.2591
2017	3.3807	3.0510	3.1925	3.3080

<b>Month</b>	<b>Reais per U.S. dollar</b>	
	<b>High</b>	<b>Low</b>
October 2017	3.2801	3.1315
November 2017	3.2920	3.2136
December 2017	3.3332	3.2322
January 2018	3.2697	3.1391
February 2018	3.2821	3.1730
March 2018	3.3380	3.3346
April 2018 (through April 4, 2018)	3.3538	3.3104

Source: Central Bank/Bloomberg

In respect of foreign exchange, the Brazilian real depreciated 1.50% compared to the U.S. dollar in 2017. During the year, the exchange rate fluctuated significantly due to reports of corruption cases in Brazil, adjustments to Brazilian monetary policy and reforms proposed by the U.S. government.

In the past, the Brazilian government has implemented various economic plans and utilized a number of exchange rate policies, including sudden devaluations, periodic mini-devaluations during which the frequency of adjustments ranged from a daily to a monthly basis, floating exchange rate systems, exchange controls and dual exchange rate markets. Since 1999, the Central Bank has allowed the *real*/U.S. dollar exchange rate to float freely, and, since that time, the *real*/U.S. dollar exchange rate has fluctuated considerably. We cannot predict whether the Central Bank or the Brazilian government will continue to let the *real* float freely or intervene in the exchange rate market by returning to a currency band system or otherwise. The *real* may depreciate or appreciate substantially against the U.S. dollar.

On April 4, 2018, the selling *real*/dollar exchange rate was R\$3.3538 to U.S.\$1.00. The *real*/dollar exchange rate fluctuates and, therefore, the selling rate at April 4, 2018 may not be indicative of future exchange rates.

**B. Capitalization and Indebtedness**

Not applicable.

**C. Reasons for the Offer and Use of Proceeds**

Not applicable.



***D. Risk Factors***

This section is intended to be a summary of more detailed discussions contained elsewhere in this annual report. The risks described below are not the only ones we face. Our business, results of operations or financial condition could be harmed if any of these risks materializes and, as a result, the trading price of our shares and our ADSs could decline.

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## Risks Relating to our Business

### *We may be unable to successfully implement our business strategy.*

Our business will be adversely affected if we are unable to successfully implement our strategic objectives. Factors beyond our control may prevent us from achieving our strategy.

Our business strategy is aimed at improving revenues and selective growth, while maintaining financial discipline. To achieve this goal, we seek to strengthen our market position by leveraging mobile telephony to increase broadband usage and by exploiting opportunities arising from fixed-to-mobile substitution.

Another of our more specific strategic efforts is to increase our presence in the residential broadband market. In order to do so, we are investing significant efforts and resources in residential broadband, expanding our fiber optic broadband services (FTTx) (when we provide fixed broadband with optical fiber until near to the customer residence), called TIM Live, and launching our fixed broadband service through the mobile network, a technology known as WTTx service (when we offer broadband through LTE (4G) network). The provision of FTTx is a highly capital intensive business, bringing a long term return on investments risk to our operation. As a new business, WTTx brings new risks, particularly related to the market response and customer behavior, that could impact our mobile network and possibly affect the quality of our core business service.

Our ability to implement our strategy is influenced by many factors outside of our control, including:

- an increase in the number of competitors in the telecommunications industry that could affect our market share;
- increased competition from mobile virtual network operator, or MVNO, companies, which offer telecommunication services to customers by leasing network capacity from traditional network players, without their own network infrastructure;
- increased competition from global and local OTT, players who offer content and services on the Internet including voice calls and messaging without owning network infrastructure;
- increased competition in our main markets that could affect the prices we charge for our services and could have an unintended adverse effect on our results;
- our ability to strengthen our competitive position in the Brazilian mobile telecommunications market;
- our ability to develop and introduce new and innovative technologies that are received favorably by the market, and to provide value-added services to encourage the use of our network;
- controls and system technology failures, which could negatively affect our revenues and reputation;
- the introduction of transformative technologies that could be difficult for us to keep pace with and could cause a significant decrease in our revenues and/or revenues for all mobile telephone carriers;
- our ability to operate efficiently and to refinance our debt as it comes due, particularly in consideration of political and economic conditions in Brazil and uncertainties in credit and capital markets;
- our ability to most efficiently scale our structure;

- our ability to attract and retain qualified personnel;
- performance of third party service providers and key suppliers on which we depend, such as any difficulties we may encounter in our supply and procurement processes, including as a result of the insolvency or financial weakness of our suppliers;
- government policy and changes in the regulatory environment in Brazil;
- the effect of exchange rate and inflation fluctuations;

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- the outcome of litigation, disputes and investigations in which we are involved or may become involved;
- the costs we may incur due to unexpected events, in particular where our insurance is not sufficient to cover such costs;
- the real possibility of an increase in taxes by state governments and federal government in order to balance their financial deficit; and
- the increasing demand on our system bandwidth to manage the continuous growth of mobile data traffic, especially in big cities, where the population is highly concentrated and the costs of network expansion are considerably high.

As a result of these uncertainties, there can be no assurance that our strategic objectives can effectively be attained in the manner and within the time frame described.

***We face increasing competition from other providers and services, which may adversely affect our results of operations.***

We face increased competition throughout Brazil from providers in the personal communications service, or PCS, market. We compete with providers of wireless services and trunking, and with providers of fixed-line telecommunications and Internet access services, because of the trend towards the convergence and substitution of fixed services for mobile, as well as bundling data and voice services. As a result, the cost of maintaining our revenue share may increase and in the future we may incur higher advertising and other costs as we attempt to maintain or expand our market presence. Other than TIM, the following entities also hold authorizations to provide PCS with national coverage: Claro S.A., under the brand name Claro, Telefônica Brasil S.A., or Telefônica Brasil, under the brand name Vivo, Oi S.A., under the brand name Oi and, Nextel Telecomunicações Ltda., under the brand name Nextel. All PCS providers with national coverage offer third generation, or 3G, and fourth generation, or 4G, mobile telecommunications network technology. Possible market consolidation may allow other telecommunications companies to compete more aggressively against us. Additionally, we may face competitors with greater access to financial resources.

We also expect to face increased competition from other services. Technological changes in the telecommunications field, such as the development and roll-out of 4G and 5G mobile network technology, and Voice over Internet Protocol (including offers from third party OTT competitors), are expected to introduce additional sources of competition. OTT applications are often free of charge, other than for data usage, accessible by smartphones, tablets and computers and allow their users to have access to potentially unlimited messaging and voice services over the Internet, bypassing more expensive traditional voice and messaging services such as two-way short (or text) message services known as SMS, which have historically been, but are no longer a source of significant revenues for mobile network operators such as TIM, and now SMS revenue is becoming irrelevant. With the growing use of smartphones in Brazil, an increasing number of customers are using OTT application services as a substitute for traditional voice or SMS communications. As a result of this scenario, we see the migration of traffic from voice to data and consequently the introduction of offers from almost all competitors of unlimited voice plans in their portfolio, accelerating the process of commoditization of voice service. These and other factors are responsible for the increase in competitive pressure we are facing in the mobile market.

OTT application providers also leverage on existing infrastructures and generally do not operate capital-intensive business models associated with traditional mobile network operators like us. OTT application service providers have recently become more sophisticated competitors, and technological developments have led to a significant improvement in the quality of service, in particular speech quality, delivered by data communications applications

from OTTs. In addition, players with strong brand capability and financial strengths have turned their attention to the provision of OTT application services. In the long term, if non-traditional mobile voice and data services or similar services continue to increase in popularity, as they are expected to do, and if we and other mobile network operators are not able to address this competition, this could contribute to further declines in mobile monthly average revenue per user, or ARPU, and lower margins across many of our products and services, thereby having a material adverse effect on our business, results of operations, financial condition and prospects.

OTTs concentrate the content, the means to create it and the distribution channel. With these resources they are dedicated to creating new ways the user can interact and consume content. Operators like TIM, which are as a result challenged to rethink value-added services, may stumble upon limitations beyond technology, such as regulation and as a result not have enough leverage to compete.

We expect that new products and technologies will emerge and that existing products and technologies will be further developed. The advent of new products and technologies such as these could have a variety of consequences for us. New products and technologies may reduce the price of our services by providing lower-cost alternatives, or they may also be superior to, and render obsolete, the products and services we offer and the technologies we use, thus requiring investment in new technology. If such changes occur, our most significant competitors in the future may be new participants in the market without the burden of an installed base of older equipment. The cost of upgrading our infrastructure and technology to continue to compete effectively could be significant.

Rising competition may increase our churn rate and could continue to adversely affect our market share and margins. Our ability to compete successfully will depend on the effectiveness of our marketing efforts and our ability to anticipate and adapt in a timely manner to developments in the industry, including the technological changes and new services that may be introduced, changes in consumer preferences, demographic trends, economic conditions and discount pricing strategies by competitors. It is difficult to predict which of many possible factors will be important in maintaining our competitive position or what expenditures will be required to develop and provide new technologies, products or services to our customers. If we are unable to compete successfully, our business, financial condition and results of operations will be materially adversely affected.

***We may be unable to respond to the trend towards consolidation in the Brazilian telecommunications market.***

The Brazilian telecommunications market has been subject to consolidation. For example, in September 2014, Telefónica S.A., or Telefónica, entered into a stock purchase agreement to acquire from Vivendi S.A., or Vivendi, all of the shares of GVT Participações S.A., the controlling shareholder of Global Village Telecom S.A., or GVT, and such acquisition, the GVT Acquisition. The GVT Acquisition increased Telefónica's share of the Brazilian telecommunications market, and we believe such trend could continue in the industry as players continue to pursue economies of scale. In June 2017, the Scandinavian group AINMT Holdings, known as Ice Group, acquired 30% of the capital stock of Nextel Brazil from NII Holdings. The agreement between the two companies provided for the possibility of the acquisition of an additional 30% of the Brazilian mobile operator, conditioned on the restructuring of the Company's debt with Brazilian and Chinese banks. This additional acquisition did not occur and the agreement was finalized in February 2018. The economic and regulatory environment faced by some relevant telecommunications companies in Brazil, such as Oi, Nextel and Sky, could also be expected to encourage the consolidation trend or even the entry of a new competitor in the Brazilian telecommunication market. If such consolidation occurs, it may result in increased competition within our market. We may be unable to adequately respond to pricing pressures resulting from consolidation in our market, adversely affecting our business, financial condition and results of operations. We may also consider engaging in merger or acquisition activity in response to changes in the competitive environment, which could divert resources away from other aspects of our business.

***We may face difficulties responding to new telecommunications technologies.***

The Brazilian wireless telecommunications market is experiencing significant technological changes, as evidenced by the following, among other factors:

- shorter time periods between the introduction of new telecommunication technologies and subsequent upgrades or replacements;
- the expansion of LTE and 4G technology, and the introduction of the 4.5G along with future development of 5G technology and simultaneous management of multiple technology layers, such as GSM, 3G, and 4G through different spectrum bands, which also involves managing the LTE RAN sharing agreement among TIM and other companies (see "Item 4. Information on the Company—B. Business Overview—Site-Sharing and Other Agreements");

- new customer behaviors, particularly migrating services from voice to data, requiring new planning models and accelerating the evolution of communications to increasingly occur on the IP network;
- ongoing improvements in the capacity and quality of digital technology available in Brazil;

- the launch of voice over LTE, known as VoLTE, which increase significantly the quality of voice calls and allows companies to traffic voice as data through their 4G networks; and
- continued auction of licenses for the operation of additional bandwidth.

We may be unable to keep pace with these technological changes, which could affect our ability to compete effectively and have a material adverse effect on our business, financial condition and results of operations.

***Our operations depend on our ability to efficiently operate our systems and controls that are subject to failure that could affect our business and our reputation.***

Our success largely depends on the continued and uninterrupted performance of our controls, network technology systems and of certain hardware. Our technical infrastructure (including our network infrastructure for mobile telecommunications services) is vulnerable to damage or interruption from information and telecommunication technology failures, power loss, floods, windstorms, fires, terrorism, intentional wrongdoing, human error and similar events. Our controls are dependent, not exclusively, on these technological systems and are also subject to the interruptions and failures. Unanticipated problems with our controls, or at our facilities, system failures, hardware or software failures, computer viruses or hacker attacks could affect the quality of our services and cause service interruptions. Any of these occurrences could result in reduced user traffic and reduced revenue and could harm our levels of customer satisfaction, our reputation and compliance with certain of our regulatory obligations.

Sophisticated information and processing systems are vital to our growth and our ability to monitor costs, render monthly invoices, process customer orders, provide customer service and achieve operating efficiencies. We cannot assure that we will be able to successfully operate and upgrade our information and processing systems or that they will continue to perform as expected. Any failure in our accounting, information and processing systems could impair our ability to collect payments from customers and respond satisfactorily to customer needs, which could adversely affect our business, financial condition and results of operations.

***Our business is dependent on our ability to expand our services and to maintain the quality of the services provided.***

Our business as a mobile telecommunications services provider depends on our ability to maintain and expand our mobile telecommunications services network. We believe that our expected growth will require, among other things:

- continuous development of our controls and operational and administrative systems;
- efficiently allocate our capital;
- increasing marketing activities;
- improving our understanding of customer wants and needs;
- continuous attention to service quality; and
- attracting, training and retaining qualified management, technical, customer relations, and sales personnel.

We believe that these requirements will place significant demand on our managerial, operational and financial resources. Failure to manage successfully our expected growth could reduce the quality of our services, with adverse effects on our business, financial condition and results of operations.



Our operations are also dependent upon our ability to maintain and protect our network. Damage to our network and backup systems could result in service delays or interruptions and limit our ability to provide customers with reliable service over our network. The occurrence of any event that damages our network may adversely affect our business, financial condition and results of operations.

***We face various cyber-security risks that, if not adequately addressed, could have an adverse effect on our business.***

We face various cyber-security risks that could result in business losses, including, but not limited to, contamination (whether intentional or accidental) of our networks and systems by third parties with whom we exchange data, equipment failures, unauthorized access to and loss of confidential customer, employee and/or proprietary data by persons inside or outside of our organization. We are also exposed to cyber-attacks causing systems degradation or service unavailability, the penetration of our information technology systems and platforms by ill-intentioned third parties, and infiltration of malware (such as computer viruses) into our systems.

Cyber-attacks against companies have increased in frequency, scope and potential harm in recent years. Further, the perpetrators of cyber-attacks are not restricted to particular groups or persons. These attacks may be committed by company employees or third parties operating in any region, including jurisdictions where law enforcement measures to address such attacks are unavailable or ineffective. We may not be able to successfully protect our operational and information technology systems and platforms against such threats. Further, as cyber-attacks continue to evolve, we may incur significant costs in the attempt to modify or enhance our protective measures or investigate or remediate any vulnerability.

The inability to operate our networks and systems as a result of cyber-attacks, even for a limited period of time, may result in significant expenses to us and/or a loss of market share to other communications providers. The costs associated with a major cyber-attack could include expensive incentives offered to existing customers and business partners to retain their business, increased expenditures on cyber-security measures and the use of alternate resources, lost revenues from business interruption and litigation. If we are unable to adequately address these cyber-security risks, or operating network and information systems could be compromised, which would have an adverse effect on our business, financial condition and results of operations.

***Certain debt agreements of our subsidiaries contain financial covenants and any default under such debt agreements may have a material adverse effect on our financial condition and cash flows.***

Certain of our subsidiaries' existing debt agreements contain restrictions and covenants and require the maintenance or satisfaction of specified financial ratios and tests. See "Item 5. Operating and Financial Review and Prospects." The ability of our subsidiaries to meet these financial ratios and tests can be affected by events beyond our and their control, and we cannot assure that they will meet those tests. Failure to meet or satisfy any of these covenants, financial ratios or financial tests could result in an event of default under these agreements. If we are unable to meet these debt service obligations, or comply with these debt covenants, we could be forced to restructure or refinance this indebtedness, seek additional equity capital or sell assets.

***Due to the nature of our business we are exposed to numerous lawsuits, consumer claims and tax-related proceedings.***

Our business exposes us to a variety of lawsuits and other proceedings brought by or on behalf of consumers in the ordinary course of our operations as a mobile telecommunications provider in Brazil. We are subject to a number of public civil actions and class actions that have been brought against mobile telecommunications providers in Brazil relating principally to the expiration of prepaid usage credits, minimum term clauses, subscription fees and the use of land to install our network sites. These suits include claims contesting certain aspects of the fee structure of our prepaid plans, hybrid (monthly billed fixed price), or so-called Control plans and postpaid plans, which are commonplace in the Brazilian telecommunications industry.

In addition, federal, state and municipal tax authorities have questioned some tax procedures we have adopted, as well as our calculation of the basis for certain sector-specific contributions (FUST and FUNTTEL, as each are defined in “Item 4. Information on the Company—B. Business Overview—Taxes on Telecommunications Goods and Services”).

An adverse outcome in, or any settlement of, these or other lawsuits could result in losses and costs to us, with an adverse effect on our business practices and results of operations. In addition, our senior management may be required to devote substantial time to these lawsuits, which they could otherwise devote to our business. See Note 23 to our consolidated financial statements.

***Any modification or termination of our ability to use the “TIM” trade name may adversely affect our business and operating results.***

Telecom Italia S.p.A., or Telecom Italia, has rights over the trade name “TIM”, which is currently assigned in an unlicensed manner to us. Telecom Italia may prevent us from using the TIM trade name at any time. The loss of use of the trade name “TIM” may have a material adverse effect on our business and operating results.

***We are subject to credit risk with respect to our customers.***

Our operations depend to a significant extent on the ability of our customers to pay for our services. Under Anatel regulations, we are allowed to undertake certain measures to reduce customer defaults, such as restricting or limiting the services we provide to customers with a history of defaults. If we are unable to undertake measures to limit payment defaults by our subscribers or that allow us to accept new subscribers based on credit history, we will remain subject to outstanding uncollectible amounts, which could have an adverse effect on our results of operations. See “Item 5. Operating and Financial Review and Prospects.”

***We may be subject to liability related to outsourcing certain functions to third-party service providers.***

We may be exposed to contingent liabilities due to our outsourcing of certain functions to third-party service providers for which we may not have made sufficient provisions. Such potential liabilities may involve claims by third party providers that are treated as direct employees as well as claims for secondary liability resulting from work place injury, wage parity and overtime pay complaints. Our financial condition and results of operation may be adversely affected in the event that a material portion of these liabilities are decided against us, for which we have not made provisions.

Furthermore, recent government announcements and legal proceedings have called into question the ability of public services concessionaires to carry out their operations by outsourcing certain functions. Though no definitive position has been reached by any governmental authority, recent court opinions could set legal precedent that could call into question our ability to outsource certain operations.

If the contracting of third party services are considered to involve the main activities of the company, it may be characterized as a direct employment, which would significantly increase our costs and as a result we may be subject to administrative proceedings by the relevant labor regulators and may be required to pay fines to the third party service providers.

***We depend on key suppliers, certain inputs and contractual relationships with other telecommunications providers which are critical to our ability to provide telecommunications services to our customers.***

We rely on various vendors to supply network equipment, mobile handsets and accessories necessary for our business. These suppliers may, among other things, delay delivery periods, increase their prices, limit the amounts they are willing to supply to us, or may suffer disruptions in their own supply chains. If these suppliers are unable or unwilling to provide us with equipment or supplies on a regular basis, we could face difficulties in carrying out our operations, which could negatively affect our results of operations and limit our ability to execute our agreements.

Furthermore, the constant changes in the telecommunications industry, such as growth of broadband, may result in a limited supply of equipment essential for the provision of services. The restrictions on the number of manufacturers imposed by the Brazilian government for certain inputs pose certain risks, including susceptibility to currency fluctuations and the imposition of customs or other duties for those inputs which are imported. Inputs produced domestically are available from a limited number of domestic suppliers, and accordingly we are highly dependent

upon their ability to accurately forecast the domestic demand and manage inventory. The foregoing risks could limit our ability to acquire such inputs in a timely and cost effective manner.

The need to hire many key suppliers requires complex deals, detailed and timely analysis of contractual documents and an integrated, end-to-end management process. We may be subject to failures in the contract or contract management systems and process, which may affect our business and financial condition.

We also rely on certain other telecommunications providers, through contractual agreements with us, to supply key infrastructure and other services, such as Industrial Exploration of Dedicated Lines (*Exploração Industrial de Linhas Dedicadas*), or EILD, interconnection and co-billing (see “Item 4. Information on the Company—B. Business Overview—Site-Sharing and Other Agreements”). Anatel permits such agreements between telecommunications providers in order to avoid unnecessary duplication of networks and infrastructure, and to lower costs and increase penetration of wireless services in Brazil.

In June 2016, one telecommunications provider that we maintain a contractual relationship with, Oi, filed for judicial reorganization (a form of bankruptcy protection under Brazilian law), acknowledging its inability to sustain its financial obligations. The judicial reorganization plan was approved at Oi's general shareholders meeting in December 2017, after intense negotiations among credit holders and shareholders, but continues to be discussed at the Brazilian courts. In March 2018, TIM and Oi settled their claims, which were generally related to infrastructure and interconnection, via a dedicated conflict resolution process at Anatel, however the settlement agreement has not yet been finally analyzed by Anatel. We cannot predict the outcomes of these processes, but changes in the controlling shareholders of Oi could lead to a change in the competitive environment of the industry and/or affect the capacity of Oi to provide essential wholesale services to our company, such as EILD and site sharing.

***Our infrastructure could be damaged as a result of natural disasters or others unexpected events.***

Our operations may be suspended or interrupted for an indeterminate period if any of our transmission bases are damaged by natural disasters, including by fire, explosion, storms or any others unexpected events. If we are unable to prevent against such damage in the event of a natural disaster and any other unexpected events, the interruption of our operations could have a material adverse effect on the continuity of our operations, financial results and the compliance with regulations.

***We use demand forecasts to make investments, however such forecasts may ultimately be inaccurate due to economic volatility and result in lower revenues than expected.***

We make certain investments, such as the procurement of materials and the development of our network infrastructure, based on our forecasts of the amount of demand that customers will have for our services at a later date. However, any major changes in the Brazilian economic scenario may affect this demand and therefore our forecasts may turn out to be inaccurate. As a result, it is possible that we may make larger investments based on demand forecasts than were necessary given actual demand at the relevant time, which may directly affect our cash flow. Unanticipated improvements in economic conditions may have the opposite effect and equally pose a risk.

The management of our cash and our financial investments are also subject to the country's economic conditions. We may make financial allocations in which the results of operations are not as expected, generating lower profitability or costs.

***Our governance and compliance processes may fail to prevent regulatory penalties and reputational harm.***

We operate in a global environment, as we have agreements with companies all over the world. Our governance and compliance processes, which include the review of internal control over financial reporting, may not prevent future breaches of all applicable legal, accounting or corporate governance standards. We may be subject to breaches of our Code of Ethics, anti-corruption policies and business conduct protocols and to instances of fraudulent behavior, corrupt practices and dishonesty by our employees, contractors or other agents. Our failure to comply with applicable laws and other standards could subject us to fines, loss of operating licenses and reputational harm.

**Risks Relating to the Brazilian Telecommunications Industry**

***Anatel classified us as an economic group with significant market power in some markets and are now subject to increased regulation.***

The National Telecommunications Agency (*Agência Nacional de Telecomunicações*), or Anatel, is the Brazilian regulatory agency for the telecommunications created under the Federal Law No. 9,472 of 1997 (LGT).

Under Anatel's General Plan for Competition Goals (*Plano Geral de Metas de Competição*), or PGMC, we have been classified as having significant market power, or SMP, in the following relevant markets: (i) passive infrastructure in transport and access networks (provision of cellular towers); (ii) mobile network termination (otherwise referred to as the mobile network termination market); and (iii) national roaming. Due to such classification, we are subject to increased regulation under the PGMC, which could have an adverse effect on our business financial condition, results of operations and compliance with regulations.

On July 4, 2014, Anatel approved, by means of Resolution No. 639/2014, a rule for the definition of maximum reference rates for entities with significant market power, based on a cost model, for Value of Use of Mobile Network (*Valor de Uso de Rede Móvel*), or VU-M, as well as the termination of calls on local fixed line networks, or TU-RL, and EILD. Pursuant to Anatel's rule, reference rates have been decreasing based on a glide path until the cost modeling known as Bottom-Up Long-Run Incremental Cost, or BU-LRIC, which takes into consideration all long-run incremental costs, updated to current values, of providing a particular service and the unit costs of such service based on an efficient network considering the existing regulatory obligations, is applied (2019 for VU-M and TU-RL, and 2020, for EILD). On July 7, 2014, Anatel published the corresponding Acts No. 6,210/2014, 6,211/2014 and 6,212/2014, which determined the specific reference rates effective as of February 2016.

TIM has filed an administrative appeal against the Wholesale Products Reference Offer (*Oferta de Referência de Produtos de Atacado*), or ORPAs, of the Telefônica and Claro groups, which were approved by Anatel, on the grounds that such ORPAs did not comply with the aforementioned cost modeling requirements. Anatel has not yet handed down a determination on our appeal on the merits. TIM had filed an administrative appeal against Oi as well, but considering the agreement reached between the companies in March 2018 and discussed above, we withdrew this claim.

Because of our classification as having SMP in the national roaming market, we must also offer roaming services to other mobile providers without SMP at the rates ratified by Anatel. We are also required to provide other providers without significant market power access to our towers and masts due to our classification as having SMP in that portion of the passive infrastructure market.

PGMC is currently under review by Anatel. As a result of such process, the agency may eliminate or create new relevant markets, as well as modify our classification as having SMP in the such markets.

We cannot assure that we will be able to fully comply with each of the applicable laws, regulations and authorizations or that we will be able to comply with future changes in the laws and regulations to which we are subject. These regulatory developments or our failure to comply with them could have a material adverse effect on our business, financial condition and results of operations.

***As a telecommunications provider, we are subject to extensive legal and regulatory obligations in the performance of our activities which may limit our flexibility in responding to market conditions, competition and changes in our cost structure or with which we may be unable to comply.***

Our business is subject to extensive government regulation, including any changes that may occur during the period of our authorization to provide telecommunication services. Anatel, which is the main telecommunications industry regulator in Brazil, regulates, among others: (i) industry policies and regulations; (ii) licensing; (iii) rates and tariffs for telecommunications services; (iv) competition; (v) telecommunications resource allocation; (vi) service standards; (vii) technical standards; (viii) quality standards; (ix) consumer rights; (x) interconnection and settlement arrangements; and (xi) coverage obligations.

In addition to the rules set forth by Anatel, we are subject to compliance with various legal and regulatory obligations, including, but not limited to, obligations arising from the following: (i) PCS authorizations under which we operate our cellular telecommunications business; (ii) fixed authorizations (local, national long distance, international long distance and multimedia service) under which we operate our telecommunications business; (iii) limited private services authorization under which we operate a private network formed by point-to-point radio communication (*radioenlaces*); (iv) the Consumer Defense Code; and (v) the General Telecommunications Law (Law No. 9,472/97, as amended).



In addition, we are also subject to national and international anti-corruption laws. We believe that we are currently in material compliance with our obligations arising out of each of the above referenced laws, regulations and authorizations.

Over the last few years, Anatel has instituted certain administrative processes against the Company and other Brazilian telecommunications providers to investigate certain alleged nonconformities related to quality goals and other regulatory obligations. In response to the initiation of such Anatel proceedings, the Company, as well as other active telecommunications companies in the Brazilian market, opted for the negotiation and conclusion of a Term of Conduct Adjustment. The Term of Adjustment of Conduct aims at the remediation of the underlying causes of the ongoing administrative processes by setting commitments for conduct adjustment and investment of additional projects in general.

Currently, the proceeding is in the office of Anatel and is pending deliberation by its board of directors with a decision expected in 2018. However, despite regulatory oversight, other entities, such as the Federal General Accounting Office and the House of Representatives, intervened in the negotiations and requested further clarification, causing a delay in the procedural process.

We cannot assure that we will be able to fully comply with each of the applicable laws, regulations and authorizations or that we will be able to comply with future changes in the laws and regulations to which we are subject. Moreover, compliance with this extensive regulation, the conditions imposed by our authorization to provide telecommunication services and other governmental action may limit our flexibility in responding to market conditions, competition and changes in our cost structure. These regulatory developments or our failure to comply with them could have a material adverse effect on our business, financial condition and results of operations.

***The Brazilian government under certain circumstances may terminate our authorizations or we may not receive renewals of our authorizations.***

We operate our business under authorizations granted by the Brazilian government. As a result, we are obligated to maintain minimum quality and service standards, including targets for call completion rates, geographic coverage and voice accessibility, data accessibility, voice drop, data drop, data throughput, user complaint rates and customer care call completion rates. Our ability to satisfy these standards, as well as others, may be affected by factors beyond our control. We cannot assure that, going forward, we will be able to comply with all of the requirements imposed on us by Anatel or the Brazilian government. Our failure to comply with these requirements may result in the imposition of fines or other government actions, including, restrictions on our sales and, in an extreme situation, the termination of our authorizations in the event of material non-compliance.

Our radio frequency, or RF, authorizations for the 800 MHz, 900 MHz and 1,800 MHz bands that we use to provide PCS services started to expire in September 2007 and are renewable for one additional 15-year period, requiring payment at every two-year period equal to 2% of the prior year's revenue net of taxes, by way of investment under the Basic and Alternative Service Plans, which are intended to increase telecommunications penetration throughout Brazil. Anatel has stated that the revenue on which the 2% payment is based should be calculated as including revenues derived from interconnection as well as additional facilities and conveniences. As a result, we are currently disputing these RF authorization renewal payments both administratively and judicially. Although there are administrative procedures still pending on analysis, Anatel has denied the Company's appeals and issued Precedent No. 13, determining that revenues from interconnection as well as additional facilities and conveniences should be considered on the basis of the calculation of the price due to the renewal of the spectrum licenses. Judicially, the matter is also still under dispute.

Any partial or total revocation of our authorizations or failure to receive renewal of such authorizations when they expire would have a material adverse effect on our financial condition and results of operations.

***Anatel's proposal regarding the consolidation of prices could have an adverse effect on our results of operations.***

Anatel issued regulations on interconnection rules from 1997 to 2014, and, as noted above, in July 2014, established a fully allocated cost model for reference rates by allocating the various service costs to determine a basic price, effective as of February 2016.

These regulations may have an adverse effect on our financial results given the dynamics of our revenues and costs related to interconnection fees. In addition, Anatel may allow more favorable prices to operators without significant market power.



***Actual or perceived health risks or other problems relating to mobile telecommunications technology could lead to litigation or decreased mobile communications usage, which could harm us and the mobile industry as a whole.***

The effects of, and any damage caused by, exposure to electromagnetic fields has been and still is the subject of careful evaluation by the international scientific community, but until now there is no scientific evidence of harmful effects on health. We cannot rule out that exposure to electromagnetic fields or other emissions originating from wireless handsets will not be identified as a health risk in the future.

Our mobile communications business may be harmed as a result of these alleged health risks. These concerns could have an adverse effect on the wireless communications industry and, possibly, expose wireless providers, including us, to litigation.

In addition, although Brazilian law already imposes strict limits in relation to transmission equipment, these concerns may cause regulators to impose greater restrictions on the construction of base station towers or other infrastructure, which may hinder the completion of network build-outs and the commercial availability of new services and may require additional investments. The expansion of our network may be affected by these perceived risks if we experience problems in finding new sites, which in turn may delay the expansion and may affect the quality of our services.

Anatel Resolution No. 303 limits emission and exposure for fields with frequencies between 9 kHz and 300 GHz, and Law No. 11,934 establishes limits related to the magnetic and electromagnetic emissions to be as defined by the World Health Organization and requiring that operators had to maintain a record of the measurements of the levels of the magnetic and electromagnetic emissions of each transmitting station. The records must be five years old at most. In 2015, Anatel established a computerized system called Mosaic in order to store the measurement reports and better assess the level of human exposure to electromagnetic fields. Anatel also began working with Brazilian telecommunications operators in January 2015 to ensure their required registered reports were being stored in Mosaic.

Any of these or any other additional regulations could adversely affect our business, financial condition and results of operations. Government authorities could also increase regulation of wireless handsets and base stations as a result of these health concerns or wireless companies, including us, could be held liable for costs or damages associated with these concerns, which could have an adverse effect on our business, financial condition and results of operation. We cannot assure you that further medical research and studies will refute a link between the mobile technology in question and these health concerns.

***Measures adopted by Anatel aiming to ensure service quality could have an adverse effect on our results.***

In July 2012, with the express goal of improving the quality of mobile telecommunications services provided in Brazil, Anatel issued administrative injunctions suspending three of the primary mobile providers, including our subsidiary TIM Celular, from selling and activating new mobile service plans. Anatel lifted the suspension only after these providers made formal commitments to undertake specific investments related to the expansion of their respective networks and improvement of their respective services.

In November 2012, Anatel issued a new administrative injunction to suspend and stop our “Infinity Day” promotion, in which customers from specific states were charged per day of use for voice service to TIM numbers and local fixed telephones. Anatel, in its preliminary analysis, considered the promotion to be potentially harmful to the quality of our mobile services. The injunction was revoked in January 2013, after Anatel determined that the promotion did not pose a risk to the provision of our mobile services.

Although measures adopted by Anatel such as the aforementioned are likely to be temporary, such measures may, along with any new measures adopted in the future, have a material adverse effect on our financial condition, results of operations and cash flow and may limit our ability to implement our business strategy.

## **Risks Relating to Brazil**

### ***Risks related to Brazilian economic and political conditions may negatively affect our business.***

Political conditions in Brazil may affect the confidence of investors and the public in general, as well as the development of the economy. In 2017, the Brazilian economy showed signs of recovery: GDP grew, inflation was kept under control and the interest rate declined, culminating in an increase in overall confidence in the market. However, the recent past has been marked by an unstable political environment evidenced by widespread protests and ongoing investigations into allegations of corruption in private and state-controlled enterprises, that contributed to the decline of the confidence of investors and the public in general.

Currently, with the progress of the different investigations carried out by the Federal Police and by the General Prosecutor's Office, there is significant uncertainty regarding the future of the national political environment and its effect on the Brazilian economy. Some relevant Brazilian companies are facing investigations by the CVM, the U.S. Securities and Exchange Commission, or the SEC, the Brazilian Federal Police and the Brazilian Federal Prosecutor's Office, in connection with corruption allegations, or the "Lava Jato" investigations. Depending on the duration, outcome and possible expansion of such investigations, the uncertainty could affect the country's reputation and result in downgrades from rating agencies. We cannot predict the results of the investigations and which policies the Brazilian government may adopt or change or the effect that might have on our business and on the Brazilian economy.

In 2016, after the legal and administrative process for the impeachment, Brazil's Senate removed President Ms. Dilma Rousseff from office on August 31, 2016, for infringing budgetary laws. Mr. Michel Temer, the former vice president, who has run Brazil since Ms. Rousseff's suspension in May, was sworn in by Senate to serve out the remainder of the presidential term until 2018. However, the recent decision of the Superior Electoral Court (*Tribunal Superior Eleitoral*) that acquitted Ms. Dilma Rousseff and Mr. Michel Temer on charges of illegal campaign financing may be reversed by the Federal Supreme Court if the appeals filed with the Federal Supreme Court are accepted, which may cause the annulment of the presidential election of 2014 and require President Michel Temer to leave the office of president. Mr. Temer remains subject of investigations by the Brazilian Federal Police and General Prosecutor's Office relating to allegations of corruption, however, and may ultimately be subject to impeachment proceedings before his presidential term ends.

Presidential elections to take place in 2018 could also significantly change the course of the ongoing fiscal reforms and the economic policies being undertaken. Uncertainty about the 2018 election may reduce investor and market confidence, and as a result we are unable to predict the country's political and economic direction in coming years.

### ***The Brazilian government has exerted significant influence over the Brazilian economy and continues to do so. This involvement may have an adverse effect on our activities, our business and on the market prices of our shares and ADSs.***

The Brazilian government has frequently intervened in the Brazilian economy and occasionally made drastic changes in economic policy. To influence the course of Brazil's economy, control inflation and implement other policies, the Brazilian government has taken various measures, including the use of wage and price controls, currency devaluations, capital controls and limits on imports and freezing bank accounts. We have no control over, and cannot predict what measures or policies the Brazilian government may take or adopt in the future. Our business, financial condition, revenues, results of operations, prospects and the trading price of our securities may be adversely affected by changes in government policies and regulations, as well as other factors, such as: (i) fluctuating exchange rates; (ii) inflation; (iii) interest rates; (iv) fiscal and monetary policies; (v) changes in tax regimes; (vi) liquidity in domestic capital and credit markets; (vii) economic, political and social instability; (viii) reductions in salaries or income levels; (ix) rising unemployment rates; (x) tax policies (including those currently under consideration by the Brazilian

Congress); (xi) exchange controls and restrictions on remittances abroad; and (xii) other political, diplomatic, social or economic developments in or affecting Brazil.

Uncertainty regarding changes by the Brazilian government to the policies or standards that affect these or other factors could contribute to economic uncertainty in Brazil and increase the volatility of the Brazilian capital market and of securities issued abroad by Brazilian companies.

Additionally, interruptions in the credit and other financial markets, and the deterioration of the Brazilian and/or global economic environment may, among other effects: (1) have a negative impact on demand, which may reduce sales, operating income and cash flow; (2) decrease consumption of our products; (3) restrict the availability of financing for our operations or investments, or for the refinancing of our debt in the future; (4) cause creditors to modify their credit risk policies and restrict our ability to negotiate any of the terms of our debt in the future; (5) cause the financial situation of our clients or suppliers to deteriorate; or (6) decrease the value of our investments.

***Changes in Brazilian tax laws may have an adverse impact on the taxes applicable to our business and over our prices.***

Our business is substantially affected by the tax regime in Brazil on telecommunications goods and services, as disclosed in detail in “Item 4. Information on the Company—B. Business Overview—Taxes on Telecommunications Goods and Services.”

In the past, the tax on financial operations, or IOF, was levied on investments made in the Brazilian financial and capital markets by foreign investors. However, since October 2014, any financial operation related to these foreign investments benefits from a 0% IOF tax rate.

In 2013, the Brazilian government maintained at 6% the IOF tax rate on international loans with a maturity of equal to or fewer than 360 days. International loans with a maturity of more than 360 days were not subject to any IOF. On June 4, 2014, the minimum maturity for an international loan to not be subject to the IOF was reduced from 361 days to 181 days, and the IOF tax rate applicable to international loans with a maturity equal to or fewer than 180 days was maintained at 6%.

Since December 24, 2013, the transfer of shares that are listed on a stock exchange located in Brazil with the specific purpose of backing the issuance of depositary receipts traded abroad is subject to a 0% IOF rate. From October 8, 2014, operations of trading Fixed Income Index Fund quotas on stock exchanges or organized over-the-counter market are subject to a 0% rate of IOF. Any change in the IOF rate could affect our shareholders and may impact our ADS and common share prices.

On July 1, 2015, Decree No. 8,426 came into effect. The decree restored the obligation of companies to pay *Programa de Integração Social* contributions, or PIS and *Contribuição Social para o Financiamento da Seguridade Social* contributions, or COFINS on financial revenues at a cumulative rate of 4.65% (previously set at 0% by Decree No. 5,442/2005). From that date, all financial revenues became taxable, except for financial revenues related to exchange variations of: (i) exportation of goods and services; (ii) obligations undertaken by the company, including loans and financing. Revenues related to hedging transactions on stock exchange values, also maintain a 0% tax rate under the decree as long as such revenues are related to operating activities and the main objective is to protect the rights and goods of the company.

In addition, Law No. 13,241, published on December 31, 2015, suspended the 0% PIS and COFINS rate on the sale of goods such as smartphones and handsets, which starting from January 1, 2016 were set back to the rate of 7.6% of COFINS and 1.65% for PIS.

Since December 2015, the principal tax applicable to goods and telecommunication services (*Imposto sobre Circulação de Mercadorias e Serviços*), or ICMS, rates were increased in some Brazilian states due to local legislation to an average of 3% and 1%, respectively. Any change in the ICMS rate may affect our financial conditions.

In March 2017, there was a favorable decision of the Brazilian Federal Supreme Court, or STF, published in October, on the composition of the calculation bases of PIS and COFINS. In summary, the court recognized the



unconstitutionality of including the ICMS in the calculation of PIS and COFINS, deciding in favor of its exclusion. The Company expects to benefit from this decision in two ways: (i) first, by recovering unduly paid amounts (the Company and/or its subsidiaries filed lawsuits claiming refund of such unduly paid amounts, but are still waiting for a final decision as all related causes are suspended until the resolution of the lead case under trial by STF); and (ii) second, by reducing the monthly amounts due for PIS and COFINS.

Provisional Measure No. 687, published on August 18, 2015 (and converted into Law No. 13,196, which was published on December 2, 2015) authorized the monetary adjustment, based on the IPCA, of the Contribution to the Development of the National Film Industry (*Contribuição para o Desenvolvimento da Indústria Cinematográfica Nacional*), or CONDECINE, which is a tax levied on telecommunications services with the objective of promoting the Brazilian audiovisual industry.

Since January 2018, the tax over value-added services has increased with the inclusion of value-added services revenues in the calculation of ISS due to Law No. 157/2016, which is a municipality tax which rates vary from 2% to 5%.

This tax regime has been subject to substantial fluctuation in the past and could be in the future. Further changes in tax regulations, such as the anticipated increase of the PIS and COFINS tax rates that the Federal Government has announced it is considering implementing in order to restore public accounts after the above-mentioned decision by the STF authorizing companies to exclude the ICMS from the calculation of PIS and COFINS, could impact our financial assets and liabilities as well as our pricing, which could have a material adverse effect on our business, financial condition and results of operations.

***Inflation, and government measures to curb inflation, may adversely affect the Brazilian economy and capital market, our business and operations and the market prices of our common shares or the ADSs.***

In the recent past, Brazil has experienced high rates of inflation and the government's measures taken in an attempt to curb inflation have had significant negative effects on the Brazilian economy. The government's measures to control inflation have often included maintaining a tight monetary policy with high interest rates, thereby restricting availability of credit and reducing economic growth.

Uncertainty regarding certain future government fiscal measures which may be taken to reduce inflation could affect the confidence of investors and the market in general, and, consequently, affect our operating and financial results and increase volatility in the Brazilian capital markets.

***Exchange rate movements and interest rate fluctuation may have an adverse effect on our business and the market prices of our shares or the ADSs.***

Appreciation of the *real* against the U.S. dollar may lead to a deterioration of the country's current account and the balance of payments, as well as to a dampening of export-driven growth. Any such appreciation could reduce the competitiveness of Brazilian exports and adversely affect net sales and cash flows from exports. Devaluation of the *real* relative to the U.S. dollar could create additional inflationary pressures in Brazil by increasing the price of imported products, which may result in the adoption of deflationary government policies. The sharp depreciation of the *real* in relation to the U.S. dollar may generate inflation and governmental measures to fight possible inflationary outbreaks, including the increase in interest rates, which reduces the purchasing power of consumers and raises the cost in the credit market. Devaluations of the *real* would reduce the U.S. dollar value of distributions and dividends on our common shares and ADSs and may also reduce the market value of such securities. Any such macroeconomic effects could adversely affect our net operating revenues and our overall financial performance.

We acquire equipment and handsets from global suppliers, the prices of which are denominated in U.S. dollars. Depreciation of the *real* against the U.S. dollar may result in a relative increase in the price of our equipment and handsets. Thus, we are exposed to foreign exchange risk arising from our need to make substantial dollar-denominated expenditures, particularly for imported components, equipment and handsets, that we have limited capacity to hedge. See "Item 5. Operating and Financial Review and Prospects."

Most of our indebtedness is denominated in *reais* and subject to Brazilian floating interest rates or subject to currency swaps that are tied to Brazilian floating interest rates. Any increase in the CDI rate, the TJLP rate or the SELIC rate may have an adverse impact on our financial expenses and our results of operations. See "Item 11. Quantitative and Qualitative Disclosures About Market Risk."

***The effects of the weak domestic economy could reduce purchases of our products and services and adversely affect our results of operations, cash flows and financial condition.***

Although the global economy recently has been showing signs of improvement, domestic economic conditions have been slow to recover. The Brazilian economy has gone through a marked recession in recent years, partially due to the interventionist economic and monetary policies of the previous administration and the general global fall.

The economy performance directly impacts our results of operations as a result of certain of our assets and liabilities being subject to inflation adjustment, and if inflation rises, disposable income of families may decrease in real terms, leading to lack of purchasing power among our customer base. In response to such tighter credit, negative financial news or declines in income or asset values, consumers and businesses may postpone spending, which could have a material adverse effect on the demand for our products and services. A loss of customers or a reduction in purchases by our current customers could have a material adverse effect on our financial condition, results of operations and cash flow and may negatively affect our ability to meet our growth targets.

***We may be impacted by volatility in the global financial markets.***

We are susceptible to swings in global economic conditions, typified most recently by difficult credit and liquidity conditions and disruptions leading to greater volatility. The global economy has largely recovered from the crisis of 2007, however markets remain subject to ongoing volatility factors including interest rate divergence, geopolitical events, and global growth expectations, and there is no assurance that similar conditions will not arise again. In the long term, as a consequence, global investor confidence may remain low and credit may remain relatively lacking. Hence, additional volatility in the global financial markets may occur.

Additional volatility in the global financial markets could have a material adverse effect on our ability to access capital and liquidity on acceptable financial terms, and consequently on our operations. Furthermore, an economic downturn could negatively affect the financial stability of our customers, which could result in a general reduction in business activity and a consequent loss of income for us.

***Developments and the perception of risk in other countries may adversely affect the Brazilian economy and market price of Brazilian issuers' securities.***

The market value of securities of Brazilian issuers is affected by economic and market conditions in other countries, including the United States, European countries, as well as in other Latin American and emerging market countries. Although economic conditions in Europe and the United States may differ significantly from economic conditions in Brazil, investors' reactions to developments in these other countries may have an adverse effect on the market value of securities of Brazilian issuers. Additionally, crises in other emerging market countries may diminish investor interest in securities of Brazilian issuers, including our securities. This could adversely affect the market price of our securities, restrict our access to capital markets and compromise our ability to finance our operations in the future on favorable terms, or at all.

In the recent past, there was an increase in volatility in all Brazilian markets due to, among other factors, uncertainties about how monetary policy adjustments in the United States would affect the international financial markets, the increasing risk aversion to emerging market countries, and uncertainties regarding Brazilian macroeconomic and political conditions. These uncertainties adversely affected us and the market value of our securities.

In addition, we continue to be exposed to disruptions and volatility in the global financial markets because of their effects on the financial and economic environment, particularly in Brazil, such as a slowdown in the economy, an increase in the unemployment rate, a decrease in the purchasing power of consumers and the lack of credit availability.

Disruption or volatility in the global financial markets could further increase negative effects on the financial and economic environment in Brazil, which could have a material adverse effect on our business, results of operations and financial condition.

**Risks Relating to Our Commons Shares and the ADSs**

***Our controlling shareholder has power over the direction of our business.***

Telecom Italia, through its ownership of TIM Brasil Serviços e Participações S.A., or TIM Brasil, our controlling shareholder, has the ability to determine actions that require shareholder approval, including the election of a majority of our directors and, subject to Brazilian law, the payment of dividends and other distributions. Telecom Italia's single largest shareholder is Vivendi, which is able to exercise significant influence over Telecom Italia. Telecom Italia may pursue acquisitions, asset sales, joint ventures or financing arrangements or may pursue other objectives that conflict with the interests of other shareholders and which could adversely affect our business, financial condition and results of operations.

***Holders of our ADSs are not entitled to attend shareholders' meetings and may only vote through the depositary.***

Under Brazilian law, only shareholders registered as such in our corporate books may attend shareholders' meetings. All common shares underlying our ADSs are registered in the name of the depositary. A holder of ADSs, accordingly, is not entitled to attend shareholders' meetings. Holders of our ADSs may exercise their limited voting rights with respect to our common shares represented by the ADSs only in accordance with the deposit agreement relating to the ADSs. There are practical limitations upon the ability of ADS holders to exercise their voting rights due to the additional steps involved in communicating with ADS holders. For example, we are required to publish a notice of our shareholders' general meetings in certain newspapers in Brazil. Holders of our shares can exercise their right to vote at a shareholders' general meeting by attending the meeting in person or voting by proxy. By contrast, holders of our ADSs will receive notice of a shareholders' general meeting by mail from the ADR depositary following our notice to the ADR depositary requesting the ADR depositary to do so. To exercise their voting rights, ADS holders must instruct the ADR depositary on a timely basis. This voting process will take longer for ADS holders than for direct holders of our shares.

We cannot assure you that holders will receive the voting materials in time to ensure that such holders can instruct the depositary to vote the shares underlying their respective ADSs. In addition, the depositary and its agents are not responsible for failing to carry out holder's voting instructions or for the manner of carrying out your voting instructions. This means that holders may not be able to exercise their right to vote and may have no recourse if our shares held by such holders are not voted as requested.

***Holders of our ADSs or common shares in the United States may not be entitled to participate in future preemptive rights offerings.***

Under Brazilian law, if we issue new shares for cash as part of a capital increase, we generally must grant our shareholders the right to purchase a sufficient number of shares to maintain their existing ownership percentage. Rights to purchase shares in these circumstances are known as preemptive rights. We may not legally allow holders of our ADSs or common shares in the United States to exercise any preemptive rights in any future capital increase unless we file a registration statement with the SEC with respect to that future issuance of shares or the offering qualifies for an exemption from the registration requirements of the Securities Act. At the time of any future capital increase, we will evaluate the costs and potential liabilities associated with filing a registration statement with the SEC and any other factors that we consider important to determine whether to file such a registration statement. We cannot assure holders of our ADSs or common shares in the United States that we will file a registration statement with the SEC to allow them to participate in a preemptive rights offering. As a result, the equity interest of those holders in us may be diluted proportionately.

***Cash dividends, interest on shareholders' equity and other cash distributions, as well as judgments seeking to enforce our obligations in respect of our shares or ADSs in Brazil will be payable only in reais.***

We pay any cash dividends, interest on shareholders' equity and any other cash distributions with respect to our common shares in reais. Accordingly, exchange rate fluctuations affect the U.S. dollar amounts received by the holders of ADSs on conversion by the depositary of dividends and other distributions in Brazilian currency on our common shares represented by ADSs. Fluctuations in the exchange rate between Brazilian currency and the U.S. dollar affects the U.S. dollar equivalent price of our common shares on the Brazilian stock exchanges. In addition, exchange rate fluctuations may also affect our dollar equivalent results of operations. See "Item 5. Operating and Financial Review and Prospects."

If proceedings are brought in the courts of Brazil seeking to enforce our obligations with respect to our shares or ADSs, we will not be required to discharge our obligations in a currency other than *reais*. Under Brazilian exchange

control limitations, an obligation in Brazil to pay amounts denominated in a currency other than *reais* may only be satisfied in Brazilian currency at the exchange rate, as determined by the Central Bank, in effect on the date the judgment is obtained, and such amounts are then adjusted to reflect exchange rate variations through the effective payment date. The then prevailing exchange may not afford non-Brazilian investors with full compensation for any claim arising out of or related to our obligations under our shares or the ADSs. See “—A. Selected Financial Data—Exchange Rates” for information regarding exchange rates for the Brazilian *real*.

***Holders of ADSs or common shares could be subject to Brazilian income tax on capital gains from sales of ADSs or common shares.***

According to Article 26 of Law No. 10,833 of December 29, 2003, which came into force on February 1, 2004, capital gains realized on the disposition of assets located in Brazil by non-Brazilian residents, whether or not to other non-residents and whether made outside or within Brazil, are subject to taxation in Brazil. Since January 1, 2017, the rate of the income tax on capital gains accrued by non-Brazilian resident individuals may vary between 15% and 22.5% depending on the capital gain amount. Ultimately, a 25% rate may apply if the capital gain is realized by investors located in a country that does not impose any income tax or that imposes tax at a maximum rate of less than 17% (as amended by National Treasury Ordinance No. 488 of November 1, 2014; prior to this date, the maximum rate was 20%), or a Low or Nil Tax Jurisdiction. Although we believe that the ADSs will not fall within the definition of assets located in Brazil for the purposes of Law No. 10,833, considering the general and unclear scope of Law 10,833 and the absence of any judicial guidance in respect thereof, we are unable to predict whether such interpretation will ultimately prevail in the Brazilian courts. See “Item 10. Additional Information—E. Taxation—Brazilian Tax Considerations.”

Gains realized by non-Brazilian holders on dispositions of common shares in Brazil or in transactions with Brazilian residents may be exempt from Brazilian income tax, or taxed at a rate that may vary between 15% and 25%, depending on the circumstances. Gains realized through transactions on Brazilian stock exchanges are exempt from the Brazilian income tax, provided that the transactions are carried out in accordance with Resolution CMN 4,373 (that replaced Resolution CMN 2,689) and the foreign investor is not located in a Low or Nil Tax Jurisdiction. Gains realized through transactions with Brazilian residents or not executed on the Brazilian stock exchanges are subject to tax at a rate (1) that may vary between 15% and 22.5% depending on the capital gain amount if the investors are located in regular taxation jurisdictions, or (2) of 25% if the capital gain is realized by investors located in Low or Nil Tax Jurisdictions. Please refer to “Item 10. Additional Information—E. Taxation—Brazilian Tax Considerations—Taxation of Gains.”

***An exchange of ADSs for common shares risks loss of certain foreign currency remittance and Brazilian tax advantages.***

The ADSs benefit from the certificate of foreign capital registration, which permits J.P. Morgan Chase Bank, N.A., or J.P. Morgan, as depositary, to convert dividends and other distributions with respect to common shares into foreign currency, and to remit the proceeds abroad. Holders of ADSs who exchange their ADSs for common shares will then be entitled to rely on the depositary’s certificate of foreign capital registration for five business days from the date of exchange. Thereafter, they will not be able to remit non-Brazilian currency abroad unless they obtain their own certificate of foreign capital registration, or unless they qualify under Resolution CMN 4,373, which entitles certain investors to buy and sell shares on Brazilian stock exchanges without obtaining separate certificates of registration.

If holders of ADSs do not qualify under Resolution CMN 4,373, they will generally be subject to less favorable tax treatment on distributions with respect to our common shares. There can be no assurance that the depositary’s certificate of registration or any certificate of foreign capital registration obtained by holders of ADSs will not be affected by future legislative or regulatory changes, or that additional Brazilian law restrictions applicable to their investment in the ADSs may not be imposed in the future.

Brazilian law allows for the Brazilian government to impose temporary restrictions, whenever there is a significant imbalance in Brazil’s balance of payments or a significant possibility that such imbalance will exist, on the remittance to foreign investors of the proceeds of their investments in Brazil, as well as on the conversion of the *real* into foreign currencies. The Brazilian government may, in the future, restrict companies from paying amounts denominated in foreign currency or require that any such payment be made in *reais*.



If similar restrictions are introduced in the future, they would likely have an adverse effect on the market price of our shares and ADSs. Such restrictions could hinder or prevent the holders of our shares or the custodian of our shares in Brazil, J.P. Morgan, as, from remitting dividends abroad.

A more restrictive policy could also increase the cost of servicing, and thereby reduce our ability to pay, our foreign currency-denominated debt obligations and other liabilities. If we fail to make payments under any of these obligations, we will be in default under those obligations, which could reduce our liquidity as well as the market price of our common shares, shares and ADSs.

#### **Item 4. Information on the Company**

##### **A. History and Development of the Company**

###### **Basic Information**

TIM Participações S.A. is a publicly held company (*sociedade anônima*) organized under the laws of the Federative Republic of Brazil. The Company was incorporated in the Federative Republic of Brazil for an indefinite period on May 22, 1998 under the name Tele Celular Sul Participações S.A., which was later changed to TIM Participações S.A. on August 30, 2004.

Our headquarters are located at João Cabral de Melo Neto Avenue, 850 – North Tower – 2<sup>nd</sup> floor, 22775-055 Rio de Janeiro, Brazil and our telephone number is +55 (21) 4109-4167.

Our agent for service of process in the United States is Puglisi & Associates located at 850 Library Avenue, Suite 204, Newark, Delaware 19711.

###### **Historical Background**

In July 1998, as part of the privatization of Telebrás, the Brazilian state-owned telecommunications monopoly, the Federal Government sold substantially all its shares of the 12 holding companies into which Telebrás had initially been broken up, including its shares of Tele Sudeste Celular Participações S.A., or TSU, and Tele Nordeste Celular Participações S.A., or TND. Following a series of acquisitions, corporate reorganizations and corporate name changes, TSU and TND merged to form TIM Participações in 2004.

We continued to expand and restructure our operations through a series of corporate reorganizations, mergers, acquisitions and name changes, and we are currently held, directly and indirectly, by Telecom Italia (which began operating in Brazil in 1998 as Telecom Italia Mobile) through its wholly owned subsidiary, TIM Brasil, formed in 2002 as the holding company of Telecom Italia's operating companies in Brazil. In turn, the single largest shareholder of Telecom Italia is Vivendi, which is able to exercise significant influence over Telecom Italia. See “—C. Organizational Structure” for a description of our current corporate structure and Exhibit 8.1 attached hereto for a list of our significant subsidiaries as of the date of this annual report.

In 2009, the acquisition of Holdco Participações Ltda., holder at the time of 100% of Intelig's capital, was approved and Intelig became a wholly-owned subsidiary of TIM after this transaction. Our acquisition of Intelig (known since September 2017 as TIM S.A.) brought material advantages through significant synergies with its network, such as its metropolitan optimal fiber network and its large backbone that allowed us to accelerate the development of our 3G network and generate significant operational cost savings.

In 2011, our wholly owned subsidiary TIM Celular entered into an agreement with Companhia Brasileira de Energia and AES Elpa (the AES Group in Brazil) for the purchase of all of AES Elpa's equity interests in Eletropaulo Telecomunicações and 98.3% of the interest of AES RJ, or the AES Atimus Acquisition. In connection with the acquisition, Eletropaulo Telecomunicações changed its corporate name to TIM Fiber SP Ltda., or TIM Fiber SP, and AES RJ changed its corporate name to TIM Fiber RJ S.A., or TIM Fiber RJ, and we call this business, collectively,

TIM Fiber. In accordance with the reorganization of TIM Fiber, TIM Fiber RJ and TIM Fiber SP were merged into TIM Celular in 2012, which owns and operates an extensive fiber optic network in metropolitan São Paulo and Rio de Janeiro. The purpose of this reorganization was to simplify our organizational structure and improve the administrative, operational and financial efficiency of the companies controlled by us.

Our shareholders approved our adherence to the *Novo Mercado* rules and the transfer of trading of the shares issued by us to the *Novo Mercado* segment of the *B3 S.A. – Brasil, Bolsa, Balcão*, or the B3, in 2011. In order to join the *Novo Mercado*, we are required to adhere to heightened requirements relating to corporate governance and the disclosure of information to the market and we are not permitted to issue preferred shares, participation bonuses or any kind of shares with restricted voting rights. From August 3, 2011, our preferred shares ceased to trade and we only had common shares traded on the *Novo Mercado* listing segment of the B3 by using the code “TIMP3”, and as from August 5, 2011, our ADSs representing preferred shares ceased to trade on the NYSE and our ADSs representing five common shares instead of ten preferred shares commenced trading on the NYSE. See “Item 9. The Offer and Listing—A. Offer and Listing Details.”

On July 25, 2017, the Company's Board of Directors approved the corporate restructuring, or the Reorganization, of its subsidiaries TIM Celular and Intelig. On September 6, 2017, as the first phase of the Reorganization, Intelig altered its articles of association to change the company from a limited liability company to a limited liability corporation (not listed), and to change its corporate name to TIM S.A. The Reorganization will result in the takeover of TIM Celular by TIM S.A. and has the objective to capture operational and financial synergies, through the implementation of a more efficient operational structure, as well as accounting and internal control systems.

## **2017 Important Events**

### ***Share Repurchase Program***

Our Board of Directors approved on October 2, 2017 a share repurchase program, as proposed by our Board of Statutory Officers. The purpose is to repurchase shares issued by the Company in order to allow the exercise of stock options, under a stock option plan of the Company developed as part of our Incentive Plan based on shares of the Company. See Notes 25 and 26 to our consolidated financial statements.

### ***Corporate Reorganization***

As noted above, the Company's Board of Directors approved on July 25, 2017 the Reorganization, under which TIM Celular will be merged into TIM S.A. (known, until its corporate name change in September 2017, as Intelig). The Reorganization has the objective to capture operational and financial synergies, through the implementation of a more efficient process structure, as well as accounting and internal control systems.

The Reorganization will also allow a unified commercial management of the various services provided by the Company's subsidiaries and a more efficient and swift response to the market's needs, through the development of new services and integrated offers, enabling a better strategic positioning and competitiveness, as well as a better customer experience.

The implementation of the Reorganization has been conducted in accordance with the consents and approvals of Anatel and of BNDES as a creditor of the Company. On December 29, 2017, Anatel's commission provided its preliminary approval for the merger of TIM Celular into TIM S.A. and for the corresponding transfer of all TIM Celular's services and spectrum licenses to TIM S.A. On January 3, 2018, the decision granting such preliminary approval was published in the Official Gazette (*Diário Oficial da União*). The Company expects to implement the merger in 2018. Following the completion of certain other required formalities, Anatel will formally proceed with the final approval in order to transfer all licenses to TIM S.A. and later merge TIM Celular's SCM license into the SCM license already held by TIM S.A.

### ***Interest on Equity***

The Board of Directors of the Company approved on November 7, 2017 the payment of interest on equity by the Company and its subsidiaries to their respective shareholders in a total amount of R\$190 million. Interest on equity is a commonly used alternative form of distribution under Brazilian law (in lieu of or in addition to dividends). Interest on equity is similar to payment of dividends from a Brazilian law standpoint except that it is deductible for income tax calculation purposes. The Company and its subsidiaries proceeded with the payment of interest on equity in November 2017, as an advance distribution of the year's results. See Note 25 to our consolidated financial statements.

### ***Towers Sale and Leaseback***

In November 2014, TIM Celular entered into sale and leaseback transaction, or the ATC Sale-Leaseback Transaction, pursuant to which it executed a Sales Agreement, or the Sales Agreement, and a Master Lease Agreement, or MLA, with American Tower do Brasil Cessão de Infraestruturas Ltda., or ATC. Under the Sales Agreement, TIM Celular could sell up to 6,481 telecommunications towers owned by it for approximately R\$3 billion, and under the MLA TIM Celular could then lease back part of the space on these towers for a period of 20 years from the date of transfer of each tower, with monthly rental prices depending on the type of tower (greenfield or rooftop). The ATC Sale-Leaseback Transaction improved the Company's operating and financial capacity and allowed TIM to expand investments and improve quality of services.

In 2017, TIM concluded the project under the Sales Agreement signed in November 2014 with ATC. By the end of the project, 5,873 towers were sold in a total amount of R\$2.65 billion. On June 30, 2017, we had the last closing provided in the Sales Agreement, under which TIM Celular transferred 54 towers to ATC, and received a total of R\$20 million. After this step, we acknowledged the conclusion of the towers sale process and that this project has contributed for the better allocation of our financial resources.

The gain on the portion of the assets effectively sold in 2017, amounting to R\$0.8 million (net of transaction costs), was recognized as other operating income for financial year 2017, while the gain on the portion of the towers subject to sale and leaseback, amounting to R\$15 million (net of transaction costs), was deferred over the lease term (20 year) per the MLA. The discount rate used in the ATC Sale-Leaseback Transaction was determined based on observable market transactions that the lessee would have to pay in a similar lease or borrowing arrangement. The discount rate applied in each tranche is described in Notes 3 and 15 to our consolidated financial statements.

### **Capital Expenditures**

Capital expenditures totaled R\$ 4,148 million in 2017, down 7.9% as compared to 2016, as found in the Industrial Plan 2017-2019. This decrease was due to efficiency on investments (more coverage, installing more equipment and fiber, yet using fewer resources due to better negotiated conditions). Approximately 87% of capital expenditures was dedicated to infrastructure, mainly transportation network projects, 4G technology and information technology. For a detailed breakdown of our capital expenditures in 2015, 2016, 2017 and currently in progress, as well as the total amount each year and method of financing the same, see “Item 5. Operating and Financial Review and Prospects—B. Liquidity and Capital Resources—Uses of Funds—Material Capital Expenditures” and “—Sources of Funds.”

In March 2018, TIM released its Industrial Plan for 2018 – 2020 that seeks to solidify its leadership in ultrabroadband networks and digitalize its customers’ experience to become the best telecom provider in Brazil and consistently continue to improve its financial results in terms of profitability and cash generation. The trajectory to achieve these goals are based on: (i) improvement in mobile and residential broadband revenues, (ii) traditional efficiency approach and digitalization initiatives and (iii) optimization of tax rates, debt and dividends to improve cash generation with the approach “more with less.” The capital expenditures expected to support the Industrial Plan for 2018 – 2020 is approximately R\$12 billion for that three-year period.

## ***B. Business Overview***

### **Market Characteristics**

The telecommunications sector in Brazil is marked by strong competition and by the effective regulation of the national telecommunications agency, ANATEL, whose mission is “to promote the development of the country’s telecommunications, in order to provide it with a modern and efficient telecommunications infrastructure, capable of providing the society with adequate, diversified and fair prices throughout the entire national territory.”

The gradual recovery of the Brazilian economy had a direct impact on the telecommunications market in 2017, which continued to experience a reduction in the mobile customer base. The mobile market has also been characterized by the process of migration from prepaid to hybrid (Control plans) and postpaid plans. This movement can be seen as a result of the growing demand for access to data and content services. At the same time, the operators sought to retain their customers with offers that are characterized by recurrent consumption and, consequently, of revenue, in line with the strategy of offering more for more.

In 2017, the sector also reflected the tendency toward increased data consumption, requiring operators to adapt their networks and face the challenge of delivering an increasingly robust infrastructure in an environment of greater

rationality in investments. Additionally, the industry was marked by an increased integration of digital services into their portfolio in order to monetize their offerings.

Finally, the growing demand for fixed broadband and the strong migration to higher speed service offerings (especially for ultra-broadband, with speeds above 34Mbps) reflected the new perception of Internet access as an essential asset for the population.

### ***Mobile Market Developments***

The following table shows the data of Brazilian mobile market during the periods presented.

	<b>2017</b>	<b>2016</b>	<b>2015</b>
Brazilian wireless subscriber base (million) <sup>(1)</sup>	236.5	244.0	257.8
Prepaid lines (million)	148.5	164.7	184.5
Postpaid lines (million)	88.0	79.4	73.3
Estimated total penetration (%) <sup>(2)</sup>	113.5	118.0	125.7

(1) Source: Anatel

(2) Based on information published by Anatel and IBGE/IPC Maps (December 2017).

Following the dynamic of last years, the downward trend of customer base reduction in 2017 continued to be driven by the “cleaning” actions in the prepaid segment where customers which previously held multiple SIM cards are discarding them and by the process of consolidation of multiple chips. According to Anatel, the Brazilian mobile market presented a contraction rate of 3.1%, compared to a 5.3% contraction rate in 2016. Although the prepaid customer base contracted by 9.8% over the course of 2017, it still continues to represent the market’s largest component, constituting 62.8% of total subscriber base as of December 31, 2017, as compared to 67.5% as of December 31, 2016. The significant reduction in the overall number of prepaid users is mainly due to acceleration in users consolidating multiple SIM cards to a single one, high penetration of mobile service and the rapid substitution of voice for data usage, resulting in a decrease in the so-called “community effect”, where consumers value a telecommunications system more as more users adopt it. The postpaid segment, however, experienced a 10.8% increase over 2016, as compared to 8.3% in the year before, driven by operators’ efforts to monetize their customer base, offering more data, content and digital services, and the migrations from prepaid to Control plans, and from entrance plans to postpaid.

### ***Mobile Competitors***

TIM is the brand name under which we market our mobile telecommunications services, offering GSM, 3G, and 4G technologies. Currently, our subsidiaries hold mobile licenses for each of the ten wireless areas of Brazil recognized by Anatel, making us a mobile operator in Brazil offering complete nationwide coverage. In two of our ten areas we are the Telebrás legacy provider. See “—A. History and Development of the Company—Historical Background.” Our network covers approximately 95% of the country’s population based on Anatel’s coverage criteria.

In addition to TIM, there are three other major participants in the Brazilian mobile market that offer nationwide coverage in all Anatel wireless areas: Vivo, Claro and Oi.

The Brazilian mobile telecommunications industry is highly competitive. Any adverse effects on our results and market share from competitive pressures will depend on a variety of factors that cannot be assessed with precision and that are beyond our control. Among such factors are our competitors’ size, experience, business strategies and capabilities, the prevailing market conditions and the applicable regulations.



***Other Competition***

We also compete with fixed line telephone service providers. The fixed line incumbent providers in Brazil (Oi, Vivo and Embratel Participações S.A. (owned by America Movil), as well as Algar Telecom, which is a regional incumbent) and some relevant players (GVT, acquired by Vivo, and Net Serviços de Comunicação S.A., owned by America Movil) offer packages of services including voice (both fixed line and mobile), broadband and cable TV services in a bundled offer. Fixed line providers are, however, required to offer their services to unaffiliated mobile providers on the same basis they are offered to affiliated mobile providers. Our acquisition of Intelig (now known as TIM S.A.) and AES Atimus broadened our participation in the fixed telecommunication sector.

We also compete in the corporate telephony business with Nextel, a provider of both digital trunking (based on push-to-talk technology), or SME, and regular mobile, or SMP, services, using 3G and 4G technology in some regions. Nextel became the fifth mobile telecommunications competitor, but its network deployment was focused mainly in the states of São Paulo and Rio de Janeiro. In 2014, Nextel also entered into a national roaming agreement with Vivo, whereby Nextel's SMP customers can use Vivo's 2G and 3G mobile network in regions where Nextel does not have coverage.

On February 9, 2015, Anatel approved, by means of Resolution No. 647/2015, the adjustment of SME licenses into PCS licenses, although charges may apply to operators in connection with such adjustment. In December 2015, Nextel won the auction for the 30 Mhz band in the 1,800 Mhz spectrum in São Paulo with an offer of R\$455 million.

## **Our Business**

We are a telecommunications company that offers mobile voice and data services, broadband Internet access, value-added services, and other telecommunications services and products.

TIM is recognized for its strong brand and for its reputation as an innovative and disruptive company capable of setting new consumption standards for the market. Our proactive approach allows the Company to be in a leading position in the transformation of the telecommunications business model. The change in consumer profiles and the emergence of new technologies foster a rupture in the telecommunications industry based on the consumption of digital data, content and services.

The Company is characterized by its pioneering and innovative offerings, among a complete portfolio for individuals as well as corporate solutions for small, medium and large companies. Besides traditional voice and data services, TIM offers a fixed-line ultra-broadband service, TIM Live, and a WTTx technology.

The Company also offers a variety of digital content and services in its portfolio of packages, increasing for its clients the day-to-day functionality of their mobile devices. The ability to manage a complete and varied portfolio gives TIM the possibility to offer customized packages to its customers and to propose convergent offers in certain regions.

In 2017, TIM launched a new concept of postpaid services, "TIM Black", with a better service usage experience and inclusion of new benefits, which further develops the Company's portfolio in the segment. TIM Black was innovative as the first postpaid plan to include unlimited calls to any operator, in addition to robust Internet and digital services packages, including video platforms. TIM further expanded its postpaid portfolio with the release of TIM Família, offering more benefits and a better experience to our customers.

TIM also made innovations in its portfolio of Control and prepaid offerings. In the Control segment, which tends to be a gateway to postpaid plans, the Company was the first to offer unlimited calls to any operator, plus data and digital services packages. The Company continues to be a valued leader in the prepaid plan segment and to offer innovative and complete packages, aiming to engender loyalty among our customer base.

TIM seeks to follow the desire of its consumers, considering them at the center of the Company's decision making, based on: (i) innovation, which is in the DNA of the Company and will continue as a priority, with new plans, offers, partnerships and technologies; (ii) quality, which is the basis for acquiring the customer's loyalty and for the expansion of its life cycle; and in the (iii) user experience, which is the strategic pillar of convergence of all others, establishing a new relationship with customers and acting in a way that everyone receives the best experience, great services and a transparent relationship with the Company.

## **Competitive Strengths**

We believe that our robust network infrastructure, our innovative approach, our brand recognition and our widespread sales network, position us well to capitalize on opportunities in the telecommunications industry in Brazil and meet the constantly changing demands of the mobile telecommunications market. We believe that our main strengths include:

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***High quality services.***

Since national coverage and quality had improved quite substantially over the last few years, Anatel also has shifted its focus. The prior focus was service quality from a broader, state-oriented perspective and now, Anatel is taking a local perspective, concentrating its efforts on smaller geographic areas like cities, especially those where service is still considered poor. In the final quarter of 2017, Anatel proposed a new quality regulation with such a city-based focus (RQUAL), which is currently under discussion with telecommunications providers. Accordingly, TIM has also started tracking its quality indicators and focusing on service quality at the city level, in order to assure an even more rigorous review of the customer experience.

The results of this local focus are demonstrated in the solid improvements of Anatel's quality metrics over the last years. As a highlight, the Company has been able to maintain positive results in 3G/4G data-related indicators due to the rapid expansion of our coverage in 2017, in particular in 4G, where we are the leading telecommunications company by number of cities covered. Anatel's official data released in 2017 demonstrates that TIM achieved a rating of 97.97% over the target in voice-related indicators, and 95.58% over the target in data-related indicators.

TIM also demonstrated a strong performance of its LTE technology in data usage, wide coverage and availability. The TIM 4G network received higher measurements, when viewed against other test of 4G networks, in the Brazilian market on the SpeedTest platform. These results are important given the strong adherence of TIM customers to this technology in 2017. At the end of 2017, approximately 60% of TIM's data traffic was carried out by the 4G network.

Moreover, in a satisfaction survey conducted by Bridge Research, TIM achieved significant results in 2017. In December 2017, the Company ranked first in overall satisfaction for the postpaid segment and second in the Control segment. TIM had a similar outcome with respect to satisfaction with mobile Internet use, occupying the first place in pure postpaid and second in Control.

It is also worth mentioning that the Company continues to invest in digitization efforts in order to improve customer experience and boost process efficiencies. TIM believes that the digital transformation of its services must take place on several fronts, from the sale and activation of the line, to post-sale and so-called "self-caring" (a term used in the telecommunications market for digital service portals that allow customers to manage profiles and subscriptions), billing, collection and, finally, payment.

The Company has experienced strong results from such digitalization efforts. In 2017, the number of users digitally seeking customer service through the "My TIM" app and website, doubled in relation to 2016, representing 57% of the total interactions (a growth of 22 percent year over year). Also, digital sales doubled gross additions in 2017, while prepaid recharging by digital means grew approximately 4 percent as a percentage of total recharges.

Our ultra-broadband service is also viewed generally as a reference of quality in the sector, driven by the Company's commitment to the customer experience. This service quality of TIM Live has demonstrated itself to be excellent, recognized by Netflix and Estadão Newspaper. At Netflix, TIM Live led as Brazil's fastest provider speed 33 times in the last 36 months, until the end of 2017, and was ranked as the best telecommunications provider in the services category for the third time in the Estadão ranking.

We are also better able to provide high quality services due to our strong relationship with our suppliers. We operate a system for information technology vendor management in order to improve the commitment of our suppliers. As a result of this approach, we benefit from enhancements like (i) better accountability of end-to-end vendors on our business processes; (ii) better contractual conditions and savings due to the increase of volumes per vendor; (iii) vendor consolidation and specialization in specific platforms/processes, creating the opportunity for long-term investments in such areas; and (iv) active contribution to transformation and simplification.

These processes were organized and improved through detailed rules such as the Projects Review Board and Investments, and the Function Points Productivity Contractual Auditing. This allowed us to achieve an excellent level of information technology governance, exemplified by better business contribution of each investment due to shared objectives and goals. As a result, we improved our efficacy and efficiency.

Finally, we also continue to seek new internal data sources in order to better understand our users' perspective and needs, including collecting and analyzing information from apps and investing in the modernization of traditional quality-assessment tools.

The Company understands that the above statistics reflect its commitment to solid infrastructure and its focus on the customer experience. However, the Company recognizes that there are some statistics and/or quality measures that use different methodologies that could present diverse results from those that are mentioned above.

***Open Innovation Program.***

TIM's Open Innovation Program has the objective to establish a network to exchange knowledge, best practices and business models within a collaborative group of enterprises, startups and academia in order to leverage the development of innovative products and services. The objective of the program is to focus on learning and exploring new technologies in partnership with complementary business partners, in order to create sustainable and responsible solutions. The network was established based on the concept of partnerships like startup hubs and/or co-working spaces, and is designed to bring together entrepreneurs, vendors, technology companies, providers and content developers, Innovation Centers and universities so that they can recognize in TIM a potential partner in the development of new products, services or business models based on technology. In 2017, TIM interacted with more than 90 startups all over the country, to discuss opportunities in areas like big data and analytics, artificial intelligence, the "Internet of things", financial technology companies, or fintechs, agritechs, mobile video and digital transformation. Over the course of 2017, some of the solutions resulting of the program have been recognized and received awards that improved TIM's ranking via this Open Innovation Program. TIM is creating a space furnished with the most modern technology to receive startups focused on the development of new solution and business models that have potential to improve TIM's services.

***Strong brand associated with innovation.***

In 2017, TIM maintained the institutional campaign slogan "Evoluir é fazer diferente" (to evolve is to do things differently). This slogan is emblematic of TIM's strategy of seeking to fulfill consumers' needs by understanding what they value and earn their trust based in three pillars: (i) innovation, which is already in the company's DNA and will continue as a priority, with new plans, offers, partnerships and technologies; (ii) quality, as TIM has worked to become a leader in 4G coverage and maintain strong investments in infrastructure to deliver the best to its customers and be prepared for the future; (iii) user experience, which, in addition to the two other pillars, is important to establish a new relationship with customers and act to give every client the best caring experience, great services and a transparent relationship with the company.

The Company also seeks a strong position in the high value customer market by offering a variety of plans bundling voice and data packages, as well digital value-added services (music, e-reading, video streaming) in order to provide a premium customer experience.

***Advanced Technology and Innovation Center.***

In terms of infrastructure, an important achievement in 2017 was the constitution of TIM Lab, a multifunctional test bed environment for evaluation of innovative technologies, products and services, attesting their functional efficiency and performance requirements, as well for development new models and solutions. This new endeavor brings engineers, researchers and technicians together to ensure effective assessment, and serves as an open space for new opportunities, leading innovation for the Brazilian telecommunications market and acting as a national reference for R&D activities.

TIM Lab performs a strategic role in supporting service assessment and innovation activities. These projects support TIM's network evolution and tackle certain important business and market needs, including the evaluation of new generation networks, future Internet applications, projects with positive social and environmental impacts and open innovation initiatives. In this sense, TIM has also joined the Telecom Infra Project, or TIP, an initiative founded by Facebook and other companies to create a new approach for building and deploying telecommunication network infrastructure, with TIM Lab as the first TIP Community Lab in Latin America.

Among the technologies assessed and approved at the TIM Lab environment, some are classified as extremely important to support the network evolution, including 700MHz LTE, IP multimedia networks (voice over LTE, video over LTE, WiFi calling services, completely laid out functional blocks, and enabled by an IP multimedia subsystem, or IMS, platform), network functions virtualization, or NFV, 4G RAN sharing, Narrowband Internet of Things, or NB-IoT, Dense Wavelength Division Multiplexing, or DWDM, transport network and power saving features and solutions.

***The only Brazilian telecommunications company listed on the Novo Mercado.***

Since our listing on the *Novo Mercado* in July 2011, we are the only company in the Brazilian telecommunications sector listed on this segment of the B3. As part of our listing on the *Novo Mercado*, we are required to adhere to heightened requirements relating to corporate governance and the disclosure of information to the market. As part of our strong commitment to these principles, we made our financial results meetings available by teleconference, smartphones and tablets, in addition to computers. We believe that the listing on the *Novo Mercado* provides greater liquidity and value for our shares and allows us greater access to international markets, promotes the strengthening of our corporate image and increases confidence in us, in addition to reaffirming the long-term commitment of the Telecom Italia Group in Brazil. We believe listing on the *Novo Mercado* also aligns the interests among our controlling and minority shareholders with respect to voting rights, tag along rights and dividend policy.

In addition, we belong to a select group of companies comprising the portfolio of the Corporate Governance Index and the B3 Tag Along Stock Index, comprised of companies that have committed to adopt better co-sale protection to minority shareholders, have actively traded in 30% of the trading sessions and do not constitute a penny stock. In 2017, we were listed for the tenth consecutive year as part of the portfolio of the Corporate Sustainability Index of the B3, an index comprised of companies that have a strong commitment to sustainability and social responsibility. As part of its commitment to society in addressing climate change, TIM conducts periodic mapping of the sources of emissions in its activities. The Company is able to do so by preparing annually a greenhouse gas (GHG) inventory in accordance with the guidelines of the GHG Protocol (which sets the global standard for how to measure, manage, and report greenhouse gas emissions).

***Highly qualified and experienced executives and controlling shareholder support.***

We have a team of highly qualified executives, widely recognized in the industry and possessing extensive experience in telecommunications markets in Europe and emerging countries. Our executive compensation policy seeks to align the interests of our executives with those of our shareholders, through variable compensation plans and stock options that reward good performance and the accomplishment of certain goals, as well as provide for improved executive retention.

Our controlling shareholder's support in our operations is further demonstrated through the sharing of know-how and best practices and development of new solutions for networking, marketing and finance, which are rapidly rolled out under a "plug & play" strategy, under which network innovations may be developed by our parent company first in other regions and then implemented with us.

**Our Strategy**

The Company's strategy is based on six foundational pillars: culture, digitalization, offer, infrastructure, efficiency and customer experience. These pillars aim to redesign the customer experience and make TIM the best choice by value in the market, supported by its position as the leader in the mobile ultra-broadband and its array of innovative offers.

The goal of our culture pillar is to disseminate the feeling of ownership and responsibility among our employees, and is intended to be the basis for a deep cultural transformation within the Company. Based on the concept of accountability, TIM believes that its employees will be able to concentrate their creativity and energy in the search for new solutions, delivering positive results.

The digitalization pillar aims to accelerate the development and implementation of digital systems, enhancing customer experience and delivering significant operational and financial efficiencies. The migration to digital and flexible platforms follows the market trend of using the most sophisticated technologies, allowing for greater



operational agility and efficiency.

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The offer pillar proposes the selective development of innovative packages, according to the client's profile. Additionally, the Company intends to expand its fixed broadband offer through Fiber to the Home, or FTTH, and WTTx technologies, which will allow a selective approach with convergent offers in certain regions.

With the infrastructure pillar, the Company aims to expand the 4G coverage via the 700MHz spectrum, reinforcing its leadership in mobile ultra-broadband coverage and quality excellence. In parallel, the development of fiber networks aims to broaden the Company's fixed broadband coverage and maintain the quality level required by the customers, and is also one of the main focuses for capital expenditure investment by the Company.

The efficiency pillar reflects the broad and systemic goal of generating disruptive efficiencies in the telecommunications market both operationally and financially.

All five pillars mentioned above are directly related to our commitment to the customer experience, which is our sixth pillar. This is the main objective of the proposed structure in which the customer is the center of decision-making. These pillars form the basis of the strategies described below.

***Protecting the value of our prepaid customer base and aiming at the growing postpaid segment, shifting focus from absolute market share to revenue share, and strengthening our existing customer base.***

As mentioned above, the Brazilian mobile telecommunications market is facing an overall reduction in the number of prepaid customers, as users which previously held multiple SIM cards are consolidating to one single SIM card, the reduction of interconnection charges, which allow companies to offer plans with off-network calls at the same price of on-network calls and the increase of use of OTT solutions to make calls at no extra cost. In connection with this trend, our strategy is to be chosen as the single SIM provider for the prepaid market by providing offers that are attractive and valuable to customers and maintaining our reputation for quality. To support this strategy, we are also implementing a new handset strategy and new initiatives in our sales channel model, including a more efficient regional approach.

Our growth strategy is mainly focused on addressing the potential for mobile Internet in the Brazilian market, particularly increasing mobile Internet penetration and data traffic. We believe mobile operators are in a strong position to address the demand for broadband in Brazil, with the ability to provide flexible price plans (including the prepaid market) affordable to the majority of the Brazilian population. The lack of fixed infrastructure is still an issue for accessibility to fixed broadband, especially in suburban areas, making mobile coverage more suitable for such customers without broadband access. In addition to providing affordability and coverage advantages, mobile operators appeal to the new cultural demand for Internet connectivity at all times and in all places. The machine-to-machine market, or M2M, is also an area of opportunity for growth with future applications to be developed.

In addition, our strategy also involves positioning TIM as a partner of our existing customer base, by increasing their loyalty by offering exclusive products to existing customers, focusing on value-added services in our offers, and by differentiation in our products and services. Value-added services represent an important part of the TIM strategy, as it is already a relevant market and has high growth rates with the potential to increase revenue streams. Such services are generally launched through a partnership with an established OTP player. We believe the foregoing strategies will allow us to strengthen customer loyalty without requiring us to incur higher costs, as increased traffic within our own network does not significantly increase our operational costs. We are also investing in new channels, to bring new customers to the company and to enhance each customer's experience. We are constantly seeking new customers through new marketing efforts and promotional initiatives.

***Capitalizing on fixed-mobile substitution in voice and traditional services.***

We seek to capitalize on the existing opportunity of fixed-mobile substitution in voice and data traffic and encourage the use of mobile devices, rather than fixed lines, for long distance communication and Internet. We believe that the main advantage of our product offerings is that our users are able to use our growing mobile network.

In the voice market, this strategy has been successful in part due to the limited service offerings of other long distance carriers in Brazil and the acceleration of fixed-mobile substitution. We have become the market leader in the long distance telecommunications market based on our market share. Fixed-mobile substitution is still evident in Brazilian market, as fixed telephony operators have experienced a decline in revenues. Since we are primarily a mobile operator with robust network infrastructure, the impact of any reduction in the fixed telephony market does not have a material impact on our performance and we therefore encourage the acceleration of fixed-mobile substitution, which in turn increases demand for our services.

As already mentioned, TIM is also targeting the residential broadband market through its 4G mobile broadband network, using WTTx technology, connecting homes to the Internet by using a router that connects to our 4G mobile network. We believe such product can be suitable specially for areas with poor fixed broadband infrastructure as our 4G coverage is growing rapidly.

***Providing Internet access to everyone.***

We intend to provide universal Internet access to all classes, offering our prepaid and postpaid customers competitive data usage plans through wireless handsets or other data devices (e.g. tablets, wearables, etc.). Our focus on increased data usage among our customers is also influenced by our ability to effectively manage our handset and accessories sales, with a primary focus on smartphone models that provide for quality Internet access at a low cost. This approach has allowed us to offer our services at a highly competitive price, offer convenient payment methods, meet market demand and allow for opportunities for innovation. The result of this strategy can be seen in the increase in our number of data users and in smartphone penetration, especially in 4G.

Leading mobile Internet growth in our sector is a key pillar of our strategy, since we see this as the most important market in terms of growth and size in the foreseeable future. Our marketing efforts have also been designed to stimulate Internet usage and leverage our 3G and 4G networks by providing for suitable and affordable postpaid and prepaid Internet plans.

***Construction of a unique infrastructure network in the Brazilian market and improving our network.***

We are committed to developing a robust network infrastructure capable of serving our customer base and anticipating new trends and technologies in the industry. The development of this infrastructure requires both organic (planning and infrastructure development projects for the existing network) and inorganic (acquisitions) investments. As part of our strategy to focus our investments in infrastructure, we acquired Intelig in December 2009, in page to establish our own fiber optic network and develop automation projects and acquired the company formerly known as AES Atimus (later TIM Fiber and now TIM Celular) in 2011 to strengthen and expand our fiber optic network.

Besides improving our core infrastructure, TIM has been rolling out an aggressive plan for 4G coverage, which has placed TIM as the undisputed leader in 4G coverage in Brazil, achieving more than 3,000 cities with such technology in 2017, considerably ahead of its competitors. This positions TIM as having the best coverage and the best mobile broadband technology, creating the possibility of an improved market position, particularly for high end customers. Moreover, TIM has also been investing in 3G technology, achieving more than 3,000 cities covered in 2017.

***Expansion into new businesses and continued strength in recently expanded sectors.***

TIM Live offers high quality ultra-broadband, with high-speed data connection varying from 35 Mbps until 1 gigabit (1,000 Mbps) downstream and 500 Mbps upstream speeds, operating within Rio de Janeiro, Duque de Caxias, Nova Iguaçu, São João do Meriti and São Paulo.

In 2017, we had a base of 390 thousand clients, covering 3 million addressable households in 163 neighborhoods in the cities mentioned above. We plan to continue expanding our coverage in Rio de Janeiro and São Paulo states throughout 2018. Our success with TIM Live has resulted from a strategy of transparent communication and a commitment to deliver the services that the consumer actually purchased, which differentiates us from local market practice. As a consequence, TIM Live continues to lead Netflix's ranking of best broadband services in Brazil (in terms of Netflix performance on particular Internet service providers), has the most satisfied users of the market according to research published by CVA Solutions, and has been listed as the best broadband service by Estado de São Paulo, one of Brazil's leading newspapers.

*Our recent sales and marketing strategy has been characterized by:*

- a focus on improving our positioning towards high value consumers, by offering a variety of plans bundling voice and data packages, as well digital value-added services (music, e-reading, video streaming). The approach for this segment is driven by the strategy of adding value for the customer base and providing users with a premium customer experience;

- an innovative and changing portfolio of offerings to appeal to the increasingly connected and cost-sensitive Brazilian customer. We have increased our data package offerings and included applications to enhance the customer experience (such as an instant messaging application). In addition, we allow the customer to continue browsing even after the end of their data package, providing them the option to continue to use data at reduced speed;
- an evolution of our postpaid plans, within which we are pursuing a number of strategies, including: (i) a review of our offers in order to stimulate the sales of postpaid plans, with discounts in services and handsets, according to the commitment of the customers; (ii) add value, including Value-Added Services as part of our plans, without extra charges; (iii) creating new markets for postpaid plans, according to our customers' usage profile; (iv) creating new opportunities for transitioning the higher spending prepaid customers to postpaid; (v) including unlimited voice calls at no extra costs in all postpaid plans and top Control plans; and (vi) creating a postpaid plan for groups, called TIM Pós Família, with up to 5 lines in the same plan, including all the same value-added services mentioned above and just one bill, addressing the needs of high income families;
- a brand repositioning within the higher value postpaid segment, TIM Black, in June 2017, and also an improvement of that portfolio by increasing the data package and providing unlimited calls;
- an effort to maintain the Company's position as an innovator by introducing within the TIM Black portfolio a double Internet package in its base-level offer which provides for video streaming with commercial partners such as Netflix, Esporte Interativo, Cartoon Networks and Looke
- maintaining of TIM Beta offers in order to develop brand loyalty as well as profitability and improve customer satisfaction. New offers are charged per week or per month and deliver a higher data package for users who achieve high scores in the gamification, which consists of the use of games dynamics to give rewards to customers, and that is exclusive to Beta users; and
- a restructuring of our small and medium business segment, targeting the growth of the overall sales force in order to boost mobile sales. This strategy will continue in order to meet customer needs and achieve alignment with industry demands.

### **Mobile Service Rates and Plans**

In Brazil, as in most of Latin America, mobile telecommunications service is offered on a "calling party pays" basis, under which the customer generally pays only for outgoing calls. Additional charges apply when a customer receives or places calls while outside of the customer's "registration area," which are the areas into which we divide our coverage areas.

Under our current authorizations, we are allowed to set prices for our service plans, provided that such amounts do not exceed a specified inflation adjusted cap. Anatel must ratify our basic and other service plans, but its focus is on compliance with the relevant regulatory rules rather than the prices charged. See "—Regulation of the Brazilian Telecommunications Industry—Rate Regulation." We charge different rates for our services, which vary according to the customer's service plan. Per minute prices decrease as customers commit to purchasing more minutes per month. Prices can also vary depending on the type of call (for example, calls from other operators on fixed lines or calls outside of the network for mobile calls) or the location of the parties on a call.

Anatel regulations require mobile telecommunications providers to offer service to all individuals regardless of income level. We recommend service plans that are suitable to each potential customer's needs and credit history, such as our prepaid service plans described below. If a customer fails to make timely payment, services can be interrupted. See "—Billing and Collection."

We offer mobile services under a variety of rate plans to meet the needs of different customer classification, including our corporate customers. The rate plans are either postpaid, where the customer is billed monthly for the previous month, or prepaid, where the customer pays in advance for a specified volume of use over a specified period.

Our postpaid plans include the following charges:

- monthly subscription charges, which usually include a bundle of minutes and data that are included in the monthly service charge;
- usage charges, for usage in excess of the specified number of minutes included in the monthly subscription charge; and
- additional charges, including charges for value-added services and data services.

Certain plans include the cost of national roaming and long distance in the price per minute so that all calls within Brazil cost the same amount per minute. Some postpaid plans are designed for high and moderate usage subscribers, who are typically willing to pay higher monthly fees in exchange for minutes included in the monthly service charge while other plans are designed to satisfy the more limited needs of low-usage postpaid subscribers. We also offer customized services to our corporate clients, which may include local call rates between employees wherever located in Brazil.

We offer a single prepaid plan with promotional offerings, which does not include monthly charges. Prepaid customers can purchase a prepaid credits plan that may be used for calls, data and additional services, based on the specific customer's needs. We have agreements with large national retail stores chains, in addition to partnerships with regional retail stores chains, to offer online recharge. Customers can also recharge straight from their mobile handsets using credit cards.

### **Consumer Plans**

In 2017, we continued to improve our positioning towards high value consumers, offering a variety of plans bundling voice and data packages, as well digital value-added services (music, e-reading, video streaming). The approach to this segment is driven by the strategy of adding value for the customer base and ensuring users a premium customer experience.

Within the consumer business, our main plans include:

#### ***Prepaid Plans***

- *TIM Pré Infinity*: under this prepaid plan, the customer is charged per day of use, with daily prices for various services (R\$1.49 voice unlimited / R\$1.49 Data 100MB / plus unlimited SMS), per service (day of use) and no charge on any day when not used;
- *TIM PRE Smart*: these offerings launched in the first half of 2016, were remodeled during 2017 and now provide larger weekly data packages (1GB / 1.5GB), unlimited SMS (in both offerings), unlimited on-network calls plus 100 minutes for other carriers (in both offerings) and OTT services (WhatsApp included in the 1GB offering, WhatsApp and Deezer included in the 1.5GB offering). The customer is automatically charged on a weekly basis, as long as there is enough balance available. There is also a monthly offering with automatic charge that includes 1.5GB data package, unlimited SMS and 400 minutes for any carrier.
- *TIM Beta*: plan marketed to young customers, charged per day for voice (to TIM numbers), SMS and mobile Internet services or weekly and monthly service bundles. The plan works with a referral mechanism. A new member can join only if referred to by existing members.



***Postpaid Plans***

In the higher value postpaid segment, we repositioned the brand by launching TIM Black in June 2017 and also improved the portfolio by increasing the data package and providing unlimited calls.

The TIM POS plans start at R\$84.99 (which requires credit card payment) for unlimited off-network calls, 4GB Internet and WhatsApp. The main offer is set at R\$139.99 (which requires invoice payment and a 12 month loyalty contract) for unlimited off-network calls, 10GB Internet, WhatsApp and data sharing among up to three additional SIM cards.

In November 2017, TIM continued its focus on innovative offerings by adding to the TIM Black portfolio a double Internet package that to be used for video streaming with commercial partners as Netflix, Esporte Interativo, Cartoon Networks and Looke.

### ***Family Plan***

TIM's "Family Plan" costs either R\$149.90 or R\$179.90 (with a regionalized offer with a discount of R\$50.00). Customers must activate at least two lines in order to be eligible for a Family Plan. Family Plans include unlimited on-network and off-network calls using the code 41, 15GB of internet, WhatsApp and the following value-added services: TIM Music, TIM Banca Virtual, TIM Protect Backup and TIM Fitness.

### ***Control Plans***

Our Control plans are a hybrid between our prepaid and postpaid plans, with fixed price billed to the customer on a monthly basis, either via credit card or digital account. Once customers of Control plans have reached the limit of their data plan, the data transmission is no longer available and the user has two options: (i) to repurchase a data package or (ii) to wait for the next data period to commence, which varies by plan, at which point his data availability and usage limit are renewed in full. Postpaid customers can also purchase a data package to navigate in full speed but the usage is not blocked when he reaches the limit of his data package.

*TIM Controle* plans start at R\$39.99 with unlimited on-network calls and 25 minutes of off-network calls and 2GB Internet. The main offer in the *TIM Controle* portfolio (which has a commercial focus) is set at R\$54.99 with unlimited off net calls, 3GB Internet and WhatsApp.

In February 2017, TIM introduced new digital services within its base-level offer (including TIM Music by Deezer, a music application with more than 40 million songs on demand, and TIM Banca Virtual, an e-reading platform for a library of 80 magazines), in accordance with the "more for more" strategy of adding value for its customer base with a pricing repositioning.

### **Corporate Plans**

In 2017, we continued to improve our positioning towards the large companies as potential clients, offering a variety of corporate solutions for mobile or fixed services (both voice and data), as well as value-added services and mobile-to-mobile services. The approach for these top clients are driven by customized solutions and a premium customer service focus.

In the small and medium business, or SMB, segment, we have kept deals attractive to our target customers, with a simple mobile portfolio and competitive pricing. In line with this strategy, we have launched TIM Black Empresas with unlimited voice calls and a variety of data packages, consistent with its strategy of providing "lots of minutes and lots of Internet, for all operators and anywhere in Brazil". Additionally, we have included relevant value-added services in the main combo offers (such as cloud storage and back up, specialized magazines and financial guides service), building on customers experience.

In sum, we had the following major launches in respect of our corporate plans in 2017:

- As mentioned above, the new mobile portfolio TIM Black Empresas, with unlimited voice calls, offered in plans from R\$39.90 (voice only) up to R\$199.90 (with 50Gb data package). Our legacy corporate mobile plans are still being offered to base customers (Liberty and Tarifa Flat);

- Relevant value-added services combos which are now included in certain of our corporate plan offerings (TIM Protect, TIM Finançs and TIM Banca Virtual); and
- Pre-defined discount grades for larger deals (up to 20% in negotiations larger than 30 mobile lines).

### **Value-Added Services**

We are constantly seeking to increase value to our customers through innovative offers and products, and 2017 was no exception. We offer, directly or through agreements entered into with third parties, value-added services, including short message services or text messaging, multimedia messaging services. Our most relevant change regarding Value-Added Services in 2017 was our new strategy to bundle Value-Added Services offers inside our core telecom products of postpaid, Control and prepaid plans. TIM Music, TIM Banca Virtual and TIM Protect Backup are the main Value-Added Services we utilize in this bundle strategy. In the last quarter of 2017, we launched a new bundle offer with access to various video products in our postpaid plans. Along with the OTT video services, we added an extra data package dedicated to stream the associated videos. For 2018 we intend to continue to implement this strategy in a wider array of products, to introduce new types of Value-Added Services into these bundles, and to launch a new strategy to sell standalone Value-Added Services offers which will focus on aligning clients with Value-Added Services offerings.

### **Financial and Other Services**

In 2017, we continued to develop this business and relaunched insurance services with a new portfolio of services, which allow us to take a broader approach to this market. For 2018, we intend to develop new partnerships with Brazilian fintechs in order to provide agility and innovation to our customers.

### **Digital Channels**

In 2017, we focused our efforts in the evolution of digital channels (including public and logged web sites, self-caring applications and e-commerce portals) in order to deliver new services, provide better customer experience and operate with more efficiency. Digital channels usage volume has increased significantly in 2017, with more visits in the public website and increases in the total sales and users of the Meu TIM application as compared to 2016.

### **Customer Service**

In order to serve our customer base, almost 60 million customers, we aligned the insourced/outsourced ratio of our internally managed customer service operations to our outsourced customer service operation to the best practices of Brazilian telecommunications business. We operate through 14 customer care centers, two of our own and twelve outsourced, comprising around 16,300 customer service representatives (of which 2,800 are the purpose of offering dedicated to provide the best options in terms of offers and services to our multi-customer base). Our high value customer service and core processes are maintained within our internal customer care centers.

As of December 31, 2017, we had more than 12.2 thousand points of sales through premium shops and dealers (exclusive or multi-brand) and consolidated partnerships with large retail chains. This figure includes 156 of our own stores. In addition to these retail stores, our customers have access to prepaid phone services through supermarkets, newsstands, and other small retailers, totaling more than 310 thousand points of sale throughout Brazil.

For the corporate market, TIM Brasil has more than 536 third-party business partners and 112 employees focused on serving small- and medium-size companies and a direct sales force team of 86 employees focused on large companies.

Throughout 2017, an important aspect of our customer service was digital customer service such as our mobile application Meu TIM and the Company's website. The digital channels are also gaining relevance in customer self-caring, top up of prepaid customers and upselling of services. In addition to being a better customer experience due to the quick response it provides, digital channels also allow TIM to reduce costs such as customer service operations and sales commissions.

In 2017, TIM worked to keep its “Customer Experience” foundational pillar as a focus (see “—Our Strategy”), creating initiatives that sought to put the customer as the center of decision-making. The approach used to promote this cultural transformation was guided by the relationship between customer and employee.

The Company has evaluated and taken action to improve the experience and professional development of its employees, with educational projects to promote engagement and insight. These efforts strengthened the bonds between an employee’s business functions and the products and services they deliver to the customer. The impact was noticeable in our Organizational Climate Survey: our “Quality and Customer Focus” satisfaction ranking increased by 10%, from 2016 to 2017, and 4% when compared to other telecommunication providers.

The business area responsible for supporting these initiatives was divided in three sections: Design, Execution and Monitoring.

The Design area created a policy with “Customer Experience” guidelines. This document defined expected behaviors and patterns in communication and interactions with customers, outlined a monitoring model, as well as refactored the products and services development cycles, to better cover all elements of Customer Experience.

The Execution area sought to solve legacy issues, with many of them concluded, which represented the efforts in the Customer Experience governance plan. These actions were grouped on four strategic pillars:

- *Customer Centric*: being customer oriented, understanding their needs, the relationship and the value proposition they expect when interacting with the company;
- *User Experience*: understand the perceptions and reactions of our customers, including their emotions, beliefs, preferences, physical and psychological responses, as well their behaviors before, during and after they use our products, offers and services;
- *Customer Monitoring*: making use of tools and techniques such as big data and predictive analytics to extract value from customer information, and to identify opportunities in revenue increase, reduced costs and improved quality;
- *Crew Experience*: With the understanding that our employees are key to create great customer experiences, empower our employees so that it is clear we are a consumer oriented organization;

In addition, we implemented the so-called “Net Promoter Score” as a fundamental key performance indicator to measure customer experience with our call center. There is an ongoing project to expand this survey to other of our customer service channels in 2018.

We have also sought to maximize customer satisfaction through improvements in our processes and systems, including customer journey mapping, where employees are invited to assume the customer perspective using empathy maps and design thinking tools. The goal of using these methods is to reduce customer effort, increase customer success and to ensure positive emotions towards TIM.

We also enhanced our interactive voice response channels to include more customer oriented services.

We completed the migration of prepaid and postpaid consumer back office services (front end was implemented in 2015) to the Siebel customer relationship management, or CRM, platform. The migration to the Siebel system from legacy systems for corporate clients is ongoing.

## **Lines of Revenue**

Our revenues from mobile and fixed services includes: (i) monthly subscription charges, (ii) network usage charges for local mobile calls, (iii) roaming fees, (iv) interconnection charges, (v) national and international long distance calls, (vi) value-added services, and (vii) co-billing. Additionally, we have revenues from sales of products (mobile handsets and accessories).

### ***Monthly Subscription Charges***

We receive a monthly subscription fee under our postpaid mobile plans, which varies based on the usage limits under the relevant plan.

### ***Network Usage Charges***

We divide our coverage areas into certain areas defined as “home registration areas.” Calls within the same home registration area are considered local calls. Each of our customers is registered as a user of one of our home registration areas.

As determined by Anatel, our usage rate categories for local mobile services on a prepaid or postpaid basis are as follows:

- VC1. The VC1 rate is our base rate per minute and applies to mobile / fixed calls made by a customer located in the customer’s home registration area to a person registered in the same home registration area.
- VC. The VC rate is our base rate per minute and applies to mobile / mobile calls made by a customer located in the customer’s home registration area to a person registered in the same home registration area.
- AD. AD is a per-call surcharge applicable to all outgoing calls or incoming calls made or received by a customer while outside such customer’s home registration area.
- VU-M. Value of Use of Mobile Network (*Valor de Uso de Rede Móvel*), or VU-M, also known as an interconnection rate or mobile termination rate, is the fee another telecommunications service provider pays us for the use of our network by such provider’s customers, in this case for local calls. (See “—Interconnection Charges”).

Usage charges are for minutes in excess of those included as part of the monthly subscription charge under the relevant postpaid plan.

### ***Roaming Fees***

We receive revenue pursuant to roaming agreements we have entered into with other mobile telecommunications service providers. When a call is made from within our coverage area by a client of another mobile service provider, that service provider is charged a roaming fee for the service used, be it voice, text messaging or data, at our applicable rates. Similarly, when one of our clients makes a mobile call when that customer is outside of our coverage area using the network of another service provider, we must pay the charges associated with that call to the mobile service provider in whose coverage area the call originates at the applicable rate of such mobile service provider.

Automatic national roaming permits our customers to use their mobile telephones on the networks of other mobile service providers while traveling or “roaming” in the limited areas of Brazil not covered by our network, complementing our current mobile coverage. Similarly, we provide mobile telecommunications service to customers of other mobile service providers when those customers place or receive calls while in our network. Mobile service providers which are party to roaming agreements must provide service to roaming customers on the same basis that such providers provide service to their own clients. All such providers carry out a monthly reconciliation of roaming charges. Our roaming agreements have a one-year term and automatically renew for additional one-year terms.

### ***Interconnection Charges***

We receive interconnection revenues in connection with any call originating from another service provider’s network, mobile or fixed line, which is received by any mobile customer, of ours or of another provider’s, while using our network. We charge the service provider from whose network the call originates an interconnection fee for every minute our network is used in connection with the call.



We have entered into interconnection agreements with most the telecommunications service providers operating in Brazil, which include provisions specifying the number of interconnection points, the method by which signals must be received and transmitted, and the costs and fees for interconnection services. The interconnection among the networks of providers of telecommunications services of collective interest is mandatory and the interconnection agreements must be submitted to Anatel for approval. Nevertheless, even in the absence of ratification by Anatel, the parties to these interconnection agreements are obligated to offer interconnection services to each other.

The interconnection fees we were permitted to charge other mobile telecommunications providers, and which other mobile telecommunications providers charge us, have in the past been adjusted by inflation. In 2004, Anatel issued regulation establishing that the agency would determine rules for the calculation of reference rates for interconnection fees based on a cost model. Transition rules were defined and applied until, in July, 2014, by means of Resolution No. 639/2014, Anatel effectively issued the rule for the definition of reference rates for entities with significant market power, based on a cost model, for VU-M, as well as maximum rates for the termination of calls on TU-RL. Since the issuance of Resolution No. 639/2014, interconnection fees have been decreasing based on a specific glide path. See “—Regulation of the Brazilian Telecommunications Industry—Interconnection Regulation.”

### ***Long Distance***

Telecommunications customers in Brazil are able to select long distance carriers on a per-call basis under the carrier selection, or the CSP program, introduced in July 2003, by punching in a two-digit code prior to dialing long distance. This regulation also increased the size of home registration areas, calls within which are local calls and, as a result, reduced the number of home registration areas.

For mobile customers, we offer long distance services throughout Brazil through our wholly owned subsidiary TIM Celular. This service allows our mobile customers the option of continuing to use our service for long distance calls, which we believe strengthens our respective relationship and loyalty, and enhances the perception of our brand as a comprehensive mobile telecommunications service. Mobile customers of other service providers can also choose to use our long distance service.

Under this structure, a customer is charged the VC1 or VC rates directly by us only for calls made by and completed to a number registered within that customer’s home registration area. Long distance calls, however, are charged to a customer by the chosen long distance carrier. Other long distance carriers, in turn, pay us a VU-M fee for any use of our network for a long distance call.

As determined by Anatel, our long distance usage rate categories are as follows:

- VC2. The VC2 rate applies to calls placed by a customer located in one of our home registration areas selecting us as the long distance carrier, on a per-call basis, to place a call to a person registered in another home registration area within the same wireless area recognized by Anatel;
- VC3. The VC3 rate applies to calls placed by a customer located in one of our home registration areas selecting us as the long distance carrier, on a per-call basis, to place a call to a person registered outside the same wireless area recognized by Anatel; and
- VU-M. VU-M is the fee another telecommunications service provider pays us for the use of our network by such provider’s customers, in this case for long distance calls. (See “—Interconnection Charges.”)

### ***Co-Billing Services***

Co-billing occurs when we bill our customers on behalf of another long distance service provider for services rendered to our customer by that carrier. Beginning July 2003, we started providing co-billing services to other telecommunication service providers operating in Brazil. The rates of such services are negotiated under the supervision of Anatel.

### ***Sales of Product***

We offer a diverse portfolio of handset models from several manufacturers for sale through our dealer network, which includes our own stores, exclusive franchises and authorized dealers. We are focused on offering an array of handsets, including essential and smartphones devices with enhanced functionality for value-added services, mainly 4G equipment that provides Dual SIM, NFC, Wi-Fi, Internet, Bluetooth and camera functionalities, while practicing a policy of increasing 4G smartphone penetration, focusing on high quality 4G smartphones to enhance the customer experience. Our mobile handsets can be used in conjunction with either our prepaid or postpaid service plans. In 2017, TIM increased its focus on the postpaid segment, offering to these customers discounts on high-level 4G smartphones. Currently, we believe that supplies of mobile handsets are sufficient to satisfy demand, but also plan to expand our mobile handset portfolio to new devices focused on the connectivity experience, such as routers and other web devices.

## **Billing and Collection**

Our company-wide, integrated billing and collection systems are provided by a third-party vendor. These systems have four main functions: (i) customer registration, (ii) customer information management, (iii) accounts receivable management and (iv) billing and collection.

These billing systems give us significant flexibility in developing service plans and billing options.

Certain aspects of billing customers in Brazil are regulated by Anatel. For mobile and fixed telephones, currently if a customer's payment is more than 15 days overdue, we can suspend the customer's ability to make outgoing calls if preceded by a notification. If the payment is 45 days overdue, we can suspend the customer's ability to receive incoming calls, also if preceded by a notification. For residential broadband, currently if a customer's payment is more than 15 days overdue, we can reduce the speed of the customer's broadband access and if the payment is 45 days overdue, we can suspend the customer's broadband access. After 90 days from the customer's payment due date, we generally discontinue service entirely, with a notification to the customer. Discontinuation of service is sometimes delayed, however, between 120 and 180 days after the due date for valued customers. The rules of suspension and discontinuation of fixed and residential broadband service are the same as those applied for the mobile service.

In March 2014, Anatel approved a single regulation for the telecommunications sector, with general rules for customer service, billing, and service offers, which are applicable to fixed, mobile, broadband and cable TV customers.

In order to avoid delinquency and discontinuation of service, however, we have invested in CRM models to identify customers with higher propensity to early delinquency, or when a postpaid customer does not pay the first or second invoice, and also reinforced credit history checks for our customers prior to service activation. Although we continue to have one of the lowest delinquency rates in the segment, we noticed an increase in bad debt as a consequence of the expansion of the postpaid base of customers and the challenging economic environment. Our Express Plan has also proved to be an important tool to prevent early delinquency, since the payments are made by credit card.

Pursuant to Anatel regulations, we and other telephone service providers periodically reconcile the interconnection and roaming charges owed among them and settle on a net basis. See “—Interconnection Charges” and “—Roaming Fees.” Currently, the roaming reconciliation process is largely managed by industry sponsored groups, while the interconnection reconciliation process is primarily managed directly by us.

## **Seasonality**

We have experienced a trend of generating a significantly higher number of new clients and product sales in the fourth quarter of each year as compared to the other three fiscal quarters. A number of factors contribute to this trend, including the increased use of retail distribution in which sales volume increases significantly during the year-end holiday shopping season, the timing of new product and service announcements and introductions, and aggressive marketing and promotions in the fourth quarter of each year.

## **Regional Overview**

We offer GSM telecommunications services with a national reach to 95% of the urban population, which is one of the most extensive GSM coverage areas in Brazil, with a presence in 3,467 municipalities. We have 3G and 4G coverage available in more than 3,000 cities to more than 90% of the urban population of Brazil.

The following table shows information regarding the Brazilian mobile telecommunications, at the dates indicated.

	<b>As of or For the Year Ended December</b>		
	<b>31,</b>		
	<b>2017</b>	<b>2016</b>	<b>2015</b>
Brazilian population (millions) <sup>(1)</sup>	207.7	206.1	204.5
Estimated total penetration (%) <sup>(2)(3)</sup>	113.5	118.0	125.7
Brazilian wireless subscriber base (millions)	236.5	244.0	257.8
National percentage subscriber growth (%)	(3.1)	(5.3)	(8.2)

- (1) According to the last information disclosed by IBGE; (July 2017).
- (2) Percentage of the total population of Brazil using mobile services, equating one mobile line to one subscriber; (December 2017).
- (3) Based on information published by Anatel and IBGE/IPC Maps; (December 2017).

### **Our Network**

Our wireless networks use 2G, 3G and 4G technologies and cover approximately 95% of the urban Brazilian population based on Anatel's coverage criteria. In order to move toward 4G services, in October 2012, we acquired additional bandwidth in the 2,530-2,540 MHz and 2,650-2,660 MHz sub-bands, with national coverage, and the 450 MHz band in Espírito Santo, Paraná, Rio de Janeiro and Santa Catarina states.

Between 2007 and 2014, we acquired new RF authorizations used for 3G and 4G mobile telephone services at the 2100 MHz, 2500 MHz and 700 MHz bands. In September 2014, we invested approximately R\$2.85 billion to acquire bandwidth in the 700 MHz range, aligned with our strategy of expanding our broadband and 4G service across Brazil. We began providing our services in the 700MHz range in 2016 (see “—Regulation of the Brazilian Telecommunications Industry—Frequencies and Spectrum Background”). During 2017, several municipalities throughout Brazil had their analog TV signals switched-off, freeing up the bandwidths in those regions for 4G mobile services. In December 2015, Anatel auctioned left over radio frequencies in the 1,800 MHz, 1,900 MHz and 2,500 MHz bands. We submitted bids for the left over lots of the 2,500 MHz band, which had originally been auctioned in 2012. This particular band spectrum provides for 4G mobile services. We were classified as the first ranked bidder in the lots for Recife, in the state of Pernambuco (Region AR 81), and Curitiba, in the state of Paraná (Region AR 41), based on our bids which totaled R\$57.5 million. The corresponding authorization terms were signed in July, 2016. See “—Regulation of the Brazilian Telecommunications Industry—Authorizations and Concessions.”

RF authorizations are generally valid for a period of 15 years and renewable for 15 more years (with exceptions such as the LTE “P” band, for which the authorization period is less than 15 years), and our current authorizations will start expiring in April 2023, starting with our 3G RF authorization.

We consider the purchase of any frequency made available by Anatel for the provision of mobile services as a priority, since having available frequency is core to our business. In 2017, we made R\$4.1 billion in investments, of which 87.3% of our capital expenditures were in infrastructure, primarily in 4G and 3G deployment, expansion and capacity enhancement of our optical transport networks, quality maintenance and enabling of fiber-to-the-site and MBB programs.

These investments allowed us to reach, by the end of 2017, the milestone of 3,003 cities with 4G coverage, or 91% of the country's urban population. We are thus the undisputed leader in 4G coverage in Brazil among mobile telecommunications providers, both by number of cities served and percentage of population covered.

Our wireless network has both centralized and distributed functions, and mainly includes transmission equipment, consisting primarily of 13 thousand BTS in our GSM network, 15 thousand NodeBs (which provide connection between mobile phones and the network) for the 3G layer and 21 thousand eNodeBs for 4G network as of December 2017, considering site-sharing, hardware equipment and software installation and upgrades. The network is connected primarily by IP radio links and/or optical fiber transmission systems distributed nationwide.

Throughout 2017, we also expanded the installation of “Biosites” across Brazil, a cellular antenna shaped like a lamp post and designed to accommodate 3G and/or 4G transmission equipment, illustrating our focus on seeking innovative infrastructure alternatives to improve the quality of and our customers’ satisfaction with our services. Each Biosite is a multifunctional device, allowing not only for the installation of new 3G and/or 4G stations, but also modernizing streetlights in cities and reducing visual clutter, since the cellular antennas and their necessary equipment are self-contained within the post itself, without the need for external or auxiliary engineering structure. Following the development of our Biosites at the end of 2017, we have the highest capacity of Biosites among Brazilian telecommunications providers, which we expect will aid in significant growth in coming years.

Another priority is developing our national network. In December 2017, we continued to increase the quantity of sites connected by optical fiber, contributing to an increase in data carried on our network as compared to 2016. The results are consistent with Anatel’s network quality requirements, and with TIM retaining its solid performance in 2017. Since national coverage and quality of service has improved substantially over the last few years, Anatel has shifted its focus in recent years. Anatel is now concentrating its efforts on smaller geographic areas, particularly in those areas where service is still considered poor. Anatel’s prior focus was on service quality from a broader state-oriented perspective rather than this local perspective.

The AES Atimus Acquisition and consequent creation of TIM Fiber (now TIM Celular) has improved our optical fiber (or fiber optic) network presence in the metropolitan regions of Rio de Janeiro and São Paulo. Our optical fiber network has capacity to offer high quality ultra-broadband service, available through our TIM Live service.

As of December 31, 2017, our optical fiber infrastructure is highlighted by the following characteristics:

- the presence of TIM Fiber (now TIM Celular) services in 185 neighborhoods in the metropolitan regions of Rio de Janeiro and São Paulo, with continued expansion in Rio de Janeiro and São Paulo, where our TIM Live service is available; and
- an extensive wide area network covering more than 3 million households by address and approximately 3.2 thousand Multi-service access nodes or MSANs, which is a network element that provides connection with the core network.

Our switching exchanges and intelligent network platforms enable us to offer flexible, high quality voice service at extremely competitive prices. Our satellite network covers distant areas of the country and is being expanded and renewed to provide high capacity private service to other carriers and corporate customers. We also acquired capacity from major submarine cable systems such as AmericasII, Globenet and Atlantis2. As mentioned above, we have initiated a multi-year plan to expand the network with a goal of expanding coverage to the most isolated areas of Brazil.

As a general matter, telecommunications operators' networks have tended to be designed, deployed and managed according to a vertical architecture model referred to as "end-to-end", where the hardware and software are proprietary and dedicated to each network function. With the growing demand for differentiated services, the need for physical space, energy and speed have become critical and, consequently, companies' capital expenditure and operating costs have tended to increase.

Such network architecture based on monolithic network elements requires a long time for development and deployment, impacting directly the time-to-market for launching new products or services and, consequently, reducing the generation of new revenues.

The NFV is the new architectural paradigm that aims to address the infrastructural network transformation as a key step in the evolution of the implementation of new systems and network infrastructure, as it adopts the concept of consolidating standardized commercial off-the-shelf hardware elements that are available in virtual environments for shared use across various applications, accelerating the ability to deliver services, reducing costs and improving customer satisfaction. TIM aims to capitalize on the proposed benefits from such technology.

TIM understands that the NFV and the sharing of resources and equipment is the way to establish an economically more efficient structure, by reducing investment and/or operational costs while also reducing the time-to-market for launching new offers (an increasingly relevant factor in a competitive scenario).

By the end of 2017, we deployed our four new virtualized network datacenters located in Rio de Janeiro, São Paulo, Fortaleza and Salvador. Some of our core network functions are already running in a virtualized fashion through these network datacenters. The migration of additional network functions to a virtualized datacenter will be based on a roadmap of virtual network functions, or VNFs, respecting the maturity of each network function.

Based on the efficiency and on the robustness of the technologies used in the NFV and IP networks, in virtualizing its core network, TIM is also optimizing capital expenditures.



Our commitment to solid infrastructure and quality improvement allow the Company to develop projects such as: (i) unification of the functions of an Intelligent Network (IN), core signaling network and network data base through Unified Data Consolidation (UDC) and (ii) the evolution of security platforms such as Session Border Controller (SBC), that accomplishes IP interconnection in with other operators. We expect from these and other projects to be able to reduce our operating expenditures by decreasing leased lines and infrastructure sharing, simplifying maintenance processes and architecture/topology, increasing resilience even in conditions of disaster recovery and improving the customer experience by increasing the speed in which calls are set up and data is transmitted and improve the amount of time needed to make customers profiles available in our data base.

In 2011, TIM implemented a Policy and Charging Control, or PCC, platform in accordance with the standards of the 3GPP. This PCC made it possible for us to develop a brand new means to control fair use, as we are now able to reduce a given subscriber's speed, block usage and offer additional data packets to maintain maximum speeds after the subscriber's existing data packet is depleted. Since then, several innovative data offers have been launched that promote the usage of data, social media and streaming. This PCC platform is now evolving to a NFV model, which brings modernization and high scalability to support the increasing demand of mobile data and reduces the time-to-market when launching new data offers.

In 2014, TIM started to change our Mobile Packet Core platform to a Unified Packet Core based on the most advanced 3GPP Evolved Packet Core standards, providing a coordinated seamless mobility management in a HetNet access environment (full multiple-access nodes for 2G/3G/4G/Femto/WiFi) in order to support the huge increase in data demand in the Brazilian telecommunications market, as discussed elsewhere throughout this annual report on Form 20-F. The Evolved Packet Core platform is also evolving to a NFV model, based on 3GPP's Control and User Plane Separation of EPC nodes. This enables flexible network deployment and operation, by distributed or centralized deployment and the independent scaling between control plane and user plane functions.

Additionally, TIM has a plan to mitigate network risk in case of unexpected events on a macro scale that prioritizes the critical network infrastructure based on a risk map, or the Network Resilience Plan. The Network Resilience Plan allows the Company to focus on the main issues, and these in turn become the basis for crafting short, medium and long-term mitigation measures in order to enhance the robustness of the network, even in case of unexpected events.

### **Sources and Availability of Raw Materials**

Our business and results of operations are not significantly affected by the availability and prices of raw materials.

### **Site-Sharing and Other Agreements**

#### *Site-Sharing Agreement*

With the objective of avoiding unnecessary duplication of networks and infrastructure, Anatel allows telecommunications service providers to use other providers' networks (long distance, backhaul and spectrum frequencies, among others) as secondary support in providing telecommunications services, with a focus on reducing costs and increasing the penetration of mobile services in Brazil. Therefore, we have allowed other telecommunications service providers in our region to use our infrastructure, and we have used other providers' infrastructure, pursuant to site-sharing agreements with such operators.

Based on such Anatel policy, in November 2012, TIM Celular formalized with Oi an agreement for the reciprocal assignment of their LTE networks (4G technology) in certain cities, which was approved by Anatel and the Administrative Council for Economic Defense (*Conselho Administrativo de Defesa Econômica*), or CADE, which is the Brazilian antitrust agency and which has the mission to ensure free competition in the market, and not only to investigate and ultimately decide on the competitive matter, but also to promote and disseminate the culture of free competition. The agreement, which does not contemplate frequency sharing, remains valid between the parties.

In April 2014, TIM Celular and Oi entered into a new agreement with the objective of negotiating the joint construction, implementation and reciprocal assignment of elements of their respective GSM (2G) and UMTS (3G) network infrastructures, which was also approved by Anatel and CADE.

In June 2015, TIM Celular, Oi and Vivo entered into an agreement for the reciprocal assignment of LTE network media (4G technology), similar to the agreement between TIM Celular and Oi in 2012, but with the inclusion of the

sharing of frequencies. As with the prior sharing agreements, Anatel and CADE approved the agreement between the parties.

Also in 2015, TIM Celular, Vivo, Claro and Oi filed with CADE a Term of Commitment with the objective of negotiating the joint contracting of one or more companies to carry out the construction, installation and provision of infrastructure in indoor environments (such as shopping malls) in several locations in Brazil, which was approved without restriction by CADE.

Finally, in November 2015, TIM Celular, Intelig (now known as TIM S.A.) and Vivo filed an agreement to share UMTS network (3G technology) under a Multiple Operation Core Network, or MOCN, RAN sharing model (with frequency) in certain cities based on their rural coverage obligations, which was also approved without restrictions.

### ***Our Operational Contractual Obligations***

For more information on our material contractual obligations, see “Item 10. Additional Information—C. Material Contracts.”

### ***Interconnection and Other Agreements***

We have entered into interconnection agreements with most of the telecommunications service providers operating in Brazil. The terms of our interconnection agreements include provisions specifying the number of interconnection points, the method by which signals must be received and transmitted, and the costs and fees for interconnection services. Interconnection agreements must be submitted for Anatel’s approval. Nevertheless, even in the absence of ratification by Anatel, the parties to these interconnection agreements are obligated to offer interconnection services to each other. See “—Interconnection Regulation.” Anatel is currently reviewing the interconnection regulation and as a result of such process we may have to changes our current practices regarding interconnection agreements.

### ***Roaming Agreements***

We have entered into roaming agreements for automatic roaming services with other mobile operators outside our regions. Automatic roaming allows our customers to use their mobile telephones on the networks of other mobile operators while traveling abroad or out of TIM coverage areas in Brazil. Similarly, we provide mobile services for customers of other mobile operators when those customers place or receive calls while visiting Brazilians cities with TIM coverage. We provide services for the clients visiting our network on the same infra-structure basis provided to our own clients. All of the mobile operators party to these agreements must carry out a monthly reconciliation of roaming charges with its roaming partners.

Through TIM Brasil, we are a member of the Brazilian Association of Telecommunications Resources (*Associação Brasileira de Recursos em Telecomunicações*), or ABRT, a group comprised of all mobile and fixed telecommunications service providers operating in Brazil. This association is in charge of managing telecommunications projects in compliance with Anatel in order to support common interests of its members. Our GSM national and international roaming services are supported by individual agreements with our partners.

### ***National Roaming Agreements***

In accordance with Anatel requirements, we have entered into national roaming agreements with other Brazilian operators to guarantee a mobile service (voice and SMS) on Anatel’s list of cities with less 30,000 inhabitants.

In 2017, Anatel required that TIM, Claro, Oi and Vivo to guarantee the provision of mobile services (voice, SMS and data) in all cities with less than 30,000 inhabitants. The project starts with a trial, which has already been implemented, of services in 35 cities (8 for TIM, 9 for Claro, 9 for Oi and 9 for Vivo), and following the trial period will expand to 2,679 additional cities in Brazil in coming years.

***International Roaming Agreements***

We have international roaming agreements available in more than 200 different countries on approximately 600 networks. These agreements include at a minimum voice service, and may be enhanced based on the technology available on the visiting network and can include voice, SMS and data (2G, 3G and 4G). Our international roaming agreements have steadily expanded in recent years. By the end of 2017, we expanded our 4G data coverage to 55 new networks, meaning now we offer 4G roaming in more than 50 countries, covering the main travel destinations for Brazilians.

## **Fraud Detection and Prevention**

“Subscription fraud,” which consists of using identification documents or data personal information of another individual to obtain mobile services, is the main fraud relating to mobile, fixed and long distance service. We are focused on implementing prevention measures in our points of sales to avoid such subscription fraud. Examples of prevention measures include digital authentication for our sales front end system, a strong training program, maintaining a blacklist of offenders to prevent fraud, analysis of the documentation presented and monitoring and identification of point of sale. We also work to detect and prevent fraud by frequently improving and updating our traffic behavior monitoring and subscriber data.

Our security operations management develops programs and strategies to mitigate fraud risks through macro business processes such as:

**Network:** Actions aimed to combat theft, robbery or damage of equipment and network infrastructure by the application of physical and electronic protections, such as equipment tracking, installation of protective security equipment, virtual and physical surveillance and intelligence analysis.

**Investigations of Specific Incidents:** These anti-fraud efforts are focused on the reduction of illicit activities. The program consolidates and analyzes all the facts related to known incidents in order to identify circumstances in which the Company’s services may be being used to perpetuate noncompliance with laws, codes and other policies such as extortion, pedophilia, aggression, theft, drug trafficking and harassment.

**Personal Security:** These efforts focus on the combined use of organizational, technical and human resources aimed at preserving the physical, intellectual and emotional integrity of the human resources of the group, ensuring compliance with the precepts pointed out in the security operations mission and focused on the foreign public on a visit to Brazil.

**Commercial Security:** These efforts seek to mitigate the losses resulting from theft and robbery of smartphones, among them the deployment of safes in the stores for the storage of high value devices in all stores, prioritizing street-front stores.

**Security in Logistics:** These efforts are directed to combat loss due to theft or theft of merchandise whether in transportation or storage.

**Security Compliance:** Active monitoring of the emergence of new legislation related to customer data security and related internal compliance efforts.

## **Disclosure Pursuant to Section 219 of the Iran Threat Reduction and Syria Human Rights Act**

Section 219 of the Iran Threat Reduction and Syria Human Rights Act of 2012 added Section 13(r) to the Exchange Act. Section 13(r) requires an issuer to disclose in its annual or quarterly reports filed with the SEC whether the issuer or any of its affiliates has knowingly engaged in certain activities, transactions or dealings with the Government of Iran, relating to Iran or with designated natural persons or entities involved in terrorism or the proliferation of weapons of mass destruction during the period covered by the annual or quarterly report. Disclosure is required even when the activities were conducted outside the United States by non-U.S. entities and even when such activities were conducted in compliance with applicable law.

We are also required to disclose our affiliates’ activities relating to Iran and Syria. We have been informed that other members of the Telecom Italia Group have entered into Roaming Agreements and certain other agreements (of a *de*

*minimis* value) for the provision of telecommunication services with telecommunications operators of these countries.

In accordance with our Code of Ethics, we seek to comply with all applicable laws. The Code of Ethics is available on our website: [www.tim.com.br/ir](http://www.tim.com.br/ir).

***TIM Participações activities relating to Iran, Syria, Sudan and North Korea***

TIM Participações is not in its knowledge, engaged in any activities, transactions or dealings with the Government of North Korea, Iran, Syria and Sudan, or the Designated Countries.

The activities, transactions or dealings TIM Participações had in the year ended December 31, 2017 in its knowledge, related in any way to Designated Countries are roaming agreements for the provision of telecommunication services, which allow our mobile customers to use their mobile devices on a network outside of their home network, or Roaming Agreements. In our view, the amounts related to these operations, detailed below, are immaterial in our business. The Company does not have any agreement with providers from North Korea.

Roaming Agreements with the following local mobile phone operators:

- Mobile Telecommunication Company of Iran, in Iran;
- Sudanese Mobile Telephone (Zain) Co. Ltd, in Sudan; and
- Syriatel Mobile Telecom SA and MTN Syria (JSC), in Syria.

The impact on our net profit (loss) arising from Roaming Agreements with networks of the Designated Countries is detailed as follows:

	<b>Year ended December 31, 2017</b>	
	<b>Revenues</b>	<b>Charges</b>
	<b>(thousands of reais)</b>	
North Korea	—	—
Iran	239	184
Sudan	4	61
Syria	38	136
Total	281	381

***Telecom Italia activities relating to Designated Countries***

The information in this section is based solely on information provided to us by our parent Telecom Italia for purposes of complying with our obligations under Section 13(r) of the Exchange Act.

Telecom Italia informs us that the activities, transactions or dealings it and its consolidated subsidiaries had in the year ended December 31, 2017 that, to its knowledge, relate to Designated Countries are (1) Roaming Agreements, (2) international telecommunications services agreements with international carriers, which cover delivery of traffic, or International Carrier Agreements, and (3) commercial sale and other agreements, or Commercial Sale and Other Agreements.

Telecom Italia informs us that the only activities that it and its consolidated subsidiaries had in the year ended December 31, 2017 that, to its knowledge, relate in any way to the Designated Countries are:

***Roaming Agreements***

Its Roaming Agreements are with the following local mobile phone operators:



- North Korea: none;
- Iran: KFZO-TKC (former Payam Kish), Gostaresh Ertebatat Taliya PJS (former Taliya), Rightel Communication, Irancell (MTN), Mobile Company of Iran (MCI) and Kish Cell Pars Co. Telecomm co;
- Sudan: Sudanese Mobile Telephone (former ZAIN SD) and MTN Sudan, Sudatel Telecom Group, Canartel;

- Syria: MTN Syria (former Spacotel Syria 94 and former Areeba), Syriatel Mobile Telecom SA (Syriatel) and Syrian Telecom Establishment (STE).

	<b>Year ended December 31, 2017</b>			
	<b>Revenues</b>	<b>Charges</b>	<b>Receivables</b>	<b>Payables</b>
	<b>(thousands of euros)</b>			
North Korea	–	–	–	–
Iran	59	397	696	2,606
Sudan	20	87	68	27
Syria	9	9	41	77
Total	88	493	805	2,710

The amounts of revenues, charges, receivables and payables are considered minimis by Telecom Italia's compared to its consolidated revenues, operating expenses, trade receivables and trade payables, respectively.

#### *International Carrier Agreements*

Telecom Italia's subsidiary Telecom Italia Sparkle S.p.A., or TI Sparkle, directly and through its subsidiaries, has agreements with the Telecommunication Company of Iran (TCI) in Iran; Sudan TLC (former PT&TG PUBLIC SUDAN), Sudatel Telecom Group, ZAIN Sudan and Canartel in Sudan; and Syrian Telecom Establishment (STE) (Directorate General of Syria) in Syria.

TI Sparkle has an agency agreement with Cypress Corporation DFZCO (a company incorporated in the "free zone" of the Dubai airport) that promotes the use of voice services towards Syrian Telecom Establishment (STE), a company reportedly affiliated with the government of Syria. The agreement provides that we pay this agent based on a fee that is a percentage of revenues we earn.

In addition, TIM S.p.A. has entered into certain agreements for the provision of TLC services (marine radio traffic) with Telecommunication Infrastructure Company of Iran (TIC) for services to the Islamic Republic of Iran Shipping Lines.

The purpose of these International Carrier Agreements is to allow the uninterrupted exchange of international traffic. Consequently, Telecom Italia intend to continue maintaining these agreements.

	<b>Year ended December 31, 2017</b>			
	<b>Revenues</b>	<b>Charges</b>	<b>Receivables</b>	<b>Payables</b>
	<b>(thousands of euros)</b>			
North Korea	–	–	–	–
Iran	470	193	4,902	4,921
Sudan	3,048	4,050	12,230	12,752
Syria	3,360	6,523	15,861	19,357
Total	6,878	10,766	32,993	37,030

The amounts of revenues, charges, receivables and payables are considered minimis by Telecom Italia's compared to its consolidated revenues, operating expenses, trade receivables and trade payables, respectively.

#### *Commercial Sale and Other Agreements*

TI Sparkle provides institutional access to Internet to Syria and Sudan by means of Seabone IP ports and data transmission capacity through international cable systems.

On December 20, 2016, Olivetti and Faravaran Hamgam, a local Iranian company, executed an agreement for the local production and sale of Olivetti's electronic cash registers and the provision of assistance in connection with these machines in Iran. Faravaran Hamgam will locally assemble Olivetti products through one of its own controlled companies. Production has not yet started.

In September 2016, TI Sparkle reached an agreement with TCI for the development of a Point of Presence, or POP, of Sparkle Internet backbone in Iran and the provision of IP Transit services from Sparkle to TIC. Currently the POP is not open.

	Year ended December 31, 2017	
	Revenues (thousands of euros)	Receivables
North Korea	—	—
Iran	—	—
Sudan	388	770
Syria	973	-
Total	1,361	770

The amounts of revenues, charges, receivables and payables are considered minimis by Telecom Italia's compared to its consolidated revenues, operating expenses, trade receivables and trade payables, respectively.

### Taxes on Telecommunications Goods and Services

The telecommunications goods and services offered are subject to a variety of federal, state and local taxes (in addition to taxes on income), the most significant of which are ICMS, ISS, COFINS, PIS, FUST, FUNTTEL, FISTEL, CONDECINE and corporate income tax and social contribution on net income, which are described below.

- *ICMS*. The principal tax applicable to goods and telecommunication services is a state value-added tax, the *Imposto sobre Circulação de Mercadorias e Serviços*, or ICMS, which the Brazilian states levy at varying rates on certain revenues arising out of the sale of goods and services, including certain telecommunications services. The ICMS tax rate for domestic telecommunications services is levied at rates between 25% and 35%. The ICMS tax rate levied on the sale of mobile handsets and other products such as modem and SIM cards averages 17% or 20% throughout the Cellular Regions, with the exception of certain handsets whose manufacturers are granted certain local tax benefits, thereby reducing the rate to as low as 7%. In 2005, certain of the Brazilian states started to charge ICMS on the sale of mobile handsets under a "tax replacement" system, under which the taxpayer that manufactures the goods is required to anticipate and pay ICMS amounts that would otherwise only become due in later steps of the distribution chain.
- *ISS*. Since 2018, the tax incidence over Value-Added Services has increased with the inclusion of those receivables within the ISS basis of calculation due to Law No. 157/2016, which is a municipality tax which rates vary from 2% to 5%.
- *COFINS*. *Contribuição Social para o Financiamento da Seguridade Social*, or COFINS, is a social contribution levied on gross revenues. Since 2000, companies began to pay COFINS tax on their bills at a rate of 3%. In December 2003, through Law No. 10,833, COFINS legislation was further amended, becoming a noncumulative tax, raising the rate to 7.6% for most transactions. However, telecommunications services revenues, among others determined by the Law mentioned above, continued to be subject to a cumulative basis at a rate of 3%. In 2015, Decree No. 8,426 came into effect, which restored COFINS on financial revenues at a rate of 4%, except for some types of financial revenues (for example, revenues from foreign exchange variations of exportation of goods and services, revenues resulting from foreign exchange fluctuations of obligations undertaken by the company, including loans and financing and revenues related to hedging transactions on stock exchange values, and revenues from commodities and futures exchanges or over the counter transactions and related to the operational activities of the company).

- *PIS. Programa de Integração Social*, or PIS, is another social contribution levied at the rate of 0.65%, on gross revenues from telecommunications service activities. In 2002, Law No. 10,637 was enacted, making such contribution non-cumulative and increasing the rate to 1.65% on gross revenues, except in connection with telecommunications services, for which the method continues on a cumulative basis at a rate of 0.65%. In 2015, Decree No. 8,426 came into effect, which restored PIS on financial revenues at a rate of 0.65%, except for some types of financial revenues (for example, revenues from foreign exchange variations of exportation of goods and services, revenues resulting from foreign exchange fluctuations of obligations undertaken by the company, including loans and financing and revenues related to hedging transactions on stock exchange values, and revenues from commodities and futures exchanges or over the counter transactions and related to the operational activities of the company).

- *FUST*. In 2000, the Brazilian government created the *Fundo de Universalização dos Serviços de Telecomunicações*, or FUST, a fund that is supported by a tax applicable to all telecommunications services. The purpose of the FUST is to reimburse a portion of the costs incurred by telecommunications service providers to meet the universal service targets required by Anatel (such as targets for rural and impoverished areas, schools, libraries and hospitals), in case these costs are not entirely recovered through the collection of telecommunications service fees and charges. FUST tax is imposed at a rate of 1% on gross operating revenues, net of discounts, ICMS, PIS and COFINS, and its cost may not be passed on to clients. Telecommunication companies can draw from the FUST to meet the universal service targets required by Anatel.

In 2005, Anatel enacted Ordinance No. 7/05 requiring that FUST should be paid on revenues arising from interconnection charges since its effectiveness. A notice was issued deciding that we must adjust values on the FUST calculation basis in order to include interconnection revenues received from other telecommunications companies. A writ of mandamus was filed against Anatel to avoid the terms of Ordinance No. 7/05. The first level decision was issued in our favor. Such decision was challenged by Anatel and the Appeal will be judged by second level.

- *FUNTTEL*. In 2000, the Brazilian government created the *Fundo para Desenvolvimento Tecnológico das Telecomunicações*, or FUNTTEL, a fund that is supported by a social contribution tax applicable to all telecommunications services. FUNTTEL is a fund managed by BNDES and FINEP, government research and development agencies. The purpose of FUNTTEL is to promote the development of telecommunications technology in Brazil and to improve competition in the industry by financing research and development in the area of telecommunications technology. FUNTTEL Tax is imposed at a rate of 0.5% on gross operating revenues, net of discount, ICMS, PIS and COFINS, and its cost may not be passed on to clients.

In 2013, Anatel enacted Resolution No. 95, which regulates FUNTTEL collection. As in the case of FUST, it requires that FUNTTEL be calculated based upon revenues arising from interconnection charges since its effectiveness. Sinditelebrasil, the Brazilian syndicate of telecom companies, filed a Writ of Mandamus against Anatel in order to compel Anatel not to apply Resolution No. 95. An injunction was issued in our favor but the final decision has not been rendered yet.

- *FISTEL*. *Fundo de Fiscalização das Telecomunicações*, or FISTEL, is a fund supported by a tax applicable to telecommunications services, which was established in 1966 to provide financial resources to the Brazilian government for its regulation and inspection of the sector. FISTEL consists of two types of fees: (1) an installation inspection fee assessed on telecommunications stations upon the issuance of their authorization certificates, as well as every time a new mobile number is activated, and (2) an annual operations inspection fee that is based on the number of authorized stations in operation, as well as the total basis of mobile numbers at the end of the previous calendar year. The amount of the installation inspection fee is a fixed value, depending on the kind of equipment installed in the authorized telecommunication station. Effective in 2001, the installation and inspection fee is assessed based on net activations of mobile numbers (that is, the number of new mobile activations reduced by the number of cancelled subscriptions), as well as based on the net additions of radio base stations. The operations inspection fee equals 33% of the total amount of installation inspection fees that would have been paid with respect to existing equipment. The public funds raised from this installation fee are appropriated to either the Brazilian Communication Company, or EBC, or ANCINE, in order to benefit Brazilian cinema industry. Also, Anatel charges the installation inspection fee when there is an extension of the term of validity of the right to use radio frequencies associated with the operation of the personal mobile service. The Company understands that such collection is unjustified and is challenging this rate in court.

- *Corporate Income Tax and Social Contribution on Net Income*. Income tax expense is made up of two components, a corporate income tax, or IRPJ, on taxable income and a social contribution tax on net income, or CSLL. The corporate income tax is payable at the rate of 15% plus an additional rate of 10% (levied on the part of

taxable profits that exceeds R\$0.02 million per month or R\$0.24 million per year). The social contribution tax is currently assessed at a rate of 9% of adjusted net income.

In 2013, the Brazilian government enacted Provisional Measure No. 627/2013, in order to end the Transitional Tax Regime, or RTT. RTT was implemented in 2008 as a way to neutralize the tax impact caused by the adoption of IFRS accounting rules in lieu of Brazilian GAAP.

In 2014, Provisional Measure No. 627 was converted into Law No. 12,973, the main objective of which was to implement the new tax regime, adapted to the new accounting guidance provided by IFRS, ending the RTT. Given that the implementation required specific adjustments to promote the elimination of the effects of registration of the new accounting methods and criteria to the statutory books, some assets and liabilities now have different methods and accounting criteria from those previously adopted by the former accounting rule. Law No. 12,973 established as a condition for the accurate tax treatment of these differences to impact only at the time of the realization of these assets or liabilities the creation of subaccounts for individualized control. The treatment is the same in regards to present value adjustments and fair value adjustments.

The rules for deductibility of goodwill were maintained for the transactions which occurred prior to the end of 2017. The tax treatment by TIM Celular of the goodwill arising from the purchase of the companies AES Atimus SP and RJ was not impacted by the new rules.

Regarding dividends, Law No. 12,973 ensured the full and unconditional exemption on payment or credit of profits or dividends earned between 2008 and 2013, previously paid or not. Uncertainty remained, however, about the exemption on profits and dividends generated in the calendar year 2014, if higher than the taxable income in the same period in the case of companies that do not opt for early adoption of the new post-RTT tax regime that year. According to the Federal tax authorities the exception is not applicable to the excess amount, or in other words, to the profits and dividends paid in excess of the taxable income.

Dividends are not subject to withholding income tax when paid. However, as the payment of dividends is not tax deductible for the company that is distributing them, there is an alternative regime for stockholder compensation called “interest on equity,” which allows companies to deduct any interest paid to stockholders from net profits for tax purposes.

These distributions may be paid in cash. The interest is calculated in accordance with daily pro rata variation of the Brazilian government’s long term interest rate TJLP, as determined by the Central Bank from time to time, and cannot exceed the greater of: (1) 50% of the net income (before taxes and already considering the deduction of the own interest amount attributable to stockholders) related to the period in respect of which the payment is made; or (2) 50% of the sum retained profits and profits reserves as of the date of the beginning of the period in respect of which the payment is made.

Any payment of interest to stockholders is subject to withholding income tax at the rate of 15%, or 25% in the case of a stockholder who is domiciled in a Low or Nil Tax Jurisdiction. These payments may be qualified, at their net value, as part of any mandatory dividend. As described herein the Company and its subsidiaries paid interest on equity in 2017. Please refer to “Item 4. Information of the Company—2017 Important Events—Interest on Equity” for detailed information.

Losses carried forward are available for offset during any year up to 30.0% of annual taxable income. No time limit is currently imposed on the application of net operating losses on a given tax year to offset future taxable income within the same tax year, nevertheless there is no monetary restatement.

Companies are taxed based on their worldwide income rather than on income produced solely in Brazil. As a result, profits, capital gains and other income obtained abroad by Brazilian entities are added to their net profits for tax purposes. In addition, profits, capital gains and other income obtained by foreign branches or income obtained from



subsidiaries or foreign corporations controlled by a Brazilian entity are computed in the calculation of an entity's profits, in proportion to its participation in such foreign companies' capital.

## Regulation of the Brazilian Telecommunications Industry

### *General*

The telecommunications sector is regulated by Anatel, which was established by law and is administratively independent and financially autonomous from the Ministry of Science, Technology, Innovation and Communication (*Ministério da Ciência, Tecnologia, Inovações e Comunicações*), or MCTIC. Anatel is responsible for promulgating standards related to telecommunications services and regulating the relationship between different operators, as set forth in the General Law of Telecommunications (*Lei Geral de Telecomunicações*), Law No. 9,472, dated July 16, 1997 and the *Regulamento da Agência Nacional de Telecomunicações*, or the Anatel Decree.

Despite liberalization, which occurred in 1997, the Brazilian telecommunications market still faces persistent dominant positions held by fixed incumbent operators. In particular, broadband access is currently offered by operators over their own infrastructure and the respective regulatory framework is not always based on effective implementation of the wholesale access obligations.

A presidential decree issued on June 30, 2011, established a bidding process for fourth generation RFs, an important landmark for the telecommunications sector. The bid occurred in 2012 and, in order to guarantee full rural service by 2018, Anatel linked the 4G blocks in the 2,500 MHz band to the 450MHz band in specific geographic regions of Brazil. As a result, the four winning operators of the 4G blocks in the 2,500 MHz band linked to the 450MHz band are subject to coverage commitments in rural areas. Such presidential decree also resulted in two new regulations to measure mobile and fixed broadband quality standards. The presidential decree also approved the PGMU, creating fixed line universal service obligations binding on the fixed telephony services (*Serviço Telefônico Móvel Comutado*), or STFC, concessionaires.

In October 2012, Anatel enacted the Regulation on Universal Obligations related to the fixed line universal service obligations (*Plano Geral de Metas de Universalização*), or PGMU, regulating backhauling, public pay phones and telephone services for families with low incomes, among others. In November 2012, Anatel enacted the General Plan for Competition Goals (*Plano Geral de Metas de Competição*), whose goal is to encourage competition by creating interconnection obligations and the sharing of infrastructure already installed by other operators. Full adoption of these standards required new investments and has been under debate since second half of 2017.

In March 2014, by means of Resolution No. 632/2014, Anatel approved the adoption of a single regulation for the telecommunications sector (*Regulamento Geral de Direitos do Consumidor de Serviços de Telecomunicações*), or RGC, with general rules for customer service, billing, and service offers, which are applicable to fixed, mobile, broadband and cable TV customers.

In 2016, Anatel issued certain regulations which are particularly relevant to our operations, including: Resolution No. 663/2016, which modified rules of the MVNO Regulation; Resolution No. 667/2016, which approved the General Regulation of Accessibility in Telecommunications Services of collective interest; Resolution No. 668/2016, which modified the STFC Regulation; and Resolution No. 671/2016, which approved the Regulation on the Use of the Radiofrequency Spectrum and modified the Regulation on the Collection of Public Price for the Right of Use of Radiofrequencies and the Regulation on the Imposition of Administrative Sanctions.

Throughout 2017, MCTIC and Anatel issued other important public consultations as listed below:

### *MCTIC*

(i) Public Consultation on a National Plan for Internet of Things, (ii) Public Consultation on a National Strategy for Digital Transformation, which has been memorialized in Decree 9319/2018 which creates the National System for Digital Transformation and establishes the governance structure for the implementation of the Brazilian Strategy for Digital Transformation, or the E-Digital Decree, and (iii) a public consultation on a draft decree setting forth the public policies for the telecommunications sector.

The E-Digital Decree sets out approximately 100 strategic actions aimed at increasing competition and online productivity levels in the country, as well as the increasing connectivity and digital inclusion levels of the Brazilian population as a whole. These actions cover strategic topics related to the digital economy, including infrastructure connectivity, privacy and data protection, the Internet of Things and cybersecurity.

The two public initiatives described above and any upcoming or replacement initiatives also aim not only to regulate new digital services and products, but to increase mobile broadband connection all over the country, through incentives for investments in infrastructure, possible tax exemptions and benefits, and government and industry interoperability.

*Anatel*

(i) Public Consultation No. 2 - Proposed General Grant Plan – PGO, (ii) Public Consultation No. 7 - Proposal for a new Regulation of Public Price for the Right to Use of Radio Frequencies, or PPDUR, (iii) Public Consultation No. 22 - Proposal for a General Numbering Regulation – RGN, (iv) Public Consultation No. 28 - Review of the manual for the application of the survey to measure satisfaction and perceived quality before telecommunications service users, (v) Public Consultation No. 29 - Proposal for a new Regulation on the Quality of Telecommunications Services, (vi) Public Consultation No. 33 - draft regulation for the certification and homologation of telecommunication products.

Additionally, Anatel enacted several important regulations that will have a significant impact on our activities, particularly those summarized below:

- Resolution 680/2017: this Resolution included Art. 62-A in the Telecommunications Services Regulation (Resolution No. 73/98), which waived the licensing requirement for all telecommunication stations of support networks that exclusively use radiocommunication equipment with restricted radiation and / or confined media (where there is no RF emission). The Company was able to reduce its installation review rate (Taxa de Discalização de Instalação), or TFI, and operating review rate (Taxa de Fiscalização de Funcionamento), or TFF, payments in all of its STFC confined media stations and all its Private Limited Service (Serviço Limitado Privado), or SLP, for radio links;
- Resolution nº 683/2017: this Resolution regulated the obligation to share infrastructure to support the provision of telecommunications services, including towers, masts, cabinets, ducts, conduits, surface structures and suspended structures.

***Review of the Current Regulatory Model for the Provision of Telecom Services***

The Brazilian government is currently focused on review the General Telecommunication Law and to transform the previous fixed telephony concessions into authorizations, modifying the obligations related thereto.

On April 11, 2016, MCTIC issued guidelines to be followed by Anatel when implementing this transformation, moving to a more market-oriented licensing approach. These guidelines were issued following a public consultation that ended on January 15, 2016.

In general terms, the MCTIC's guidelines establish that public authorities should promote access to broadband service at affordable costs and levels, putting broadband at the center of public policy.

As a result, Anatel is expected to: (i) propose concrete rules and criteria to enable the phasing-out of concessions, (ii) highlight the consistency of the new licensing rules with the existing infrastructure coverage obligations, (iii) ensure service provision (including broadband) in less attractive economic areas, (iv) give incentives to concessionaires to migrate to the new licensing framework, (v) lessen obligations for fixed telephony, (vi) schedule the phasing-out of the retail price control over retail fixed telephony services, (vii) withdraw recurring licensing fees, (viii) schedule the phasing-out of the asset reversion scheme (foreseeing that the network assets used to provide services under a concession must be returned to the state upon the expiry of the concession), and (viii) establish suitable mechanisms to ensure regulation compliance control.

As a result of the ongoing debate regarding the licensing regime, Anatel was tasked with reviewing concession contracts by December 2016. However, after the publication of Resolution 673, approved on December 30, 2016, the deadline for reviewing these contracts was postponed to June 30, 2017. In spite of the fact that the deadline has passed, revised concession contracts have been not signed yet.

A bill that proposes changes to the General Telecommunication Law and allows Anatel to change the licensing mode of telecommunications service is under review in the Brazilian Senate. According to the proposal, upon request of the STFC concessionaires, Anatel may authorize the migration of the concession agreements to authorizations, subject to the observance of certain requirements. Anatel will be responsible for determining the economic value associated with the migration, which shall be paid in exchange for investment commitments, prioritizing the implementation of network infrastructure with high capacity for data communication in locations without appropriated competition.

The bill also proposes changes in the radiofrequency rules, allowing subsequent and unlimited renewals of radiofrequency authorizations of up to 20 years each, generating an environment possibly more conducive to long-term investments. In addition, the bill favors the creation of a spectrum secondary market, allowing transfers of radiofrequency authorizations between players, upon Anatel's approval. The economic and operational conditions will be defined by Anatel.

Currently, the bill is in the Senate, awaiting a vote. Even if the Senate approves the bill without changes in relation to the proposal approved by the House of Representatives, it still has to be submitted for Presidential approval.

Also, there is new Presidential Decree that may be issued in 2018 with the goal of updating and consolidating, in a single instrument, the public policies for the telecommunications in Brazil. The proposal places broadband at the center of public policy of Brazilian telecommunications. This decree, submitted to the public consultation, in October 2017, revokes and replaces three other decrees currently in force, bringing together in a single instrument the regulatory guidelines for the expansion of broadband services and digital inclusion in the country. The Decree will repeal Decree No. 4,733 / 2003, which provides for public telecommunications policies; Decree No. 7,175 / 2010, which established the National Broadband Plan (PNBL); and Decree No. 8.776 / 2016, which created the Brazil Intelligent Program, a new stage of expansion of the PNBL with actions to universalize access to the Internet and increase the average speed of fixed broadband in the country. The decree will also establish public and private investment priorities for the expansion of telecommunications infrastructure through fiber optics, radio and satellite.

#### ***Authorizations and Concessions***

With the privatization of the Telebrás system and pursuant to the Minimum Law (*Lei Mínima*), Band A and Band B service providers were granted concessions under Cellular Mobile Service (*Serviço Móvel Celular*), or SMC, regulations. Each concession was a specific grant of authority to supply mobile telecommunications services in a defined geographical area, subject to certain requirements contained in the applicable list of obligations attached to each concession.

Our predecessors were granted SMC concessions and in December 2002, such SMC concessions were converted into PCS authorizations, with an option to renew the authorizations for an additional 15 years. TIM Celular acquired PCS authorizations in conjunction with auctions of bandwidth by Anatel in 2001, and subsequently acquired additional authorizations and operations under the PCS regulations as well.

In December 2007, we acquired certain 3G frequencies sub-bands (1,900-2,100MHz), with national coverage; these authorizations were granted in April 2008 and are valid until 2023

On May 30, 2011, we entered into two new RF terms, formalizing the acquisition of excess RF in the states of Minas Gerais, Paraná, Santa Catarina, Amapá, Roraima, Pará, Amazonas and Maranhão and those new terms expire in April 2023.

In October 2012, we acquired the 2,530-2,540 MHz and 2,650-2,660 MHz sub-bands, with national coverage, and the 450 MHz band in Espírito Santo, Paraná, Rio de Janeiro and Santa Catarina states (the 450 MHz band was jointly acquired with Intelig), which terms expire in October 2027.

In December 2014, we acquired the 718-728 MHz and 773-783 MHz sub-bands, with national coverage; these authorizations are valid until 2029. These sub-bands are partially available for mobile operation since broadcasters are still using them, or Anatel's approval required for their usage is still pending. The mobile operations on those sub-bands may only begin after the reallocation of broadcasting channels and following approval by Anatel and interference mitigation.

On March 4, 2015, by Decision No. 66/2015-CD, Anatel approved our renewal application related to the 4G Block (2500 MHz P Band) in Minas Gerais, and also approved our renewal application concerning the authorization terms of the D and E Bands (900 MHz and 1800 MHz). On July 22, 2015, Authorization Act No. 4710/2015-CD was issued (and subsequently published in the Official Gazette of July 28, 2015), extending the use of the aforementioned authorizations terms, until 2030 and 2028, respectively.

In December 2015, Anatel auctioned left over radiofrequencies in the 1,800 MHz, 1,900 MHz and 2,500 MHz bands. We submitted bids for the left over lots of the 2,500 MHz 4G band, which had originally been auctioned in 2012. We were classified as the first-ranked bidder in the lots for Recife, in the state of Pernambuco, and Curitiba, in the state of Paraná, based on our bids which totaled R\$57.5 million. The corresponding authorization terms were excluded by Anatel in July 2016.

Because there is prejudicial unsolved interference in 3G frequency (F sub-band) in the São Paulo metropolitan area (AR11), TIM was granted an authorization to use the 900MHz spectrum under a secondary basis in such area. The last license was granted by Act No. 711 on March 2017 and is valid for 36 months (until March 2020).

The STFC and SCM authorization terms do not have an expiration date. On August 2017, TIM obtained an authorization to explore SLP, in order to use this license to operate a private network formed by point-to-point radio communication (radioenlaces). These radio licenses are valid for 15 years.

The following table shows each of our authorizations in effect on December 31, 2017:

<b>Territory</b>	<b>450 MHz</b>	<b>800 MHz, 900 MHz and 1800 MHz</b>	<b>Additional Frequencies 1800 MHz</b>	<b>1900 MHz and 2100 MHz (3G)</b>	<b>2500 MHz V1 Band (4G)</b>	<b>2500 MHz P Band** (4G)</b>	<b>700 MHz</b>
States of Amapá, Roraima, Pará, Amazonas and Maranhão	–	March, 2031	April, 2023	April, 2023	October, 2027	PA – February, 2024*	December, 2029
States of Rio de Janeiro and Espírito Santo	October, 2027	March, 2031	ES – April, 2023–	April, 2023	October, 2027	RJ – February, 2024*	December, 2029
States of Acre, Rondônia, Mato Grosso, Mato Grosso do Sul, Tocantins, Distrito Federal, Goiás, Rio Grande do Sul (except for the city of Pelotas and its surrounding region) and the cities of Londrina and Tamarana in the state of Paraná	PR - October, 2027	March, 2031	April 2023 Interior –	April, 2023	October, 2027	Curitiba – PR July, 2031  DF – February, 2024*	December, 2029
State of São Paulo State of Paraná (except for the cities of Londrina and Tamarana)	–	March, 2031	April, 2023–	April, 2023	October, 2027	–	December, 2029
State of Santa Catarina	October, 2027	September, 2022*	April, 2023	April, 2023	October, 2027	February, 2024*	December, 2029
	October, 2027	September, 2023*	April, 2023	April, 2023	October, 2027	–	December, 2029
	–	April, 2024*	–	April, 2023	–	–	–



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City of Pelotas and its surrounding region in the State of Rio Grande do Sul				October, 2027		December, 2029	
State of Pernambuco	-	May, 2024*	-	April, 2023	October, 2027	Recife July, 2031	December, 2029
State of Ceará	-	November, 2023*	-	April, 2023	October, 2027	-	December, 2029
State of Paraíba	-	December, 2023*	-	April, 2023	October, 2027	-	December, 2029
State of Rio Grande do Norte	-	December, 2023*	-	April, 2023	October, 2027	-	December, 2029
State of Alagoas	-	December, 2023*	-	April, 2023	October, 2027	-	December, 2029
State of Piauí	-	March, 2024*	-	April, 2023	October, 2027	-	December, 2029
State of Minas Gerais (except for the cities in sector 3 of PGO for RF of 3G and excess RF)	-	April, 2028*	April, 2023	April, 2023	October, 2027	February, 2030	December, 2029
States of Bahia and Sergipe.	-	August, 2027*	-	April, 2023	October, 2027	-	December, 2029

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\* Terms already renewed for 15 years and therefore not entitled to another renewal period.

\*\* Only covers complementary areas in the specified states. The Radiofrequency Blocks of the Municipalities of the National Code (CN) 92, which were part of Lot 208, were returned.

According to the General Telecommunications Law and regulations issued by Anatel thereunder, licenses to provide telecommunications services are granted either under the public regime, by means of a concession or a permission, or under the private regime, by means of an authorization. Only STFC incumbents are currently operating under the public regime. All the other telecommunications services providers in Brazil are currently operating under the private regime, including all the PCS services providers.

Telecommunications services providers under the private regime are classified as either providing a service of collective interest or restricted interest. Collective interest private regime services are subject to requirements imposed by Anatel under their authorizations and the General Telecommunications Law. Restricted interest private regime services are subject to fewer requirements than public regime or collective interest private regime services. According to the General Telecommunications Law and the regulation thereunder, all the PCS services providers in Brazil operate under the collective interest private regime.

#### ***Obligations of Telecommunications Companies***

In November 1999, Anatel and the Brazilian mobile service providers jointly adopted a Protocol for Mobile Cellular Service Providers, or the Protocol. The Protocol established additional quality of service targets and rates, which SMC operators were required to achieve by June 2001. Although the General Telecommunications Law does not specify any penalties for failing to meet the targets required by the Protocol, Anatel was required to examine the performance of the Brazilian telecommunications companies under the Protocol's standards. Despite migration to PCS in December 2002, from January to June 2003, we reported to Anatel regarding, and had complied with, all quality of service indicators applicable to SMC operators. The Protocol ceased to be applicable to TIM Sul, TIM Nordeste and TIM Maxitel (merged into TIM Celular) after July 2003.

Beginning in September 2003, we became subject to the PCS quality of service indicators. Our quality of service obligations under our PCS authorizations differ substantially from those under the previous SMC concessions. See “—PCS Regulation.” Since December 2003, we have achieved the majority of the quality service requirements applicable to the PCS service operators. Some of our PCS quality of service indicators are currently difficult to achieve due to, for example, our dependence on the performance of third parties and the continuing clarification of some of the quality of service measurements under the PCS rules. As a result, since 2004 Anatel has been filing administrative proceedings against TIM Celular and TIM Nordeste for non-compliance with certain of our quality of service obligations. In some of these proceedings, Anatel applied a fee that did not cause a material adverse effect on our business, financial condition and results of operations. We will continue to strive to meet all of our quality of service obligations under the PCS authorizations.

In 2011, Anatel published Resolution No. 575/11 to Review of the Regulation on the Management of Quality of Service – PCS. The new regulation established new quality goals, evaluation criteria, data collection and quality monitoring of Service Providers – PCS. The Anatel regulation aims to create a comprehensive model of quality management of the PCS providers providing preventive and proactive on the part of Anatel, through the incorporation of indicators and benchmarks that allow the systematic evaluation of the quality of service in all its dimensions. Anatel also published Resolution No. 574/11 in 2011, which set broadband quality measurement standards.

On November 9, 2017, Public Consultation No. 29/2017 was published to review the quality framework, in which Anatel proposed a draft of a single Regulation on the Management of Quality with rules applicable to fixed, mobile, broadband and cable TV providers. Among the proposals – reportedly inspired by the theory of responsive regulation – are (i) the division of the quality indicators into Operational Indicators and Research Indicators for measuring the quality of service perceived by the user; and (ii) the measure of quality by municipality.

On January 2, 2018, the initial term for public comment on the proposal was extended for sixty (60) days and subsequently for thirty (30) more days, ending on April 8, 2018.

### ***PCS Regulation***

In September 2000, Anatel promulgated regulations regarding PCS wireless telecommunications services that are significantly different from the ones applicable to mobile companies operating under Band A and Band B.

According to rules issued by Anatel, renewal of a concession to provide mobile telecommunications services, as well as permission from Anatel to transfer control of cellular companies, are conditioned on agreement by such cellular service provider to operate under the PCS rules. TIM Sul, TIM Nordeste and TIM Maxitel converted their cellular concessions into PCS authorizations in December 2002, and later transferred them to TIM Sul, TIM Nordeste and TIM Maxitel, which are now TIM Celular subject to obligations under the PCS regulations. See “—Authorizations and Concessions.”

Anatel has initiated administrative proceedings against TIM Celular for noncompliance with certain quality standards and noncompliance with its rules and authorization terms. We have been fined by Anatel in some proceedings and are still discussing the penalty imposed in appeals before the agency. As a result of these proceedings, Anatel applied some fines that did not cause a material adverse effect on our business. In the year ended December 31, 2017, the total amount of these fines was R\$203.3 million. However, only R\$30.8 million was classified as “probable loss” by our legal advisors.

We continue to do our best to fully comply with our obligations under the PCS regime or with future changes in the regulations to which we are subject. See “—Obligations of Telecommunications Companies,” “Item 3. Key Information—D. Risk Factors—Risks Relating to our Business” and “Item 8. Financial Information—A. Consolidated Statements and Other Financial Information—Legal Proceedings.”

### ***Significant Market Power***

In November 2012, Anatel published a new competition framework known as the PGMC. Also in November 2012, Anatel published a series of regulations identifying groups with significant market power in the following relevant markets as defined by the PGMC: (i) wholesale offer of fixed access infrastructure for data transmission through copper or coaxial cable in rates equal or higher than 10 Mbps (Act No. 6.617, of November 8, 2012); (ii) wholesale offer of fixed infrastructure for local and long distance transportation for data transmission in rates equal or higher than 34 Mbps (Act No. 6.619, of November 8, 2012); (iii) passive infrastructure for transport and access networks (Act No. 6.620, of November 8, 2012); (iv) mobile network termination (Act No. 6.621, of November 8, 2012); and (v) national roaming (Act No. 6.622, of November 8, 2012).

The TIM Group, comprised of TIM Celular and TIM S.A. (formerly known as Intelig), is currently considered to have a significant market power in the following markets: (i) passive infrastructure in transport and access networks (provision of towers); (ii) mobile network termination (otherwise referred to as the mobile network termination market); and (iii) national roaming.

Due to such classification we are subject to increased regulation under the PGMC, which could have an adverse effect on our business financial condition and results of operations. Specifically, because we have been classified as having significant market power in the mobile network termination market, the rates charged by mobile service providers to other mobile service providers to terminate calls on their mobile networks, or VU-M, are regulated. On July 4, 2014, Anatel approved, by means of Resolution No. 639/2014, a rule for the definition of maximum reference rates for entities with significant market power, based on a cost model, for VU-M, TU-RL, and EILD. Pursuant to Anatel’s rule,

reference rates will decline based on a glide path until the cost modeling known as BU-LRIC is applied (2019, for VU-M and TU-RL; and 2020, for EILD). On July 7, 2014, Anatel published the corresponding Acts No. 6,210/2014, 6,211/2014 and 6,212/2014, which determined the specific reference rates effective as of February 2016. Because of our classification as having significant market power in the national roaming market, we must also offer roaming services to other mobile providers without significant market power at the rates approved by Anatel. We are also required to provide other providers without significant market power access to our towers due to our classification as having significant market power in that portion of the passive infrastructure market.

On December 5, 2016, Anatel published public consultations on (i) the revision of PGMC’s relevant markets and remedies, and (ii) the proposal of a specific Regulation for the Approval of Reference Offers, for public comment until March 22, 2017. Anatel is still analyzing the contributions.

According to the PGMC proposal, cities in Brazil will be classified by levels of competition (1 – competitive, 2 – moderately competitive, 3 – less competitive, 4 – non-competitive), and asymmetric measures will be applied according to the market competition. In addition, also based on the proposal submitted to public consultation, wholesale relevant markets will be defined as follows:

<b>PGMC (2012)</b>	<b>PGMC Revision (Public Consultation)</b>
Wholesale mobile call termination	Wholesale mobile interconnection
National roaming	National roaming
Full unbundling and bistream, or, Wholesale fixed network infrastructure access less than 10 Mbps	Wholesale fixed network infrastructure access
Leased lines, interconnection class V, interlinking, or, Wholesale fixed network infrastructure transport less than 34 Mbps	Leased lines
Ducts, trenches and towers, or, Passive infrastructure	Passive infrastructure – redefined * towers regulated by law
–	Wholesale fixed interconnection
–	High capacity data transport

Drafts of the acts whereby Anatel will designate the groups that have significant market power in each relevant market, also submitted to public consultation, indicate that we could be identified as having significant market power in the wholesale relevant markets of mobile interconnection and national roaming.

For additional detail, see “—Network Usage Charges”, “—Roaming Fees”, “—Interconnection Charges” and “—Long Distance”.

***Interconnection Regulation***

Telecommunication operators must publish a public interconnection offer on both economic and technical conditions and are subject to the “General Interconnection Regulatory Framework” issued by Anatel in 2005.

Also in 2005, Anatel issued a ruling for “Accounting Separation and Cost Accounting,” introducing the obligation of presenting the Accounting Separation and Allocation Document (*Documento de Separação e Alocação de Contas*), or DSAC, by the license holders and groups holding Significant Market Power in the offering of fixed and/or mobile network interconnection and wholesale leased lines (*Exploração Industrial De Linha Dedicada*), or EILD. Starting from 2006 (for fixed operators) and 2008 (for mobile operators related to the results of 2006 and 2007), operators (TIM included) are delivering the requested information to Anatel.

In 2013, Anatel reviewed almost the entirety of DSAC. Pursuant to Resolutions No. 608 and 619, the level of information to be delivered to Anatel and the number of products analyzed were extended. Rules on costs allocation were also standardized in order to allow comparison of the results among operators.

With respect to mobile interconnection, in October 2011, Anatel established a mechanism for reducing fixed-to-mobile call rates, applying a reduction of 18% in 2012 and 12% in 2013. In November 2012, through Resolution 600, Anatel decided that the VU-M reference rates in 2014 would be 75% of the valid VU-M in 2013, and in 2015 by 50% of the valid VU-M in 2013. Based on that, in December 2013, VU-M prices for 2014 and 2015 were

published in accordance with Resolution No. 600.

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In addition to the VU-M reduction, Anatel established a bill and keep, or B&K, rule between significant market power and non-significant market power PCSs. From January 2013 until February 2015, the B&K was 80%/20%. On February 12, 2015, Anatel approved, by means of Resolution No. 649/2015, the following new B&K percentages, amending the percentages established by Resolution 600: 75%/25%, from 2015 until 2016; 65%/35%, from 2016 until 2017; 55%/45%, from 2017 until 2018; and 50%/50%, from 2018 until 2019, which was the object of a judicial suit (on going), in order to suspend its effects. After 2019, the VU-M will be charged by the significant market power whenever their network is used to originate or to finish a call. In July 2015, we filed a lawsuit seeking to annul Resolution No. 649/2015 and maintain the percentages originally established by Resolution 600, which currently remains pending a final decision.

With respect to fixed interconnection, Anatel revised the criteria for pricing the use of fixed networks in May 2012. According to such regulation, after January 1, 2014, a full B&K regime (in which no payments are due for the traffic termination) was implemented for local STFC operators dealing with other local STFC operators. Currently, therefore, no payments are due for the use of a local STFC operator's network by other local STFC operator. With respect to interconnection of STFC operators with long distance and mobile operators, we understand that, in 2012, when Anatel issued PGMIC, the asymmetrical measure that permitted STFC operators without significant market power to charge a TU-RL 20% higher than the TU-RL charged by STFC operator, with significant market power was revoked. In September 2016, we filed a lawsuit on this subject, which is still pending a final decision.

On July 4, 2014, Anatel approved, by means of Resolution No. 639/2014, a rule for the definition of maximum reference rates for entities with significant market power, based on a cost model, for VU-M, TU-RL, and EILD. Pursuant to Anatel's rule, reference rates will decline based on a glide path until the cost modeling known as BU-LRIC is applied (2019, for VU-M and TU-RL; and 2020, for EILD). On July 7, 2014, Anatel published the corresponding Acts No. 6,210/2014, 6,211/2014 and 6,212/2014, which determined the specific reference rates effective as of February 2016.

On February 24, 2017, considering the glide path provided in Act No. 6,211, VU-M rates were again reduced, depending on the region, to the level of approximately R\$0.05 (five cents) and, in 2018, will also be reduced to levels of R\$0.03 (three cents).

### ***Rate Regulation***

Under our PCS authorizations, we are allowed to set prices for our service plans, subject to approval by Anatel, provided that such amounts do not exceed a specified inflation adjusted cap. Anatel currently uses the IST (*Índice de Serviços de Telecomunicações*), a specific price inflation index that it developed, in evaluating prices and determining the relevant cap for prices charged in the telecommunications industry. As mentioned above, on July 4, 2014, Anatel approved the calculation of VU-M, TU-RL and EILD reference rates based on a cost model. We expect that the adjustment of our prices will follow the market trend, and that the adjustment will be below the annual inflation rate based on the IST.

### ***Number Portability***

In March 2007, Anatel issued a new regulation regarding number portability in Brazil for fixed telephony and PCS providers. Portability is limited to migration between providers of the same telecommunications services. For PCS providers, portability can take place when customer changes services provider within the same Registration Area as well as when customer changes the service plan of the same area. Anatel finished the nationwide NP implementation schedule in March 2009.

### ***Value-Added Services and Internet Regulation***



Value-added services are not considered under Brazilian telecommunications regulations to be telecommunications services, but rather an activity that adds features to a telecommunications service. Regulations require all telecommunications service providers to grant network access to any party interested in providing value-added services, on a non-discriminatory basis, unless technically impossible. Telecommunications service providers also are allowed to render value-added services through their own networks. Internet connection, when offered to users on a single basis, by parties other than telecommunications service providers, is considered by Brazilian legislation to be a value-added service, and its providers are not considered to be telecommunications companies. Current regulations allow us or any other interested party to offer Internet connection through our network. In such case, Internet connection would be deemed as a portion of the telecommunications service that enables users to navigate the Internet.

In April 2014, the Brazilian President passed Law No. 12,965 of 2014, known as the Legal Framework for the Use of the Internet (*Marco Civil da Internet*), or the Internet Framework, which establishes the principles, guarantees, rights and duties for the use of the Internet in Brazil.

Key topics covered in the Internet Framework are: net neutrality; collection, use and storage of personal data; confidentiality of communications; freedom of expression and the treatment of illegal, immoral or offensive contents.

The Presidential Decree No. 8,711/2016 was enacted by the Brazilian President on May 11, 2016 and provided additional detail on the Internet Framework in three main aspects: (i) clarification of the scope and implementation of the net neutrality rules, (ii) implementation of the rights and obligations related to privacy and data protection regarding Brazilian Internet users, and (iii) governance of the Internet Framework, including authorities entitled to enforce the legislations.

This decree entered into force on June 10, 2016, however could be revoked or amended by a new presidential decree that may be issued in 2018 regarding public policies for telecommunications (see “—Review of the Current Regulatory Model for the Provision of Telecom Services”).

There are also bills of law both in the Brazilian House of Representatives and the Senate addressing personal data protection, which means this issue will continue to be addressed by the Brazilian Congress.

### ***Frequencies and Spectrum Background***

We have a license to operate PCS services in the 450 MHz, 700 MHz, 800 MHz, 900 MHz, 1.8 GHz, 1.9/2.1 GHz and 2.5 GHz frequency ranges, which allows us to provide mobile communications services with 2G, 3G and 4G technologies throughout Brazil.

In connection with the PCS authorization auctions in 2001 and 2002, Anatel divided the Brazilian territory into three separate regions, each of which is equal to the regions applicable to the public regime fixed-line telephone service providers. PCS services could only be provided under Bands C, D and E at that time with initially 1800 MHz band and afterwards also the 900 MHz band. We acquired the D band in regions II and III and the E band in region I, completing our national coverage when considering TIM Sul, TIM Nordeste and Maxitel coverage.

We requested a renewal of our authorizations for the D and E bands (1800 and 900 MHz frequencies) in September 2013, given that the initial term for which the authorization was expiring. The process was reviewed by Anatel, which handed down a decision based on formal legal opinion by the Federal Attorney General on the matter. According to such decision, TIM was entitled under the current rules to a renewal of our authorizations for the D and E bands, that started from March 2016.

In December 2007, we acquired new authorizations for the 1800 MHz frequency in the São Paulo and Rio de Janeiro in order to improve our RF capacity in these regions. Within the same auction, Claro and Vivo acquired authorizations to provide PCS services in regions where we had historically provided services but where Claro and Vivo previously did not, using 1800 MHz and 1900 MHz bands. This resulted in increased competition in these regions. In the same auction, Oi received authorization to provide PCS services in the state of São Paulo using 1800 MHz (band M in the whole state and band E in the state's countryside).

In December 2007, we acquired 3G frequencies sub-bands (1900-2100MHz), with national coverage; these authorizations were granted in April 2008 and are valid until 2023. Oi, Claro, Vivo and Algar Telecom also acquired 3G frequencies sub-bands in the same auction carried out by Anatel. All the authorization winners were subject to coverage and/or expansion commitments, divided by Municipality among the winners, in unserved areas.

In December 2010, Anatel auctioned an empty 3G band of radio spectrum consisting of (10+10) MHz in 2.1 GHz in the whole country (the “H Band” Auction), and other left over frequencies in the 900 MHz and 1800 MHz bands that had not been assigned in previous auctions. In this auction:

- Of the 12 available lots in the H Band, 10 were awarded to Nextel, at the time a new entrant in the GSM market, which had traditionally offered trunking services in Brazil. Current operators were prevented from participating due to spectrum caps. Oi and CTBC (now known as Algar Telecom), managed to win the remaining two lots where they had cap availability.
- The new entrant will be benefited with spectrum and infrastructure sharing, specifically in locations with less than 30,000 inhabitants, subjected to commercial agreements.
- TIM won individual block of frequencies in five service areas, strengthening its presence in the North, Santa Catarina, Minas Gerais and Paraná, bidding a total of R\$81.8 million, to be paid proportionately to the remaining years in the existing authorization licenses (remaining years/15).
- VIVO won blocks in 900 MHz and due to available cap, managed to win lots of 1700/1800 MHz in all regions, completing a national coverage of (10+10) MHz in this band.
- Claro won blocks of spectrum in the 1700/1800 MHz band.

In December 2011, Anatel started auction No. 001/2011-PVCP/SPV, pursuant to which 16 blocks in the 1,800 MHz band were sold to Claro, Oi, CTBC and TIM. As a result of our participation in the auction, we expanded our 2G coverage and increased our presence in the northern and midwestern regions of Brazil, including the states of Paraná, Espirito Santo, Rio Grande do Sul, Santa Catarina and Minas Gerais. Our corresponding RF authorization periods were formalized with Anatel in May 2013.

In 2012, Anatel established a bidding process in order to comply with Presidential Decree No. 7.512 of June 2011, which set April 2012 as the deadline to auction the 2.5GHz band, in order to introduce 4G technology in Brazil. Anatel modeled the auction with 2 national blocks of (20+20) MHz (W and Z) and 2 national blocks of (10+10) MHz (V1 and V2). In order to guarantee full rural service by 2018, Anatel linked the 4G blocks to the 450MHz band in specific geographic regions of Brazil.

We participated in the auction as a group bidding in the name of TIM and Intelig. We did not bid for the W block (Amazonas as a rural area), which we viewed as having a high premium if compared to the X block (67%), whereas we successfully acquired the V1 block, which in our view held the best CAPEX/OPEX profile associated with rural services in its selected regions (RJ, ES, SC and PR). The joint bid allowed us to take advantage of the flexibility of the auction rules. These bands brought heavy coverage obligations as its short range characteristics demands large investments.

The year 2013 began with indications from the government and Anatel that they hoped to speed up the move to digitalization of TV in Brazil. In November 2013, Anatel approved the dedication of a single band, of the 700MHz spectrum, exclusively to mobile services and in September 2014, Anatel concluded the 700 MHz spectrum auction that granted to TIM, Vivo, Claro and Algar the operation of the 700 MHz frequency for the 4G mobile technology, to be added to the current LTE service in the 2.5 GHz RF. We bid on Block 2 of that auction, for national coverage of the 700 MHz band, and won the same with a bid of R\$1.947 billion (a 1% premium over the minimum price of R\$1.927 billion). The 700MHz spectrum, with its long range and good penetration characteristics, is very important to the expansion of the mobile data network in the country, offering even better 4G navigation quality to customers and allowing service to reach a greater number of users, supporting both rural obligations and city coverage. Another benefit of our acquisition of Block 2 of the 700MHz spectrum is the potential for economies of scale with respect to equipment and synergy with the Asia-Pacific Telecommunity, or APT, band plan and the European digital dividend for the spectrum.

The auction also required the winning bidders to proportionally reimburse the broadcasters for the clean-up of the spectrum previously held and used by them. We spent R\$1.199 million in order to create in March 2015 an entity called the Entity for Administration of TV and RTV Channel Relocation and Digitalization Process, or EAD, with the other winning bidders, to ensure the spectrum clean-up. The price allocated to clean-up of the spectrum related to unsold blocks was shared proportionately among the winning bidders who bought the other blocks. To offset such additional cost to the winning bidders, the price of the 700 MHz spectrum was discounted using Anatel's WACC methodology.

The Authorization Terms for usage of the 700 MHz spectrum were signed in December 2014 and the Articles of Association and By-laws of EAD were filed on March 2, 2015. Our EAD payments were completed in January 2018.

In December 2015, Anatel auctioned left over radiofrequencies in the 1,800 MHz, 1,900 MHz and 2,500 MHz bands. We submitted bids for the left over lots of the 2,500 MHz band which had originally been auctioned in 2012. This particular band spectrum provides for 4G mobile services. We were classified as the first ranked bidder in the lots for Recife, in the state of Pernambuco, and Curitiba, in the state of Paraná, based on our bids which totaled R\$57.5 million. The corresponding authorization terms were executed by Anatel in July, 2016.

### ***VU-M and Wholesale Market***

The interconnection of telecommunication operators is mandatory, allowing the users of different services to make calls from one network to another. In the case of PCS, Anatel has established that, whenever its network is used to originate or to receive calls, the operators will receive the VU-M, also known as an interconnection rate or mobile termination rate, set by free agreement. Anatel urged us to adopt a single VU-M per region, as such region is set out in the PCS General License Plan (*Plano Geral de Autorizações*), or PGA, which began on November 1, 2010. We declined to do so and instead chose to commercially negotiate VU-Ms with different providers. Under applicable regulations, VU-M rates could be negotiated among operators with reference rates only applied by Anatel in case of dispute.

### ***Industrial Exploration of Dedicated Lines***

In December 2010, Anatel approved a public hearing that considered alterations of the Industrial Exploration of Dedicated Lines (*Exploração Industrial de Linha Dedicada*) or EILD, which established mechanisms for the operation of transmissions circuits up to 34 Mbps to increase transparency between operators and concessionaires. In May 2012, Anatel approved the new EILD regulations (*Regulação de Exploração Industrial de Linha Dedicada*), or REILD, detailing mechanisms to optimize the operating structure for transmission loop contracts in order to increase contract price transparency and affording equal treatment to independent service providers from concessionaire groups. The REILD specifically sets out more effective rules on project definition including Standard EILD or Special EILD, in addition to contract and delivery terms, and specifies EILD delivery dispute resolution procedures. Concurrently, in May 2012, Anatel approved new EILD reference prices, a step towards value fixation in disputes between service providers.

Considering that EILD is also a market subject to the asymmetric regulation defined by Anatel in the PGMC, operators classified by Anatel as pertaining to group with significant market power in the EILD market, such as Oi, were required to submit reference prices and offers for Anatel's approval, as well as to only offer EILD through a specific system designed for the PGMC. In September 2013, Anatel ratification, for the first time, reference prices and offers of the operators with significant market power in the EILD market. At least every six months new reference prices and offers must be submitted for Anatel's approval. We are not currently classified as having significant market power in the EILD market.

Nevertheless, the TIM network is still growing and, with its backbone now reaching the North region of Brazil by using optical fiber technologies and not only via satellite, this has allowed TIM to strengthen and expand the services offered in that region, particularly in the states of Pará, Amapá and the city of Manaus, the capital of the state of Amazonas and a very important industrial zone.

The greatest benefits of the use of the optical fiber technology are the higher network stability and assurance, greater voice and data traffic capacity and the higher transmission rates that we can now provide to our customers, all of which are essential features to support the increasing telecommunication services demands in the region.

We have started discussions to apply the EILD reference rates based on cost model to the existing agreements we have with operators with significant market power in the EILD market. Although we were engaged in administrative and judicial disputes on the issue in 2016, by the end of that year we reached a commercial agreement that enabled us to withdraw those administrative and judicial disputes with Telefonica and Vivo. In July 2017, by means of Judgment 217/2017 which was an administrative dispute about the effects of the cost model, the board of directors of Anatel recognized the applicability of the reference rates set forth in Act No. 6,210/2014 between the Oi group and the TIM Group. These reference rates were valid until the approval by Anatel of a new ORPA, issued by Oi and signed by TIM, based on the cost model. We executed Oi's ORPA regarding the EILD reference rates on March 9, 2018, which was the final step in the resolution of our administrative and legal disputes with Oi related to EILD.

As part of the strategy of reducing operating expenses and as consequence of the expansion of our optic network infrastructure we are gradually deactivating leased lines such as EILD. The agreements for network sharing between the national operators is also a key factor to the reducing of leased lines. The number of leased circuits has considerably decreased along the last year. New lines are hired only in the cases where leasing is demonstrated to be the most cost effective solution.

### ***Costs Modeling***

The implementation of a costs model by Anatel has been in development since March 2005, when the Separation and Allocation of Accounts Document (*Documento de Separação e Alocação de Contas*), or DSAC was approved, for pricing of STFC and PCS interconnection, as well as wholesale market inputs, in particular with regards to industrial exploitation of the dedicated lines, or EILD and unbundling.

In July 2014, Anatel published the final decision regarding the cost modeling to set the wholesale reference values for the fixed and mobile access and interconnection services, as well as the maximum reference values for leased lines.

Anatel established that TU-RL and VU-M, are cost oriented starting from February 2016 and reaching the efficient cost level based on BU-LRIC model in 2019. For EILD, the efficient cost level will only be reached in 2020. See “Item 3. Key Information—C. Risk Factors—Risks Relating to the Brazilian Telecommunications Industry—Anatel classified us as an economic group with significant market power in some markets and are now subject to increased regulation.”

Anatel signaled that all products (not only call termination rates and leased lines) will be cost oriented from the revision of the PGMC. In October 2016, all operators had to answer a data request from Anatel which was intended to gather the necessary data to update the cost model for all the products in the PGMC, such as national roaming and passive infrastructure. See “—Interconnection Regulation.”

### ***Migration of the Mobile Networks with Analog Technology***

In February 2011, Anatel approved Resolution No. 562/11, which modified a provision of the regulation on conditions of use of RF, determining that, after a period of 360 days from the publication, the use of analog technology in RF sub bands of 800 MHz would no longer be allowed.

In relation to the use of such RF, we no longer have any subscriber of analog technology (AMPS). However, our analog networks were still used by STFC concessionaires to provide services to subscribers in rural areas of the country, a service called RuralCel.

In December 2016, Anatel approved Resolution No. 672/16, which prohibited the use of analog technology in the radiofrequency sub bands of 800 MHz, 900 MHz, 1,800 MHz, 1,900 MHz and 2,100 MHz. We shut down our Ruralcel service in 2017, and consequently turned off the related radio base stations, as attested to by Oi and recognized by Anatel in Decisionmaking No. 6/2017.

### ***Quality Management Regulation***

In October 2011, Anatel published PCS and SCM quality management regulations to establish quality parameters which were to have been met by the mobile telephone and Internet connection operators in up to 12 months. Most quality parameters established became effective in October and November 2012.

Among such quality parameters, most notable are the ones relating to the quality of the networks, both mobile and fixed, creating obligations of minimum and average speeds in numbers, higher than those currently used by operators,



which required investments so that such obligations could be met.

As a response to the need to better quantify the financial impacts, Oi has presented a cancellation request along with a revision request to Anatel for the presentation of technical surveys of the economic impacts of the new regulations.

The aforementioned request was submitted for a public hearing by Anatel, which resulted in a series of differing opinions regarding quality measures by the different operations that are currently being considered by Anatel.

With regard to STFC, Anatel approved in December 2012 the Quality Management Regulation for STFC service providers, the purpose of which is the creation of a new quality management model available, such as Quality Management Regulation for PCS and SCM.

In February 2013, Anatel published STFC quality management regulations to establish quality parameters which should be met by fixed telephone operators in 120 days. All parameters established became effective in June 2013.

In November 2017, Anatel launched a new public consultation in order to review the quality framework, but as of the date of this annual report the process remains ongoing.

### ***Consolidation of TIM and TIM S.A. (formerly named Intelig) and TIM Fiber STFC Licenses***

With the acquisition of Intelig (now TIM S.A.) by TIM Participações, we were required to eliminate existing overlapping licenses in order to abide by regulations. We were given 18 months to implement these changes, beginning on the date of closing of the transaction. This term was later extended for an additional 12 months, expiring on June 30, 2012.

On December 30, 2011, we filed petitions with Anatel to authorize the consolidation of our STFC license terms in the local mode under Intelig and our STFC LDN and LDI license terms under TIM. On June 30, 2012, we returned the two-digit CSP code 23 to Anatel, keeping the operation of STFC LDN and LDI bound to TIM Celular S.A.'s license for CSP 41, whereas Intelig keep the STFC local license.

The amendments to the STFC Instrument of Authorization executed between TIM/Intelig and Anatel providing for the foregoing were published on October 26, 2012.

On August 29, 2012, the companies TIM Fiber SP and TIM Fiber RJ formalized before Anatel their waiver of SCM exploration authorizations. Promptly thereafter, both companies were merged into TIM Celular S.A., which is already authorized to provide such services. Anatel terminated the SCM authorizations held by TIM Fiber SP and TIM Fiber RJ. Upon absorption of TIM Fiber SP and TIM Fiber RJ, TIM Celular S.A., as successor in interest, became the provider of the services previously provided by these companies.

The Board of Directors of the Company approved on July 25, 2017 the Reorganization, under which TIM Celular will be merged into TIM S.A. (formerly known as Intelig). Accordingly, in June 2017, the companies filed with Anatel a prior approval request to implement the merger. On December 29, 2017, Anatel's commission gave its prior approval for the merger of TIM Celular into TIM S.A. and for the corresponding transfer of all TIM Celular's services and spectrum licenses to TIM S.A. On January 3, 2018, such prior approval decision was published in the Official Gazette. The companies intend to implement the merger in 2018. After some further required formalities are completed, Anatel will transfer all such licenses to TIM S.A. and later merge TIM Celular's SCM license into the SCM license already held by TIM S.A.

### ***Anatel Administrative Proceedings***

Under the terms of its PCS authorization, TIM Celular implemented mobile personal telecommunications coverage for the assigned area. Under such term of authorization, TIM Celular is required to operate in accordance with the quality standards established by Anatel. If it fails to meet the minimum quality standards required, TIM Celular is subject to Obligation Non-Compliance Determination Procedures, or PADO, and applicable penalties. Anatel has brought

administrative proceedings against the TIM Group for (1) noncompliance with certain quality service indicators (PGMQ); and (2) default of certain other obligations assumed under the Terms of Authorization and pertinent regulations. In its defense before Anatel, the TIM Group attributed the lack of compliance to items beyond its control and not related to its activities and actions. We cannot predict the outcome of these proceedings at this time, but have accrued the amount in our balance sheet as a provision for all those cases in which we estimate our loss to be probable.

**C. Organizational Structure**

We are part of the Telecom Italia Group, which is engaged in the communications sector and, particularly, the fixed and mobile national and international telecommunications sector. The operating segments of the Telecom Italia Group are organized according to the relative geographical localization for the telecommunications business (Domestic—Italy, Brazil and, until March 8, 2016, Argentina). We are currently held, directly and indirectly, by Telecom Italia through its wholly owned subsidiary, TIM Brasil. In turn, the single largest shareholder of Telecom Italia is Vivendi, which directly holds approximately 23.94% of our ordinary share capital.

Substantially all assets held by TIM Participações consist of the shares of its wholly owned subsidiaries TIM Celular (incorporated in the Federative Republic of Brazil and headquarters located in the State of São Paulo), and TIM S.A. (known, until its corporate name change in September 2017, as Intelig) (incorporated in the Federative Republic of Brazil and headquarters located in the State of Rio de Janeiro).

On July 25, 2017, the Company's Board of Directors approved the Reorganization, under which TIM Celular will be merged into TIM S.A. The Reorganization has the objective to capture operational and financial synergies, through the implementation of a more efficient process structure, as well as accounting and internal control systems.

The following chart illustrates our current ownership structure:

**D. Property, Plants and Equipment**

Our principal properties consist of radiofrequencies, transmission equipment, switching exchanges and gateway equipment, which connect calls to and from customers and enables data traffic connections, and radio base stations, which comprise certain signal transmission and reception equipment covering a defined area. At our radio base station, we have also installed antennas and certain equipment to connect these antennas with our switching equipment. As of December 31, 2017, we had more than 15 thousand NodeB, almost 13 thousand BTS and more than 85 thousand kilometers in fiber optic networks. We generally lease or buy the sites where our mobile telecommunications network equipment is installed. Over the course of financial year 2017, we had leased approximately 110,856 square meters of real property, all of which was available for office space. We also lease

approximately 1,270 square meters of commercial office space, and 24,590 square meters of stores operated by us. There are no material encumbrances that may affect our utilization of our property or equipment. All of our property and equipment is owned or leased domestically; we do not own or lease any property or equipment outside of Brazil.

**Item 4A. Unresolved Staff Comments**

None.

## **Item 5. Operating and Financial Review and Prospects**

### **A. Operating Results**

The following discussion of the Company's financial condition and operating results should be read in conjunction with the Company's audited consolidated financial statements as of and for the years ended December 31, 2017, 2016 and 2015 included in this annual report that have been prepared in accordance with IFRS, issued by IASB as well as with the information presented under "Item 3. Key Information—A. Selected Financial Data."

#### **Brazilian Political and Economic Overview**

The year 2017 marked the improvement of the Brazilian economy with the recovery of GDP, which grew by 1.0% after two consecutive years of decline, mainly driven by domestic consumption and trade balance surplus. The trade balance closed the year with a surplus of U.S.\$67 billion, representing a growth of 40.49% compared to 2016. Of note was the 17.55% increase in exports, which more than offset the 9.59% increase in imports. Inflation, measured by the IPCA, was under strict control and, by the end of 2017, it was at 2.95%, below the minimum target set by the Central Bank. The performance is explained by reduced demand, plentiful harvests which reduced the prices of food, the reduction in the price of beverages, and the relatively high figures for 2016 that serve as a comparative base. The SELIC, or basic interest rate, was consistently reduced throughout 2017 and closed the year at a historical low of 7.00%, a significant reduction of 6.75 percentage points compared to the closing of 2016. This movement is explained by the still modest economic recovery of the country and the lower expectation of inflation.

Despite the overall positive result, instability continued to mark the political environment, leading to uncertainties regarding the approval of fiscal and political reforms, in particular the public pension reform. The upcoming presidential elections in 2018 also contribute towards reduced visibility regarding the direction of the country's economy.

Internationally, the continuous military posturing, especially between the United States and North Korea, brought volatility to the markets, generating strong fluctuations in securities trading markets. In Europe, levels of economic activity are improving in the Eurozone, even as discussions regarding Brexit continue. In the United States, some government proposals and the U.S. Federal Reserve Board's monetary policy have set a tone of uncertainty about the sustainability of global economic growth in the years to come.

In respect of foreign exchange, the Brazilian real depreciated 1.50% compared to the U.S. dollar in 2017. During the year, the exchange rate fluctuated significantly due to reports of corruption cases in Brazil, adjustments to Brazilian monetary policy and reforms proposed by the U.S. government.

#### **Impact of Inflation on Our Results of Operations**

Inflation directly impacts our results of operations as certain of our assets and liabilities are subject to monetary adjustments by reference to indexes that measure or that are impacted by inflation such as IPCA, TJLP, and SELIC. In 2017, the net impact of inflation adjustments was a loss of R\$238 million and in 2016, was a loss of R\$207 million. The loss in 2017 and 2016 can be explained by inflation adjustment on loans from BNDES, and, to a lesser extent, losses due to inflation adjustment on provisions for the aggregate contingency value of public civil actions and lawsuits pending against us. In addition to the foregoing direct impacts, if inflation rises, disposable income of families may decrease in real terms, leading to lack of purchasing power among our customer base. Measures to combat inflation, such as a tight monetary policy with high interest rates, result in restrictions on credit and short-term liquidity, further decreasing the purchasing power of our customers.

**Sale and leaseback**

A sale and leaseback transaction is one where the group sells an asset and immediately reacquires the use of the same asset by entering into a lease agreement with the buyer. The accounting treatment of the sale and leaseback transaction depends upon the substance of this transaction (by applying the principles of lease classification) and whether or not the sale was made at the asset's fair value.

For financial sale and leaseback, the total gain is deferred and amortized over the lease term. For operational sale and leaseback, generally the assets are sold at fair value, and consequently, the gain or loss from the sale is immediately recognized in the income statement.

At the beginning of the lease term, the Company recognizes finance leases as assets and liabilities in its balance sheet at amounts equal to the fair value of the leased property or, if lower, the present value of the minimum lease payments, each determined at the beginning of the lease.

The discount rate used in a sale and leaseback transaction is determined based on observable market transactions where the lessee would have to pay on a similar lease or borrowing arrangement contract or loan. As mentioned in Note 3.f to our consolidated financial statements, discount rates applied by management in the transactions carried out during the year were decisive for the calculation of the portion of the gain recorded through profit and loss, as well as the portion of deferred gain and amortized over the lease term.

### **Critical Accounting Policies**

Critical accounting policies are those that are important to the presentation of our financial condition and results of operations and require management's most subjective, complex judgments, often requiring management to make estimates about the effect of matters that are inherently uncertain. As the number of variables and assumptions affecting the possible future resolution of the uncertainties increases, those judgments become more complex.

Accounting estimates and judgments are continuously reassessed. They are based on the Company's historical experience and other factors, such as expectations of future events, considering the circumstances presented as at the base date of the financial statements.

By definition, the accounting estimates resulting from such assumptions rarely equal the actual outcome. The estimates and assumptions that present significant risk with probability to cause relevant adjustments in the book values of assets and liabilities for the next fiscal years are shown below. We also describe our significant accounting policies, including the ones discussed below, in Note 3 to our consolidated financial statements.

### ***Impairment Losses of Non-Financial Assets***

Losses from impairment take place when the book value of assets or cash generating unit exceeds the respective recoverable value, which is considered as the fair value less costs to sell, or the value in use, whichever is greater. The calculation of the fair value less costs to sell is based on the information available from sale transactions involving similar assets or market prices less the additional costs incurred to dispose of those assets. The value in use is based on the discounted cash flow model. Cash flows derive from the Company's business plan. Since this is an ongoing business as from the fifth projection year a perpetuity of nominal growth of cash flows was estimated.

Any reorganization activities to which the Company has not committed itself on the financial statements disclosure date on which the financial statements are reported or any material future investments aimed at improving the asset base of the cash generating unit being tested are excluded for the purposes of the impairment test.

The recoverable value is sensitive to the discount rates used in the discounted cash flow method, as well as with expected future cash receivables and the growth rate of revenue and expenses used for extrapolation purposes. Adverse economic conditions may lead to significant changes in these assumptions.

At December 31, 2017 and 2016, the principal non-financial assets valued in this way were goodwill recorded by the Company (see Note 14 to our consolidated financial statements), and the fair value of goodwill was substantially in excess of its net book value.

### ***Income Tax and Social Contribution (Current and Deferred)***



Income tax and social contribution (current and deferred) are calculated in accordance with interpretations of the legislation currently in force. This process normally includes complex estimates in order to define the taxable income and differences. In particular, deferred tax assets on income tax and social contribution losses and temporary differences are recognized to the extent that it is probable that future taxable income will be available and can be offset. The recoverability of the deferred income tax on tax and social contribution losses and temporary differences takes into account estimates of taxable income (see Notes 10 and 33 to our consolidated financial statements).

***Provision for Legal and Administrative Proceedings***

Legal and administrative proceedings are analyzed by the Company's management and internal and external legal advisors. The Company's reviews take into account factors such as the hierarchy of laws, case law available, recent court decisions and their relevance in the legal order. Such reviews involve the judgment of our management (see Note 10 to our consolidated financial statements).

***Fair Value of Derivatives and Other Financial Instruments***

Financial instruments presented at fair value in the balance sheet are measured using evaluation techniques that considers observable data or observable data derived from the market (see Notes 37 and 38 to our consolidated financial statements).

***Unbilled Revenues***

Considering that some billing cut-off dates occur at intermediate dates within the months, at the end of each month there are revenues already earned by the Company but not effectively billed to the customers. These unbilled revenues are recorded based on estimates which take into account historical data of usage, number of days since the last billing date, among other factors.

**Results of Operations**

The following discussion should be read in conjunction with "Item 4. Information on the Company" and "Item 3. Key Information". As set forth in greater detail below, our financial condition and results of operations are significantly affected by Brazilian telecommunications regulation, including the regulation of rates. See "Item 4. Information on the Company—B. Business Overview—Regulation of the Brazilian Telecommunications Industry—Rate Regulation." Our financial condition and results of operations have also been, and are expected to continue to be, affected by the political and economic environment in Brazil. See "Item 3. Key Information—D. Risk Factors—Risks Relating to Brazil."

The following table shows certain components of our statement of operations for each year in the three-year period ended December 31, 2017, as well as the percentage change from year to year.

	<b>Year ended December 31,</b>			<b>Percentage change</b>	
	<b>2017</b>	<b>2016</b>	<b>2015 (1)</b>	<b>2017 – 2016</b>	<b>2016 – 2015</b>
	<b>(in thousand of reais)</b>				
Revenue	16,233,959	15,617,413	17,142,265	3.9	(8.9)
Cost of services provided and goods sold	(7,740,150)	(7,693,406)	(8,306,857)	0.6	(7.4)
Gross income	8,493,809	7,924,007	8,835,408	7.2	(10.3)
<b>Operating income (expenses):</b>					
Selling expenses	(4,575,177)	(4,719,029)	(4,822,974)	(3.0)	(2.2)
General and administrative expenses	(1,424,643)	(1,258,722)	(1,195,277)	13.2	5.3
Other income (expenses), net	(560,636)	(522,061)	434,283	7.4	n.a.
Operating income (expenses)	(6,560,457)	(6,499,812)	(5,583,968)	0.9	16.4
Operating income	1,933,352	1,424,196	3,251,440	35.8	(56.2)
<b>Financial income (expenses):</b>					
Financial income	512,565	750,450	862,708	(31.7)	(13.0)
Financial expenses	(1,009,653)	(1,156,485)	(1,115,524)	(12.7)	3.7

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Foreign exchange variations, net	(748)	(4,845)	2,409	(84.6)	n.a.
Financial income (expenses)	(497,836)	(410,880)	(250,406)	21.2	64.1
Income before income and social contribution taxes	1,435,516	1,013,316	3,001,034	41.7	(66.2)
Income and social contribution taxes	(201,009)	(262,889)	(915,591)	(23.5)	(71.3)
Net income for the year	1,234,507	750,427	2,085,443	64.5	(64.0)

(1) Revised figures reported on our annual report on Form 20-F issued on April 10, 2017, as explained in Note 2(e) of our consolidated financial statements presented therewith.

## Results of Operations for the Year Ended December 31, 2017 Compared to the Year Ended December 31, 2016

### Operating Revenues

Our operating revenues consisted of:

- Mobile and Fixed Services: (i) local and long distance voice, (ii) data and content (value-added services), (iii) interconnection, and (iv) other services.
- Product Revenue: sale of handsets and accessories.

The composition of our operating revenues by category of service is presented in Note 27 to our consolidated financial statements and discussed below. We do not determine net operating revenues or allocate cost by category of service.

The following table shows the breakdown of our operating revenue, as well as the percentage change of each component from the prior year, for each of 2017 and 2016:

### Statement of Operations Data: Operating Revenues

	Year ended December 31,		Percentage
	2017	2016	change
	(in millions of reais)		2017 – 2016
Gross operating revenue	22,611.1	22,745.6	(0.6)
Deductions from gross revenue	(6,377.1)	(7,128.2)	(10.5)
Total revenue	16,234.0	15,617.4	3.9

Our gross operating revenue was R\$22,611 million for the year ended December 31, 2017, representing a loss of 0.6% as compared to our gross operating revenue of R\$22,746 million for the year ended December 31, 2016. This slight loss was mainly due to the recovery of mobile service revenue, which decreased by 0.2% compared to the year ended December 31, 2016, but which had decreased by 8.7% for the year ended December 31, 2016 compared to the year ended December 31, 2015, and by the increase in the landline service revenue, which increased by 9.1% compared to the year ended December 31, 2016. The revenue from goods sold slowed the pace at which it decreased, down by 14.5% compared to the year ended December 31, 2016, while the decrease for the year ended December 31, 2016 as compared to the year ended December 31, 2015, was 47.9%.

Deductions from gross revenue for the year ended December 31, 2017 was R\$6,377 million, a decrease of 10.5% compared to the year ended December 31, 2016, which was R\$7,128 million. This dynamic is explained by the reduction in the discounts offered and by the greater concentration of consumption of services with lower taxation.

Our revenue for the year ended December 31, 2017 was R\$16,234 million, an increase of 3.9% as compared to the year ended December 31, 2016. Net mobile service revenue increased 5.1% for the year ended December 31, 2017 as compared to the year ended December 31, 2016, from R\$13,968 million in the year ended December 31, 2016 to R\$14,687 million in the year ended December 31, 2017. The main driver of this dynamic is the solid expansion in data and content revenue, which more than compensated for the negative impact of the reduction of demand for voice service, the regulatory reduction in the interconnection fee (VU-M) and a Brazilian macroeconomic environment which was still recovering. Net landline service revenue increased by 4.7%, to R\$787 million for the year ended

December 31, 2017 from R\$752 million for the year ended December 31, 2016, mainly explained by the TIM Live expansion.

The Company's management understands that a breakdown of net revenue can be helpful in an analysis of the Company's revenue dynamics. The details of net revenue and the main highlights are presented below:

**Revenue Breakdown**

	<b>Year ended December 31,</b>		<b>Percentage</b>
	<b>2017</b>	<b>2016</b>	<b>change</b>
	<b>(in millions of reais)</b>		
Total revenue	16,234.0	15,617.4	3.9
Service revenue	15,474.1	14,720.3	5.1
Service revenue – mobile	14,687.1	13,968.5	5.1
Client generated	13,379.6	12,557.6	6.5
Local voice (usage and monthly fee)	3,725.2	4,891.3	(23.8)
Long distance voice	1,050.5	1,415.8	(25.8)
Data and content (VAS)	8,603.8	6,250.4	37.7
Interconnection	835.2	1,061.0	(21.3)
Others	472.3	349.9	35.0
Service revenue - landline	787.1	751.8	4.7
Goods sold	759.8	897.2	(15.3)

*Service Revenue*

Service revenue for the year ended December 31, 2017 was R\$15,474 million, an increase of 5.1% compared to R\$14,720 million in the year ended December 31, 2016, and demonstrated the trend of recovery in mobile and landline segments. Revenue from mobile services, or MSR, performed similarly, increasing 5.1% to R\$14,687 million for the year ended December 31, 2017, from R\$13,968 million for the year ended December 31, 2016, due to the strong expansion of VAS services.

Client generated revenue, or CGR, which consists local voice, long distance voice and data and content revenue, increased by 6.5%, from R\$12,558 million for the year ended December 31, 2016 to R\$13,380 million for the year ended December 31, 2017, driven by an increase in revenue from VAS services, which reflects the the increased customer demand for data and content services.

Local voice revenue decreased 23.8%, R\$3,725 million for the year ended December 31, 2017 as compared to R\$4,891 million for the year ended December 31, 2016. Long distance voice revenue decreased by 25.8% for the year ended December 31, 2017, to R\$1,050 million as compared to R\$1,416 million for the year ended December 31, 2016. The decrease in both local voice revenue and long distance voice revenue are explained by voice-to-data migration as we introduce more data and content services into our voice and data combination packages.

The dynamics of changes to voice revenue is reflected in the monthly average minutes of use by customers, or MOU, per month totaled 110 minutes, which represents a decrease of 5.8% for the year ended December 31, 2017 as compared to the year ended December 31, 2016, and which is a result of the national change in the customer profile, as our customers migrate from heavier voice usage to greater reliance on data.

Data and content revenue for the year ended December 31, 2017 was R\$8,604 million, an increase of 37.7% for the year ended December 31, 2017 as compared to R\$6,250 million for the year ended December 31, 2016 and represented 58.6% of MSR. This can be explained by the Company's strategy of offering more packages with recurring offers and content incorporated into these offers.

The dynamics of changes to data demand are reflected in the average customer's bytes of use, or BOU, per month, measured through November, increased by nearly 95% compared to the previous year, explained by increased plan offerings with expanded data and our efforts to migrate customers to 4G and boost smartphone penetration using this technology.

Interconnection revenue decreased 21.3% for the year ended December 31, 2017, with R\$835 million as compared to R\$1,061 million for the year ended December 31, 2016. The increase in incoming traffic was not enough to compensate for the effects of the regulatory decrease in the VU-M mobile termination rate (see "Item 4. Information on the Company—B. Business Overview—Regulation of the Brazilian Telecommunications Industry—Interconnection Regulation" for information regarding recent regulatory changes to VU-M rates).

Other mobile revenue for the year ended December 31, 2017 was R\$472 million, an increase of 35.0% as compared to R\$350 million for the year ended December 31, 2016. This increase is explained by the current dynamic of network sharing contracts and swaps that generate revenue, representing more than 50% of this line of revenue (and the corresponding network and interconnection costs).

The monthly average revenue per user, or ARPU, was R\$20.2 for the year ended December 31, 2017, an increase of 12.1% as compared to the year ended December 31, 2016. The increase in ARPU is explained mainly by the improvement in our base mix of customers, with a greater proportion of postpaid customers, and also by the individual growth of each segment.

Landline service revenue rose 4.7%, at R\$787 million for the year ended December 31, 2017 as compared to R\$752 million the year ended December 31, 2016. This increase was driven by the growth and expansion of coverage of TIM Live and which accounted for 44.6% of the increase in net revenue as compared to the year ended December 31, 2016. With the expansion of coverage, the contribution of TIM Live to fixed service revenue has increased from 35% of total fixed service revenue for the year ended December 31, 2017 as compared to 25% for the year ended December 31, 2016.

#### *Goods Sold*

Revenue from goods sold decreased 15.3%, from R\$897 million for the year ended December 31, 2016 to R\$760 million for the year ended December 31, 2017, explained by the reduction in the number of devices sold and the lower average price per device. Despite the decrease, the pace of deceleration was lower as compared to the variations of previous years. The penetration of smartphones for the year ended December 31, 2017 reached 80.9% compared to 72.8% for the year ended December 31, 2016.

#### *Operating Costs and Expenses*

Operating costs and expenses remained under control and ended 2017 relatively flat, with an increase of 0.5% for the year ended December 31, 2017 as compared to the year ended December 31, 2016, despite the growth of the postpaid base and the continuous expansion of our network, which come with associated costs.

The following table shows the components of operating costs and expenses for each of the periods indicated.

#### **Statement of Operations Data: Operating Costs and Expenses**

	<b>Year ended December 31,</b>		<b>Percentage</b>
	<b>2017</b>	<b>2016</b>	<b>change</b>
	<b>(in millions of reais)</b>		<b>2017 – 2016</b>
Personnel	(956.4)	(1,005.3)	(4.9)
Third party services	(3,023.6)	(2,905.1)	4.1
Interconnection and means of connection	(2,632.6)	(2,676.8)	(1.7)
Depreciation and amortization	(3,751.7)	(3,512.1)	6.8
Taxes, fees and contributions	(967.6)	(1,094.5)	(11.6)
Rent and insurance	(764.9)	(725.0)	5.5
Cost of goods sold	(846.8)	(976.0)	(13.2)
Publicity and advertising	(411.0)	(438.8)	(6.3)
Losses on doubtful accounts	(316.4)	(266.4)	18.7
Others	(68.9)	(71.1)	(3.1)



Total operating expenses	(13,740.0)	(13,671.2)	0.5
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***Personnel***

Personnel costs decreased by 4.9% in the year ended December 31, 2017 as compared to the year ended December 31, 2016, to R\$956 million from R\$1,005 million, respectively. This decrease can be explained by the non-recurring effects and adjustments for organizational rightsizing occurred in 2016. The reduction in our employee base to 9,519 employees in 2017 from 12,294 employees in 2016 also contributed to this decrease.

### ***Third Party Services***

Third party services costs increased 4.1%, to R\$3,024 million in the year ended December 31, 2017 as compared to R\$2,905 million in the year ended December 31, 2016, mainly due to increased costs from outside providers in connection with maintaining our expanding network infrastructure. Additionally, our increased postpaid sales result in a commensurate increase in commissioning expenses and other customer management expenses (such as billing, collection and customer care).

### ***Interconnection and Means of Connection***

Our costs for interconnection and means of connection decreased 1.7%, to R\$2,633 million in the year ended December 31, 2017 as compared to R\$2,677 million in the year ended December 31, 2016. This dynamic is related to the decrease in the VU-M interconnection fee and lower costs for leased lines as a result of Anatel Resolution No. 639 and an overall reduction in the number lines due to the Zero Leased Lines project.

### ***Depreciation and Amortization***

Depreciation and amortization expenses increased by 6.8% in the year ended December 31, 2017 as compared to the year ended December 31, 2016, to R\$3,752 million from R\$3,512 million, respectively. This increase is explained by a greater number of construction works in progress and a greater investment in software.

### ***Taxes, Fees and Contributions***

Taxes, fees and contributions costs decreased by 11.6% in the year ended December 31, 2017, to R\$968 million from R\$1,094 million in the year ended December 31, 2016, impacted by the decrease in FISTEL expenses.

### ***Rental and Insurance***

Rental and insurance costs increased 5.5% to R\$765 million in the year ended December 31, 2017 from R\$725 million in the year ended December 31, 2016. This increase is related to our network expansion, which increased our costs related to land leasing and infrastructure sharing.

### ***Costs of Goods Sold***

Our cost of goods sold continued to reduce its pace of decline as compared to previous years, decreasing by 13.2%, from R\$976 million in the year ended December 31, 2016 to R\$847 million in the year ended December 31, 2016. It was impacted by the decrease, by 12.6% in the year ended December 31, 2017 as compared to the year ended December 31, 2016, in the number of devices sold, and also by the lower average selling price for devices, which decreased by 1.7% in the year ended December 31, 2017 as compared to the year ended December 31, 2016. The reduction in the average device sales price is a result of a change in the strategy of suppliers to deliver higher quality equipment at more affordable prices. The Company continues to develop its product sales mix toward high-value devices, with sales volumes migrating from the prepaid segment and concentrating on postpaid and Control segments.

### ***Publicity and Advertising***

Publicity and advertising costs decreased 6.3% in the year ended December 31, 2017 as compared to the year ended December 31, 2016, to R\$411 million from R\$439 million, respectively, impacted by the decrease in prepaid recharge fees and efficiencies on our advertising spending mix.

***Losses on Doubtful Accounts***

Losses on doubtful accounts, or Bad Debt, increased 18.7%, to R\$316 million in the year ended December 31, 2017 as compared to R\$266 million the year ended December 31, 2016, following the continued growth in our postpaid customer base and revenue. Despite this increase, Bad Debt remains under control as a percentage of our gross revenue, at 1.4%.

**Others**

Other costs decreased 3.1%, or R\$2 million, in the year ended December 31, 2017 as compared to the year ended December 31, 2016. For the year ended December 31, 2017, those other costs amounted to R\$69 million, compared to R\$71 million for the year ended December 31, 2016.

**Other Income (Expenses), Net**

Other expenses, net increased 7.4% to R\$561 million in the year ended December 31, 2017 from R\$522 million in the year ended December 31, 2016. This increase was mainly explained by changes in the comparative base, which in 2016 included more transfers of towers to ATC as revenues from the disposal of assets. See Note 29 to our consolidated financial statements.

**Operating Income to Net Income**

The following table shows our net income, as well as the percentage change, for each of the periods indicated:

**Statement of Operations Data: Net Income**

	<b>Year ended December 31,</b>		<b>Percentage</b>
	<b>2017</b>	<b>2016</b>	<b>change</b>
	<b>(in millions of reais)</b>		<b>2017 – 2016</b>
Operating income	1,933.4	1,424.2	35.8
Financial income (expenses)	(497.8)	(410.9)	21.2
Income and social contribution taxes	(201.0)	(262.9)	(23.5)
Net income for the year	1,234.6	750.3	64.5

**Financial Income (Expenses)**

In the year ended December 31, 2017, financial expenses were R\$498 million, an increase of 21.2% as compared to the R\$411 million in financial expenses in the year ended December 31, 2016, explained by a positive derivatives mark-to-market effect that occurred in 2016.

**Income and Social Contribution Taxes**

Income and social contribution taxes are calculated based on the separate income of each subsidiary, adjusted by the additions and exclusions permitted in the year ended December 31, 2017 under tax law. Income tax and social contribution was R\$201 million in the year ended December 31, 2017, a decrease of 23.5% as compared R\$263 million to the year ended December 31, 2016, mainly explained by the deduction of a R\$190 million payment of Interest on Equity in November 2017. The effective rate of income and social contribution taxes was 14.0% in 2017 as compared to 25.9% in 2016.

**Net Income for the Year**

As a consequence of all of the dynamics explained above, our net income in the year ended December 31, 2017 was R\$1,235 million, representing an increase of 64.5% from a net income of R\$750 million in the year ended December 31, 2016.

**Results of Operations for the Year Ended December 31, 2016 Compared to the Year Ended December 31, 2015**

***Operating Revenues***

Our operating revenues consisted of: (i) monthly subscription charges, (ii) usage charges, which include roaming charges, (iii) interconnection charges, (iv) long distance charges, (v) value-added services, (vi) other service revenues and (vii) proceeds from the sale of handsets and accessories.

The composition of our operating revenues by category of service is presented in Note 27 to our consolidated financial statements and discussed below. We do not determine net operating revenues or allocate cost by category of service.

The following table shows certain components of our operating revenues, as well as the percentage change of each component from the prior year, for each of 2016 and 2015:

**Statement of Operations Data: Operating Revenues**

	<b>Year ended December 31,</b>		<b>Percentage</b>
	<b>2016</b>	<b>2015 (1)</b>	<b>change</b>
	<b>(in millions of reais)</b>		
Monthly subscription charges and usage charges	8,018.8	9,767.6	(17.9)
Fixed services	1,178.9	1,003.2	17.5
Interconnection charges	1,102.5	1,581.8	(30.3)
Long distance charges	2,101.8	2,710.7	(22.5)
Value-added services	8,548.0	7,741.8	10.4
Other service revenues	417.9	319.6	30.8
Gross operating revenues from services	21,367.8	23,124.6	(7.6)
Value-added and other taxes relating to services	(5,358.7)	(5,680.1)	(5.7)
Discounts and returns on services	(1,288.8)	(2,057.0)	(37.3)
Net operating revenues from services	14,720.3	15,387.2	(4.3)
Sales of mobile handsets and accessories	1,377.8	2,646.9	(47.9)
Value-added and other taxes on handset sales	(336.2)	(567.9)	(40.8)
Discounts and returns on handset sales	(144.5)	(323.9)	(55.4)
Net operating revenues from handset and accessory sales	897.2	1,755.0	(48.9)
Net operating revenues	15,617.4	17,142.3	(8.9)

(1) Revised figures reported on our annual report on Form 20-F issued on April 10, 2017, as explained in Note 2(e) of our consolidated financial statements presented therewith.

Our gross service revenue for the year ended December 31, 2016 was R\$21,367.8 million, representing a 7.6% decrease from R\$23,124.6 million in the year ended December 31, 2015, mainly due to major changes in usage patterns primarily a shift from voice to data usage and the related trend of SIM card consolidation as users have shifted from having multiple SIM cards from different operators and also due to the ongoing poor macroeconomic environment in Brazil. See “Item 4. Information on the Company—B. Business Overview—Regulation of the Brazilian Telecommunications Industry—Interconnection Regulation” for information regarding recent regulatory changes to VU-M rates.

The gross handset revenue for the year ended December 31, 2016 was R\$1,377.8 million, a 47.9% decrease over R\$2,646.9 million for the year ended December 31, 2015, resulting from reduced handset sales following an adverse macroeconomic environment that affected the Brazilian retail sector as a whole.

Gross revenue for the year ended December 31, 2016 totaled R\$22,745.6 million, a 11.7% decrease from the year ended December 31, 2015.

Net operating revenue decreased 8.9% to R\$15,617.4 million in the year ended December 31, 2016 from R\$17,142.3 million in the year ended December 31, 2015 for the reasons described below:

***Monthly Subscription Charges and Usage Charges***

Revenue from monthly subscription charges and usage charges was R\$8,018.8 million in the year ended December 31, 2016, a 17.9 % decrease from R\$9,767.6 million in the year ended December 31, 2015, due primarily to the reduction in mobile usage as a result of the macroeconomic slowdown in Brazil and the trend toward migration from voice to data services as reflected by the 4.25% decrease in our total subscriber base from 66.2 million lines in 2015 to 63.4 million lines in 2016, with the largest decrease in our prepaid subscribers. This migration is resulting in a reduction in our community effect, which is how we describe the effect of users focusing their calls within our network, because on-network and off-network calls, in certain plans, have the same rates. As a consequence, some customers have less need to maintain multiple SIM cards in order to call users on other operators, resulting in SIM card consolidation, which decreased our customer base.

The total monthly average minutes of use, or MOU, for 2016 and 2015 were as follows:

	<b>Year ended December 31,</b>	
	<b>2016</b>	<b>2015</b>
Average total MOU	117	119

### ***Fixed Services***

Revenue from fixed services was R\$1,178.9 million in the year ended December 31, 2016, a 17.5% increase from R\$1,003.2 million in December 31, 2015, mainly due to strong results in the ultra-broadband business and a redesign of our service portfolio to integrate fixed-plus-mobile service for all of our large corporate clients. The fixed year results confirm the resilience of TIM's fixed operations. Even with a tough macro environment, TIM's corporate solutions fixed services remained on track together with TIM Live, which had a solid year increasing revenue growth compared to 2015.

### ***Interconnection Charges***

Interconnection revenue consist of amounts paid to us by other mobile and fixed line providers for completion of calls and SMS on our network of calls and SMS originating on their networks. Our interconnection revenue were R\$1,102.5 million in the year ended December 31, 2016, a 30.3% decrease from R\$1,581.8 million in 2015, principally due to a combination of the recent cut in VU-M rates (see "Item 4. Information on the Company—B. Business Overview—Regulation of the Brazilian Telecommunications Industry—Interconnection Regulation" for information regarding recent regulatory changes to VU-M rates) and the reduction of overall voice traffic and SMS messaging. Interconnection as a percentage of total gross services revenue decreased to 5.16% in the year ended December 31, 2016.

### ***Long Distance Charges***

Revenue from long distance charges decreased 22.5% to R\$2,101.8 million in the year ended December 31, 2016 from R\$2,710.7 million in the year ended December 31, 2015, reflecting the trend of increasing data usage by customers as compared to voice which has resulted in the commoditization of long distance. Long distance services commoditization process is speeding up and has impacted the performance in 2016.

### ***Value-Added Services***

Value-added service revenue increased 10.4% to R\$8,548.0 million in the year ended December 31, 2016 from R\$7,741.8 million the year ended December 31, 2015, principally due to the launch of a new portfolio of offers focusing on innovative revenue sources (such as value-added services). Value-added services include SMS, MMS, data transmission, downloads (wallpaper and ringtones), television access, voicemail, chat and others. See "Item 4. Information on the Company—B. Business Overview—Value-Added Services" for additional information on value-added services. Data transmission, supported by our 3G and 4G networks, is the key component to our value-added service revenue, and we have focused on improving our position in this area through expanding partnerships, incentivizing our customer base to acquire smartphones and promoting our mobile broadband service through TIM web broadband.

### ***Other Service Revenue***

Revenue from other services increased 30.8% to R\$417.9 million in the year ended December 31, 2016 from R\$319.6 million in the year ended December 31, 2015, mainly driven by the growth of revenue related to infrastructure



sharing, and partially offset by the decline in tower leasing revenue as a consequence of the ATC Sale-Leaseback Transaction (see “Item 4. Information on the Company—A. History and Development of the Company—2017 Important Events—Towers Sale & Leaseback” and Note 1(b) to our consolidated financial statements).

***Sales of Mobile Handsets***

Sales of mobile handsets decreased 47.9% to R\$1,377.8 million in the year ended December 31, 2016 from R\$2,646.9 million registered in the year ended December 31, 2015. The decrease was mainly due to reduced handset sales volumes as a result of a deteriorating macroeconomic environment that affected the Brazilian retail sector as a whole.

***Value-Added and Other Taxes Relating to Services***

The principal tax on telecommunications services is ICMS tax, which is imposed at rates between 25% and 35%. ICMS is also the principal tax on sales of handsets, which is imposed at a rate between 17% and 20%, with the exception of certain handsets whose manufacturers are granted certain local tax benefits. See “Item 4. Information on the Company—B. Business Overview—Taxes on Telecommunications Goods and Services.”

Two federal social contribution taxes, PIS and COFINS, are imposed at combined rates of 3.65% on gross revenue relating to operating telecommunications services and at combined rates of 9.25% on gross revenue from value-added services and mobile telephone handset sales.

Our value-added and other taxes relating to services and handset sales were R\$5,358.7 million in the year ended December 31, 2016 compared to R\$5,680.1 million in the year ended December 31, 2015, a decrease of 5.7%. This decrease is mainly due to a decrease in gross revenue, which reflected an impact on all business fronts as a result of major changes in usage patterns (reflecting the shift from voice to data), difficult macroeconomic conditions, as well as the impact of mobile-termination rate cuts.

***Discounts on Services and Handset Sales***

Discounts on services and handset sales decreased 55.4% to R\$144.5 million in the year ended December 31, 2016 compared to R\$323.9 million in the year ended December 31, 2015, due mainly to lower related revenue.

***Costs of Services and Goods***

Costs of services and goods decreased by 7.4% to R\$7,693.4 million in the year ended December 31, 2016 from R\$8,306.9 million in the year ended December 31, 2015, mainly due to lower VU-M rates to be paid by us when our customers connect to another network and a reduction in the volume of handsets sold. See “Item 4. Information on the Company—B. Business Overview—Regulation of the Brazilian Telecommunications Industry—Interconnection Regulation” for information regarding recent regulatory changes to VU-M rates.

The following table shows the components of costs of services and goods for each of the periods indicated.

**Statement of Operations Data: Costs of Services and Goods**

	<b>Year ended December 31,</b>		<b>Percentage</b>
	<b>2016</b>	<b>2015 (1)</b>	<b>change</b>
	<b>(in millions of reais)</b>		<b>2016 – 2015</b>
Depreciation and amortization	(2,884.6)	(2,535.7)	13.8
Interconnection, circuit leasing and related expenses	(2,676.8)	(2,805.4)	(4.6)
Third party services	(506.4)	(490.9)	3.2
Personnel	(59.0)	(91.0)	(35.2)
Rental and insurance	(551.0)	(495.6)	11.2

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Taxes, fees, contributions and others	(39.6)	(31.7)	24.9
Total cost of services	(6,717.4)	(6,450.2)	4.1
Cost of handsets and accessories sold	(976.0)	(1,856.7)	(47.4)
Total cost of services and goods	(7,693.4)	(8,306.9)	(7.4)

(1) Revised figures reported on our annual report on Form 20-F issued on April 10, 2017, as explained in Note 2(e) of our consolidated financial statements presented therewith.

### ***Depreciation and Amortization***

Depreciation and amortization expenses grew 13.8% to R\$2,884.6 million in the year ended December 31, 2016 from R\$2,535.7 million in the year ended December 31, 2015, mainly due to higher network equipment depreciation and higher software amortization, driven by the continuing investment in capital expenditure on the last few years, as established in the Company's Business Plan (*Plano Industrial*).

### ***Interconnection, Circuit Leasing and Related Expenses***

Interconnection, circuit leasing and related expenses consist of the amount paid to fixed-line and other mobile service providers for termination of our outgoing calls on their networks as well as lease payments to fixed carriers for the use of their network. Interconnection, circuit leasing and related expenses costs decreased 4.6% to R\$2,676.8 million in the year ended December 31, 2016 from R\$2,805.4 million in the year ended December 31, 2015, mainly due to a drop in total interconnection rates and by cost-efficiency gains related to the tariff reduction for leased lines' tariff adjustment in accordance with Anatel's Resolution No. 639/2014.

### ***Third Party Services***

Third party services costs were R\$506.4 million in the year ended December 31, 2016, increasing 3.2% from R\$490.9 million incurred in the year ended December 31, 2015, mainly due to higher costs from outside providers in connection with maintaining our own network, directly related to the increased amount of equipment we must maintain as a result of infrastructure investments.

### ***Personnel***

Personnel costs decreased 35.2% to R\$59.0 million in the year ended December 31, 2016 from R\$91.0 million in the year ended December 31, 2015. This decrease was mainly due to a reduction of approximately 3,200 employees by December 31, 2016, a decrease of 24.5% as compared with the year ended December 31, 2015, in connection with the company's strategic focus on organizational rightsizing and efficiency plan.

### ***Rental and Insurance***

Rental and insurance costs increased 11.2% to R\$551.0 million in the year ended December 31, 2016 from R\$495.6 million in the year ended December 31, 2015. This increase is primarily due to the higher number of leased sites, which include both leases of land for placement of our owned towers, as well as leases of space on the towers of other operators.

### ***Taxes, fees, contributions and others***

Taxes, fees, contributions and other costs increased 24.9% to R\$39.6 million in the year ended December 31, 2016 from R\$31.7 million in the year ended December 31, 2015.

### ***Costs of Handsets and Accessories Sold***

The cost of handsets and accessories sold in 2016 was R\$976.0 million, representing a 47.4% decrease from R\$1,856.7 million in the year ended December 31, 2015. This decrease is attributable to decreased handset sales volumes as described above under "—Sales of Mobile Handsets."

### ***Gross Profit Margins***

The following table shows our gross profits, as well as the percentage change, for each of the periods indicated:

**Statement of Operations Data: Gross Profit**

	<b>Year ended December 31,</b>		<b>Percentage</b>
	<b>2016</b>	<b>2015 (1)</b>	<b>change</b>
	<b>(in millions of reais)</b>		
Net operating revenues from services	14,720.3	15,387.2	(4.3)
Cost of services	(6,717.4)	(6,450.2)	4.1
Gross profit from services	8,002.9	8,937.0	(10.5)
Net operating revenues from sales of mobile handsets and accessories	897.2	1,755.0	(48.9)
Cost of goods	(976.0)	(1,856.7)	(47.4)
Gross loss from sales of mobile handsets and accessories	(78.8)	(101.7)	(22.5)
Gross profit	7,924.1	8,835.4	(10.3)

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(1) Revised figures reported on our annual report on Form 20-F issued on April 10, 2017, as explained in Note 2(e) of our consolidated financial statements presented therewith.

Our gross profit margin from services (gross profit as a percentage of net service revenues) decreased from 57.4% in the year ended December 31, 2015 to 53.8% in the year ended December 31, 2016. This performance is mainly due to major changes in usage patterns (primarily a shift from voice to data usage), deteriorating macroeconomic conditions in Brazil and the impact of VU-M rate cuts, offset by a 10.4% increase in our value-added services net revenues, which had a better profit margins than other services we offer, but nevertheless do not offset the decrease in revenues from the decrease in the use voice services.

Our negative gross margin for sales of mobile handsets and accessories increased from negative 5.8% in the year ended December 31, 2015 to negative 8.8% in the year ended December 31, 2016.

Our overall gross profit margin decreased from 51.5% in the year ended December 31, 2015 to 50.7% in December 31, 2016. This resulted primarily from a lower gross profit margin from services.

### *Operating expenses*

The following table shows our operating expenses, as well as the percentage change from year to year of each component, for the years ended December 31, 2016 and 2015:

#### **Statement of Operations Data: Operating Expenses**

	<b>Year ended December 31,</b>		<b>Percentage</b>
	<b>2016</b>	<b>2015 (1)</b>	<b>change</b>
	<b>(in millions of reais)</b>		<b>2016 – 2015</b>
Selling expenses	(4,719.0)	(4,823.0)	(2.2)
General and administrative expenses	(1,258.7)	(1,195.3)	5.3
Other operating expenses, net	(552.1)	434.3	n.a.
Total operating expenses	(6,499.8)	(5,584.0)	16.4

(1) Revised figures reported on our annual report on Form 20-F issued on April 10, 2017, as explained in Note 2(e) of our consolidated financial statements presented therewith.

Our total operating expenses increased by 16.40% to R\$6,499.8 million in the year ended December 31, 2016 from R\$5,584.0 million in December 31, 2015, mainly due to the factors described below:

### *Selling Expenses*

Selling expenses decreased 2.16% to R\$4,719.0 million in the year ended December 31, 2016 from R\$4,823.0 million in the year ended December 31, 2015, mainly due to a significant decrease in advertising expenses, despite the new updates to our portfolio of offers, and a reduction in commissioning expenses, as a result from the efforts of the efficiency program.



### ***General and Administrative Expenses***

General and administrative expenses increased by 5.31% to R\$1,258.7 million in the year ended December 31, 2016 from R\$1,195.3 million in the year ended December 31, 2015, mainly as a result of an increase of depreciation and amortization.

### ***Other Operating Expenses, Net***

Other net operating expenses increased to R\$522.1 million in the year ended December 31, 2016 from a gain of R\$434.3 million in the year ended December 31, 2015. This increase was mainly explained by higher costs on contingencies, despite gains resulting from the ATC Sale-Leaseback Transaction (see “Item 4. Information on the Company—A. History and Development of the Company—2017 Important Events—Towers Sale & Leaseback” and Note 1.b to our consolidated financial statements).

### ***Net Financial Expense***

Net financial expense increased to R\$410.9 million in the year ended December 31, 2016, from a net financial expense of R\$250.4 million in the year ended December 31, 2015. The variation was mainly due to an increase in financial expenses as a result of the ATC Sale-Leaseback Transaction (see “Item 4. Information on the Company—A. History and Development of the Company—2017 Important Events—Towers Sale & Leaseback”) and a decrease in financial income due to the poor performance of our dollar-denominated foreign exchange fund, intended to mitigate our exposure to U.S. dollar-denominated operating expenses and capital expenditures and partially offset by a positive market-to-market effect.

### ***Income and Social Contribution Taxes***

Income and social contribution taxes are calculated based on the separate income of each subsidiary, adjusted by the additions and exclusions permitted in the year ended December 31, 2016 under tax law. We recorded income and social contribution tax of R\$262.9 million in the year ended December 31, 2016, a decrease of 71% when compared to R\$915.6 million recorded for the year ended December 31, 2015, due mainly to an effective reduction in the tax base caused by the increase of the regional tax incentives (*Superintendência do Desenvolvimento da Amazônia*, or SUDAM, and *Superintendência do Desenvolvimento do Nordeste*, or SUDENE).

### ***Net Income***

Our net income in the year ended December 31, 2016 was R\$750.4 million, representing a decrease of 64% from a net income of R\$2,085.4 million in the year ended December 31, 2015.

### ***B. Liquidity and Capital Resources***

We expect to finance our capital expenditures and other liquidity requirements for the remainder of 2018, 2019 and 2020 with our cash, operating revenue, renewals of maturing short-term indebtedness and disbursements from our existing loan agreement with Finnish Export Credit / KfW of U.S.\$150 million, of which U.S.\$51 million remains undisbursed and available at our request. See “—Sources of Funds—Financial Contracts” for additional detail on our financial contracts and Note 37 to our consolidated financial statements for a discussion of the other types of financial instruments used by the Company.

Our net debt position in 2017 means we should not need substantial funding to meet our obligations or to conduct our activities. We believe that our current working capital is sufficient for our present requirements. For more detail, see



Note 37 to our consolidated financial statements.

**Sources of Funds**

*Cash from operations*

Our cash flows from operating activities was R\$5,404 million in the year ended December 31, 2017 compared to R\$4,992 million in the year ended December 31, 2016, an increase of 8.3% mainly explained by the improvement in cash from operating activities.

We had other significant variations in our operational assets and liabilities which affected our cash from operations. The main variations of assets and liabilities were:

Positives

- Decrease of R\$377 million in the amount of trade accounts receivable in the year ended December 31, 2017 as compared to the year ended December 31, 2016.
- Increase of R\$525 million in the amount of suppliers in the year ended December 31, 2017 as compared to the year ended December 31, 2016.

Negatives

- Decrease of R\$300 million in the amount of tax, charges and contributions in the year ended December 31, 2017 as compared to the year ended December 31, 2016.
- Decrease of R\$880 million in the amount of authorizations to be paid in the year ended December 31, 2017 as compared to the year ended December 31, 2016.
- Increase of R\$121 million in the amount of prepaid expenses in the year ended December 31, 2017 as compared to the year ended December 31, 2016.

***Financial Contracts***

We and our subsidiaries are party to the financial contracts described below, each to be used for purposes of the development of our business, generally, unless otherwise expressly provided herein. With respect to loans denominated in currencies other than *reais*, we enter into currency swaps to hedge against exchange rate fluctuations.

In 2017, TIM Celular received disbursements totaling R\$663 million related to existing financial agreements, as set forth below and as each agreement is described further in the following paragraph.

The terms of our long-term debt contain cross-default clauses, restrictions on our ability to merge with another entity and restrictions on our ability to prematurely redeem or repay such debt. We are currently not, and do not expect to be, in breach of any material covenant of our debt instruments, which breach would be construed an event of default under their terms.

As mentioned above, our principal financing agreements are

- Credit Agreement, dated as of November 19, 2008 and amended on June 29, 2010, among BNDES, as lender, TIM Celular, as borrower, and TIM Participações as guarantor, in the principal amount of R\$716.9 million, which R\$692.9 million was disbursed, the undrawn value of the credit line was cancelled. The agreement, which matures on July 15, 2018 bears interest at (1) a fixed rate of 3.62% plus the TJLP or (2) fixed interest rate of 4.5% per annum. On December 31, 2017, the outstanding amount under this credit agreement, including accrued interest, was R\$68 million.
- Credit Agreement, dated as of November 19, 2008, amended on December 12, 2008, June 29, 2010, and December 10, 2012, among BNDES, as lender and TIM Celular and Intelig (now known as TIM S.A.), as borrowers, and TIM Participações as guarantor, in the principal amount of R\$3,674 million (a R\$2,164 million increase in the credit limit was effected by way of amendment on December 10, 2012). The agreement, which matures on December

15, 2019 bears interest at either (1) a fixed rate of 3.32% plus the TJLP; (2) TJLP or (3) fixed interest rate of 2.5% per annum. As of December 31 2017, the outstanding debt of TIM Celular under this credit agreement, including accrued interest, was R\$508 million and the outstanding debt of TIM S.A. including accrued interest, was R\$44 million.

- Master Loan Agreement, dated as of June 20, 2013, between Cisco Capital, as lender, TIM Celular, as borrower. The purpose of the loan is to finance TIM Celular's purchase of Cisco and third-party products and services. The loan to be given pursuant to the Master Loan Agreement was executed pursuant to a Facility Agreement, dated as of August 28, 2013, between Cisco Capital, as lender, and TIM Celular, as borrower, in the total principal amount of U.S.\$50 million. On October 14, 2014, a new Facility Agreement was signed, between Cisco Capital, as lender, and TIM Celular, as borrower, in the total principal amount of U.S.\$50 million. The new Facility Agreement was fully disbursed on November 5, 2014. On November 18, 2015, a new Facility Agreement was signed between Cisco Capital, as lender and TIM Celular, as borrower in the total principal amount of U.S.\$50 million. The new Facility Agreement was fully disbursed on December 15, 2015. The total outstanding amount as of December 31, 2017 converted from U.S. dollars was R\$199 million, including accrued interest. The first agreement matures in September 2018 and bears an average cost of 93.80% of the CDI after hedging, the second agreement matures in November 2019 and bears an average cost of 91.90% of the CDI after hedging and the third agreement matures in December 2020 and bears an average cost of 84.50% of the CDI after hedging. No guarantees were issued under this loan.

- Credit Agreement, dated as of December 23, 2013, between BNDES, as lender and TIM Celular, as borrower, and TIM Participações as guarantor, in the principal amount of R\$5,700 million. The agreement, involves six credit lines, each of which has different conditions, interest rates and tenors: (1) Credit Line A, in an amount of R\$2,401 million, a fixed interest rate of 2.52% plus the TJLP and 8 years tenor; (2) Credit Line B, in an amount of R\$600.4 million, a fixed interest rate of 2.52% plus the SELIC and 8 years tenor; (3) Credit Line C, in an amount of R\$2,036 million, a fixed interest rate of 2.52% plus the SELIC and 8 years tenor; (4) Credit Line D, in an amount of R\$428 million, a fixed interest rate of 3.50% and 7 years tenor; (5) Credit Line E, in an amount of R\$189 million, a fixed interest rate of 1.42% plus the TJLP and 8 years tenor; and (6) Credit Line F, in an amount of R\$45 million, an interest rate of TJLP and 8 years tenor. Each credit line is to be used for specific purposes as set forth in the Credit Agreement. Due to the interest rate dynamics in Brazil and strong cash flow, the Company prepaid R\$800 million of this loan in December 2017 and, because of that, the total outstanding amount under this credit agreement, including accrued interest, was R\$3,500 million on December 31, 2017.
- Loan Agreement, dated as of April 15, 2014, between KfW IPEX as lender, TIM Celular, as borrower and TIM Participações as guarantor, in the principal amount of U.S.\$100 million. The total outstanding amount as of December 31, 2017 converted from U.S. dollars was R\$111 million, including accrued interest. The agreement matures on April 15, 2019 and bears an average cost of 102.50% of the CDI after hedging. No guarantees were issued under this loan.
- Loan Agreement, dated as of December 23, 2015, between Finnish Export Credit as lender, KfW IPEX as facility agent, TIM Celular, as borrower and TIM Participações as guarantor, in the principal amount of U.S.\$150 million. The new Loan Agreement is divided in three tranches of U.S.\$50 million to be disbursed in 2016, 2017 and 2018. On April 20, 2016, the first tranche was disbursed and it has an average cost of 79% of the CDI after hedging, and the second tranche was disbursed on April 20, 2017 and it has an average cost of 81.5% after hedging. As of December 31, 2017, the total outstanding amount under this credit agreement, converted from U.S. dollars and including accrued interest, was R\$261 million. The agreement matures on December 30, 2024.

See Note 19 in our consolidated financial statements for a further description of such financing agreements.

### ***Funds From Subsidiaries***

There are no material restrictions on the ability of our subsidiaries to transfer funds to the Company in the form of cash dividends, loans or advances.

### **Uses of Funds**

Our principal uses of funds during the three-year period ended December 31, 2017, were capital expenditures, payment of dividends to our shareholders and loan repayments.

### ***Material Capital Expenditures***

Our capital expenditures in 2017, 2016 and 2015 related primarily to: (i) developing our fiber optic network, (ii) deployment and expansion of the capacity of our third and fourth generation (3G and 4G) networks, (iii) expanding network capacity, geographic coverage and digitalization, (iv) maintenance of our networks and IT systems, (v) purchases of equipment relating to our migration to PCS operations, and (vi) developing new operational and information technology systems.

The following table contains a breakdown of our investments in fixed assets for the years ended December 31, 2017, 2016 and 2015:

### Capital Expenditures Categories

	Year ended December 31,		
	2017	2016	2015
	(in millions of reais)		
Network	2,904.6	2,916.1	3,498.2
Information technology	717.8	888.6	807.8
Licenses	69.1	196.5	190.8
Other	456.4	501.2	267.4
Total capital expenditures	4,147.9	4,502.4	4,764.2

See “Item 4. Information on the Company—A. History and Development of the Company—Capital Expenditures.”

### Dividends

Our dividends are calculated in accordance with our By-laws and Brazilian corporate law. Under our By-laws, we are required to distribute an aggregate amount equal to at least 25% of our adjusted net income to our shareholders, either as dividends or as tax-deductible interest on shareholders’ equity, each year ended December 31, provided that there are funds available for distribution.

For the purposes of the Brazilian corporate law and in accordance with our By-laws, “adjusted net income” is the amount equal to the net profit adjusted to reflect allocations to or from: (1) the legal reserve, and (2) a contingency reserve for probable losses, if applicable.

The following table contains a breakdown of the dividends and interest on shareholders’ equity actually paid (net of income taxes) by us to our shareholders during the years ended December 31, 2017, 2016 and 2015:

### Dividend Distribution

	Year ended December 31,		
	2017	2016	2015
	(in millions of reais)		
Dividends	103.3	148.7	468.6
Interest on shareholders’ equity	161.7	—	—
Total distributions	265.1	148.7	468.6

In April 2018 our shareholders will vote on the distribution of R\$103 million as dividends in accordance of the minimum required on Brazilian Law, with respect to our 2017 results. The amounts indicated in the table above for 2016 and 2015 were approved at the annual general meeting in 2017 and 2016, respectively.

### Funding and Treasury Policies

The Company maintains a general policy of continually monitoring its financial position and treasury activities in order to ensure solid fiscal control. As a result of our (1) cash position, (2) leverage ratio of 0.45 times Net Debt to

EBITDA (for additional detail, see “—Leverage” below). However, in accordance with our funding and treasury policy, the Company will continue to monitor new financing opportunities with a particular focus on soft loans, or loans with a below-market interest rate, and long-term facilities.

## Leverage

Management tracks the ratio of net debt to EBITDA, which we refer to as the financial leverage index, in order to monitor the sustainability of our debt levels and our ability to take on additional debt. The ratio is a common credit analysis metric in the telecommunications industry and shows approximately how many years it would take to pay back our indebtedness, assuming no new debt is taken on, EBITDA remains constant and all cash and cash equivalents may be used to repay debt. In addition, we believe that the ability to take on additional debt is a critical factor affecting success, as indebtedness may be required to make investments necessary to grow the Company's business. We believe that our current financial leverage index, Net Debt to EBITDA, reflects low levels of indebtedness and the ability to incur additional debt if needed for investment. Investors should be cautious in comparing our financial leverage index to that of other companies that report a similar ratio of debt to EBITDA because EBITDA in particular may be calculated differently from company to company, leading to financial leverage indices that are not comparable. Accordingly, any such comparison may be misleading.

The following table sets forth our financial leverage index for the reported periods:

	2017	2016
	(in millions of reais)	
Total borrowing and derivatives (Notes 19 and 37)	4,643	6,584
Leasing – Liabilities (Note 15)	1,887	1,802
Leasing – Assets (Note 15)	(205)	(205)
Anatel debts (Note 18)	98	147
Less: Cash and cash equivalents (Note 4)	(2,961)	(5,128)
Foreign exchange fund (Note 5)	–	(480)
FIC (Investment Fund in Units) (Note 5)	(766)	–
Net debt	2,697	2,721
EBITDA	5,947	5,209
Financial leverage index	0.45	0.52

A reconciliation of our net income to EBITDA, as well as a further explanation of the calculation of our financial leverage index, is also presented in Note 37 to our consolidated financial statements.

We believe that using EBITDA as a non-GAAP measure is useful to management, investors and other users of our financial information in evaluating operating profitability on a more variable cost basis as they exclude the depreciation and amortization expense related primarily to capital expenditures and acquisitions that occurred in prior years, as well as in evaluating operating performance in relation to TIM's competitors. EBITDA is calculated by adding back interest, taxes, depreciation and amortization expense to net income.

### C. *Research and Development*

#### **Research and Development**

We do not independently develop new telecommunications hardware and depend upon the manufacturers of telecommunications products for the development of new hardware.

#### **Patents and Licenses**

We hold no material intellectual property assets. Telecom Italia owns the rights to the “TIM” trade name which is currently informally licensed to us.

**D. Trend Information**

**Customer Base and Market Share**

In the year ended December 31, 2017, our subscriber base decreased 7.5% to 58.6 million customers, which represented a market share of 24.8%, compared to 63.4 million customers and 26.0% of market share in 2016. This overall subscriber base reduction was a result of a significant decrease in the number of prepaid customers in the Brazilian mobile telecommunications market, generally, as most of our disconnections were of prepaid plans. Prepaid plan users concentrate the lower-middle socioeconomic classes of Brazil, as defined by the Brazilian Institute of Geography and Statistics (*Instituto Brasileiro de Geografia e Estatística*). These users are particularly affected by macroeconomic pressures in Brazil, accelerating the number of users consolidating multiple SIM cards to a single one, the high penetration of mobile service and the rapid substitution of voice for data usage, resulting in a decrease in the “community effect.”



With respect to the composition of our customer base, the postpaid segment accounted for 30.4% of our total subscriber base in the year ended December 31, 2017, compared to 23.5% from a year ago, due to (i) customers' migration from prepaid to postpaid (mainly via our Control plans), (ii) number portability (migration from one to another operator) and (iii) the stabilization of the churn rate. The prepaid segment represents 69.6% of our customer base at the end of 2017, 6.9 percentage points lower than 2016, impacted by the driven by the "cleaning" actions in the prepaid segment where customers which previously held multiple SIM cards are discarding or consolidating them and migration to our Control segment.

Although no assurances can be given as to the size of our subscriber base and market share in the future, we intend to focus on maintaining and improving our strong position in the mobile and fixed telecommunications market in Brazil. Our strategies for doing so are outlined in more detail in "Item 4. Information on the Company —B. Business Overview—Our Strategy."

### **Trends in Sales and Prices**

The volume of unit sales continues to decrease due to a slow recovery of economic conditions, which limits consumer purchasing power, the decrease in our customer base overall, and the trend of customers seeking greater value over high volume. We will continue to monetize our customer base using the strategy of "more for more" and focus on the development of all of our business lines.

Under our PCS authorizations, we are allowed to set prices for our service plans, subject to approval by Anatel, provided that such amounts do not exceed a specified inflation adjusted cap. We expect that the adjustment of our prices will follow the market trend. The rates for our service plans, as well as a description of the main features of such plans, are set out in "Item 4. Information on the Company—B. Business Overview —Mobile Service Rates and Plans."

### **Monthly Average Revenue Per User (ARPU)**

TIM's ARPU was R\$20.2 in the year ended December 31, 2017, an increase of 12.1% when compared to an ARPU of R\$18.0 for the year ended December 31, 2016, largely due to the improvement in the composition of our customer base with more postpaid and also by the individual growth of each segment.

Revenues from value-added services had an important role in promoting ARPU's increase trend of the market as a whole. In 2017 we registered a value-added service net revenue growth of 37.7%, which accounted for 58.6% of mobile service revenue (compared to 44.7% registered in 2016). We anticipate that revenues from value-added services are expected to continue to increase and become a larger component of our total service revenues, particularly based on the availability of our 3G and 4G offers (such as our mobile broadband solution). As the provision of value-added services has a relatively low marginal cost, we continue to expect that value-added services will contribute to the growth of our operating margins.

### **Competitive Environment**

Brazil's telecommunication market is in a mature stage and is subject to a competitive landscape that is almost unique in the world. This market has grown at a faster pace compared to other sectors of the economy. Brazil is one of the few markets with four nationwide competitors, each with a market share between 16% and 32%, which TIM believes, acts as the driver of growth and for the development of differentiated and quality services at fair and competitive prices.

In 2017, amid this competitive landscape, our subscriber acquisition costs, or SAC, (which are comprised of a subsidy, commissions and total advertising expenses) amounted to R\$39.6 per gross add for the year ended December

31, 2017, compared to R\$29.0 in the year ended December 31, 2016. The increase of 36.7% year over year is primarily due to higher commissioning expenses (postpaid users reflected an increased proportion of our gross additions) and to the increase in loyalty offers (discounted device offers). Despite the increase in SAC, the SAC to ARPU ratio, which indicates the return per client, remained at a healthy level of 2.2 months in 2017.

In addition to competition from other traditional mobile telecommunications service providers, the level of competition from fixed-line service providers has increased, and it is possible it will continue to increase, as fixed-line service providers attempt to attract subscribers away from mobile service based on price and package offers that bundle multiple applications such as voice services (mobile and fixed-line), broadband and other services. Technological changes in the telecommunications field, such as the rapid development of fourth generation (LTE) and its derivations (Advanced LTE and others) after the consolidation of third generation in recent years, the increasing use of number portability and in the next few years, the development of the fifth generation are expected to introduce additional sources of competition. It is also expected that Anatel will auction licenses to provide mobile telecommunications services over additional bandwidth frequencies to accommodate these emerging technologies.

#### ***E. Off-Balance Sheet Arrangements***

The equipment and property rental agreements signed by the Company and its subsidiaries have different maturity dates. Below is a list of minimum rental payments to be made under such off-balance sheet agreements:

<b>Maturity</b>	<b>Amount (in millions of reais)</b>
2018	780
2019	813
2020	845
2021	879
2022	914
Total	4,231

#### ***F. Tabular Disclosure of Contractual Obligations***

The following table shows our contractual obligations and commercial commitments as of December 31, 2017:

##### **Payments due by Period (in millions of reais)**

	<b>Total</b>	<b>Less than 1</b>			<b>More than</b>
		<b>year</b>	<b>1-3 years</b>	<b>4-5 years</b>	<b>5 years</b>
Total borrowings (post hedge) <sup>(1)</sup>	4,643	1,312	2,043	1,231	57
Finance leases <sup>(2)</sup>	1,780	190	38	40	1,512
Total <sup>(3)</sup>	6,423	1,502	2,081	1,271	1,569

(1) Considering the balances related to derivative financial instruments as of December 31, 2017.

(2) The information regarding payments due by period under our finance leases reflects future payments due that are non-cancelable without payment of a related penalty.

(3) Other than as set forth herein (see, for example, Item 4. Information on the Company—B. Business Overview—Our Business), we have no capital lease obligations, unconditional purchase obligations, or other long-term liabilities reflected on our balance sheet of our primary financial statements. Interest is not included in long-term debt since it is subject to variable interest.

**Contingent Pension Liabilities**

Until December 1999, we participated in a multi-employer defined benefit plan, or the Telebrás Pension Plan, that covered the employees of the Telebrás System who retired before the Breakup as well as those who continued working for the operating companies after the Breakup. We are contingently liable, jointly and severally, with the other New Holding Companies, for the unfunded obligations of the Telebrás Pension Plan with respect to all such employees who retired before January 30, 2000. In December 1999, we changed to a defined benefit plan (the “PBS Plan”) that covers only those former employees of Telebrás who continued to be employed by us after December 1999.

In November 2002, we created a separate defined contribution plan, or the TIMPREV Pension Plan. Migration to this plan was optional for employees linked to the PBS Plan. Migration to the TIMPREV Pension Plan extinguishes the migrating participant's rights under the PBS Plan.

### **SISTEL and TIMPREV**

The Company and TIM Celular have sponsored a private defined benefit pension plan for a group of Telebrás system's former employees, which is managed by Fundação Sistel de Seguridade Social – SISTEL, as a consequence of the legal provisions applicable to the privatization process of these companies in July 1998.

Given that in 1999 and 2000 the sponsors of the pension plans managed by SISTEL had already negotiated conditions for the creation of individual pension plans for each sponsoring company and the maintenance of joint liability only in relation to the participants already assisted on January 31, 2000, the Company and its subsidiaries, like other companies created as a result of the former Telebrás system, created in 2002 the TIMPREV Pension Plan, a defined contribution pension plan meeting the most modern social security standards adopted by private companies, and enabling migration to this plan of the employee groups linked to SISTEL.

On November 13, 2002, the Brazilian Secretariat for Supplementary Pension Plans, through official ruling CGAJ/SPC No. 1917, approved the statutes of the new pension plan, or hereafter the Statutes of the TIMPREV Benefits Plan, as a defined contribution plan, which provide for new conditions for granting and maintaining benefits, as well as the rights and obligations of the Plan Managing Entity, the sponsoring companies, participants and the beneficiaries thereof.

Under this new plan, the sponsor's regular contribution will correspond to 100% of a participant's basic contribution, and TIMPREV's managing entity will ensure the benefits listed below, under the terms and conditions agreed upon, with no obligation to grant any other benefits, even if the government-sponsored social security entity starts granting them:

- Normal retirement pension
- Early retirement pension
- Disability pension
- Deferred proportional benefit
- Death benefit

However, as not all of the Company's and its subsidiaries' employees have migrated to TIMPREV, the pension and health care plans deriving from the TELEBRÁS system listed below remain in force:

**PBS:** defined benefits plan of SISTEL, which includes active employees who participated in the plans sponsored by the companies of the former TELEBRÁS system;

**PBS Assistidos:** a multi-sponsored pension plan for inactive employees;

**Convênio de Administração:** for managing pension payments to retirees and pensioners of the predecessors of the subsidiary companies; and

**PAMEC/Apólice de Ativos:** health care plan for pensioners of the predecessors of the subsidiary companies.

As happened with the *Termo de Relação Contratual Atípica*, or TRCA Plan, the Company, until December 31, 2010, had understood that it was responsible for liabilities of PAMEC participants (health care plan) related to the Company and its subsidiaries. Based on a new understanding of its internal and external lawyers, the Company has changed its position. As a result, the liabilities previously recorded were written off.

In accordance with the rules established by NPC-26 issued by the Institute of Independent Auditors of Brazil – IBRACON, and approved by CVM Resolution No. 371, the plans having a surplus are not recorded by the Company, as it is impossible to recover these amounts. Furthermore, the amounts of contributions will not be reduced for future sponsors.

On January 29, 2007 and April 9, 2007, through the Brazilian Secretariat for Supplementary Pension Plans- SPC, the Ministry of Social Security approved the transfer of the management of the PBS–Tele CelularSul, TIM PrevSul, PBT–TIM, Convênio de Administração, PBS–Telenordeste Celular and TIM PrevNordeste benefit plans (according to SPC/DETEC/CGAT Communications Nos. 169, 167, 168, 912, 171 and 170, respectively) from SISTEL to HSBC – Fundo de Pensão.

The PBS Assistido plan continues to be managed by SISTEL. The only exception is Plano PAMEC, which was extinguished, with the Company remaining responsible for coverage of the respective benefit, which is now called PAMEC/Apólice de Ativos.

In 2017, contributions to pension plans and other post-employment benefits amounted to R\$ 47.0 million (R\$ 44.8 million in 2016).

## **Item 6. Directors, Senior Management and Employees**

### **A. Directors and Senior Management**

#### **Board of Directors**

We are administered by a Board of Directors (*Conselho de Administração*) and a Board of Statutory Officers (*Diretoria*), which are overseen by a Fiscal Council (*Conselho Fiscal*) and a Statutory Audit Committee (*Comitê de Auditoria Estatutário*). The Board of Directors is composed of five to nineteen members, each serving for a two-year term with the possibility of re-election.

Directors’ duties and responsibilities are determined by Brazilian law, our By-laws (*Estatuto Social*) and our Disclosure and Corporate Governance Policy (*Política de Divulgação/Negociação e Diferenças de Governança Corporativa da NYSE*), as determined by CVM Instruction 358/2002. All decisions taken by our Board of Directors are recorded in the board’s minute books. The Board of Directors holds regular meetings once every quarter of the fiscal year and also holds special meetings whenever called by the chairman, by two directors or by the Chief Executive Officer. The chairman of the Board of Directors may also invite, at his discretion, any of our key employees to the Board of Directors’ meetings, in order to discuss any relevant corporate matter. The Board of Directors has two special advisory committees: the Compensation Committee (*Comitê de Remuneração*) and the Control and Risks Committee (*Comitê de Controle e Riscos*), both composed only of members of the Board of Directors. The Statutory Audit Committee also reports to the Board of Directors and is composed independent members of the Board of Directors.

Members of our Board of Directors are required to comply with, and have agreed to comply with, our Disclosure and Corporate Governance Policy, our Code of Ethics and certain other Brazilian law regulations including the “*Regulamento de Listagem do Novo Mercado da B3 S.A. - Brasil, Bolsa Balcão – Bolsa de Valores Mercadorias e Futuros.*”

The following are the current members of the Board of Directors and their respective titles, whose terms of office will be valid until the annual shareholders’ meeting to be held in April 2019:

<b>Name</b>	<b>Title</b>	<b>Date of Birth</b>	<b>Date Appointed</b>
Alberto Emmanuel Carvalho Whitaker	Director	October 10, 1940	April 19, 2017
Celso Luis Loducca	Director	July 23, 1958	March 16, 2018

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Enrico Barsotti	Director	January 24, 1967	April 19, 2017
Herculano Aníbal Alves	Director	February 27, 1953	April 19, 2017
João Cox Neto	Chairman	May 02, 1963	March 16, 2018
Mario di Mauro	Director	August 26, 1971	November 29, 2017
Nicoletta Montella	Director	October 3, 1972	April 19, 2017
Piergiorgio Peluso	Director	March 25, 1968	March 16, 2018
Sabrina Valenza	Director	January 24, 1968	April 19, 2017
Stefano De Angelis	Director	August 22, 1967	April 19, 2017



Mr. Whitaker, Mr. Alves and Mr. Araujo are qualified as independent directors according to Brazilian independence standards. They are scheduled to be re-elected or replaced at the annual shareholders' meeting to be held in 2019. Set forth below are brief biographical descriptions of the members of the Board of Directors.

*Alberto Emmanuel Carvalho Whitaker.* Mr. Whitaker holds a degree in Law from Faculdades Metropolitanas Unidas – FMU and is a lawyer duly admitted to the Brazilian Bar Association, São Paulo Section (OAB/SP). He is also a business administrator duly registered at the Regional Administration Council of São Paulo (CRA/SP). He attended several extension courses focused on Corporate Governance at the following institutions: Instituto Brasileiro de Governança Corporativa (IBGC), the University of Chicago, the International Institute for Management Development (IMD, Lausanne), the National Association of Corporate Directors - Washington, and the Global Corporate Governance Forum - IFC-Washington. Mr. Whitaker has also been a member of the Board of Directors of various national and multinational companies, and is currently a member of the Board of Directors of IBGC, the fiscal council of the Museu de Arte de São Paulo and member of the Board of Directors of the Fundação Bienal de São Paulo. Mr. Whitaker also held the position of executive director of several prominent financial entities and general manager of the Brazilian subsidiaries of the SCR Sibelco, a world leader in the mining and processing of industrial minerals from 1991 to 2006. At TIM Participações, Mr. Whitaker was a member of the Fiscal Council/Audit Committee, from April 11, 2008 to December 12, 2013; chairman of the Fiscal Council/Audit Committee from October 28, 2010 to December 12, 2013, and has been a member and coordinator of the Statutory Audit Committee from December 12, 2013 to date; a member of the Board of Directors from May 8, 2014 to date; and a member of Control and Risks Committee from May 8, 2014 to date.

*Celso Luis Loducca.* Mr. Loducca is an advertiser and has served as a member of the Board of Directors and member of the Statutory Audit Committee at TIM Participações since March 2018. Mr. Loducca began his career as an advertising editor at Standard, worked at Talent, W / Brasil and Young & Rubicam, before becoming the Vice Chairman and Creative Director at Casa do Saber Foundation, where he currently serves as Senior Consultant for Marketing and Business of the “Who We Are?” Program, which proposes discussions on themes of humanity from different points of view.

*Enrico Barsotti.* Mr. Barsotti holds a degree in Economic Sciences and currently serves as member of the Board of Directors and member of the Compensation Committee at TIM Participações. Since 2016, Mr. Barsotti has been Director of Development and Pricing of Telecom Italia S.p.A, as well as non-executive Director of the digital service provider Alfabook Srl since 2015. Still in Telecom Italia, Mr. Barsotti served as Marketing Business Development Manager in 2016, and Business and Quality Support Manager from 2013 to 2016.

*Herculano Aníbal Alves.* Mr. Alves received a degree in Economics from Pontifícia Universidade Católica de São Paulo, PUC-SP in 1980, a specialist in Financial Administration from Fundação Getúlio Vargas in 1983 and a master's degree in Finance and Investments from Fundação Getúlio Vargas in 1989 and attended the Governance, Risk and Compliance course from the Risk University of KMPG in 2016. From May 2014 to April 2015, Mr. Alves was an Equities Consultant at BRAM – Bradesco Asset Management S.A. DTVM, or BRAM. He was Director of Equities of BRAM US from September 2011 to March 2015, Head of Equities at BRAM – Bradesco Asset Management Ltda. from July 2001 to April 2014, and Senior Manager of Equities at Bradesco Templeton Asset Management Ltda. from June 1998 to June 2001. Previously, he also held the position of Director at the banking company ABN AMRO from February 1995 to June 1998 and he served as an equity portfolio manager, investment analysis manager and analyst at Unibanco from June 1985 to January 1995. From January 1983 to June 1985, he worked at Banco Bozano Simonsen in the credit area, and from March 1971 to September 1982 at the bus company Vila Carrão Ltda. in the administrative and financial area. Mr. Alves was a member of the Investment Committee and of the Assets Allocation Committee of BRAM from 2001 to 2015, and was also member of the Monthly Committee of BRAM with the vice-presidents of

Banco Bradesco. He serves as fiscal council member of Cielo S.A. and Grendene S.A., both since 2015. Mr. Alves was a member of the Board of Directors of Marfrig Brazil Foods from 2015 to 2016, he occupies the position as a member of the Mergers and Acquisitions Committee (*Comitê de Aquisições e Fusões*) since 2015 and the position as a member of the Council of Supervision of the Investment Analysts (*Conselho de Supervisão dos Analistas de Investimentos*), or CSA since 2016. He was also a Board of Directors member of the Association of Capital Markets Investors (*Associação dos Investidores do Mercado de Capitais*) from 2011 to 2016, President of the Private Equity Funds Commission of Anbima (*Comissão de Fundos de Ações de Anbima*) from 2012 to 2016, and he was technical director and adviser of the Brazilian Association of Capital Markets (*Associação Brasileira de Mercado de Capitais*), or ABAMEC / SP, from 1982 to 1992. In addition, he served as advisor to various private equity investment funds and since 2012 he has been an alternate member of the Board of Directors of the fund 2BCapital. Mr. Alves was also a Professor at Fundação Armando Alvares Penteado - FAAP.

*Stefano De Angelis.* Mr. De Angelis is an Italian citizen, graduated in economics from the University of Rome “La Sapienza” and has an MBA from the University of Torino. He has extensive experience in the telecommunications industry and joined in TIM Participações, as the Chief Executive Officer, in May 2016. Before that, he held the position of Commercial Director at Telecom Italia in the period from 2014 to 2016, Chief Executive Officer at Telecom Argentina in the period from 2013 to 2014 and Director of Planning and Control at Telecom Italia from 2007 to 2013. Mr. De Angelis previously worked at TIM Participações SA, from 2004 to 2007, when he held the position of Chief Financial Officer. In addition, he has held other executive functions within Telecom Italia group.

*Sabrina Valenza.* Mrs. Valenza holds a degree in Economics and serves as member of the Board of Directors and member of the Control and Risks Committee at TIM Participações. In addition, Ms. Valenza has been Process and Service Creation Manager at Telecom Italia SpA since 2016. Previously Ms. Valenza held the functions of Manager of Transverse Processes - Operations from 2014 to 2016 and Head of Operations Management - Technology from 2012 to 2015.

*Piorgio Peluso.* Mr. Peluso holds a degree in Economics and Social Sciences, with specialization in Finance, at Università Commerciale Luigi Bocconi. Mr. Peluso has been member of the Board of Directors at TIM Participações since March 2018, and has been the Chief Financial Officer of Telecom Italia SpA since 2012. From 2011 to 2012, Mr. Peluso was the General Manager of Fondiaria-SAI S.p.A, acting in the recovery plan of the insurance group and later integration with the Unipol group. Following the merger of UniCredit Corporate Banking S.p.A. with UniCredit S.p.A. in 2010, Mr. Peluso was appointed Head of Corporate & Investment Banking Italy, UniCredit Group. In 2009, Mr. Peluso was an Executive Officer of UniCredit Corporate Banking S.p.A.

*João Cox Neto.* Mr. Cox holds a degree in economics from the Federal University of Bahia and a post-graduate degree from the Université du Québec à Montréal and the College of Petroleum Studies at Oxford University. Mr. Cox has been Chairman of the Board of Directors of TIM Participações since March 2018. Previously, Mr. Cox served as a Member of the Board of Directors of several companies in different countries (Brazil, Argentina, the Netherlands and Israel), in addition to being a Member of the Board of Directors at ABRASCA - Brazilian Association of Publicly-Held Companies and IBRI - Brazilian Institute of Investor Relations. From 2006 to 2010 Mr. Cox served as CFO and Vice Chairman of Board of Directors at Claro.

*Nicoletta Montella.* Mrs. Montella holds a degree in Economics and serves as member of the Board of Directors and member of the Control and Risks Committee at TIM Participações. In addition, Ms. Valenza has been Process and Service Creation Manager at Telecom Italia SpA since 2016. Previously Ms. Valenza held the functions of Manager of Transverse Processes - Operations from 2014 to 2016 and Head of Operations Management - Technology from 2012 to 2015.

*Mario di Mauro.* Mr. Di Mauro holds a bachelor’s degree in Economics and an MBA from the University G. D’Annunzio in Chieti, Italy. He has been Chief Strategy Officer, (covering strategic planning, group strategy and business positioning for TIM) since September 2016 in Rome, Italy at Telecom Italia, and CEO of Tim Ventures S.r.l. since July 2014. He was the head of Strategy & Innovation (covering IT strategic planning, group strategy, and IT business positioning) at Telecom Italia since February 2014 in Rome, Italy, from 2014 to 2016. He is a member of the board of directors of the Italian companies Olivetti S.p.A. and Advanced Caring Centre s.r.l. since 2014 and Chief Executive Officer of Tim Ventures s.r.l. since 2015. Prior to that, Mr. Di Mauro occupied several positions at Telecom Italia, namely: head of Strategic Projects from 2013 to 2014; head of Business Valuation – Mergers & Acquisitions from 2010 to 2013; head of International Planning & Control from 2008 to 2010; and head of Business Positioning & Competitive Analysis from 2006 to 2008. From 2001 to 2005, Mr. Di Mauro was head of the Planning & Control & Investment Projects at Telecom Italia. From 2000 to 2001, he was responsible for Controlling Activities and from 1998 to 2001 he was a Senior Analyst Controlling Activities, both positions within the International Affairs division of Telecom Italia Mobile S.p.A., which has since merged with Telecom Italia. From 1995 to 1998, Mr. Di Mauro was

a consultant and an Assistant Professor in Chieti, Italy.

We do not have contracts with our directors providing benefits upon termination of their appointments.

**Board of Statutory Officers**

Pursuant to our By-laws, our Board of Statutory Officers (the members of which we also refer to as our Statutory Officers) is comprised of at least two and no more than twelve members, who may or may not be shareholders. The title of the members of our Board of Statutory Officers shall be as follows: (1) Chief Executive Officer, (2) Chief Financial Officer, (3) Investors Relations Officer, (4) Business Support Officer, (5) Chief Operating Officer, (6) Regulatory and Institutional Affairs Officer, (7) Legal Officer; and (8) Chief Technology Officer. Each member of our Board of Statutory Officers, who serve two-year terms of office (with re-election permitted) may be elected or dismissed by our Board of Directors at any time and with no cause.

The following are the current members of the Board of Statutory Officers and their respective titles, whose terms of office will remain valid until the first Board of Directors' Meeting to be held after the 2018 annual shareholders' meeting:

<b>Name</b>	<b>Title</b>	<b>Date of Birth</b>	<b>Date Appointed</b>
Stefano De Angelis	Chief Executive Officer	August 22, 1967	May 11, 2016
Adrian Calaza	Chief Financial Officer and Investor Relation Officer	March 8, 1967	September 2, 2016 and October 2, 2017, respectively
Bruno Mutzenbecher Gentil	Business Support Officer	January 1, 1969	February 5, 2018
Pietro Labriola	Chief Operating Officer	October 1, 1967	May 11, 2016
Mario Girasole	Regulatory and Institutional Affairs Officer	June 8, 1968	May 11, 2016
Jaques Horn	Legal Officer	March 15, 1964	May 11, 2016
Leonardo de Carvalho Capdeville	Chief Technology Officer	September 4, 1969	May 11, 2016

Brief biographical descriptions of our statutory officers are set forth below.

*Stefano De Angelis.* See “—Board of Directors.”

*Adrian Calaza.* Mr. Calaza is an Argentine citizen, graduated in business administration from the University of Belgrano and holds an MBA in Management and Business Administration from the University of CEMA. With extensive experience in the telecommunications industry, Mr. Calaza was elected Chief Financial Officer in TIM Participações SA in September 2016. Before that, he held the position of Chief Financial Officer in Telecom Argentina from 2009 to 2016, where he also was Corporate Administrative Services Manager from 2007 to 2009. Previously, Mr. Calaza held various executive roles, including Capital Expenditures and Control Manager at TIM Participações S.A. from 2006 to 2007, Chief Financial Officer at Telecom América Latina S.A. from 2004 to 2005 and Chief Financial Officer in Entel S.A. from 2000 to 2004. Mr. Calaza joined the Telecom Italia Group in January, 1999, where he held various positions, including Chief Financial Officer of Entel S.A., in Bolivia, a subsidiary of the Telecom Italia Group and Corporate Chief Financial Officer of Telecom América Latina S.A in Brazil.

*Bruno Mutzenbecher Gentil.* holds a degree in Business Administration and has been the Purchasing & Supply Chain Officer at TIM Participações since February 2018. From 2016 to 2017, Mr. Gentil served as Vice President of Corporate Resources at Telefônica Brasil S.A., where he also held the position of Vice President of Strategy and Consolidation between 2015 and 2016. Previously, from 2013 to 2015, Mr. Gentil served as Vice-President of Finance at GVT - Global Village Telecom S.A., where he also held the position of Controller in the period from 2006 to 2013.

*Pietro Labriola.* Mr. Labriola is an Italian citizen with a degree in Administration from Universidade de Studi di Bari and a masters in Innovation and Technology Management from ASMIT Advanced School. With more than 20 years of experience in the telecommunications sector, Mr. Labriola assumed the position of Chief Operating Officer at TIM Participações in August 2015 and, in February 2017, the position of Chief Executive Officer at Intelig. Prior to this, he held the following positions in the Telecom Italia group: Chief Transformation Officer from 2013 through 2015, Executive Vice President Business Market from 2009 through 2012, Executive Vice President Fixed Line Services from 2007 through 2008, Executive Vice President Marketing from 2001 through 2006. From 1996 through 2001, Mr. Labriola held positions as Marketing Director and Business Director at Infostrada Serviços de Comunicações Fixas.

*Mario Girasole.* Mr. Girasole is an Italian citizen with a Laurea Magistralis in Economics from University LUISS (Rome). He also has an L.L.M. in International Business Law (London), post graduate in Competition Policy, in International Commerce and Modern Economic History, and executive education at London Business School (Finance), Harvard (School of Government), Columbia Business School (Advanced Management Program) and INSEAD (International Directors Programme). He joined TIM in 1997, for the regulatory and pricing area, in Rome. From 2000 to 2003, he headed, in Brussels, the TIM Group relations with the institutions of the European Union, and was appointed to the position of Deputy-Chairman of the European Mobile Sector (GSM Europe). Starting from 2004, he was Head of Public and Regulatory Affairs at Telecom Italia America Latina and at TIM Brasil. During this period, he worked also as Director of Entel Bolivia and Alternate Director of TIM Participações. Mr. Girasole is the Regulatory and Institutional Affairs Officer of the Company since January 2009 and since 2012, he runs the Press Relations and the Corporate Social Responsibility departments. He is also member of the Boards and Councils of national and international entities, including SindiTelebrasil, GSM Latin America, Italo-Brazilian Chamber of Commerce and the Brazilian Institute for Competition Studies (*Instituto Brasileiro de Estudos da Concorrência*), or IBRAC. In September 2014, Mr. Girasole was awarded as Knight of the Order of the Star of Italy by the President of the Italian Republic “for promoting friendly relations and co-operation with other countries and ties with Italy.”

*Jaques Horn.* Mr. Horn graduated in Law (LLB) at Candido Mendes University, and obtained specializations at Harvard and at the Academy of International and American Law. He has been Chief Legal Officer at TIM since July 2010 and Secretary of the Company’s Board of Directors since 2012. He worked at Tetra Pak from 2007 to 2010, as Legal Director, where he was responsible for the Central and South America and the Caribbean region. He also worked at Shell, from 1994 to 2007, as Legal Corporate Manager at the holding company and Legal Director at the subsidiary companies. Mr. Horn worked as Legal Counsel at Companhia Atlantica de Petroleo (ARCO Petroleum Co.) from 1990 to 1994, as a Lawyer at Franco, Bhering, Barbosa & Novaes Law Firm for one year, and as a Tax Senior Consultant at Arthur Andersen for almost four years.

*Leonardo de Carvalho Capdeville.* Mr. Capdeville holds a degree from Instituto Nacional de Telecomunicações – INATEL in Electronic Engineering, specializing in Telecommunications. He also holds an MBA from Fundação Getúlio Vargas in Rio de Janeiro, Brazil. Mr. Capdeville also attended the International Program of Management Development at IEDE - Institute for Executive Development in Madrid, Spain and to the Disruptive Innovation Program by the Harvard Business School. Currently, he is Chief Technology Officer of the Company, elected on February 12, 2015 and a member of the Trustee Council of the Telecommunications Research and Development Center (*Centro de Pesquisa e Desenvolvimento de Telecomunicações*), or CpQD. Prior to that, Mr. Capdeville was responsible for the Network, IT and Wholesale departments at the Company. From 1998 to 2014, Mr. Capdeville was a Network Director at Telefônica Brasil (under the brand name Vivo). Mr. Capdeville also worked at Promon Eletrônica Ltda, or Promon, from 1991 to 1995 and then from 1996 to 1998. While at Promon, he held the position of engineer responsible for implementing the mobile telephony in the State of Espírito Santo, Brazil, and performed other activities related to network projects. From February 1995 to October 1996, Mr. Capdeville worked at Gerenciamento e Assessoria de Serviços S/C Ltda., as coordinator of the implementation of the team and of the data communication area.

There are no family relationships among any of our directors and statutory officers, nor any arrangement or understanding with major shareholders, customers or suppliers pursuant to which any director or executive officer was selected.

### **Statutory Audit Committee**

The current composition of the Statutory Audit Committee consists of three members, elected by our controlling shareholder. None of the members were elected by the minority shareholders.

The following are the current members of our Statutory Audit Committee:

<b>Name</b>	<b>Date of Birth</b>	<b>Date Appointed</b>
Alberto Emmanuel Carvalho Whitaker	October 10, 1940	April 26, 2017
Celso Luis Loducca	July 23, 1958	March 16, 2018
Herculano Aníbal Alves <sup>(*)</sup>	February 27, 1953	April 26, 2017



(\*) Audit committee financial expert.

The Statutory Audit Committee was created and its first members appointed at the shareholders' meeting held on December 12, 2013, in accordance with Rule 10A-3 under Section 301 of the Sarbanes-Oxley Act of 2002, or Sarbanes-Oxley, and CVM Instruction 509/2011. The Statutory Audit Committee's internal regulations were approved at the Board of Directors meeting held on December, 23, 2013.

The Statutory Audit Committee is composed of at least three (3) and at the most five (5) members, all elected by the Board of Directors, who serve two-year terms of office, matching the terms of the members of the Board of Directors. Re-election is permitted up to, for a maximum period of 10 years. Members of the Statutory Audit Committee may be dismissed by our Board of Directors at any time and without cause.

The Statutory Audit Committee's general duties and responsibilities under Brazilian corporate law, our By-laws and its internal rules, include: (i) opining, preliminarily, on the hiring and removal from office of the independent auditor in charge of auditing the financial statements, or any other service provided by such auditor, whether or not it may be related to auditing; (ii) analyzing the auditor's annual work plan, discussing the results of the activities performed, revisions made and assessing the performance of the independent auditors; (iii) supervising independent auditors' activities to assess their independence, quality and adequacy of the services provided to the Company, including, to the full extent permitted by law, assistance solving any disagreement between the management and the independent auditors concerning the presentation of financial statements; (iv) supervising the activities performed by the internal audit department, and for that purpose analyzing the annual work plan, discussing the results of the activities performed, the revisions made and assess the performance of internal auditors; (v) supervising and analyzing the effectiveness, quality and integrity of the Company's internal controls over financial reporting, in order to, inter alia, monitor the implementation of the provisions related to: (a) the presentation of the financial statements, including quarterly financial information and other interim statements; and (b) the disclosure of information and evaluations based on adjusted financial data and on non-accounting data, resulting in unexpected additions to the structure of the usual reports on financial statements; (vi) analyzing complaints, anonymous or not, concerning any accounting matters from internal controls or audit, received by the Company, as well as suggesting measures that may be taken; (vii) examining, assessing and expressing opinions, in advance, based on the material provided by the Company's management, on whether the contracts to be signed between the Company, or its subsidiaries, on one hand, and the majority shareholder or its subsidiaries, associated companies, or companies under common control or which may control the said shareholder, or parties related in some other way to the Company, on the other hand, meet the standards that normally apply within the market to similar agreements between independent parties, with the Statutory Audit Committee having the right to request further clarification or the opinion of independent third parties, whenever deemed necessary; (viii) drawing up the annual synthesis report, pursuant CVM rules, to be presented, together with the financial statements, including a description of: (a) its activities, the results and conclusions reached and recommendations made; and (b) any situation where there is a significant disagreement between the Company's management, independent auditors and the Statutory Audit Committee regarding financial statements of the Company; and (ix) assessing and monitoring the Company's exposure to risk, with the right to request detailed information on policies and proceedings related to: (a) remuneration of the management; (b) utilization of the Company assets; and (c) expenses incurred on behalf of the Company; and (x) analyze any complaints received by the whistleblowing channel of the Company and its respective envisaged actions of improvement.

### **Fiscal Council**

The current composition of the Fiscal Council consists of three members elected by our controlling shareholder. None of the members were elected by the minority shareholders.

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The following are the current members of our Fiscal Council, whose terms of office will be valid until the annual shareholders' meeting to be held in 2018:

<b>Name</b>	<b>Date of Birth</b>	<b>Date Appointed</b>
Walmir Kesseli	May 28, 1959	April 19, 2017
Jarbas Tadeu Barsanti Ribeiro	March 18, 1951	April 19, 2017
Josino de Almeida Fonseca	February 12, 1940	April 19, 2017

Under Brazilian corporate law, our By-laws and the internal rules of the Fiscal Council, the Fiscal Council's general duties and responsibilities include monitoring the actions of management and verifying its compliance with legal duties and appropriate statutes; providing opinions regarding management's annual report, business plans and budgets; and performing reviews of, and opinions regarding our financial statements. All members serve independently from the Company in their capacities on the Fiscal Council.

### **Other Committees**

We have other non-statutory committees including a Compensation Committee and a Control and Risks Committee.

#### ***Compensation Committee***

The Compensation Committee was established by the Board of Directors on September 30, 2008 to: (1) prepare proposals for our Board of Directors regarding allotment of the overall annual remuneration approved by general shareholders' meeting; (2) provide our Board of Directors with proposals concerning the remuneration of our statutory officers; (3) evaluate the compensation criteria of Company's statutory officers; and (4) monitor the performance of the decisions taken by management and the Company's policies relating to senior executive compensation; and (5) analyze other matters concerning the compensation of the Company's members, as delegated by the Board of Directors.

The members of our Compensation Committee are appointed and dismissed by our Board of Directors. The Compensation Committee consists of three members, all of whom are effective members of our Board of Directors.

The following are the current members of our Compensation Committee, which as of the date of this annual report has one seat vacant:

<b>Name</b>	<b>Date of Birth</b>	<b>Date Appointed</b>
Enrico Barsotti	January 24, 1967	April 26, 2017
Mario Di Mauro	August 26, 1971	November 29, 2017

#### ***Control and Risks Committee***

The Control and Risks Committee was established by the Board of Directors on June 18, 2013, and tasked with the following responsibilities: (a) recommending internal control measures to be adopted by the Board of Directors establishing the specific authority of the Board of Statutory Officers and the limits of such specific authority, subject to the provisions of the By-laws, as well as deciding on the assignment of new functions to the Directors; (b) monitoring the Company's compliance with our corporate governance policy and periodically updating the same; (c) without prejudice to the competence of the Board of Directors, recommending procedures for better supervision of the management of the Directors; (d) acknowledging the internal audit work plan reviewed by the Company's Statutory Audit Committee in accordance with the Company's By-laws; (e) approving the compliance department's work plan and monitoring compliance with the same; (f) reviewing and evaluating periodic reports issued in accordance with the internal control and risk management system by the internal audit department and the compliance department and, in connection with the same, requesting that the internal audit department review specific operational areas or that the compliance department develop new procedures; (g) requesting information from the Board of Statutory Officers regarding specific processes or issues of the Company and / or its subsidiaries, whenever it deems appropriate; (h) supervising and monitoring issues related to the social responsibility of the Company, aiming at the sustainable development of the Company and / or its subsidiaries, and monitoring the Company's compliance with the principles established in our Code of Ethics and Conduct; and (i) analyzing any other matters related to the internal control of the Company as are delegated by the Board of Directors.

The members of our Control and Risks Committee are appointed and dismissed by our Board of Directors. The Control and Risks Committee shall be composed up to five members, of which two members should be independent, and all of whom shall be members of our Board of Directors.

The following are the current members of the Control and Risks committee, which as of the date of this annual report has two seats vacant:

<b>Name</b>	<b>Date of Birth</b>	<b>Date Appointed</b>
Herculano Anibal Alves	February 27, 1953	April 26, 2017
Nicoletta Montella	October 3, 1972	April 26, 2017
Sabrina Valenza	January 24, 1968	April 26, 2017

### **B. Compensation**

In a meeting to be held on April 19, 2018, the shareholders will vote on the aggregate amount of approximately R\$35,703 million as compensation to our statutory officers and approximately R\$3,690 million as compensation to our Board of Directors during 2018. The statutory officers' and directors' compensation is composed of fixed remuneration, benefits, bonuses, short-term incentives and participation in long term incentive plans.

Accordingly, we did not set aside or accrue any amounts to provide pension, retirement or similar benefits to our officers and directors during 2018. The aggregate compensation to our statutory officers in the year ended December 31, 2017, including fixed remuneration, benefits, bonuses, short-term incentive and long term incentive plans, was approximately R\$28,122 million considering INSS (approximately R\$26,786 million without INSS).

Our statutory officers and other managers of the company are eligible to receive a short-term incentive (Management by Objectives, or MBO) bonuses. The general criteria for the MBO bonus are approved by our Board of Directors and provide that eligible statutory officers and other managers may receive an amount calculated based on the organizational roles and certain pre-established performance targets.

Some key officers are also eligible to participate in a long-term incentive plan. The general criteria for the 2018 program are approved by our Board of Directors and provide that eligible participants may receive shares in part through the achievement of long term strategic goals (or so-called performance shares) and in part by remaining employed with the Company until the completion of the vesting period (or so-called restricted shares). For the year ended on December 31, 2017, each member of our Board of Directors received an average of R\$461,497 considering INSS (R\$386,738 without INSS) and each member of our Fiscal Council received annual compensation of R\$200,091 considering INSS (R\$166,743 without INSS), paid pro rata according to each member's time of service on such body.

### **C. Board practices**

See "—A. Directors and Senior Management" and "—B. Compensation."

### **D. Our Employees**

On December 31, 2017, we had 9,574 full-time employees. We do not employ a significant number of temporary employees. The following tables show a breakdown of our employees as of December 31, 2017, 2016 and 2015.

	<b>As of December 31,</b>			
	<b>2017</b>	<b>2016</b>	<b>2015</b>	
Network	1,833	1,813	1,966	1,966
Sales and marketing	3,326	3,414	4,195	4,195
Information technology	448	484	517	517
Customer care	2,526	2,734	5,033	5,033
Support and other	1,441	1,418	1,351	1,351
Total number of employees	9,574	9,863	13,062	13,062

All employees are represented by state unions affiliated with the following federations: National Federation of Telecommunications Workers and the Workers' Federation. We negotiate annually a new collective bargaining agreement and profit sharing program with both unions. Management believes that our relationships with our workforce are satisfactory. We did not experience a work stoppage that had a material effect on our operations.

## Employee Benefit Plans

The Company and its subsidiaries have defined benefit and defined contribution plans in place. In general, defined benefit plans establish a specific retirement benefit amount that an employee will receive upon retirement, usually dependent on one or more factors such as age, length of service and remuneration.

The liability recognized in the balance sheet with respect to defined benefit pension plans is the present value of the defined benefit liability as at the balance sheet date, less the fair value of plan assets, and past service cost adjustments are not recognized. The defined benefit obligation is calculated annually by independent actuaries, using the projected unit credit method. The present value of defined benefit obligation is determined by discounting estimated future cash outflows, using interest rates consistent with market yields, which are denominated in the currency in which benefits will be paid and which have maturities close to those of the respective pension plan liabilities.

The actuarial gains and losses resulting from changes in actuarial assumptions are recorded within shareholders' equity as other comprehensive income, as incurred.

Past service costs are recognized immediately in income, unless the changes to the pension plan are conditional upon employees remaining in employment for a specific time period (the period in which the right is acquired). In this case, past service costs are amortized using the straight-line method over the period during which the right was acquired.

With respect to defined contribution plans, the Company makes contributions to pension insurance plans public or private on a mandatory, contractual or voluntary. The Company has no further obligation for payment after the contribution is made. The contributions are recognized as employee benefit expense when due.

Following the acquisition and incorporation of AES Atimus (later TIM Fiber and now TIM Celular) in 2011, we assumed this company's defined benefit pension plan. The plan is currently under review and will be separated from the Eletropaulo Telecomunicações plan and TIM Fiber's portion will be migrated to another administrator.

Currently, there are no more active participant contributions to this plan and there is no payment of monthly contributions. We have undertaken an actuarial study following the premises of IAS-19 and CVM to identify the existence of actuarial liabilities. Were we to identify a deficit, we would be obligated to report such deficit on the company's balance sheet as OCI (Other Comprehensive Income). At present, the great majority of participants are still young. We believe expenditures to cover eventual deficits under this legacy plan to be remote. There should be no short-term obligation.

Since 2006, the company's pension funds had been administered by HSBC. After a two year process beginning in 2011, during which the company evaluated other multiemployer pension fund management companies, the company elected to transfer the administration of the following pension plans to Icatu Pension Funds (*Icatu Fundo Multipatrocinado*), a pension fund management company in Brazil: Defined Benefit Plan - Tele Celular Sul PBS; PBS Tele Nordeste Celula; Defined Contribution Plan - Nordeste TIMPREV, TIMPREV Sul; and Intelig Gente.

In February 2013, the National Superintendency of Pension Funds (*Superintendência Nacional de Previdência Complementar*), or PREVIC, approved the transfer of administration, and the entire transfer process was concluded in May 2013. Since this time, these plans have been closed to new members. The Benefit Plan PBT TIM remains managed by HSBC.

## Share-Based Compensation Plan

We operate share-based compensation plans, which in our previous plan consisted of stock options and which in our new proposed plan consists of performance shares and/or restricted shares, under which we receive the services of certain employees in consideration for equity granted. The fair value of the employee's services is recognized as an expense, with a compensating entry to capital reserves, and are determined by reference to the fair value of the options granted. Non-market-related vesting conditions are included in the assumptions underlying the number of option which will vest. The total expense amount is recognized during the period over which the rights vest, when specific vesting conditions should be fulfilled. On the balance sheet date, the entity reviews its estimates regarding the number of options which will vest, based on the non-market-related vesting conditions. It recognizes the effect of this review of initial estimates, if any, in the income statement, with a corresponding adjustment to the capital reserve.



Amounts paid to employees, net of any directly attributable transaction costs, are credited to capital reserve and share issuance premium reserve, if applicable, when options are exercised.

Social contributions payable in connection with the granting of share options are deemed an integral part of the grant itself, and the payment is treated as a transaction settled in cash.

### **Defined Contribution Plan**

During 2002, TIM created a new defined contribution pension plan, or TIMPREV, which allowed employees to migrate from the former pension plan. The Secretary of Complementary Pension approved TIMPREV on November 13, 2002 in Notification 1,917 CGAJ/SPC. TIMPREV sets forth new guidelines for the granting and maintenance of benefits and outlines new rights and obligations for Sistel, the plan administrator; sponsors; participants and their respective beneficiaries.

Migration from the PBS Plan to TIMPREV is optional. In order to encourage migration to TIMPREV, we offered bonuses to those employees migrating before January 29, 2003. As of December 31, 2004, more than 90% of the participants in our private plan had migrated to TIMPREV. Upon electing to migrate to TIMPREV, a participant extinguishes all rights to benefits under the PBS Plan.

During 2008, the Company made its best effort to encourage migration of the remaining participants of the defined benefit plans to TIMPREV. Even though employees agreed with the migration proposed, legal complications not allow this change prevented the migration at that time. The situation was resolved in 2009 and a new cycle of migration encouragement for TIMPREV was offered. On this occasion more participants migrated to TIMPREV plans, one of the plans (PBT) was closed.

As more employees participate in TIMPREV, we anticipate that the sponsor's risk to eventual actuarial deficit will decrease, consistent with the characteristics of typical defined contribution plans. Under the rules of defined contribution plans, the sponsor normally contributes 100% of the basic contribution of the participant. In accordance with the terms and conditions of the approved rules, the administrator of TIMPREV will ensure the benefits listed below:

- a regular retirement pension;
- an anticipated retirement pension;
- a disability pension;
- a deferred proportional benefit; and
- a death pension.

However, the administrator will not assume responsibility for granting any other benefit, even if social security officially grants it to its beneficiaries.

In accordance with Brazilian law, our employees also receive payments based on our financial performance. The amount of the payment is determined by negotiation between us and the unions representing our employees.

Due to our acquisition of Intelig (now TIM S.A.) in 2010, the pension plan of this company was taken over by TIM. The TIM S.A. pension plan is a closed defined contribution plan, managed by HSBC Pension Fund and is not offered

to our employees anymore, since we have started a process with the Secretary of Complementary Pension to change the plan rules, in order to close the plan to new members. For new TIM S.A. employees or those transferred from TIM S.A. to TIM, we now offer the supplementary defined contribution plan managed by Itaú Vida e Previdência S.A., since TIM S.A. also became a sponsor of this plan.

**E. Share Ownership**

As of December 31, 2017, our board members, fiscal council members and statutory officers, owned, in the aggregate, 266,527 common shares, which represented 0.01% of our common shares outstanding. Accordingly, each of our directors or statutory officers beneficially owns less than one percent of outstanding common shares.

Some key officers are also eligible to participate in a long term incentive plan (stock option plans) for which compensation is based on performance targets for our share price, as further described in “—B. Compensation” and “—D. Our Employees—Share-Based Compensation Plan.”

**Item 7. Major Shareholders and Related Party Transactions****A. Major Shareholders**

The following table sets forth information relating to the ownership of common shares by TIM Brasil and our officers and directors, as of December 31, 2017. We are not aware of any other shareholder that beneficially owns more than 5% of our common shares.

Name of owner	Common Shares Owned	Percentage of Outstanding Common Shares
TIM Brasil Serviços e Participações S.A	1,611,969,946	66.58%
All our officers and directors as a group*	266,527	0.01%
Total	1,612,236,473	66.58%

\* Represents less than 1%.

Since TIM Brasil owns 66.58% of our outstanding common shares, it has the ability to control the election of our Board of Directors and to determine the direction of our strategic and corporate policies. The common shares held by TIM Brasil have the same voting rights as the common shares held by other holders and TIM Brasil has no special voting rights beyond those ordinarily accompanying the ownership of our common shares.

As of December 31, 2017, there were 392,391,818 common shares represented by ADSs. As of such date, the number of common shares represented by ADSs represented 16.2% of our total capital.

TIM Brasil is a wholly owned Brazilian subsidiary of Telecom Italia Finance, which in turn is a wholly owned Dutch subsidiary of Telecom Italia. Telecom Italia is a corporation organized under the laws of the Republic of Italy. In turn, the single largest shareholder of Telecom Italia is Vivendi, which is able to exercise significant influence over Telecom Italia. See “Item 4. Information on the Company—C. Organizational Structure.”

Telecom Italia and its subsidiaries, or the Telecom Italia Group, operate mainly in Europe, the Mediterranean Basin and South America. The Telecom Italia Group is engaged principally in the communications sector and, particularly, the fixed and mobile national and international telecommunications sector. The group is focused currently on digitalization and accordingly is investing in the development of its ultra-broadband network and new technologies.

**Significant Changes in Percentage Ownership of Principal Shareholders**

None.

**Shareholders' Agreements**

None.

***B. Related Party Transactions***

As of December 31, 2017, we did not owe to our affiliates any amounts arising out of outstanding inter-company loans. We had assets and liabilities in amounts of R\$133,128 thousand and R\$95,645 thousand, respectively on December 31, 2017 with companies of the Telecom Italia Group. See Note 35 to our consolidated financial statements.

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### **Guarantees of Obligations of our Subsidiaries**

We are guarantor in favor of BNDES, in the amount of R\$4,120 million as of December 31, 2017, under the Credit Agreements of TIM Celular and Intelig (now known as TIM S.A.).

We are guarantor in favor of KfW IPEX, in the amount of U.S.\$34 million as of December 31, 2017, under the Loan Agreement of TIM Celular.

We are guarantor in favor of KfW IPEX, in the amount of U.S.\$78 million as of December 31, 2017, under the Loan Agreement of TIM Celular between Finnish Export Credit as lender and KfW IPEX as facility agent.

For more information on our guarantees of obligations of our subsidiaries, see “Item 5. Operating and Financial Review and Prospects—B. Liquidity and Capital Resources—Sources of Funds—Financial Contracts.”

### **Agreement between Telecom Italia and TIM Participações and our Subsidiaries**

At the shareholders’ meeting to be held on April 19, 2018, our shareholders will vote on an extension of the Cooperation and Support Agreement, originally signed on May 3, 2007 with Telecom Italia, for an additional 12 month period until April 30, 2019. The purpose of this agreement is to enable us to benefit from Telecom Italia’s internationally recognized expertise, built throughout years of operation in more mature and developed markets. The cooperation and support activities to be performed by the parties will be focused on adding value to our operations through:

- Benefiting from Telecom Italia’s experience and industrial capacity as one of the major players in the European market;
- Applying the systems/services/processes/best practices that were largely used in the Italian market and may be easily customized for the Brazilian market through limited investments and mitigated implementation risks; or
- An increase in efficacy by adopting in-house solutions that have been widely tested and used.

The extended term of the agreement provides for a total price cap of R\$ 49.6 million. The price cap represents the maximum consideration to be paid by TIM Participações operating companies for all the services and support rendered by Telecom Italia during 2018 and 2019 under the agreement.

### ***C. Interests of Experts and Counsel***

Not applicable.

## **Item 8. Financial Information**

### ***A. Consolidated Statements and Other Financial Information***

See “Item 18. Financial Statements.”

### **Legal Proceedings**

The Company and its subsidiaries are subject to judicial and administrative proceedings, including civil, criminal, labor, tax and regulatory claims covering a wide range of matters that arise in the ordinary course of business. We

adopted a policy of analyzing each such proceeding and making a judgment as to whether a loss is probable, possible or remote. We make accruals for legal proceedings that we are party to when we determine that losses are probable and can be reasonably estimated. For civil, labor, tax and regulatory proceedings where risk of loss has been classified as possible, there is no provision made and these proceedings are not expected to have a material adverse effect on our business or financial condition. Our judgment is always based on the opinion of our legal advisers. Accrual balances are adjusted to account for changes in circumstances for ongoing matters and the establishment of additional accruals for new matters. While we believe that the current level of accruals is adequate, changes in the future could impact these determinations.

In this annual report on Form 20-F, we disclose in detail those legal proceedings which we and our legal advisors have determined to be material, along with overall summaries and the aggregate value of our legal proceedings where risk of loss is probable. See Note 23 to our consolidated financial statements.

### ***Consumer Lawsuits***

As of December 31, 2017, our subsidiaries are party to consumer lawsuits at the judicial and administrative levels where the risk of loss is considered probable amounting to R\$88,637 thousand (R\$105,112 thousand as of December 31, 2016). These lawsuits generally relate to questions regarding alleged improper billing, contract cancellation, quality of services and undue restriction.

### ***PROCON and Public Prosecutor's Office***

TIM is involved in judicial and administrative proceedings brought by PROCON and various state public prosecutor's offices where the risk of loss is considered probable in the amount of R\$4,551 thousand as of December 31, 2017 (R\$4,705 thousand as of December 31, 2016). These proceedings arise from consumer complaints related to alleged: (i) failures in the provision of network services; (ii) bundling arrangements for product and services; (iii) issues related to quality care; (iv) violations of PROCON's Customer Service Rules (*Novas Regras Para o Serviço de Atendimento ao Consumidor*); (v) contractual violations; (vi) misleading advertising; and (vii) suspension of loyalty benefits in cases of theft of cell phones.

### ***Former Trade Partners***

TIM is a defendant in lawsuits filed by certain former commercial partners for alleged breach of contract. The amounts involved for such lawsuits where the risk of loss is considered probable are of R\$13,152 thousand as of December 31, 2017 (R\$8,661 thousand as of December 31, 2016).

Most materially, TIM Celular is the defendant in a lawsuit filed by Botafogo Comércio e Importação Ltda. in 2002, by a former commercial partner, who argues that TIM Celular did not perform the contract and practiced unfair competition which ended up putting them out of business. A settlement procedure commenced and was adjudicated, whereby TIM Celular was required to pay consequential damages, lost profits and moral damages. In the meantime, TIM Celular filed an action to reverse the judgment, in which the Court rendered a decision to partially uphold TIM's claims, in order to modify the methodology of calculation of damages, lost profits and moral damages. The calculations of such damages, prepared by a retained expert witness, total approximately R\$2,773 thousand (historical date January 12, 2015). Currently, TIM is waiting for a decision to be handed down in respect of Botafogo Comércio e Importação Ltda's appeal.

### ***Social, Environmental, and Infrastructure***

As of December 31, 2017, our subsidiaries are party to lawsuits with various actors arising from environmental licensing and installation / operation licensing issues. The amounts involved in such lawsuits where the risk of loss is considered probable are R\$3,157 thousand as of December 31, 2017 (R\$3,390 thousand as of December 31, 2016).

### ***Other***

We are also party to other civil claims brought by several third-parties mentioned above, in respect of, among others: (i) renewal of lease agreements; (ii) equity subscription of shares; (iii) compensation claims; (iv) alleged breach of contract; and (v) debt actions. The amounts involved in such civil claims where the risk of loss is considered probable are R\$18,224 thousand as of December 31, 2017 (R\$20,120 thousand as of December 31, 2016).

Additionally, TIM S.A. (formerly Intelig) is involved in a lawsuit filed by a creditor of Editora JB, Gazeta Mercantil and Problem Solver Consultoria Ltda. The judge in that case ordered a seizure order on TIM S.A.'s bank account in the amount of R\$3,373 thousand based on the reasoning that Editora JB and Gazeta Mercantil are part of the same economic group as TIM S.A.

TIM S.A. has filed an interlocutory appeal, which was not granted. After that, TIM S.A. filed a request for amendment, which was also rejected. TIM S.A. filed an appeal to the Superior Court (*Superior Tribunal de Justiça*),



which also was denied. The National Treasury Attorney's Office (*Procuradoria-Geral da Fazenda Nacional*) filed a motion contesting the discussed values. The relevant amount is still maintained in an escrow account (judicial deposit).

### ***Labor Claims***

A significant percentage of our labor claims relate to either claims filed by former employees of service providers who, in accordance with Brazilian labor legislation, have filed claims against us on the grounds that we are responsible for labor-related obligations not satisfied by the service provide companies, or our organizational restructuring processes, in particular the closure of our customer service call centers, including in-house staff and outsourced personnel. There were 1,845 labor claims filed against the Company and its subsidiaries as at December 31, 2017, (1,074 as at December 31, 2016), most of which relate to employment claims filed by employees as well as claims that involve former employees of service providers. The amount involved in such labor claims where the risk of loss is considered probable is R\$172,467 thousand as of December 31, 2017 (R\$81,876 thousand as of December 31, 2016).

There was a public civil action filed by the Labor Public Prosecutor's Office of the Third Region, in the State of Minas Gerais, which alleged irregular outsourcing practices and demanded collective punitive damages. A judgment was rendered on April 16, 2008, in which the acting judge ruled the Labor Public Prosecutors' Office claims as partially valid, recognizing irregular outsourcing and granting collective punitive damages. An appeal was filed but was dismissed on July 13, 2009. In order to obtain staying effects for its appeal, TIM Celular filed an unspecified writ of prevention, which was dismissed without prejudice. In order to reverse the decision of the Regional Labor Court of the Third Region, TIM Celular filed an appeal alleging abusive acts by the judge with the Superior Labor Court, and obtained a favorable decision, which reversed the appellate court's decision. A motion for clarification was filed, but dismissed. On September 16, 2009, a motion to review was filed, which is currently pending judgment by the Higher Labor Court. The case is suspended since 2015, due a Federal Supreme Court decision applicable to all call centers' outsourcing claims of telecommunications companies.

Following the above mentioned public civil action in Minas Gerais, the Labor Public Prosecutor's Office of the Federal District filed a claim alleging irregular outsourcing practices and demanding collective punitive damages. The action was found to be without merit, with the court ruling that under the General Telecommunications Law, all outsourcing in the telecommunications sector is legal. The Labor Public Prosecutor's Office filed an ordinary appeal with the Regional Labor Court of the Tenth Region in March 2010, but the ruling of the lower court was upheld. Thereafter, the Labor Public Prosecutor's Office filed for a review, which is pending a hearing by the by the Higher Labor Court. The case is suspended, due the application for overturning due a Federal Supreme Court decision applicable to all call centers' outsourcing claims of telecommunications companies.

A group of actions have been filed in the state of Paraná, involving claims for damages in connection with contractual provisions set forth in employees' work cards. According to an internal rule, TELEPAR had undertaken to supplement the retirement benefits of employees hired prior to 1982. Prior to its privatization, TELEPAR had proposed to implement this benefit by means of the payment of a certain amount in cash. However, some of the company's former employees have questioned this transaction, and in some cases have obtained favorable decisions.

There are a series of labor claims, particularly in São Paulo, brought by former Gazeta Mercantil employees who have filed claims requesting the inclusion of Holdco or TIM Participações as defendants, claiming damages from Holdco and TIM Participações. Plaintiffs who have filed the claims were employees of Gazeta Mercantil, without any employment ties to Holdco or TIM Participações. However, prior to the merger with TIM Participações, Holdco belonged to the Docas economic group, of which Gazeta Mercantil is part.

## **Social Security Claims**

In São Paulo, TIM Celular received a debit assessment notice referring to alleged irregularity in the payment of social security contributions in connection with the payment of profit sharing in the amount of R\$4,995 thousand as of December 31, 2017 (R\$5,372 thousand as of December 31, 2016). TIM Celular filed its administrative defense, but on September 16, 2009, a decision was rendered which upheld the assessment notice. An administrative appeal was filed on October 5, 2009, the judgment of which is still pending.

In May 2006, TIM Celular was issued a tax assessment notice in the amount of R\$9,868 thousand as of December 31, 2017 (R\$5,686 thousand as of December 31, 2016) for social security contributions that were allegedly due in connection with the following: (1) hiring bonuses (2) non-adjusted bonuses (3) payments to self-employed persons, and (4) sales incentives. TIM Celular filed an administrative defense but the tax assessment was upheld. TIM Celular filed an appeal with the Ministry of Finance's Taxpayers' Council, which is now pending judgment.

Intelig (now TIM S.A.) in Rio de Janeiro received notifications for the release of tax debt regarding alleged irregularities in the payment of social security contributions levied in connection with the following: (1) profit sharing, (2) retention of 11% on service agreements, (3) failure to deduct and pay management fees, and (4) failure to properly fill out the GFIP. An administrative defense was presented, with an unfavorable outcome. Intelig (now TIM S.A.) filed an appeal with the Taxpayers' Commission of the Ministry of Finance, which is currently pending judgment. Based on the final decision in the administrative proceedings with respect to the assessment for 11% withholding on service agreements, a legal action, with the amount of R\$43,496 thousand as of December 31, 2017 (R\$43,496 thousand as of December 31, 2016) was filed to reverse the assessment.

## **Tax Claims**

### ***Federal Taxes***

The amounts involved in such federal taxes where the risk of loss is considered probable is R\$33,907 thousand as of December 31, 2017 (R\$57,393 thousand as of December 31, 2016).

The total federal tax claims, not including the regulatory taxes (FUST, FUNTTEL and other) assessed against the Company is equal to R\$3,752,877 thousand as of December 31, 2017 (R\$3,560,440 thousand as of December 31, 2016). The most relevant claims assessed are:

- Tax carryforward loss (CIT) and negative basis of Social Contribution on Profits (CSLL) compensation disallowance; challenge to the goodwill expenses deduction; disallowance of WHT compensation due to alleged lack of documental support; lack of payment of CIT/CSLL due on a monthly estimate basis; fine for failure to present digital files; failure to formal requirement and compliance procedures related to Regional Tax Incentives (SUDENE) The amount in dispute, classified as a possible contingency, is R\$2,552,068 thousand as of December 31, 2017 (R\$2,190,975 thousand as of December 31, 2016).
- Alleged improper credits that resulted in tax carryforward losses and CSLL negative basis compensation disallowance. The amount in dispute, classified as a possible contingency, is R\$192,417 thousand as of December 31, 2017 (R\$185,001 thousand as of December 31, 2016).
- Social contribution on net income on exchange variation resulting from swap operations accounted for on a cash basis. The amount in dispute, classified as a possible contingency, is R\$62,312 thousand as of December 31, 2017 (R\$58,914 thousand as of December 31, 2016).
- Withholding tax collection on income of residents abroad, including those remitted as international roaming and payment to unidentified beneficiaries, as well as the payment of CIDE on royalties remittances abroad, including international roaming The amount in dispute, classified as a possible contingency, is R\$241,431 thousand as of December 31, 2017 (R\$229,061 thousand as of December 31, 2016). Regarding TIM S.A., the amount in dispute is R\$56,469 thousand as of December 31, 2017 (R\$52,963 thousand as of December 31, 2016).
- Alleged failure to calculate and collect corporate income tax, PIS/COFINS and social contribution on profits due to total or partial disregard, by the Brazilian Internal Revenue Service (Receita Federal do Brasil), of the compensations proceeded and from CIT negative balance calculated on previous years. The amount in dispute, classified as a possible contingency, is R\$396,103 thousand as of December 31, 2017 (R\$412,741 thousand as of December 31, 2016).

### ***State Taxes***

The amounts involved in state tax disputes where the risk of loss is considered probable is R\$59,403 thousand as of December 31, 2017 (R\$64,280 thousand as of December 31, 2016).

The total state tax claims assessed against the Company is equal to R\$7,407,881 thousand as of December 31, 2017 (R\$6,982,809 thousand as of December 2016). The most relevant claims assessed are:

- Alleged incorrect deduction of unconditional discounts offered to customers in the ICMS basis of calculation, as well as penalties for alleged noncompliance with an accessory obligation. The amount in controversy, classified as a possible contingency, is R\$1,244,936 thousand as of December 31, 2017 (R\$1,200,113 thousand as of December 31, 2016).
- Use of tax benefit (Program for the Economic, Integrated and Sustainable Development of the Federal District - PRO-DF) granted by the state tax authority, which was later declared unconstitutional by the Supreme Court. Additionally, the company was assessed due to alleged undue credit of ICMS resulting from interstate purchase of goods with tax benefit granted in the state of origin. The amount in controversy, classified as a possible contingency, is R\$1,055,667 thousand as of December 31, 2017 (R\$985,842 thousand on December 31, 2016).
- ICMS credits reversal and credits arising from the acquisition of fixed assets. The amount in controversy, classified as a possible contingency, for TIM Celular is R\$784,654 thousand as of December 31, 2017 (R\$907,777 thousand as of December 31, 2016), and for TIM S.A. is R\$19,950 thousand as of December 31, 2017 (R\$19,534 thousand as of December 31, 2016).
- ICMS credit entries and debt reversals, identification and documentation support of amounts and information included in clients' bills, such as the tax rate and credits granted, as well as credits arising from ICMS substitution or nontaxable operations. The amount in controversy, classified as a possible contingency, for TIM Celular is R\$1,698,409 thousand as of December 31, 2017 (R\$1,230,516 thousand as of December 31, 2016) and for TIM S.A. is R\$128,875 thousand as of December 31, 2017 (R\$111,625 as of December 31, 2016).
- Appropriation of ICMS credits originated from operational energy consumption and acquisition. The amount in controversy, classified as a possible contingency, is R\$131,625 thousand as of December 31, 2017 (R\$322,722 thousand as of December 31, 2016).
- Alleged lack of ICMS collection on network infrastructure sharing operations considering that the originally deferred tax was formerly not collected in accordance with Ordinance No. 128/98. The amount in controversy, classified as a possible contingency, is R\$120,880 thousand as of December 31, 2017 (R\$112,537 thousand as of December 31, 2016).
- Incidence of ICMS and the State Poverty Fund (*Fundo Estadual de Combate à Pobreza – FECOP*), on the acquisition of fixed assets and on telecommunication services provided in specific cases set forth in local legislation. The amount in controversy, classified as a possible contingency, is R\$175,729 thousand as of December 31, 2017 (R\$169,431 thousand as of December 31, 2016).
- Alleged conflict between the information filed in the accessory obligations and the tax collection as well as charge of specific penalty for noncompliance with those obligations. The amount in controversy, classified as a possible contingency, is R\$253,443 thousand as of December 31, 2017 (R\$234,006 as of December 31, 2016).
- Alleged non-payment of ICMS due to the use of reversed debits related to the prepaid service, as well as alleged undue ICMS credit on goods alleged to have benefited from reduction in the calculation basis. The amount in controversy, classified as a possible contingency, is R\$73,722 thousand as of December 31, 2017 (R\$69,195 thousand as of December 31, 2016).
- ICMS taxation on international roaming services provided. The amount in controversy, classified as a possible contingency, is R\$45,917 thousand as of December 31, 2017 (R\$39,665 thousand as of December 31, 2016).

- ICMS credits entries regarding the tax treatment of handsets loan operations. The amount in controversy, classified as a possible contingency, is R\$185,526 thousand as of December 31, 2017 (R\$105,418 thousand as of December 31, 2016).

- Telecom service cancellation due to improper billing / subscription fraud and alleged undue credit and duplication of ICMS. The amount in controversy, classified as a possible contingency, is R\$23,797 thousand as of December 31, 2017 (R\$22,499 thousand as of December 31, 2016).
- Charge of ICMS related to subscription services excluded from taxation due to its classification as non-telecommunication services. The amount in controversy, classified as a possible contingency, is R\$112,848 thousand as of December 31, 2017. There was no correspondent contingency on December 31, 2016.

### ***Municipal Taxes***

The amounts involved in municipal taxes where the risk of loss is considered probable is R\$1,738 thousand as of December 31, 2017 (R\$1,629 thousand as of December 31, 2016).

The total municipal tax claims assessed against the Company is equal to R\$658,783 thousand as of December 31, 2017 (R\$509,613 thousand as of December 31, 2016). The most relevant subjects assessed are:

- (i) supposed lack of ISS collection regarding services import. The amount in dispute, classified as a possible contingency, is R\$136,732 thousand as of December 31, 2017 (R\$128,145 thousand as of December 31, 2016).
- (ii) charge of ISS tax and penalties due to the supposed lack of collection over the company's revenue accounts. The amount in controversy, classified as a possible contingency, is R\$269,547 thousand as of December 31, 2017 (R\$183,962 thousand as of December 31, 2016).
- (iii) constitutionality of the collection of the Inspection Fee for Operation (*Taxa de Fiscalização de Funcionamento – TFF*) by municipal authorities of different locations. The amount in controversy, classified as a possible contingency, is R\$107,519 thousand as of December 31, 2017 (R\$66,939 thousand as at December 31, 2016).

### ***FUST and FUNTTEL***

The amounts involved in regulatory process where the risk of loss is considered probable is R\$30,796 thousand as of December 31, 2017 (R\$29,282 thousand as of December 31, 2016).

The total amount assessed against the Company is R\$2,709,076 thousand as of December 31, 2017 (R\$2,779,295 thousand as of December 31, 2016).

The main claim involves the collection of FUST and FUNTTEL following the issuance by ANATEL of Ordinance no. 07/2005, aiming specifically at the collection of these contributions on interconnection revenues earned by telecommunications services providers from the date upon which Law. 9,998 / 2000 came into force.

### **Material Proceedings with Adverse Director, Management or Affiliate**

None.

### **Dividend Policy**

Under our By-laws, we are required to distribute an aggregate amount equal to at least 25% of our adjusted net income to our shareholders, either as dividends or as tax-deductible interest on shareholders' equity. We may also make additional distributions to the extent of available distributable profits and reserves. Our subsidiary TIM Celular S.A. is also subject to mandatory distribution requirements and, to the extent of distributable profits and reserves, is

accordingly required to pay dividends to us. All of the aforementioned distributions may be made as dividends or as tax-deductible interest on shareholders' equity.

Brazilian corporations may make payments to shareholders characterized as interest on shareholders' equity (*juros sobre capital próprio*) as an alternative form of making dividend distributions to the shareholders. The rate of interest may not be higher than the Federal Government's long-term interest rate as determined by BNDES from time to time. Dividends are not subject to withholding income tax when paid. On the other hand, interest on shareholders' equity paid to shareholders is deductible from the corporation's net income for tax purposes, but the distributions are subject to withholding tax.



For the purposes of Brazilian corporate law, and in accordance with our By-laws, adjusted net income is an amount equal to net profit adjusted to reflect allocations to and from:

- the legal reserve; and
- contingency reserves.

We are required to maintain a legal reserve to which we must allocate 5% of net income for each fiscal year until the amount for such reserve equals 20% of our capital. However, we are not required to make any allocations to our legal reserve in respect of any fiscal year in which our legal reserve, together with our other capital reserves, exceeds 30% of our capital. Losses, if any, may be charged against the legal reserve.

Brazilian corporate law also provides for two discretionary allocations of net income that are subject to approval by the shareholders at the annual meeting. First, a percentage of net income may be allocated to a contingency reserve for anticipated losses that are deemed probable in future years. Any amount so allocated in a prior year must be either reversed in the fiscal year in which the loss was anticipated if such loss does not in fact occur, or written off in the event that the anticipated loss occurs. Second, if the mandatory distributable amount exceeds the sum of realized net income in a given year, such excess may be allocated to unrealized revenue reserve. Under Brazilian corporate law, realized net income is defined as the amount of net income that exceeds the net positive result of equity adjustments and profits or revenues from operations with financial results after the end of the next succeeding fiscal year.

Under Brazilian corporate law, any company may, as a term in its by-laws, create a discretionary reserve that authorizes the allocation of a percentage of a company's net income to the discretionary reserve and must also indicate the purpose, criteria for allocation and a maximum amount of the reserve. The Company's By-laws authorize the allocation of the net income balance not allocated to the payment of the mandatory minimum dividend to a supplementary reserve for the expansion of corporate business, not to exceed 80% of the capital.

We may also allocate a portion of our net income for discretionary appropriations for plant expansion and other capital investment projects, the amount of which would be based on a capital budget previously presented by our management and approved by shareholders. Under Brazilian corporate law, capital budgets covering more than one year must be reviewed at each annual shareholders' meeting. After completion of the relevant capital projects, we may retain the appropriation until the shareholders vote to transfer all or a portion of the reserve to capital realized.

The amounts available for distribution may be further increased by a decrease in the contingency reserve for anticipated losses anticipated in prior years but not realized. The amounts available for distribution are determined on the basis of financial statements prepared in accordance with IFRS.

The legal reserve is subject to approval by the shareholders voting at the annual meeting and may be transferred to capital but is not available for the payment of dividends in subsequent years. Our calculation of net income and allocations to reserves for any fiscal year are determined on the basis of financial statements prepared in accordance with CVM rules and Brazilian corporate law.

Under Brazilian corporate law, a company is permitted to suspend the mandatory dividend in respect of common shares not entitled to a fixed or minimum dividend if:

- its management (board of directors and board of statutory officers) and fiscal council report to the shareholders' meeting that the distribution would be incompatible with the financial circumstances of that company; and
- the shareholders ratify this conclusion at the shareholders' meeting.

In this case,

- the management must forward to CVM within five days of the shareholders' meeting an explanation justifying the information transmitted at the meeting; and

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- the profits which were not distributed are to be recorded as a special reserve and, if not absorbed by losses in subsequent fiscal years, are to be paid as dividends as soon as the financial situation permits.

For the purposes of Brazilian corporate law, 25% of the net income after income tax and social contribution for such fiscal year, net of any accumulated losses from prior fiscal years and any amounts allocated to warrants and employees' and management's participation in a company's profits, shall be distributed as dividends.

### ***Payment of Dividends***

We are required by law and by our By-laws to hold an annual shareholders' meeting by April 30 of each year, at which, among other things, an annual dividend may be declared by decision of our shareholders on the recommendation of our statutory officers, as approved by our Board of Directors. The payment of annual dividends is based on the financial statements prepared for the fiscal year ending December 31. Under Brazilian corporate law, dividends are required to be paid within 60 days following the date the dividend is declared to shareholders of record on such declaration date, unless a shareholders' resolution sets forth another date of payment, which in any event shall occur prior to the end of the fiscal year in which such dividend was declared.

A shareholder has a three-year period from the dividend payment date to claim dividends in respect of its shares, after which we have no liability for such payment. Because our shares are issued in book-entry form, dividends with respect to any share are credited to the account holding such share. We are not required to adjust the amount of paid-in capital for inflation. Annual dividends may be paid to shareholders on a pro rata basis according to the date when the subscription price is paid to us.

### ***B. Significant Changes***

None.

## **Item 9. The Offer and Listing**

### ***A. Offer and Listing Details***

Our common shares are listed on the *Novo Mercado* segment of the São Paulo Stock Exchange (*B3 S.A. – Brasil, Bolsa, Balcão*), or the B3, under the symbol "TIMP3" and our ADSs are listed on the New York Stock Exchange, or the NYSE, under the symbol "TSU." The table below sets forth, for the indicated periods, the high and low closing prices of the ADSs on the NYSE, in U.S. dollars, and the common shares on the B3, in *reais*. On December 31, 2017, the last reported sales price of our common shares on the B3 was R\$13.10 and on December 31, 2017, the last reported sales price of our ADSs on the NYSE was U.S.\$19.31. As of December 31, 2017, the U.S. dollar-*real* exchange rate was R\$3.3080 per U.S.\$1.00.

At an extraordinary shareholders meeting held on June 22, 2011 our shareholders approved, among other things: (1) the conversion of all of our preferred shares into common shares, at a ratio of 0.8406 common shares for each preferred share; (2) our adherence to the *Novo Mercado* rules and the transfer of trading of the shares issued by us to the *Novo Mercado*, and (3) amendments to our By-laws.

In order to join the *Novo Mercado*, we entered into a *Novo Mercado* Participation Agreement with the B3. Through this agreement, which became effective on July 27, 2011, we are required to adhere to heightened requirements relating to corporate governance and the disclosure of information to the market. Additionally, as of such date, our shares started trading on the *Novo Mercado* segment of the B3. Pursuant to the *Novo Mercado* Regulations, we are not permitted to issue preferred shares, participation bonuses or any kind of shares with restricted voting rights.

Prior to August 2, 2011 we had common shares and preferred shares listed on the B3 under the symbols “TCSL3” and “TCSL4,” respectively. Our ADSs listed on the NYSE each represented 10 preferred shares. As part of our migration to the *Novo Mercado* listing segment of the B3, our preferred shares ceased to trade on August 2, 2011. On August 4, 2011, our ADSs representing preferred shares ceased to trade on the NYSE. From August 3, 2011, we only had common shares traded on the *Novo Mercado* listing segment of the B3, by using the symbol “TIMP3” and as from August 5, 2011, our ADSs representing five common shares instead of ten preferred shares commenced trading on the NYSE.

	NYSE		B3 S.A. – BRASIL, BOLSA, BALCÃO	
	High	Low	High	Low
	(in U.S.\$ per ADS)		(in reais per common share)	
<b>Year ended</b>				
December 31, 2013	27.19	17.42	12.33	7.75
December 31, 2014	30.16	21.51	13.83	10.49
December 31, 2015	24.38	8.44	12.88	6.56
December 31, 2016	13.85	7.12	8.86	5.68
December 31, 2017	19.43	11.80	13.10	7.73
<b>Year ended December 31, 2016</b>				
First quarter	11.38	7.12	8.24	5.68
Second quarter	11.20	9.29	8.10	6.39
Third quarter	13.50	10.15	8.63	6.81
Fourth quarter	13.85	11.28	8.86	7.56
<b>Year ended December 31, 2017</b>				
First quarter	16.70	11.80	10.30	7.73
Second quarter	16.56	13.75	10.46	9.30
Third quarter	19.07	14.89	12.01	9.85
Fourth quarter	19.43	17.34	13.10	11.45
<b>Month ended</b>				
October 31, 2017	19.22	18.08	12.34	11.56
November 30, 2017	19.31	17.34	12.44	11.45
December 31, 2017	19.43	17.97	13.10	11.80
January 31, 2018	21.26	19.31	13.50	12.65
February 29, 2018	22.10	19.75	14.35	13.03
March 31, 2018	22.49	20.94	14.74	13.98
April 2018 (through April 4, 2018)	21.99	21.18	14.74	14.11

### **B. Plan of Distribution**

Not applicable.

### **C. Markets**

Our common shares are listed on the *Novo Mercado* segment of the B3 S.A. – Brasil, Bolsa, Balcão, under the symbol “TIMP3” and our ADSs are listed on the New York Stock Exchange, or the NYSE, under the symbol “TSU.” For additional detail, see “—A. Offer and Listing Details.”

### **Trading on the Brazilian Stock Exchanges**

#### **B3 S.A. - Brasil, Bolsa, Balcão**

The B3 is the only Brazilian Stock Exchange on which equity and debt securities issued by Brazilian companies are traded.

Trading on the B3 is conducted every business day, from 10:00 a.m. to 5:00 p.m., or from 11:00 a.m. to 6:00 p.m. during daylight saving time in Brazil, on an electronic trading system called “Megabolsa.” Trading is also conducted between 6:00 p.m. and 7:30 p.m., or between 7:00 p.m. and 8:30 p.m. during daylight savings time in Brazil, in an after-market system. The “after-market” trading is the scheduled after the close of principal trading sessions, when investors may send purchase and sell orders and make trades through the home broker system. This after-market trading is subject to regulatory limits on price volatility of securities traded by investors operating on the Internet.

When shareholders trade shares or units on the B3, the trade is settled in three business days after the trade date, without adjustments to the purchase price. The seller is ordinarily required to deliver the shares or units to the exchange on the second business day following the trade date. Delivery of and payment for shares or units are made through the facilities of *Central Depositária of B3* clearing house.

In order to maintain control over the fluctuation of the B3 index, B3 has adopted a “circuit breaker” system pursuant to which trading sessions may be suspended for a period of 30 minutes or one hour whenever the B3 index falls below 10% or 15%, respectively, in relation to the closing index levels of the previous trading session. The B3 also implemented a 15% limit, up or down, on price fluctuations in shares traded on the spot market. The minimum and maximum price is based on a reference price for each asset, which will be the previous session’s closing quote, when considering the asset at the beginning of the day before the first trade, or the price of the day’s first trade. The asset’s reference price will be altered during the session if there is an auction sparked by the intraday limit being breached. In this case the reference price will become whatever results from the auction.

Although the Brazilian equity market is Latin America’s largest in terms of market capitalization, it is smaller and less liquid than the major U.S. and European securities markets. Moreover, the B3 is less liquid than the New York Stock Exchange and other major exchanges in the world. Although any of the outstanding shares of a listed company may trade on a Brazilian stock exchange, in most cases fewer than half of the listed shares are actually available for trading by the public, the remainder being held by small groups of controlling persons, governmental entities or one principal shareholder. Trading on Brazilian stock exchanges by non-residents of Brazil is subject to registration procedures.

Trading on Brazilian stock exchanges by a holder not deemed to be domiciled in Brazil, for Brazilian tax and regulatory purposes (a “non-Brazilian holder”), is subject to certain limitations under Brazilian foreign investment legislation. With limited exceptions, non-Brazilian holders may only trade on Brazilian stock exchanges in accordance with the requirements of Resolution CMN 2,689. Resolution CMN 2,689 requires that securities held by non-Brazilian holders be maintained in the custody of, or in deposit accounts with, financial institutions and be registered with a clearinghouse duly authorized by the Central Bank and the CVM. In addition, Resolution CMN 2,689 requires non-Brazilian holders to restrict their securities trading to transactions on Brazilian stock exchanges or qualified over-the-counter markets. With limited exceptions, non-Brazilian holders may not transfer the ownership of investments made under Resolution CMN 2,689 to other non-Brazilian holders through a private transaction. See “Item 10. Additional Information—E. Taxation—Brazilian Tax Considerations” for a description of certain tax benefits extended to non-Brazilian holders who qualify under Resolution CMN 2,689.

#### ***Differentiated Levels of Corporate Governance and the Novo Mercado***

In order to increase the transparency of the Brazilian capital markets and protect minority shareholders’ rights, the B3 has implemented certain new initiatives, including:

- a classification system referred to as “Differentiated Levels of Corporate Governance” applicable to the companies already listed on the B3; and
- a new separate listing segment for qualifying issuers referred to as the *Novo Mercado*.

The Differentiated Levels of Corporate Governance, Basic Levels, Level 1 and Level 2, are applicable to listed companies that voluntarily comply with special disclosure and corporate governance practices established by the B3. The companies may be classified into different levels, depending on their degree of adherence to the B3’s practices of disclosure and corporate governance.

The *Novo Mercado* is a separate listing segment for the trading of shares issued by companies that voluntarily adopt certain additional corporate governance practices and disclosure requirements which are more demanding than those required by the current law in Brazil. Companies may qualify to have their shares traded in the *Novo Mercado*, if, in addition to complying with the Level 2 corporate governance practices referred to above, their capital stock consists only of voting common shares.

Below we highlight some of corporate governance practices required by the *Novo Mercado* listing segment of the B3:

- only common shares, with voting rights;



- 100% tag along, with the same conditions for all shareholders in transfer of control;
- establishment and maintenance of Internal Audit, Compliance Department and Audit Committee (statutory or non-statutory);
- public offer required in case of delisting from Novo Mercado;
- at least 2 or 20% of board members must be independent (whichever is greater);
- listed companies' commitment to maintain a free float of at least 25% or 15%, in case of an average daily trading volume above R\$25 million.

On May 20, 2011 the Board of Directors of TIM Participações recommended to the Extraordinary General Shareholders' Meeting of the Company its migration to the *Novo Mercado* listing segment of the B3 (at that time, the *BM&FBOVESPA S.A. – Bolsa de Valores, Mercadorias e Futuros*), which took place on June 22, 2011. With this migration TIM moved to the highest level of corporate governance. Only 32% of Brazilian listed companies are in the Novo Mercado and TIM is the only telecommunications company stock among them.

### ***B3 Market Administration Panel***

Pursuant to Law No. 9,307/96, a Market Arbitration Panel (the "Panel") has been established by the B3. The Panel was established to settle certain types of disputes, including disputes relating to corporate governance, securities issues, financial regulatory issues and other capital market matters, with respect to B3 listed companies that have undertaken to voluntarily comply with Level 2 and *Novo Mercado* levels of corporate governance and disclosure. The Panel will provide a forum for dispute resolution involving, among others, the B3, the applicable listed company and the shareholders, directors and management of the applicable listed company.

### **Regulation of Brazilian Securities Markets**

The Brazilian securities markets are principally governed by law No. 6,385, of December 7, 1976, and Brazilian corporate law, each as amended and supplemented, and by regulations issued by the CVM, which has authority over stock exchanges and the securities markets in general; the National Monetary Council; and the Central Bank, which has, among other powers, licensing authority over brokerage firms and regulates foreign investment and foreign exchange transactions.

These laws and regulations, among others, provide for licensing and oversight of brokerage firms, governance of the Brazilian stock exchanges, disclosure requirements applicable to issuers of traded securities, restrictions on price manipulation and protection of minority shareholders. They also provide for restrictions on insider trading. Accordingly, any trades or transfers of our equity securities by our officers and directors, our controlling shareholders or any of the officers and directors of our controlling shareholders must comply with the regulations issued by the CVM.

Under Brazilian corporate law, a corporation is either publicly held (*companhia aberta*), as we are, or closely held (*companhia fechada*). All publicly held companies are registered with the CVM and are subject to reporting requirements. We have the option to ask that trading in securities on the B3 be suspended in anticipation of a material announcement. Trading may also be suspended on the initiative of the B3 or the CVM, based on or due to, among other reasons, a belief that a company has provided inadequate information regarding a material event or has provided inadequate responses to inquiries by the CVM or the B3.

The Brazilian over-the-counter market consists of direct trades between individuals in which a financial institution registered with the CVM serves as intermediary. No special application, other than registration with the CVM, is necessary for securities of a public company to be traded in this market. The CVM requires that it be given notice of all trades carried out in the Brazilian over-the-counter market by the respective intermediaries.

Trading on the B3 by non-residents of Brazil is subject to limitations under Brazilian foreign investment and tax legislation. The Brazilian custodian for our common shares on behalf of the depository for the ADSs, has obtained registration from the Central Bank to remit U.S. dollars abroad for payments of dividends, any other cash distributions, or upon the disposition of the shares and sales proceeds thereto. In the event that a holder of ADSs exchanges common shares for ADSs, the holder will be entitled to continue to rely on the custodian's registration for five business days after the exchange. Thereafter, the holder may not be able to obtain and remit U.S. dollars abroad upon the disposition of our common shares or upon distributions relating to our common shares, unless the holder obtains a new registration. See "Item 10. Additional Information—B. Memorandum and Articles of Association."

Brazilian regulations also require that any person or group of persons representing the same interest that has directly or indirectly acquired an interest corresponding to 5% of a type or class of shares of a publicly traded company must provide such publicly traded company with information on such acquisition and its purpose, and such company must transmit this information to the CVM. If this acquisition causes a change in the corporate control or in the administrative structure of the company, as well as when such acquisition triggers the obligation of making a public offering in accordance with CVM Instruction 358/03, then the acquiring entity shall disclose this information to the applicable stock exchanges and the appropriate Brazilian newspapers. Regulations also require disclosure of any subsequent increase or decrease of five percent or more in ownership of common shares, including warrants and debentures convertible into common shares in the same terms above.

### **Trading on the New York Stock Exchange**

We are a “controlled company” and a “foreign private issuer” within the meaning of the NYSE corporate governance standards. Under the NYSE rules, a controlled company is exempt from certain NYSE corporate governance requirements. In addition, a foreign private issuer may elect to comply with the practice of its home country and not to comply with certain NYSE corporate governance requirements, including the requirements that (1) a majority of the board of directors consist of independent directors, (2) a nominating and corporate governance committee be established that is composed entirely of independent directors and has a written charter addressing the committee’s purpose and responsibilities, (3) a compensation committee be established that is composed entirely of independent directors and has a written charter addressing the committee’s purpose and responsibilities and (4) an annual performance evaluation of the nominating and corporate governance and compensation committees be undertaken. Although we have similar practices, they do not entirely conform to the NYSE requirements, therefore we currently use these exemptions and intend to continue using them.

### **Code of Business Conduct and Ethics**

Although adoption of a code of ethics is not required by Brazilian Corporate Law, we implemented a code of ethics regulating the conduct of our managers in connection with the registration and control of financial and accounting information and their access to privileged and nonpublic information and data to comply with the requirements of Sarbanes-Oxley and NYSE rules. See “Item 16B. Code of Ethics.”

#### ***D. Selling Shareholders***

Not applicable.

#### ***E. Dilution***

Not applicable.

#### ***F. Expenses of the issue***

Not applicable.

### **Item 10. Additional Information**

#### ***A. Share Capital***

Not applicable.

**B. *Memorandum and Articles of Association***

The following summarizes certain material provisions of TIM's By-laws and the Brazilian corporate law, the main bodies of regulation governing us. Copies of TIM's By-laws have been filed as exhibits to this annual report on Form 20-F. Except as described in this section, TIM's By-laws do not contain provisions addressing the duties, authority or liabilities of the directors and senior management, which are instead established by Brazilian corporate law.

## Registration

TIM's By-laws have been registered with the Public Registry of the state of Rio de Janeiro under company number (NIRE) 33.3.0027696-3.

## Corporate Purpose

Article 2 of our By-laws provides that our corporate purpose is to: (1) hold interest in the capital of companies that explore any type of telecommunications services, under the terms and conditions provided for in the relevant permits, authorizations or concessions, companies that develop activities that are necessary or useful to the provision of such services, or companies that provide Internet connection services, value-added services and Internet application services; (2) promote, through its controlled or affiliated companies, the expansion and implementation of any type of telecommunications services, under the terms and conditions provided for in the relevant permits, authorizations or concessions; (3) promote, perform or give guidance in relation to the borrowing of funds from internal and external sources to be invested by the Company or by its controlled companies; (4) promote and incentivize study and research activities for the development of any type of telecommunications services, as well as of Internet connection services, other value-added services and Internet application services; (5) provide, directly or through controlled or affiliated companies, services related to the telecommunications industry; (6) promote, incentivize and coordinate, through controlled or affiliated companies, the education and training of the staff required by the telecommunications industry in general; (7) perform or promote the importation of goods and services for the controlled or affiliated companies; (8) engage in any other activities related or akin to its purpose; and (9) hold interest in the corporate capital of other companies.

## Company Management

According to our By-laws, our Board of Directors is comprised of at least five and at most nineteen permanent members. The following is a description of some of the provisions of our By-laws concerning the Board of Directors:

- the Board of Directors has the power to approve loans and financing as well as other transactions giving rise to indebtedness, for an amount exceeding R\$300 million, as set forth in Article 22, Item XIII;
- the Board of Directors has the power to allocate the total budget for management remuneration approved by the shareholders' meeting among the directors and the statutory officers, as necessary; and
- the Board of Directors has the power to authorize the Company, as well as its controlled companies and affiliates, to enter into, amend or terminate shareholders' agreements.

There are no provisions in the By-laws with respect to:

- a director's power to vote on a proposal in which such director is materially interested;
- a director's power to vote compensation to him or herself in the absence of an independent quorum;
- borrowing powers exercisable by the directors;
- age limits for retirement of directors;
- required shareholding for director qualification; or

- disclosure of share ownership.

The statutory officers are the Company's representative and executive body, and each one of them shall act within his/her respective scope of authority. Following is a description of some of the provisions of our By-laws concerning the Board of Statutory Officers:

- the power to authorize the participation of the Company or its companies controlled in any joint venture, partnership, consortium or any similar structure;

- the power to ratify, within the limits set forth in the By-laws, the purchase of materials and equipment and the execution of property, construction work and service agreements; and
- the power to approve the contracting by the Company or by its controlled companies of loans, financing, or any other transactions implying indebtedness to the Company or its controlled companies, whose individual value is greater than R\$30.0 million, provided that certain provisions of the By-laws are observed.

## **Rights Relating to our Shares**

### ***Dividend Rights***

Under our By-laws, we are required to distribute an aggregate amount equal to at least 25% of our adjusted net income to our shareholders, either as dividends or as tax-deductible interest on shareholders' equity. We may also make additional distributions to the extent of available distributable profits and reserves. Our subsidiary TIM Celular S.A. is also subject to mandatory distribution requirements and, to the extent of distributable profits and reserves, is accordingly required to pay dividends to us. All of the aforementioned distributions may be made as dividends or as tax-deductible interest on shareholders' equity.

Brazilian corporations may make payments to shareholders characterized as interest on shareholders' equity (*juros sobre capital próprio*) as an alternative form of making dividend distributions to the shareholders. The rate of interest may not be higher than the Federal Government's long-term interest rate as determined by BNDES from time to time. Dividends are not subject to withholding income tax when paid. On the other hand, interest on shareholders' equity paid to shareholders is deductible from the corporation's net income for tax purposes, but the distributions are subject to withholding tax.

For the purposes of Brazilian corporate law, and in accordance with our By-laws, adjusted net income is an amount equal to net profit adjusted to reflect allocations to and from:

- the legal reserve; and
- contingency reserves.

We are required to maintain a legal reserve, to which we must allocate 5% of net income for each fiscal year until the amount for such reserve equals 20% of our capital. However, we are not required to make any allocations to our legal reserve in respect of any fiscal year in which our legal reserve, together with our other capital reserves, exceeds 30% of our capital. Losses, if any, may be charged against the legal reserve.

Brazilian corporate law also provides for two discretionary allocations of net income that are subject to approval by the shareholders at the annual meeting. First, a percentage of net income may be allocated to a contingency reserve for anticipated losses that are deemed probable in future years. Any amount so allocated in a prior year must be either reversed in the fiscal year in which the loss was anticipated if such loss does not in fact occur, or written off in the event that the anticipated loss occurs. Second, if the mandatory distributable amount exceeds the sum of realized net income in a given year, such excess may be allocated to unrealized revenue reserve. Under Brazilian corporate law, realized net income is defined as the amount of net income that exceeds the net positive result of equity adjustments and profits or revenues from operations with financial results after the end of the next succeeding fiscal year.

Under Brazilian corporate law, any company may, as a term in its by-laws, create a discretionary reserve that authorizes the allocation of a percentage of a company's net income to the discretionary reserve and must also indicate the purpose, criteria for allocation and a maximum amount of the reserve. The Company's By-laws authorize the

allocation of the net income balance not allocated to the payment of the mandatory minimum dividend to a supplementary reserve for the expansion of corporate business, not to exceed 80% of the capital.

We may also allocate a portion of our net income for discretionary appropriations for plant expansion and other capital investment projects, the amount of which would be based on a capital budget previously presented by our management and approved by shareholders. Under Brazilian corporate law, capital budgets covering more than one year must be reviewed at each annual shareholders' meeting. After completion of the relevant capital projects, we may retain the appropriation until the shareholders vote to transfer all or a portion of the reserve to capital realized.



The amounts available for distribution may be further increased by a decrease in the contingency reserve for anticipated losses anticipated in prior years but not realized. The amounts available for distribution are determined on the basis of financial statements prepared in accordance with IFRS.

The legal reserve is subject to approval by the shareholders voting at the annual meeting and may be transferred to capital but is not available for the payment of dividends in subsequent years. Our calculation of net income and allocations to reserves for any fiscal year are determined on the basis of financial statements prepared in accordance with CVM rules and IFRS.

Under Brazilian corporate law, a company is permitted to suspend the mandatory dividend in respect of common shares not entitled to a fixed or minimum dividend if:

- its management (Board of Directors and Board of Statutory Officers) and Fiscal Council report to the shareholders' meeting that the distribution would be incompatible with the financial circumstances of that company; and
- the shareholders ratify this conclusion at the shareholders' meeting.

In this case,

- the management must forward to CVM within five days of the shareholders' meeting an explanation justifying the information transmitted at the meeting; and
- the profits which were not distributed are to be recorded as a special reserve and, if not absorbed by losses in subsequent fiscal years, are to be paid as dividends as soon as the financial situation permits.

For the purposes of Brazilian corporate law, 25% of the net income after income tax and social contribution for such fiscal year, net of any accumulated losses from prior fiscal years and any amounts allocated to warrants and employees' and management's participation in a company's profits, shall be distributed as dividends.

### ***Payment of Dividends***

We are required by law and by our By-laws to hold an annual shareholders' meeting by April 30 of each year, at which, among other things, an annual dividend may be declared by decision of our shareholders on the recommendation of our statutory officers, as approved by our Board of Directors.

The payment of annual dividends is based on the financial statements prepared for the fiscal year ending December 31. Under Brazilian corporate law, dividends are required to be paid within 60 days following the date the dividend is declared to shareholders of record on such declaration date, unless a shareholders' resolution sets forth another date of payment, which in any event shall occur prior to the end of the fiscal year in which such dividend was declared.

A shareholder has a three-year period from the dividend payment date to claim dividends in respect of its shares, after which we have no liability for such payment. Because our shares are issued in book-entry form, dividends with respect to any share are credited to the account holding such share. We are not required to adjust the amount of paid-in capital for inflation. Annual dividends may be paid to shareholders on a pro rata basis according to the date when the subscription price is paid to us.

### ***Voting Rights***

Each common share entitles the holder to one vote at meetings of shareholders.

**Meeting of Shareholders**

According to Brazilian law, shareholders must be previously notified through a notice published three times in Brazilian official gazettes in order for an annual or extraordinary shareholders' meeting to be held. The notification must occur at least 15 days prior to the meeting scheduled date. If the meeting so noticed is not held for any reason on first notice, a second notification must be published at least eight days before the second meeting date.

On the first notice, meetings may be held only if shareholders holding at least one-fourth of voting shares are represented. Extraordinary meetings for the amendment of the By-laws may be held on the first notice only if shareholders holding at least two thirds of the voting capital are represented. On a second call, the meetings are held regardless of quorum.

Pursuant to our By-laws and Brazilian corporate law, shareholders at our annual shareholders' meeting, which is required to be held within the first four months following the end of the fiscal year, will convene to:

- take the management accounts; examine, discuss and vote on the financial statements;
- decide on the uses to which the net income of the fiscal year should be put and on the distribution of dividends; and
- elect the members of the Fiscal Council and, when applicable, the members of the Board of Directors.

An extraordinary shareholders' meeting shall be convened whenever the Company interests so require. Pursuant to our By-laws and Brazilian corporate law, the following actions, among others, are exclusive powers of the shareholders' meeting:

- to amend the By-laws;
- to decide on the appraisal of assets given by shareholders to pay up capital stock;
- to decide on the Company's transformation, merger, take-over and split-up; its dissolution and liquidation; to appoint and remove liquidators and appreciate their accounts;
- to suspend the rights of shareholders not in compliance with their duties imposed by law, the By-laws or the *Novo Mercado* Listing Rules;
- to elect and remove, at any time, the members of the Board of Directors and the Fiscal Council;
- to determine the global or individual remuneration of the Board of Directors, Board of Statutory Officers and the Fiscal Council;
- to annually take the accounts of the management and decide on the submitted financial statements;
- to decide where the Company shall file a civil liability law suit against the management for losses in the Company's assets as provided by law;
- to resolve in compliance with all provisions of any law, the By-laws or the *Novo Mercado* rules about capital stock increase by means of subscription of new shares, and on the issuance of any other bonds or securities, whether in Brazil or abroad and whenever the limit of the authorized capital has been attained;
- to decide on the withdrawal from the register of publicly-held companies before the CVM;
- to decide on the delisting of the Company from the *Novo Mercado* listing segment;
- to choose a company to prepare an opinion concerning the appraisal of the Company's shares in the event of cancellation or delisting; and

- to previously approve the execution of loan agreements, management agreements and technical support services agreements, between the Company or its controlled companies, on the one side, and the controlling shareholder or its controlled companies, affiliated or under the same control or the controlling companies of the latter, or parties related to the Company, on the other side, after prior assessment of the Statutory Audit Committee to the effect that the terms and conditions of the agreement in question are in compliance with standards normally adopted in the market for transactions of the same nature between independent parties.

### ***Preemptive Rights***

Except in the case of a public offering of ordinary shares or convertible debentures, public subscription or a public tender offer (whereby such actions must be authorized by the Board of Directors in accordance with article 22, section II of the By-laws), each of our shareholders has a general preemptive right to subscribe shares in any capital increase, in proportion to its shareholding. A minimum period of 30 days following the publication of notice of the capital increase is allowed for the exercise of the right, and the right is transferable.

Preemptive rights to purchase shares may not be offered to U.S. holders of the ADSs unless a registration statement under the Securities Act is effective with respect to the shares underlying those rights or an exemption from the registration requirements of the Securities Act is available. Consequently, if you are a holder of our ADSs who is a U.S. person or is located in the United States, you may be restricted in your ability to participate in the exercise of preemptive rights.

### ***Right of Redemption***

Subject to certain exceptions, the common shares are redeemable by shareholders exercising withdrawal rights in the event that shareholders representing over 50% of the voting shares adopt a resolution at a duly convened shareholders meeting to:

- reduce the mandatory distribution of dividends;
- change our corporate purpose;
- participate in a group of companies;
- transfer all of our shares to another company in order to make us a wholly owned subsidiary of that company;
- split up, subject to the conditions set forth by Brazilian corporate law;
- change corporate form;
- approve the acquisition of another company, the price of which exceeds certain limits set forth in Brazilian corporate law; or
- merge or consolidate ourselves with another company.

The redemption right expires 30 days after publication of the minutes of the relevant shareholders' meeting. The shareholders would be entitled to reconsider any action giving rise to redemption rights within 10 days following the expiration of those rights if they determine that the redemption of shares of dissenting shareholders would jeopardize our financial stability.

Brazilian corporate law excludes dissenters' rights in such cases for holders of shares that have a public float rate higher than 50% and that are "liquid." Shares are defined as being "liquid" for these purposes if they are part of the B3 Index or another stock exchange index (as defined by CVM). For as long as our shares are part of any qualifying market index, the right of redemption shall not be extended to our shareholders with respect to decisions regarding our merger or consolidation with another company, or the participation in a group of companies as defined by Brazilian corporate law. Currently, our common shares do not have a public float rate higher than 50%; accordingly, dissenter's withdrawal rights are applicable.

Unless otherwise provided in the By-laws, which is not the case with us, a shareholder exercising rights to redeem shares is entitled to receive the book value of such shares, determined on the basis of the last annual balance sheet approved by the shareholders. If the shareholders' meeting giving rise to redemption rights occurs more than 60 days after the date of the last annual balance sheet, a shareholder may demand that its shares be valued on the basis of a new balance sheet that is as of a date within 60 days of such shareholders' meeting.

### ***Form and Transfer***

Our shares are maintained in book-entry form with a transfer agent, Banco Bradesco S.A., and the transfer of our shares is made in accordance with the applicable provision of the Brazilian corporate law, which provides that a transfer of shares is effected by an entry made by the transfer agent on its books, debiting the share account of the seller and crediting the share account of the purchaser, against presentation of a written order of the seller, or judicial authorization or order, in an appropriate document which remains in the possession of the transfer agent. The common shares underlying our ADS are registered on the transfer agent's records in the name of the Brazilian depositary.

Transfers of shares by a foreign investor are made in the same way and executed by such investor's local agent on the investor's behalf except that, if the original investment was registered with the Central Bank under the Brazilian foreign investment in capital markets regulations, the foreign investor should also seek amendment, if necessary, through its local agent, of the certificate of registration to reflect the new ownership.

The B3 reports transactions carried out in its market to its *Central Depositária*, which is the exchange's central clearing system. A holder of our shares may choose, at its discretion, to participate in this system. All shares elected to be put into the system will be deposited in custody with the relevant stock exchange, through a Brazilian institution duly authorized to operate by the Central Bank and CVM and having a clearing account with the relevant stock exchange. The fact that such shares are subject to custody with the relevant stock exchange will be reflected in our register of shareholders. Each participating shareholder will, in turn, be registered in our register of beneficial shareholders, as the case may be, maintained by the relevant stock exchange and will be treated in the same way as registered shareholders.

### ***C. Material Contracts***

See "Item 5. Operating and Financial Review and Prospects—B. Liquidity and Capital Resources—Sources of Funds—Financial Contracts" the summary of certain financing agreements to which we have been a party, other than contracts entered into in the ordinary course of business.

### ***D. Exchange Controls***

There are no restrictions on ownership of our common shares by individuals or legal entities domiciled outside Brazil. However, the right to convert dividend payments and proceeds from the sale of shares into foreign currency and to remit such amounts outside Brazil is subject to restrictions under foreign investment legislation which generally requires, among other things, that the relevant investments have been registered with the Central Bank.

Foreign investors may register their investment under Law No. 4,131 of September 3, 1962, or Law No. 4,131, or Resolution CMN 4,373 (that replaced Resolution CMN 2,689). Registration under Law No. 4,131 or under Resolution CMN 4,373 generally enables foreign investors to convert into foreign currency dividends, other distributions and sales proceeds received in connection with registered investments and to remit such amounts abroad. Resolution CMN 4,373 affords favorable tax treatment to foreign investors who are not resident in a Low or Nil Tax Jurisdiction, which is defined under Brazilian tax laws as a country that does not impose taxes or where the maximum income tax rate is lower than 20% or that restricts the disclosure of shareholder composition or ownership of investments.

Under Resolution CMN 2,689, foreign investors may invest in almost all financial assets and engage in almost all transactions available in the Brazilian financial and capital markets, provided that certain requirements are fulfilled. In accordance with Resolution CMN 2,689, foreign investors are individuals, corporations, mutual funds and collective investments domiciled or headquartered abroad.

Pursuant to Resolution CMN 2,689, foreign investors must:

- appoint at least one representative in Brazil with powers to perform actions relating to the foreign investment;
- complete the appropriate foreign investment registration form;
- obtain registration as a foreign investor with the CVM; and

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- register the foreign investment with the Central Bank.

The securities and other financial assets held by the foreign investor pursuant to Resolution CMN 2,689 must be:

- registered or maintained in deposit accounts or under the custody of an entity duly licensed by the Central Bank or by the CVM; or
- registered in registration, clearing and custody systems authorized by the Central Bank or by the CVM.

In addition, securities trading by foreign investors pursuant to Resolution CMN 2,689 is restricted to transactions carried out on the stock exchanges or organized over-the-counter markets licensed by the CVM.

On January 26, 2000, the Central Bank enacted Circular No. 2,963, providing that beginning on March 31, 2000, all investments by a foreign investor under Resolution CMN 2,689 are subject to the electronic registration with the Central Bank. Foreign investments registered under the Annex IV regulations were required to conform to the new registration rules by June 30, 2000.

Resolution No. 1,927 of the CMN provides for the issuance of depositary receipts in foreign markets in respect of shares of Brazilian issuers. Our ADS program was approved under the Annex V regulations by the Central Bank and the Brazilian securities commission prior to the issuance of the ADSs. Accordingly, the proceeds from the sale of ADSs by ADR holders outside Brazil are free of Brazilian foreign investment controls and holders of the ADSs will be entitled to favorable tax treatment. According to Resolution CMN 2,689, foreign investments registered under Annex V Regulations may be converted into the new investment system and vice-versa, provided the conditions set forth by the Central Bank and the CVM are complied with.

Under current Brazilian legislation, the Federal Government may impose temporary restrictions on remittances of foreign capital abroad in the event of a serious imbalance or an anticipated serious imbalance of Brazil's balance of payments. For approximately six months in 1989 and early 1990, the Federal Government froze all dividend and capital repatriations that were owed to foreign equity investors, in order to conserve Brazil's foreign currency reserves. These amounts were subsequently released in accordance with Federal Government directives. The imbalance in Brazil's balance of payments increased during 1999, and there can be no assurance that such increases will not incur in the future or that the Federal Government will not impose similar restrictions on foreign repatriations in the future for similar or other reasons.

#### ***E. Taxation***

The following summary contains a description of the principal Brazilian and U.S. federal income tax consequences of the ownership and disposition of the common shares or ADSs, but it does not purport to be a comprehensive description of all the tax considerations that may be relevant to a decision to hold common shares or ADSs. The summary is based upon the tax laws of Brazil and regulations thereunder and on the federal income tax laws of the United States and regulations and other authorities thereunder as of the date hereof, all of which are subject to change. Holders of common shares or ADSs should consult their tax advisers as to the tax consequences of the ownership and disposition of common shares or ADSs in their particular circumstances.

Although there is at present no income tax treaty between Brazil and the United States, the tax authorities of the two countries have had discussions that may culminate in such a treaty in the future. No assurance can be given, however, as to whether or when a treaty will enter into force or how it will affect the U.S. holders of common shares or ADSs.

#### **Brazilian Tax Considerations**

The following discussion summarizes the principal Brazilian tax consequences of the ownership and disposition of common shares or ADSs by a non-Brazilian holder. This discussion does not address all the Brazilian tax considerations that may be applicable to any particular non-Brazilian holder, and each non-Brazilian holder should consult its tax adviser about the Brazilian tax consequences of investing in common shares or ADSs.

### *Taxation of Dividends*

Dividends paid by us in cash or in kind from profits of periods beginning on or after January 1, 1996 (1) to the depositary in respect of common shares underlying ADSs or (2) to a non-Brazilian holder in respect of common shares will generally not be subject to Brazilian income tax withholding.

### *Taxation of Gains*

According to Article 26 of Law No. 10,833 of December 29, 2003, which came into force on February 1, 2004, capital gains realized on the disposition of assets located in Brazil by non-Brazilian residents, whether or not to other non-residents and whether made outside or within Brazil, are subject to taxation in Brazil. Since January 1, 2017, the rate of the income tax on capital gains accrued by non-Brazilian individual residents may vary between 15% and 22.5% depending on the capital gain amount. Ultimately, a 25% rate may apply if the capital gain is realized by investors located in a Low or Nil Tax Jurisdiction (see below under “—Discussion on Low or Nil Tax Jurisdictions”). Although we believe that the ADSs will not fall within the definition of assets located in Brazil for the purposes of Law No. 10,833, considering the general and unclear scope of Law 10,833 and the absence of any judicial guidance in respect thereof, we are unable to predict whether such interpretation will ultimately prevail in the Brazilian courts.

Gains realized by non-Brazilian holders on dispositions of common shares in Brazil or in transactions with Brazilian residents may be exempt from Brazilian income tax or taxed at a rate that may vary between 15% and 25%, depending on the circumstances. This is because the current legislation prescribes specific taxation rules for gains arising from investments in the Brazilian financial and capital markets as opposed to other types of gains.

In this sense, gains realized by non-Brazilian holders through transactions on Brazilian stock exchanges, if carried out in accordance with Resolution CMN 4,373 (that replaced Resolution CMN 2,689), as described below, are exempt from Brazilian income tax or subject to income tax at a rate of 15% if a holder in a Low or Nil Tax Jurisdiction realizes the gain. On the other hand, gains realized through transactions with Brazilian residents or not executed on the Brazilian stock exchanges are subject to tax at a rate that may vary between 15% and 22.5% depending on the capital gain amount, or of 25% if the transactions are made by investors resident in a Low or Nil Tax Jurisdiction. Non-Brazilian holders should consult their tax advisors on the applicable income tax rate.

Non-Brazilian holders of common shares registered under Resolution CMN 4,373 (which includes ADSs) will only be subject to the tax exemption mentioned herein if the investor has:

- appointed a representative in Brazil with power to take action relating to the investment in common shares;
- registered as a foreign investor with the CVM; and
- registered its investment in common shares with the Central Bank.

In addition, Resolution CMN 4,373 also establishes that securities held by foreign investors must be maintained under the custody of, or in deposit accounts with, financial institutions duly authorized by the Central Bank and the CVM.

Securities trading under Resolution CMN 4,373 is restricted to transactions on Brazilian stock exchanges or qualified over-the-counter markets. As stated herein, the preferential treatment afforded under Resolution CMN 4,373 and afforded to investors in ADSs is not available to investors resident or domiciled in Low or Nil Tax Jurisdictions.

There can be no assurance that the current preferential treatment for non-Brazilian holders of common shares under Resolution CMN 4,373 will be maintained.

Gain on the disposition of common shares, subject to the tax treatment described above, is measured by the difference between the amounts in Brazilian currency realized on the sale or exchange and the acquisition cost of the shares sold, measured in Brazilian currency, without any correction for inflation. The acquisition cost of shares registered as an investment with the Central Bank is calculated on the basis of the foreign currency amount registered with the Central Bank.

The deposit of common shares in exchange for the ADSs may be subject to Brazilian income tax if the amount previously registered with the Central Bank as a foreign investment in our common shares is lower than

- the average price per common share on the B3 on the day of the deposit; or
- if no common shares were sold on that day, the average price per common share on the B3 during the fifteen preceding trading sessions.

The difference between the amount previously registered and the average price of the common shares, calculated as set forth above, may be considered by the tax authorities as a capital gain subject to income tax. Unless the common shares were held in accordance with Resolution CMN 4,373, in which case the exchange would be tax-free, the capital gain will be subject to income tax at the following rates: (1) 15%, for gains realized through transactions that were conducted on Brazilian stock exchanges; or (2) from 15% to 22.5% for gains realized through transactions in Brazil that were not conducted on the Brazilian stock exchanges, or 25% if realized by investors located at Low or Nil Tax Jurisdiction.

The cancellation of ADSs in exchange for common shares is not subject to Brazilian income tax if the non-Brazilian holder qualifies under Resolution CMN 4,373, but is subject to the IOF/Exchange tax as described below.

#### ***Discussion on Low or Nil Tax Jurisdictions***

For purposes of Brazilian law, Low or Nil Tax Jurisdictions are countries and jurisdictions that do not tax income or that have a maximum income tax rate lower than 20%. Since 1998, the Brazilian Internal Revenue Service has issued acts expressly listing the countries/jurisdictions that are to be considered low tax jurisdictions for Brazilian tax purposes. Currently, the tax authorities have deemed approximately 65 countries to be low tax jurisdictions pursuant to Normative Instruction 1,037/2010, article 1. These countries include the Bahamas, the British Virgin Islands, the Cayman Islands, Hong Kong and certain corporate regimes of Singapore.

Under Brazilian tax legislation, holders domiciled in Low or Nil Tax Jurisdictions are: (1) subject to a higher rate of withholding tax on income and capital gains; (2) not entitled to exemptions for investments in the Brazilian capital markets; (3) subject to automatic application of transfer pricing rules in transactions with Brazilian legal entities that are resident in Brazil; and (4) subject to thin capitalization rules on debt with legal entities that are resident in Brazil.

On June 24, 2008, Law No. 11,727/08 (as amended by National Treasury Ordinance No. 488 of November 1, 2014) introduced the concept of "privileged tax regime," which is a tax regime that (1) does not tax income or taxes it at a maximum rate lower than 17%; (2) grants tax benefits to non-resident entities or individuals (a) without the requirement to carry out a substantial economic activity in the country or dependency or (b) contingent to the non-exercise of a substantial economic activity in the country or dependency; (3) does not tax or that taxes the income generated abroad at a maximum rate lower than 20%; or (4) does not provide access to information related to shareholding composition, ownership of assets and rights or economic transactions carried out. According to article 2 of Normative Instruction 1,037/2010, LLCs incorporated in the United States, among others, are listed as privileged tax regimes by the tax authorities.

In principle, the best interpretation of Law No. 11,727/08 is that the new concept of privileged tax regime should be solely applied for purposes of transfer pricing rules in export and import transactions. However, due to the recent enactment of this Law, we are unable to ascertain whether or not the privileged tax regime concept will be extended to the concept of Low or Nil Tax Jurisdiction. The provisions of Law No. 11,727/08 that refer to the privileged tax regime came into effect on January 1, 2009. Although we are of the opinion that the concept of privileged tax regime should not affect the tax treatment of a non-resident shareholder described above, we cannot assure you whether subsequent legislation or interpretations by the Brazilian tax authorities regarding the definition of privileged tax

regime will extend such concept to the tax treatment of a non-resident shareholder described above.

Prospective purchasers should therefore consult with their tax advisors regarding the consequences of the implementation of Law No. 11,727/08, Normative Instruction No. 1,037/2010 and of any related Brazilian tax laws or regulations concerning Low or Nil Tax Jurisdictions and privileged tax regimes.

### ***Distributions of Interest on Capital***

A Brazilian corporation may make payments to its shareholders characterized as interest on the corporation's capital as an alternative form of making dividend distributions. See "Item 8. Financial Information—A. Consolidated Statements and Other Financial Information—Dividend Policy." The rate of interest may not be higher than the TJLP, as determined by the Central Bank from time to time. The total amount distributed as interest on capital may not exceed, for tax purposes, the greater of:

- 50% of net income for the year in respect of which the payment is made, after the deduction of social contribution or net profits and before (1) making any deduction for corporate income taxes paid and (2) taking such distribution into account; or
- 50% of retained earnings for the year prior to the year in respect of which the payment is made.

Payments of interest on capital are decided by the shareholders on the basis of recommendations by our Board of Directors.

Distributions of interest on capital paid to Brazilian and non-Brazilian holders of common shares, including payments to the depositary in respect of common shares underlying ADSs, are deductible by us for Brazilian tax purposes up to the limit mentioned above. Such payments are subject to withholding income tax at the rate of 15%, or 25% in the case of a stockholder who is domiciled in a Low or Nil Tax Jurisdiction. These payments may be qualified, at their net value, as part of any mandatory dividend. As described herein the Company and its subsidiaries executed interest on equity payments in 2017. Please refer to "Item 4. Information of the Company—2017 Important Events—Interest on Equity" for detailed information. No assurance can be given that our Board of Directors will not recommend that future distributions of profits be made as interest on capital instead of as dividends.

### ***Other Brazilian Taxes***

There are no Brazilian inheritance, gift or succession taxes applicable to the ownership, transfer or disposition of the common shares or ADSs by a non-Brazilian holder except for gift and inheritance taxes levied by some states in Brazil on gifts made or inheritances bestowed by individuals or entities not resident or domiciled in Brazil or in the relevant state to individuals or entities that are resident or domiciled within such state in Brazil. There is no Brazilian stamp, issue, registration or similar taxes or duties payable by holders of common shares or ADSs.

### ***Tax on Foreign Exchange and Financial Transactions***

Tax on foreign exchange transactions, or the "IOF/Exchange Tax"

Brazilian law imposes the IOF/Exchange Tax on the conversion of reais into foreign currency and on the conversion of foreign currency into reais. Currently, the tax rate related to foreign investments in the Brazilian financial and capital markets is zero.

However, it is important to note that the Brazilian Government is permitted to increase such rate at any time up to 25%. However, any increase in rates may only apply to future foreign exchange transactions.

Tax on transactions involving bonds and securities, or the "IOF/Bonds Tax"

Brazilian law imposes the IOF/Bonds Tax on transactions involving bonds and securities, including those carried out on a Brazilian stock exchange. The rate of IOF/Bonds Tax applicable to transactions involving the deposit of common shares in exchange for ADSs is currently zero, but can be reviewed by the Brazilian government any time. The rate is

applied to the product of the number of common shares received and the closing price for those shares on the date prior to the transfer, or if such closing price is not available, the last available closing price for such shares.

**U.S. Federal Income Tax Considerations**

The following are the material U.S. federal income tax consequences to a U.S. Holder described below of owning and disposing of common shares or ADSs, but it does not purport to be a comprehensive description of all tax considerations that may be relevant to a particular person's decision to hold or dispose of such securities. The discussion applies only to a U.S. Holder that holds common shares or ADSs as capital assets for U.S. federal income tax purposes and it does not describe all tax consequences that may be relevant to U.S. Holders subject to special rules, such as:



- certain financial institutions;
- insurance companies;
- dealers or traders in securities or foreign currencies who use a mark-to-market method of tax accounting;
- persons holding common shares or ADSs as part of a hedge, “straddle,” wash sale, conversion transaction, integrated transaction or similar transaction or persons entering into a constructive sale with respect to the common shares or ADSs;
- persons whose functional currency for U.S. federal income tax purposes is not the U.S. dollar;
- partnerships or other entities classified as partnerships for U.S. federal income tax purposes;
- persons liable for the alternative minimum tax or the provisions of the Code (as defined below) known as the Medicare Contribution Tax;
- tax-exempt entities, including “individual retirement accounts” or “Roth IRAs”;
- persons who acquired our common shares or ADSs pursuant to the exercise of an employee stock option or otherwise as compensation;
- persons holding shares in connection with a trade or business conducted outside of the United States; or
- persons holding common shares or ADSs that own or are deemed to own ten percent or more of our stock (by vote or value).

If an entity that is classified as a partnership for U.S. federal income tax purposes holds common shares or ADSs, the U.S. federal income tax treatment of a partner will generally depend on the status of the partner and the activities of the partnership. Partnerships holding common shares or ADSs and partners in such partnerships should consult their tax advisers as to the particular U.S. federal income tax consequences of holding and disposing of the common shares or ADSs.

This discussion is based on the Internal Revenue Code of 1986, as amended, or the “Code,” administrative pronouncements, judicial decisions and final, temporary and proposed Treasury regulations, all as of the date hereof. These laws are subject to change, possibly with retroactive effect. It is also based in part on representations by the depository and assumes that each obligation under the deposit agreement and any related agreement will be performed in accordance with its terms.

A “U.S. Holder” is a holder who, for U.S. federal income tax purposes, is a beneficial owner of common shares or ADSs that is:

- a citizen or individual resident of the United States;
- a corporation, or other entity taxable as a corporation, created or organized in or under the laws of the United States, any state therein or the District of Columbia; or
- an estate or trust the income of which is subject to U.S. federal income taxation regardless of its source.

In general, a U.S. Holder that owns ADSs will be treated as the owner of the underlying common shares represented by those ADSs for U.S. federal income tax purposes. Accordingly, no gain or loss will be recognized if a U.S. Holder exchanges ADSs for the underlying common shares represented by those ADSs.

The U.S. Treasury has expressed concerns that parties to whom American depositary shares are released before delivery of shares to the depositary, or intermediaries in the chain of ownership between U.S. Holders and the issuer of the security underlying the American depositary shares, may be taking actions that are inconsistent with the claiming of foreign tax credits by U.S. Holders of American depositary shares. Such actions would also be inconsistent with the claiming of the preferential rates of tax applicable to dividends received by certain non-corporate U.S. Holders. Accordingly, the creditability of Brazilian taxes and the availability of the preferential tax rates for dividends received by certain non-corporate U.S. Holders, each described below, could be affected by actions taken by such parties or intermediaries.

U.S. Holders should consult their tax advisers concerning the U.S. federal, state, local and foreign tax consequences of owning and disposing of common shares or ADSs in their particular circumstances.

This discussion assumes that the Company is not, and will not become, a passive foreign investment company, as described below.

### ***Taxation of Distributions***

Distributions paid on common shares or ADSs, including distributions of interest on capital, will generally be treated as dividends to the extent paid out of the Company's current or accumulated earnings and profits (as determined under U.S. federal income tax principles). Because the Company does not maintain calculations of its earnings and profits under U.S. federal income tax principles, it is expected that distributions generally will be reported to U.S. Holders as dividends. Subject to applicable limitations and the discussion above regarding concerns expressed by the U.S. Treasury, dividends paid by qualified foreign corporations to certain non-corporate U.S. Holders are taxable at rates applicable to long-term capital gains. A foreign corporation is treated as a qualified foreign corporation with respect to dividends paid on stock that is readily tradable on a securities market in the United States, such as the New York Stock Exchange (where our ADSs are traded). U.S. Holders should consult their tax advisers to determine whether these preferential rates will apply to dividends they receive and whether they are subject to any special rules that limit their ability to be taxed at these preferential rates.

The amount of a dividend will include any amounts withheld by the Company in respect of Brazilian taxes on the distribution. The amount of the dividend will be treated as foreign-source dividend income to U.S. Holders and will not be eligible for the dividends-received deduction generally allowed to U.S. corporations under the Code. Dividends will be included in a U.S. Holder's income on the date of the U.S. Holder's or, in the case of ADSs, the depositary's receipt of the dividend. The amount of any dividend income paid in *reais* will be the U.S. dollar amount calculated by reference to the exchange rate in effect on the date of such receipt regardless of whether the payment is in fact converted into U.S. dollars. If the dividend is converted into U.S. dollars on the date of receipt, a U.S. Holder generally should not be required to recognize foreign currency gain or loss in respect of the dividend income. A U.S. Holder may have foreign currency gain or loss if the dividend is converted into U.S. dollars after the date of its receipt.

### ***Sale or Other Disposition of Common Shares or ADSs***

For U.S. federal income tax purposes, gain or loss realized on the sale or other disposition of common shares or ADSs will be capital gain or loss, and will be long-term capital gain or loss if the U.S. Holder held the common shares or ADSs for more than one year. The amount of the gain or loss will equal the difference between the U.S. Holder's tax basis in the common shares or ADSs disposed of and the amount realized on the disposition, in each case as determined in U.S. dollars. Such gain or loss will generally be U.S.-source gain or loss for foreign tax credit purposes. If a Brazilian tax is withheld on the sale or other disposition of common shares or ADSs, a U.S. Holder's amount realized will include the gross amount of the proceeds of such sale or other disposition before deduction of the

Brazilian tax.

See “—Brazilian Tax Considerations—Taxation of Gains” for a description of when a disposition may be subject to taxation by Brazil.

***Foreign Tax Credits in Respect of Brazilian Taxes***

Subject to applicable limitations that may vary depending upon a U.S. Holder’s circumstances and subject to the discussion above regarding concerns expressed by the U.S. Treasury, Brazilian income taxes withheld from dividends on common shares or ADSs generally will be creditable against a U.S. Holder’s U.S. federal income tax liability.

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A U.S. Holder will be entitled to use foreign tax credits to offset only the portion of its U.S. tax liability that is attributable to foreign-source income. This limitation on foreign taxes eligible for credit is calculated separately with regard to specific classes of income. Because a U.S. Holder's gains from the sale or exchange of common shares or ADSs will generally be treated as U.S.-source income, this limitation may preclude a U.S. Holder from claiming a credit for all or a portion of the Brazilian taxes imposed on any such gains. U.S. Holders should consult their tax advisers as to whether these Brazilian taxes may be creditable against the U.S. Holder's U.S. federal income tax liability on foreign-source income from other sources. Instead of claiming a credit, a U.S. Holder may elect to deduct such Brazilian taxes in computing its taxable income, subject to generally applicable limitations under U.S. law. An election to deduct foreign taxes instead of claiming foreign tax credits must apply to all taxes paid or accrued in the taxable year to foreign countries and possessions of the United States.

The Brazilian IOF/Bonds Tax and any IOF/Exchange Tax imposed on the deposit of common shares in exchange for ADSs and the cancellation of ADSs in exchange for common shares (as discussed above under “—Brazilian Tax Considerations—Tax on Foreign Exchange and Financial Transactions”) will not be treated as creditable foreign taxes for U.S. federal income tax purposes. U.S. Holders should consult their tax advisers regarding the tax treatment of these taxes for U.S. federal income tax purposes.

The rules governing foreign tax credits are complex and, therefore, U.S. Holders should consult their tax advisers regarding the availability of foreign tax credits in their particular circumstances.

#### ***Passive Foreign Investment Company Rules***

The Company believes that it was not a “passive foreign investment company,” or PFIC, for U.S. federal income tax purposes for its 2017 taxable year. However, since PFIC status depends upon the composition of a company's income and assets and the market value of its assets from time to time, there can be no assurance that the Company will not be a PFIC for any taxable year.

If the Company were a PFIC for any taxable year during which a U.S. Holder held common shares or ADSs, gain recognized by such U.S. Holder on a sale or other disposition (including certain pledges) of the common shares or ADSs would be allocated ratably over the U.S. Holder's holding period for the common shares or ADSs. The amounts allocated to the taxable year of the sale or other disposition and to any year before the Company became a PFIC would be taxed as ordinary income. The amount allocated to each other taxable year would be subject to tax at the highest rate in effect for individuals or corporations, as appropriate, for such taxable year, and an interest charge would be imposed on the resulting tax liability for such taxable year. Similar rules would apply to any distribution received by a U.S. Holder on its common shares or ADSs to the extent in excess of 125% of the average of the annual distributions on common shares or ADSs received by a U.S. Holder during the preceding three years or such U.S. Holder's holding period, whichever is shorter. Certain elections (such as a mark-to-market election) may be available that would result in alternative treatment under the PFIC rules. U.S. Holders should consult their tax advisers to determine whether the Company is a PFIC for any given taxable year and the tax consequences to them of holding shares in a PFIC.

If the Company is a PFIC for any taxable year during which a U.S. Holder owned common shares or ADSs, the U.S. Holder will generally be required to file IRS Form 8621 with its annual U.S. federal income tax returns, subject to certain exceptions.

#### ***Information Reporting and Backup Withholding***

Payments of dividends and sales proceeds that are made within the United States or through certain U.S.-related financial intermediaries generally are subject to information reporting and may be subject to backup withholding unless (1) the U.S. Holder is a corporation or other exempt recipient or (2) in the case of backup withholding, the U.S.

Holder provides a correct taxpayer identification number and certifies that it is not subject to backup withholding.

The amount of any backup withholding from a payment to a U.S. Holder will be allowed as a credit against the U.S. Holder's U.S. federal income tax liability and may entitle the U.S. Holder to a refund, provided that the required information is timely furnished to the IRS.

Certain U.S. Holders who are individuals (and certain specified entities) may be required to report information relating to their ownership of an interest in certain foreign financial assets, including stock of a non-U.S. person, subject to exceptions (including an exception for stock held through a U.S. financial institution). U.S. Holders should consult their tax advisers regarding their reporting obligations with respect to our common shares or ADSs.

U.S. HOLDERS OF OUR COMMON SHARES OR ADSs SHOULD CONSULT THEIR OWN TAX ADVISERS AS TO THE BRAZILIAN, U.S. FEDERAL, STATE, LOCAL AND OTHER TAX CONSEQUENCES OF THE OWNERSHIP AND DISPOSITION OF OUR COMMON SHARES OR ADSs BASED UPON THEIR PARTICULAR CIRCUMSTANCES.

***F. Dividends and Paying Agents***

Not applicable.

***G. Statement by Experts***

Not applicable.

***H. Documents on Display***

Statements contained in this annual report as to the contents of any contract or other document referred to are not necessarily complete, and each of these statements is qualified in all respects by reference to the full text of such contract or other document filed as an exhibit hereto. Anyone may read and copy this report, including the exhibits hereto, at the Securities and Exchange Commission's public reference room in Washington, D.C. Information on the operation of the public reference room is available over the Internet at <http://www.sec.gov>.

We are subject to the information and periodic reporting requirements of the Exchange Act and, in accordance therewith, will file periodic reports and other information with the SEC. These periodic reports and other information will be available for inspection and copying at the regional offices, public reference facilities of the SEC referred to above. As a foreign private issuer, we are exempt from certain provisions of the Exchange Act prescribing the furnishing and content of proxy statements and periodic reports and from Section 16 of the Exchange Act relating to short swing profits reporting and liability.

We will furnish to J.P. Morgan, as depositary, copies of all reports we are required to file with the SEC under the Exchange Act, including our annual reports in English, containing a brief description of our operations and our audited annual consolidated financial statements. In addition, we are required under the Deposit Agreement to furnish the depositary with copies of English translations to the extent required under the rules of the SEC of all notices of common shareholders' meetings and other reports and communications that are generally made available to holders of common shares. Under certain circumstances, the depositary will arrange for the mailing to all ADR holders, at our expense, of these notices, reports and communications.

We also file financial statements and other periodic reports with the CVM. Copies of our annual report on Form 20-F and documents referred to in this annual report and our bylaws will be available for inspection upon request at our offices at 850, João Cabral de Melo Neto, North Tower - 12th floor, 22775-057, Rio de Janeiro, RJ, Brasil.

***I. Subsidiary Information***

Not applicable.

**Item 11. Quantitative and Qualitative Disclosures About Market Risk**

We are exposed to market risk from changes in both foreign currency exchange and interest rates. We are exposed to foreign exchange rate risk mainly because certain costs of ours are denominated in currencies (primarily U.S. dollars) other than those in which we earn revenues (primarily *reais*). Similarly, we are subject to market risk deriving from changes in interest rates, which may affect the cost of our financing. Since 1999, we began entering into hedging agreements, derivative instruments, such as foreign exchange forward contracts, foreign currency options, interest rate swaps and forward rate agreements, to manage these market risks, covering payments of principal on our foreign exchange denominated indebtedness. We also have entered into arrangements to hedge market risk deriving from changes in interest rates for some of our debt obligations. We do not hold or issue derivative or other financial instruments for trading purposes.

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### **Interest Rate Risk**

On December 31, 2017, the amount of our outstanding debt which accrued interest at the CDI, TJLP and SELIC floating interest rates totaled R\$6,423 million. On the same date, we had cash and cash equivalents, in the amount of R\$2,961 million in instruments accruing interest at the CDI rate.

Over a one year period, before accounting for tax expenses, a hypothetical, instantaneous and unfavorable change of 100 basis points in interest rates applicable to our financial assets and liabilities on December 31, 2017 would have resulted in a variation of R\$64 million in our interest expenses from financial contracts and a variation of R\$30 million in our income from financial investments (assuming that this hypothetical 100 basis point movement in interest rates uniformly applied to each “homogenous category” of our financial assets and liabilities and that such movement in interest rates was sustained over the full one-year period).

### **Exchange Rate Risk**

As of December 31, 2017, we did not have any outstanding unhedged financial loans denominated in foreign currency and were thus not exposed to exchange rate risk based on our loans. We enter into hedging agreements to hedge our borrowings denominated in foreign currency and thus have limited our exchange rate exposure regarding such borrowings.

Our revenues are earned almost entirely in *real*, and we have no material foreign currency-denominated assets. We acquire our equipment and handsets from global suppliers, the prices of which are primarily denominated in U.S. dollars. Thus, we are exposed to foreign exchange risk arising from our need to make substantial dollar-denominated expenditures, particularly for imported components, equipment and handsets, that we have limited capacity to hedge. In order to hedge part of the exchange rate risk linked to capital expenditures and operating expenses, a bandwidth of +/- 10% is generally negotiated into our agreements in order to minimize effects of exchange rate fluctuations on the acquisition costs of equipment. In 2017, due to the new Brazilian macroeconomic scenario, the Company elected to terminate its prior investments in a U.S. dollar-denominated hard currency fund.

## **Item 12. Description of Securities Other than Equity Securities**

### **A. Debt Securities**

Not applicable.

### **B. Warrants and Rights**

Not applicable.

### **C. Other Securities**

Not applicable.

### **D. Description of American Depositary Receipts in Respect of Common Shares**

Our depositary is J.P. Morgan Chase Bank, N.A., with its corporate trust office at which the ADRs will be administered is located at 4 New York Plaza, Floor 6, New York, NY, 10004, United States.

Each ADS represents five common shares, deposited with the custodian and registered in the name of the depositary.

**Charges of Depositary**

The depositary may charge U.S.\$5.00 or less per 100 ADSs (or portion thereof) from each person to whom ADSs are issued, including issuances against deposits of shares, issuances in respect of share distributions, rights and other distributions, issuances pursuant to a stock dividend or stock split declared by the Company or issuances pursuant to a merger, exchange of securities or any other event affecting the ADSs or the deposited securities. It may also charge each person surrendering ADRs for withdrawal or whose ADSs are cancelled or reduced for any other reason.

Furthermore, the depository may also charge any additional fees incurred in connection with such transaction by any governmental authorities or other institutions such as the Brazilian Clearing and Depository Corporation (*Companhia Brasileira de Liquidação e Custódia*) or the B3, the stock exchange on which the shares are registered for trading.

Altogether, the following fees and charges can be incurred by ADR holders, any party depositing or withdrawing common shares or any party surrendering ADRs or to whom ADRs are issued (including, without limitation, issuance pursuant to a stock dividend or stock split declared by TIM Participações or an exchange of stock regarding the ADRs or deposited securities or a distribution of ADRs pursuant to the deposit agreement), whichever is applicable:

<b>Depository Actions:</b>	<b>Description of Fees Incurred by ADR Holders per Payment:</b>
Depositing or substituting the underlying shares	U.S.\$5.00 or less per 100 ADSs (or portion thereof)
Receiving or distributing dividends	U.S.\$0.05 or less per ADS (or portion thereof)
Selling or exercising rights	U.S.\$5.00 or less per 100 ADSs for all distributions of securities or the net cash proceeds from the sale thereof
Withdrawal of an underlying security	U.S.\$5.00 or less per 100 ADSs (or portion thereof)
Transferring, splitting, grouping receipts	U.S.\$1.50 per ADR or ADSs for transfers made, to the extent not prohibited by the rules of any stock exchange or interdealer quotation system upon which the ADSs are traded, including, as necessary, any transfer or registration fees in connection with the deposit or withdrawal of deposited securities
General depository services	An aggregate fee of U.S.\$0.05 or less per ADS per calendar year (or portion thereof) for services performed by the depository in administering the ADRs.
	As necessary, expenses incurred by the depository in connection with the conversion of <i>reais</i> into U.S. dollars
	As necessary, cable, telex and facsimile transmission and delivery charges incurred at the request of persons depositing or delivering common shares, ADRs or any deposited securities
	As necessary, any fees and expenses incurred by the depository in connection with the delivery of deposited securities or otherwise in connection with the depository's or its custodian's compliance with applicable laws, rules or regulations.

### **Ongoing Reimbursements by the Depository**

J.P. Morgan, as depository, has agreed to reimburse certain reasonable Company's expenses related to the establishment and maintenance of the ADR program. Such reimbursable expenses include legal fees, investor relations servicing, investor related presentations, broker reimbursements, ADR-related advertising and public relations in those jurisdictions in which the ADRs may be listed or otherwise quoted for trading, accountants' fees in relation to this Form 20-F filing with the SEC and other bona fide Program-related third party expenses.



During the year ended December 31, 2017, we received from our depositary U.S.\$2.8 million as reimbursement of expenses related to annual stock exchange listing fees, standard maintenance costs of ADRs, underwriting and legal fees and investor relations activities.

See also “Item 10. Additional Information—E. Taxation.”

## **PART II**

### **Item 13. Defaults, Dividend Arrearages and Delinquencies**

None.

### **Item 14. Material Modifications to the Rights of Security Holders and Use of Proceeds**

None.

### **Item 15. Controls and Procedures**

#### ***(a) Disclosure Controls and Procedures***

Under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, we have evaluated the effectiveness of the design and operation of our disclosure controls and procedures as of December 31, 2017. Based on that evaluation, our Chief Executive Officer and Chief Financial Officer have concluded that these controls and procedures are effective in ensuring that all material information required to be filed in this annual report has been made known to them in a timely fashion. Our disclosure controls and procedures are effective in ensuring that information required to be disclosed in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the Commission's rules and forms and are effective in ensuring that information to be disclosed in the reports that we file or submit under the Exchange Act is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officers, to allow timely decisions regarding required disclosure.

#### ***(b) Management's Annual Report on Internal Control over Financial Reporting***

Management is responsible for establishing and maintaining adequate internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) of the Exchange Act). Our internal control system was designed to provide reasonable assurance as to the integrity and reliability of the published financial statements. All internal control systems, no matter how well designed, have inherent limitations and can provide only reasonable assurance that the objectives of the control system are met.

Management evaluated the internal control over financial reporting under the supervision of our Chief Executive Officer, or CEO, and Chief Financial Officer, or CFO, as of December 31, 2017. Management evaluated the effectiveness of our internal control over financial reporting based on the criteria set out in the Committee of Sponsoring Organizations of the Treadway Commission framework set in 2013. Our management concluded that as of December 31, 2017, our internal control over financial reporting was effective and had no material weaknesses, based on those criteria.

Our independent registered public accounting firm, PricewaterhouseCoopers Auditores Independentes, has issued an audit report on the effectiveness of our internal controls over financial reporting as of December 31, 2017.

#### ***(c) Audit Report of the Registered Public Accounting Firm***

PricewaterhouseCoopers Auditores Independentes, the independent registered public accounting firm that has audited our consolidated financial statements, has issued an audit report on the effectiveness of our internal controls over financial reporting as of December 31, 2017. Their attestation report on internal controls over financial reporting is included herein.

**(d) *Changes in Internal Control over Financial Reporting***

The Company constantly aims to improve the quality of its internal controls over financial reporting. This may result in the modification of certain internal processes and operations, without necessarily affecting related controls. There have not been any changes in our internal control over financial reporting (as such term is defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) during the period covered by this annual report that have materially affected or are reasonably likely to materially affect, our internal control over financial reporting.

**Item 16. [Reserved]**

**Item 16A. Audit Committee Financial Expert**

Our Statutory Audit Committee, which functions as an audit committee, shall be comprised of at least three and at most five members and an equal number of alternates, who may or may not be shareholders, elected by the Board of Directors. In 2017, we had three members. Our Statutory Audit Committee has determined that one of its members, Mr. Herculano Aníbal Alves, an independent member of our Statutory Audit Committee under Brazilian rules, is an “audit committee financial expert,” as such term is defined by the SEC.

**Item 16B. Code of Ethics**

**Code of Ethics**

We have adopted a Code of Ethics that applies to our Chief Executive Officer, Chief Financial Officer, Principal Accounting Officer and persons performing similar functions, as well as to our other Directors, Statutory Officers, controlling shareholders, members of our boards and committees, all employees and suppliers in accordance with CVM rules satisfying the requirements of Brazilian Law. Our Code of Ethics is filed as an exhibit to this annual report and is available on our website at <http://www.tim.com.br/ir>. The Code of Ethics is also available free of charge upon request. Such request may be made by email or telephone at the address set forth in the second paragraph of “Item 4. Information on the Company—A. History and Development of the Company—Basic Information.” The Code of Ethics was updated on the Board of Directors’ meeting held on May 24, 2013.

Our Code of Ethics addresses most of the principles set forth by the Securities and Exchange Commission in Section 406 of Sarbanes-Oxley. However, pursuant to company policy and section 156 of Brazilian Corporate Law No. 6,404 an officer is prohibited from taking part in any corporate transaction in which he has an interest that conflicts with the interests of the company. This disqualification must be disclosed to the board. Moreover, an officer may only contract with the company under reasonable and fair conditions, identical to those that prevail in the market or under which the company would contract with third parties. Any contract entered into or performed in violation of this article is voidable and requires the offending officer to disgorge any benefits he received from such violation.

In November 2006, a communication channel was created to address “complaints” related to breaking and/or suspicion of breaking the Control Model of the Company. The Control Model is a document based on the Code of Ethics, General Principles of Internal Control and Principles of Behavior with the Public Administration. This channel is accessible by email or letter addressed to the Internal Audit department.

**Anti-Corruption Policy**

In order to ensure compliance with existing Brazilian and international corruption laws and minimize the risks associated with the same, the Company has adopted an Anti-Corruption Policy (*Política Anticorrupção*). Our Anti-Corruption Policy was approved by our Board of Directors on May 24, 2013, and focuses on internal mitigating controls to be followed to avoid vulnerability to corrupt practices. In conjunction with the adoption of this Anti-Corruption Policy, we also provide anti-corruption training courses to our managers, directors and employees.

**Anti-Corruption Organizational Model**

We have adopted an Anti-Corruption Organizational Model (*Modelo Organizacional para os fins da Lei Anticorrupção*), presented to and approved by our Statutory Audit Committee and our Risk and Control Committee in a joint meeting on July 30, 2014 and approved by our Board of Directors on August 5, 2014. The Anti-Corruption



Organizational Model, updated on October 6, 2016, is an integral part of the Company's legal and regulatory compliance program, with the purpose of generally promoting honest and ethical conduct, and deterring wrongdoings within the Company. The provisions of the Anti-Corruption Organizational Model also specifically align with Legislative Decree No. 231/01 of Italy, the Brazilian Anti-Corruption Law and international standards on anti-corruption, such as the Foreign Corrupt Practices Act and the UK Bribery Act 2010. We also provide training on the content of our Anti-Corruption Organizational Model by means of in-person courses and e-learning sessions.

**Item 16C. Principal Accountant Fees and Services****Audit and Non-Audit Fees**

The following table sets forth the fees billed to us by our independent auditors, PricewaterhouseCoopers Auditores Independentes, during the years ended December 31, 2017 and 2016:

	<b>Year ended December 31,</b>	
	<b>2017</b>	<b>2016</b>
	<b>(in thousands of reais)</b>	
Audit fees	6,408	4,963
Audit-related fees	168	169
Tax fees	–	–
All other fees	–	2,137
Total fees	6,576	7,438

Audit fees in the above table are the aggregate fees billed PricewaterhouseCoopers Auditores Independentes, in connection with the audit of our annual financial statements and limited reviews of our quarterly financial information for statutory purposes and the assessment required under Section 404 of the Sarbanes Oxley Act.

In 2017, our external auditors provided audit and audit-related services other than in connection with the audit of our financial statements. Such services included the review of the information Accounting Separation and Allocation Document (DSAC).

TIM and all other telecommunications and media operators in Brazil are required by Anatel to have certain quality indicators in the provision of multimedia and mobile services measured by an independent expert. In October 2011, Anatel published Regulations 574 and 575, which mandated the selection of a body responsible for measuring the quality of Brazilian broadband services offered to the population. As result, Anatel defined all the quality indicators and determined that PricewaterhouseCoopers EAQ Ltda., or PwC EAQ, would be engaged to provide this measurement service, with the total value of the services split between the telecommunications and media operators companies. The engagement was completed in 2016 and in that year TIM paid R\$2.1 million for such services provided by PwC EAQ under the aforementioned Anatel regulations. PwC has not been engaged in 2017.

**Audit Committee Pre-Approval Policies and Procedures**

The general authority to pre-approve the engagement of our independent auditors to render non-audit services is under the purview of our Statutory Audit Committee. Accordingly, the Statutory Audit Committee has established pre-approval procedures to control the provision of all audit and non-audit services by our independent auditors, or the Pre-Approval Policy. Under the Pre-Approval Policy, the engagement of our independent auditors to provide audit and non-audit services must be pre- approved by the Statutory Audit Committee, either in the form of a special approval or through the inclusion of the services in question in a list adopted by the Statutory Audit Committee of pre-approved services. The Pre-Approval Policy is detailed as to the particular services to be provided.

Additionally, the Pre-Approval Policy affirms that the Statutory Audit Committee's responsibilities under the Securities Exchange Act of 1934 are not delegated to management. All non-audit services provided by the Group's principal auditing firm were approved by the audit committee, and all such non-audit services to be provided in the future will also require approval from the audit committee.

**Item 16D. Exemptions from the Listing Standards for Audit Committees**

Not applicable. We have created a Statutory Audit Committee in accordance with Exchange Act Rule 10A-3 and CVM Instruction 509/2011.

For more details, see “Item 6. Directors, Senior Management and Employees—A. Directors and Senior Management—Statutory Audit Committee.”

**Item 16E. Purchases of Equity Securities by the Issuer and Affiliated Purchasers**

None.

**Item 16F. Change in Registrant's Certifying Accountant**

None.

**Item 16G. Corporate Governance**

**Principal Differences Between Brazilian and US. Corporate Governance Practices**

The significant differences between our corporate governance practices and those of the NYSE are as follows:

***Independence of Directors and Independence Tests***

Neither our Board of Directors nor our management tests the independence of directors before elections are made. However, both Brazilian corporate law and the CVM establish rules for certain qualification requirements and restrictions, investiture, compensation, and duties and responsibilities of the companies' executives and directors. We believe these rules provide adequate assurances that our directors are independent, and they permit us to have directors that would not otherwise pass the independence tests established by the NYSE.

***Executive Sessions***

According to Brazilian corporate law, up to one-third of the members of the Board of Directors can be elected for executive positions. The remaining non-management directors are not expressly empowered to serve as a check on management and there is no requirement that those directors meet regularly without management.

***Committees***

Even though we are not required under applicable Brazilian corporate law to have special advisory committees of the Board of Directors, we have three such committees: the Statutory Audit Committee, the Control and Risks Committee and the Compensation Committee. The first was implemented on December 12, 2013 and the last two were implemented on September 30, 2008. Pursuant to our By-laws, our shareholders elect our directors at a general shareholders' meeting. Our shareholders also establish compensation for our directors and statutory officers.

***Audit Committee and Additional Requirements***

The Statutory Audit Committee was created and its members appointed at the shareholders' meeting held on December 12, 2013, in accordance with Rule 10A-3 under Section 301 of Sarbanes-Oxley and CVM Instruction 509/2011. The Statutory Audit Committee's internal regulations were approved at the Board of Directors meeting held on December 23, 2013.

The Statutory Audit Committee is composed of at least three (3) and at the most five (5) members, all independent, and elected by the Board of Directors, who serve two-year terms of office, matching the terms of the members of the Board of Directors. Re-election is permitted up to, for a maximum period of 10 years. Our Board of Directors may dismiss members of the Statutory Audit Committee at any time and without cause.

***Shareholder Approval of Equity Compensation Plans***

NYSE rules require that shareholders be given the opportunity to vote on all equity compensation plans and material revisions thereto, with limited exceptions. Under the Brazilian corporate law, shareholders must approve all stock option plans. In addition, any issuance of new shares that exceeds our authorized share capital is subject to

shareholder approval.

***Corporate Governance Guidelines***

NYSE rules require that listed companies adopt and disclose corporate governance guidelines. Since we have migrated to the B3's *Novo Mercado*, we are subject to those rules on corporate governance, which include a disclosure policy, a policy on publicizing acts or relevant facts, which requires the public disclosure of all relevant information pursuant to guidelines set forth by the CVM, as well as an insider trading policy, a policy on securities transactions, which, among other things, establishes black-out periods and requires insiders to inform management of all transactions involving our securities.

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*Code of Business Conduct and Ethics*

NYSE rules require that listed companies adopt and disclose a code of business conduct and ethics for directors, officers and employees, and promptly disclose any waivers of the code for directors or statutory officers. Applicable Brazilian law does not have a similar requirement.

**Item 16H. Mine Safety Disclosure**

Not applicable.

### **PART III**

#### **Item 17. Financial Statements**

We have responded to Item 18.

#### **Item 18. Financial Statements**

See our audited consolidated financial statements beginning at page F-1.

#### **Item 19. Exhibit Index**

##### EXHIBIT INDEX

- 1.1\* By-laws of TIM Participações S.A. approved at the Annual Shareholder's Meeting held on April 12, 2016.
- 2.1 Amended & Restated Deposit Agreement, dated as of February 27, 2017, among TIM Participações S.A., J.P. Morgan Chase Bank, N.A., as Depositary, and holders of American Depositary Receipts issued thereunder, which is incorporated by reference to Exhibit 99.(A) to our Form F-6 POS filed with the Securities and Exchange Commission on February 27, 2017.
- 4.1 English Summary of Term of Authorization for Use of Radiofrequency Blocks Associated with Personal Mobile Service No. 113/2016/SOR-ANATEL, dated as of July 26, 2016, between Anatel (the National Telecommunications Agency) and TIM Celular S.A. , which is incorporated by reference to our annual report filed on Form 20-F with the Securities and Exchange Commission on April 11, 2017.
- 4.2 English Summary of Term of Authorization for Use of Radiofrequency Blocks Associated with Personal Mobile Service No. 114/2016/SOR-ANATEL, dated as of July 26, 2016, between Anatel (the National Telecommunications Agency) and TIM Celular S.A., which is incorporated by reference to our annual report filed on Form 20-F with the Securities and Exchange Commission on April 11, 2017.
- 4.3 Loan Agreement, dated as of December 23, 2015, between Finnish Export Credit Ltd. as lender, KfW IPEX-Bank GmbH, as facility agent and TIM Celular S.A., as borrower, which is incorporated by reference to our annual report filed on Form 20-F with the Securities and Exchange Commission on April 14, 2016.
- 4.4 Facility Agreement, dated as of October 27, 2015, between Cisco Systems Capital Corporation, as Lender and TIM Celular S.A., as borrower, which is incorporated by reference to our annual report filed on Form 20-F with the Securities and Exchange Commission on April 14, 2016.
- 4.5 English Summary of Credit Agreement – Contrato de Financiamento Mediante Abertura de Crédito N° 15.2.0825.1, dated as of December 29, 2015, between BNDES, the Brazilian Development Bank (Banco Nacional de Desenvolvimento Econômico e Social), as lender, TIM Celular S.A., as borrower, and TIM Participações S.A. as guarantor, which is incorporated by reference to our annual report filed on Form 20-F with the Securities and Exchange Commission on April 14, 2016.
- 4.6 English Summary of Term of Authorization for Use of Radiofrequency Blocks Associated with Personal Mobile Service No. 144/2014/SOR-ANATEL, dated as of December 5, 2014, between Anatel (the National Telecommunications Agency) and TIM Celular S.A., which is incorporated by reference to our annual report filed on Form 20-F with the Securities and Exchange Commission on April 15, 2015.
- 4.7

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- English Summary of Term of Authorization for Use of Radiofrequency Blocks Associated with Personal Mobile Service No. 145/2014/SOR-ANATEL, dated as of December 5, 2014, between Anatel (the National Telecommunications Agency) and TIM Celular S.A., which is incorporated by reference to our annual report filed on Form 20-F with the Securities and Exchange Commission on April 15, 2015.
- 4.8 English Summary of Term of Authorization for Use of Radiofrequency Blocks Associated with Personal Mobile Service No. 146/2014/SOR-ANATEL, dated as of December 5, 2014, between Anatel (the National Telecommunications Agency) and TIM Celular S.A., which is incorporated by reference to our annual report filed on Form 20-F with the Securities and Exchange Commission on April 15, 2015.
- 4.9 Loan Agreement, dated as of April 15, 2014, between KfW IPEX-Bank GmbH, as lender and TIM Celular S.A., as borrower, which is incorporated by reference to our annual report filed on Form 20-F with the Securities and Exchange Commission on April 15, 2015.
- 4.10 Facility Agreement Reference number TIMLAF2LT to Master Loan Agreement Reference No. TIMLALT, dated as of October 14, 2014, between Cisco Systems Capital Corporation, as lender and TIM Celular S.A., as borrower, which is incorporated by reference to our annual report filed on Form 20-F with the Securities and Exchange Commission on April 15, 2015.
- 4.11 Finance Contract (Master Loan Agreement), dated as of June 20, 2013, between Cisco Systems Capital Corporation, as lender, TIM Celular S.A., as borrower, which is incorporated by reference to our annual report filed on Form 20-F with the Securities and Exchange Commission on April 15, 2014.
- 4.12 Facility Agreement, dated as of August 28, 2013, between Cisco Systems Capital Corporation, as lender, and TIM Celular S.A., as borrower, which is incorporated by reference to our annual report filed on Form 20-F with the Securities and Exchange Commission on April 15, 2014.
- 4.13 English Summary of Credit Agreement, dated as of December 23, 2013, between BNDES, the Brazilian Development Bank (Banco Nacional de Desenvolvimento Econômico e Social), as lender and TIM Celular S.A., as borrower, and TIM Participações S.A. as guarantor, which is incorporated by reference to our annual report filed on Form 20-F with the Securities and Exchange Commission on April 15, 2014.
- 4.14 English Summary of Term of Authorization for Use of Radiofrequencies, dated as of April 3, 2013, between Anatel (the National Telecommunications Agency) and TIM Celular S.A., which is incorporated by reference to our annual report filed on Form 20-F with the Securities and Exchange Commission on April 15, 2014.
- 4.15 Fourth Amendment, dated as of December 10, 2012, to the Loan Agreement between BNDES, the Brazilian Development Bank (Banco Nacional de Desenvolvimento Econômico e Social), as lender, and TIM Nordeste S.A. and TIM Celular S.A., as borrowers, dated November 19, 2008 (English translation), which is incorporated by reference to our annual report filed on Form 20-F with the Securities and Exchange Commission on April 26, 2013.
- 4.16 Fifth Amendment, dated as of December 10, 2012, to the Loan Agreement between BNDES, the Brazilian Development Bank (Banco Nacional de Desenvolvimento Econômico e Social), as lender, and TIM Nordeste S.A. and TIM Celular S.A., as borrowers, dated November 19, 2008 (English translation), which is incorporated by reference to our annual report filed on Form 20-F with the Securities and Exchange Commission on April 26, 2013.
- 4.17 Term of Authorization for provision of PCS service dated March 12, 2001 (English translation), which is incorporated by reference to our annual report filed on Form 20-F with the Securities and Exchange Commission on May 14, 2012.
- 4.18 Term of Authorization for provision of PCS services dated February 26, 2010 authorization (English translation), which is incorporated by reference to our annual report filed on Form 20-F with the Securities and Exchange Commission on May 14, 2012.
- 4.19 Term of Authorization for provision of PCS services dated November 29, 2010 (English translation), which is incorporated by reference to our annual report filed on Form 20-F with the Securities and



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- Exchange Commission on May 14, 2012.
- 4.20 Amendment No. 5 to Cooperation and Support Agreement with Telecom Italia dated April 24, 2012, which is incorporated by reference to our annual report filed on Form 20-F with the Securities and Exchange Commission on May 14, 2012.
- 4.21 Addendum to the Loan Agreement dated as of November 19, 2008, between BNDES, the Brazilian Development Bank (Banco Nacional de Desenvolvimento Econômico e Social), as lender, and TIM Nordeste S.A., as borrower, which is incorporated by reference to our annual report filed on Form 20-F with the Securities and Exchange Commission on June 26, 2009.
- 4.22 Loan Agreement, dated as of November 19, 2008, between BNDES, the Brazilian Development Bank (Banco Nacional de Desenvolvimento Econômico e Social), as lender, and TIM Nordeste S.A. and TIM Celular S.A., as borrowers, which is incorporated by reference to our annual report filed on Form 20-F with the Securities and Exchange Commission on June 26, 2009.
- 4.23 Addendum to the Credit Agreement dated as of November 19, 2008, between BNDES, the Brazilian Development Bank (Banco Nacional de Desenvolvimento Econômico e Social), as lender, and TIM Celular S.A., as borrower, which is incorporated by reference to our annual report filed on Form 20-F with the Securities and Exchange Commission on June 26, 2009.
- 4.24\* Tenth Amendment to the Cooperation and Support Agreement, dated as of April 26, 2017, between Telecom Italia S.p.A. and TIM Celular S.A. and Intelig Telecomunicações Ltda. with the Company as intervening party.
- 4.25 Authorization agreement for TIM Celular S.A. dated May 25, 2007 pursuant to which TIM is authorized to provide landline switched telephone services (STFC) in regions I, II and III, which is incorporated by reference to our annual report filed on Form 20-F with the Securities and Exchange Commission on June 3, 2008.
- 4.26 Term of Authorization for Use of Radiofrequencies, dated as of April 29, 2008, between Anatel (the National Telecommunications Agency) and TIM Nordeste S.A., which is incorporated by reference to our annual report filed on Form 20-F with the Securities and Exchange Commission on June 26, 2009.
- 4.27 Term of Authorization for Use of Radiofrequencies, dated as of April 29, 2008, between Anatel (the National Telecommunications Agency) and TIM Nordeste S.A., which is incorporated by reference to our annual report filed on Form 20-F with the Securities and Exchange Commission on June 26, 2009.
- 4.28 Term of Authorization for Use of Radiofrequencies, dated as of April 29, 2008, between Anatel (the National Telecommunications Agency) and TIM Nordeste S.A., which is incorporated by reference to our annual report filed on Form 20-F with the Securities and Exchange Commission on June 26, 2009.
- 4.29 Term of Authorization for Use of Radiofrequencies, dated as of April 29, 2008, between Anatel (the National Telecommunications Agency) and TIM Nordeste S.A., which is incorporated by reference to our annual report filed on Form 20-F with the Securities and Exchange Commission on June 26, 2009.
- 4.30 Term of Authorization for Use of Radiofrequencies, dated as of April 29, 2008, between Anatel (the National Telecommunications Agency) and TIM Nordeste S.A., which is incorporated by reference to our annual report filed on Form 20-F with the Securities and Exchange Commission on June 26, 2009.
- 4.31 Term of Authorization for Use of Radiofrequencies, dated as of April 29, 2008, between Anatel (the National Telecommunications Agency) and TIM Nordeste S.A., which is incorporated by reference to our annual report filed on Form 20-F with the Securities and Exchange Commission on June 26, 2009.
- 4.32 Term of Authorization for Use of Radiofrequencies, dated as of April 29, 2008, between Anatel (the National Telecommunications Agency) and TIM Nordeste S.A., which is incorporated by reference to our annual report filed on Form 20-F with the Securities and Exchange Commission on June 26, 2009.

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- 4.33 Term of Authorization for Use of Radiofrequencies, dated as of April 29, 2008, between Anatel (the National Telecommunications Agency) and TIM Nordeste S.A., which is incorporated by reference to our annual report filed on Form 20-F with the Securities and Exchange Commission on June 26, 2009.
- 4.34 Term of Authorization for Use of Radiofrequencies, dated as of April 29, 2008, between Anatel (the National Telecommunications Agency) and TIM Celular S.A., which is incorporated by reference to our annual report filed on Form 20-F with the Securities and Exchange Commission on June 26, 2009.
- 4.35 Term of Authorization for Use of Radiofrequencies, dated as of April 29, 2008, between Anatel (the National Telecommunications Agency) and TIM Celular S.A., which is incorporated by reference to our annual report filed on Form 20-F with the Securities and Exchange Commission on June 26, 2009.
- 4.36 Term of Authorization for Use of Radiofrequencies, dated as of April 29, 2008, between Anatel (the National Telecommunications Agency) and TIM Celular S.A., which is incorporated by reference to our annual report filed on Form 20-F with the Securities and Exchange Commission on June 26, 2009.
- 4.37 Term of Authorization for Use of Radiofrequencies, dated as of April 29, 2008, between Anatel (the National Telecommunications Agency) and TIM Celular S.A., which is incorporated by reference to our annual report filed on Form 20-F with the Securities and Exchange Commission on June 26, 2009.
- 4.38 Term of Authorization for Use of Radiofrequencies, dated as of April 29, 2008, between Anatel (the National Telecommunications Agency) and TIM Celular S.A., which is incorporated by reference to our annual report filed on Form 20-F with the Securities and Exchange Commission on June 26, 2009.
- 4.39 Term of Authorization for Use of Radiofrequencies, dated as of April 29, 2008, between Anatel (the National Telecommunications Agency) and TIM Celular S.A., which is incorporated by reference to our annual report filed on Form 20-F with the Securities and Exchange Commission on June 26, 2009.
- 4.40 Term of Authorization for Use of Radiofrequencies, dated as of November 30, 2005, between Anatel (the National Telecommunications Agency) and Intelig Telecomunicações Ltda., which is incorporated by reference to our annual report filed on Form 20-F with the Securities and Exchange Commission on June 30, 2010.
- 4.41 Term of Authorization for Use of Radiofrequencies, dated as of May 5, 2006, between Anatel (the National Telecommunications Agency) and Intelig Telecomunicações Ltda., which is incorporated by reference to our annual report filed on Form 20-F with the Securities and Exchange Commission on June 30, 2010.
- 4.42 Term of Authorization for Use of Radiofrequencies, dated as of April 2, 2007, between Anatel (the National Telecommunications Agency) and Intelig Telecomunicações Ltda., which is incorporated by reference to our annual report filed on Form 20-F with the Securities and Exchange Commission on June 30, 2010.
- 6.1 Statement regarding computation of per share earnings, which is incorporated by reference to Note 34 to our consolidated financial statements included in this annual report.
- 8.1\* List of Significant Subsidiaries.
- 11.1\* Code of Ethics (English free translation).
- 12.1\* Section 302 Certification of the Chief Executive Officer.
- 12.2\* Section 302 Certification of the Chief Financial Officer.
- 13.1\* Section 906 Certification of the Chief Executive Officer.
- 13.2\* Section 906 Certification of the Chief Financial Officer.
- 101.INS\*\* XBRL Instance Document
- 101.SCH\*\* XBRL Taxonomy Extension Schema Document
- 101.CAL\*\* XBRL Taxonomy Extension Calculation Linkbase Document

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101.DEF\*\* XBRL Taxonomy Extension Definition Linkbase Document  
101.LAB\*\* XBRL Taxonomy Extension Label Linkbase Document  
101.PRE\*\* XBRL Taxonomy Extension Presentation Linkbase Document  
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\* Filed herewith.

\*\* As permitted by Rule 405(a)(2)(ii) of Regulation S-T, the registrant's XBRL (eXtensible Business Reporting Language) information will be furnished in an amendment to this Form 20-F that will be filed no more than 30 days after the date hereof. In accordance with Rule 406T(b)(2) of Regulation S-T, such XBRL information will be furnished and not filed or part of a registration statement or prospectus for purposes of Sections 11 or 12 of the Securities Act of 1933, as amended, will be deemed not filed for purposes of Section 18 of the Exchange Act of 1934, as amended, and otherwise will not be subject to liability under those sections.

## Technical Glossary

The following explanations are not intended as technical definitions, but to assist the general reader to understand certain terms as used in this annual report.

**3G:** The third generation of mobile telecommunications network technology that comply with the IMT-2000 standard as defined by the International Telecommunications Union (ITU).

**3GPP (3rd Generation Partnership Project):** An entity that unites seven telecommunications standard development organizations to produce reports and specifications.

**4G:** The fourth generation of mobile telecommunications network technology succeeding 3G, which comply with the IMT-Advanced standard as defined by the International Telecommunications Union (ITU).

**Access Network:** The part of a telecommunications network which connects subscribers to their immediate service provider. It is contrasted with the core network, which connects local providers to each other.

**Analog:** A mode of transmission or switching which is not digital, e.g., the representation of voice, video or other modulated electrical audio signals which are not in digital form.

**ARPU (Monthly Average Revenue Per User):** A measure used in the mobile telecommunications industry to evaluate the revenue generated by customers.

**Broadband services:** Services characterized by a transmission speed of 2Mbps or more. According to international standards, these services are interactive services, including video telephone/videoconferencing (both point to point and multipoint).

**Core Network:** The central part of a telecommunication network that connects local providers to each other and provides various services to customers who are connected by the access network.

**CDMA (Code Division Multiple Access):** A standard of digital mobile telecommunications technology.

**Channel:** One of a number of discrete frequency ranges utilized by a radio base station.

**Digital:** A mode of representing a physical variable such as speech using digits 0 and 1 only. The digits are transmitted in binary form as a series of pulses. Digital networks allow for higher capacity and higher flexibility through the use of computer-related technology for the transmission and manipulation of telephone calls. Digital systems offer lower noise interference and can incorporate encryption as a protection from external interference.

**EDGE (Enhanced Data rates for Global Evolution):** A technology that provides enhanced functionality and facilitates the use of advanced technology over mobile devices.

**Evolved Packet Core (EPC):** A flat architecture used by network operators that provides a converged voice and data networking framework to connect users on a Long-Term Evolution (LTE) network.

**FDD (Frequency Division Duplex):** A technology used in wireless communications where the uplink and the downlink use a different frequency.

*FX*: The term foreign exchange is usually abbreviated as “forex” and occasionally as “FX.” The foreign exchange is the exchange of one currency for another, or the conversion of one currency into another currency. Foreign exchange also refers to the global market where currencies are traded virtually around-the-clock.

*GB*: A measure of the unit for digital information, representing one billion bytes.

*GPRS (General Packet Radio Services)*: An always-on packet switching technology, which supports WAP, SMS text messaging, and other data communications.

*GSM (Global System Mobile)*: A standard of digital mobile telecommunications technology.

*HetNet*: A heterogeneous network is a network connecting computers and other devices with different operating systems and/or protocols.

*Interconnection charge*: Amount paid per minute charged by network operators for the use of their network by other network operators. Also known as an “access charge.”

*IP network*: a communication network that uses Internet Protocol (IP) to send and receive messages by delivering packets from the source host to the destination host based on the IP addresses in the packet headers.

*LTE (Long Term Evolution)*: A wireless broadband technology designed to support roaming Internet access via cell phones and handheld devices.

*MB*: A measure of the unit for digital information, representing one million bytes.

*MMDS*: A multichannel multipoint distribution service.

*MMS*: An enhanced version of short message services, which allows users the capability to send, in a single message, multiple color images, sounds and different size text to another mobile phone or email account.

*Mobile Packet Core*: Architecture systems for supporting mobile technologies including 2G, 3G and 4G / LTE.

*Mobile service*: A mobile telecommunications service provided by means of a network of interconnected low powered radio base stations, each of which covers one small geographic cell within the total mobile telecommunications system service area.

*MOU (Monthly Average Minutes of Usage)*: The monthly average number of minutes of use of each mobile phone user.

*Network*: An interconnected collection 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 cable or point-to-point connections.

*Penetration*: The measurement of the take-up of services. At any date, the penetration is calculated by dividing the number of customers by the population to which the service is available and multiplying the quotient by 100.

*RAN*: A radio access network, or the wireless radio frequency-based portion of a network providing access from a mobile terminal device (transmitter/receiver) to the core, or backbone, network of the radio service provider and ultimately to the public switched telephone network or the Internet or other IP-based network.

*Roaming*: A function that enables customers to use their mobile telephone on networks of service providers other than the one with which they signed their initial contract.

*RF*: Radio frequency, or a rate of oscillation which corresponds to the frequency of radio waves, and the alternating currents which carry radio signals.

*SMS*: Two-way short (or text) message services, allowing users to send and receive short messages to and from users of networks of other carriers.

*Switch:* These are used to set up and route telephone calls either to the number called or to the next switch along the path. They may also record information for billing and control purposes.

*TDMA (Time Division Multiple Access):* A standard of digital mobile telecommunications technology.

*UMTS (Universal Mobile Telecommunications System):* A third-generation mobile communication standard in which data travels at 2 Mbps over a broadband system.

*Unified Packet Core (UPC):* A system architecture used by network operators which features the IP multimedia subsystem (IMS) in order to deliver a broad range of multi-screen offerings important for the emerging 4G / LTE and other next generation infrastructures.



*Value-Added Services:* Value-added services provide additional functionality to the basic transmission services offered by a telecommunications network.

*WAP (Wireless Application Protocol):* A specification for a set of telecommunications protocols to standardize the way that wireless devices, such as mobile telephones and radio receivers, can be used to access the Internet.

**SIGNATURES**

The registrant hereby certifies that it meets all of the requirements for filing Form 20-F and that it has duly caused and authorized the undersigned to sign this annual report on its behalf.

Dated: April 5, 2018

**TIM PARTICIPAÇÕES S.A.**

By: /s/ Stefano De Angelis  
Name: Stefano De Angelis  
Title: Chief Executive Officer

By: /s/ Adrian Calaza  
Name: Adrian Calaza  
Title: Chief Financial Officer and Investor Relations Officer

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***TIM Participações S.A. and Subsidiaries***

*Consolidated Financial Statements as at*

*December 31, 2017 and 2016*

*and three years ended December 31, 2017 and*

*Report of Independent Registered Public Accounting*

*Firm*

**TIM PARTICIPAÇÕES S.A. AND SUBSIDIARIES**

**CONSOLIDATED FINANCIAL STATEMENTS**

**As of December 31, 2017 and 2016 and three years  
ended December 31, 2017**

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DC0 - Informação pública

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**Report of Independent Registered Public Accounting Firm**

To the Board of Directors and Shareholders

TIM Participações S.A. and its subsidiaries

***Opinions on the Financial Statements and Internal Control over Financial Reporting***

We have audited the accompanying consolidated balance sheets of TIM Participações S.A. and its subsidiaries as of December 31, 2017 and 2016, and the related consolidated statements of income, comprehensive income, changes in shareholders' equity and cash flows for each of the three years in the period ended December 31, 2017, including the related notes (collectively referred to as the "consolidated financial statements"). We also have audited the Company's internal control over financial reporting as of December 31, 2017, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2017 and 2016, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2017 in conformity with International Financial Reporting Standards as issued by the International Accounting Standards Board. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31,

2017, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the COSO.

### ***Basis for Opinions***

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in Management's Annual Report on Internal Control over Financial Reporting appearing in Item 15(b). Our responsibility is to express opinions on the Company's consolidated financial statements and on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) ("PCAOB") and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

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*Definition and Limitations of Internal Control over Financial Reporting*

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ PricewaterhouseCoopers Auditores Independentes

Rio de Janeiro, RJ, Brazil

April 5, 2018

We have served as the Company's auditor since 2010.



**TIM PARTICIPAÇÕES S.A. AND SUBSIDIARIES****CONSOLIDATED BALANCE SHEETS***(In thousands of Reais)*

	<b>Notes</b>	<b>2017</b>	<b>2016</b>
<b>Assets</b>			
<b>Current assets</b>			
Cash and cash equivalents	4	2,960,718	5,128,186
Marketable securities	5	765,614	479,953
Trade accounts receivable	6	2,540,856	2,919,177
Inventory	7	123,785	143,934
Indirect taxes and contributions recoverable	8	386,001	633,854
Direct taxes and contributions recoverable	9	323,040	334,806
Prepaid expenses	11	168,366	130,392
Financial instruments	37	53,875	82,454
Financial leases	15	19,773	2,818
Regulatory credit recoverable	16	68,571	83,107
Other current assets		196,789	168,718
		<b>7,607,388</b>	<b>10,107,399</b>
<b>Non-current assets</b>			
Long term receivables			
Marketable securities	5	2,997	-
Trade accounts receivable	6	26,207	24,092
Indirect taxes and contributions recoverable	8	949,586	867,143
Direct taxes and contributions recoverable	9	209,503	200,898
Deferred taxes	10	-	41,690
Judicial deposits	12	1,366,576	1,294,125
Prepaid expenses	11	39,466	54,374
Financial instruments	37	26,915	134,468
Financial leases	15	185,558	201,944
Other non-current assets		35,154	12,442
		<b>2,841,962</b>	<b>2,831,176</b>
Property, Plant and Equipment	13	10,838,488	11,084,530
Intangible assets	14	11,312,527	10,632,575

Total assets	24,992,977	24,548,281
	32,600,365	34,655,680

The accompanying notes are an integral part of these consolidated financial statements.

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**TIM PARTICIPAÇÕES S.A. AND SUBSIDIARIES****CONSOLIDATED BALANCE SHEETS***(In thousands of Reais)*

	<b>Notes</b>	<b>2017</b>	<b>2016</b>
Liabilities			
Current Liabilities			
Suppliers	17	3,986,557	3,461,081
Borrowing and financing	19	1,351,860	1,145,225
Finance lease obligations	15	176,925	96,604
Financial instruments	37	14,044	36,163
Payroll and related charges		262,450	212,279
Indirect taxes, charges and contributions payable	20	305,266	453,130
Direct taxes, charges and contributions payable	21	260,786	363,726
Dividends and interest on equity payable	25	143,591	206,112
Authorizations payable	18	233,173	486,494
Deferred revenue	22	480,431	812,340
Other current liabilities		9,354	8,401
		7,224,437	7,281,555
Non-current liabilities			
Borrowing and financing	19	3,339,084	5,574,557
Finance lease obligations	15	1,710,247	1,705,634
Financial instruments	37	18,419	45,310
Indirect taxes, charges and contributions payable	20	2,527	112
Direct taxes, charges and contributions payable	21	206,788	258,840
Deferred taxes	9	98,919	108,358
Provision for legal and administrative proceedings	23	528,320	478,482
Pension plan and other post-employment benefits		2,635	1,586
Provision for decommissioning costs	24	22,803	21,726
Authorizations payable	18	273,527	900,138
Deferred revenue	22	990,932	1,061,304
Other non-current liabilities		30,543	30,565
		7,224,744	10,186,612
Total liabilities		14,449,181	17,468,167
Shareholders' Equity	25		
Share capital		9,866,298	9,866,298

Treasury shares	(16,487)	(3,369)
Capital reserves	1,687,565	1,564,149
Accumulated other comprehensive income	989	(507)
Profit reserves	6,612,819	5,760,942
Total shareholders' equity	18,151,184	17,187,513
Total liabilities and shareholders' equity	32,600,365	34,655,680

The accompanying notes are an integral part of these consolidated financial statements.

**TIM PARTICIPAÇÕES S.A. AND SUBSIDIARIES****CONSOLIDATED STATEMENT OF INCOME**

Years ended December 31

(In thousands of *Reais*, except otherwise stated)

	<b>Notes</b>	<b>2017</b>	<b>2016</b>	<b>2015</b>
Revenue	27	16,233,959	15,617,413	17,142,265
Cost of services provided and goods sold	28	(7,740,150)	(7,693,406)	(8,306,857)
Gross income		8,493,809	7,924,007	8,835,408
Operating income (expenses):				
Selling expenses	28	(4,575,177)	(4,719,029)	(4,822,974)
General and administrative expenses	28	(1,424,643)	(1,258,722)	(1,195,277)
Other income (expenses), net	29	(560,637)	(522,060)	434,283
		(6,560,457)	(6,499,811)	(5,583,968)
Operating income		1,933,352	1,424,196	3,251,440
Financial income (expenses):				
Financial income	30	512,565	750,450	862,708
Financial expenses	31	(1,009,653)	(1,156,485)	(1,115,524)
Foreign exchange variations, net	32	(748)	(4,845)	2,409
		(497,836)	(410,880)	(250,407)
Income before income and social contribution taxes		1,435,516	1,013,316	3,001,033
Income and social contribution taxes	33	(201,009)	(262,889)	(915,591)
Net income for the year		1,234,507	750,427	2,085,442

Earnings per share attributed to the Company's shareholders (in R\$ per share)

Basic earnings per share	34	0.51	0.31	0.86
Diluted earnings per share	34	0.51	0.31	0.86

The accompanying notes are an integral part of these consolidated financial statements.



**TIM PARTICIPAÇÕES S.A. AND SUBSIDIARIES**

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

Years ended December 31

(In thousands of *Reais*)

	<b>2017</b>	<b>2016</b>	<b>2015</b>
Net income for the year	1,234,507	750,427	2,085,442
Other components of comprehensive income			
Items not to be reclassified to income:			
Remeasurement of post-employment benefit obligations, net of taxes	(694)	(204)	(416)
Items to be subsequently reclassified to income:			
Cash flow hedge (Note 5)	2,190	(2,190)	-
Total comprehensive income for the year	1,236,003	748,033	2,085,026

The items included in the Consolidated Statement of Comprehensive Income are recorded net of taxes.

The accompanying notes are an integral part of these consolidated financial statements.

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**TIM PARTICIPAÇÕES S.A. AND SUBSIDIARIES****CONSOLIDATED STATEMENT OF CHANGES IN SHAREHOLDERS' EQUITY**

(In thousands of Reais)

	<b>Capital Stock</b>	<b>Capital reserves</b>	<b>Legal reserve</b>	<b>Profit reserves Additional dividends Reserve for expansion</b>	<b>Treasury shares</b>	<b>Accumulated other comprehensive income</b>	<b>Retained earnings</b>	
<b>Balances as at 1<sup>st</sup> January, 2015</b>	9,866,298	1,344,470	515,956	3,226,356	- (3,369)	2,303	-	14,982,612
Total comprehensive income for the year								
Net income for the year	-	-	-	-	-	-	2,085,442	2,085,442
Remeasurement of post-employment benefit obligation	-	-	-	-	-	(416)	-	(416)
Total comprehensive income for the year	-	-	-	-	-	(416)	2,085,442	2,085,026
Total contributions from shareholders and distributions								

to shareholders								
Stock Options (Note 26)	-	4,504	-	-	-	-	-	-
Allocation of net income for the year:								
Legal reserve (Note 25)	-	-	103,557	-	-	-	-	(103,557)
Dividends proposed (Note 25)	-	-	-	-	-	-	-	(468,616)
Tax benefit reserve (Note 25)	-	93,123	-	-	-	-	-	(93,123)
Recording of expansion reserve (Note 25)	-	-	-	1,420,146	-	-	-	(1,420,146)
Dividends recorded directly in shareholder's equity	-	-	-	4,394	-	-	-	-
Total contributions from shareholders and distributions	-	97,627	103,557	1,424,540	-	-	-	(2,085,442)
to shareholders								
<b>Balances as at December 31, 2015</b>	9,866,298	1,442,097	619,513	4,650,896	-	(3,369)	1,887	- 16,
Total comprehensive income for the year								
Net income for the year								750,427
Remeasurement of post-employment benefit obligation	-	-	-	-	-	-	(240)	-
Cash flow hedge							(2,190)	
Total comprehensive income for the year	-	-	-	-	-	-	(2,394)	750,427
Total contributions from shareholders and								

distributions to shareholders									
Stock options (Note 26)	-	3,802	-	-	-	-	-	-	-
Allocation of net income for the year:									
Legal reserve (Note 25)	-	-	37,521	-	-	-	-	(37,521)	
Dividends proposed (Note 25)	-	-	-	-	-	-	-	(367,274)	(3)
Recording of tax benefit reserve (Note 25)	-	118,250	-	-	-	-	-	(118,250)	
Recording of expansion reserve (Note 25)	-	-	-	445,992	-	-	-	(445,992)	
Dividends recorded directly in shareholders' equity	-	-	-	7,020	-	-	-	-	(4)
• Total contributions from shareholders and distributions to shareholders	-	122,052	37,521	453,012	-	-	-	(750,427)	(1)
<b>Balances as at December 31, 2016</b>	9,866,298	1,564,149	657,034	5,103,908	-	(3,369)	(507)		- 17,
Total comprehensive income for the year									
Net income for the year	-	-	-	-	-	-	-	1,234,507	1,
Remeasurement of post-employment benefit obligation	-	-	-	-	-	-	(694)	-	
• Cash flow hedge							2,190	-	
Total comprehensive income for the year	-	-	-	-	-	-	1,496	1,234,507	1,

Total contributions from shareholders and distributions to shareholders									
Stock options (Note 26)	-	10,923	-	-	-	-	-	-	-
Disposal of treasury shares									
Allocation of net income for the year:									
Legal reserve (Note 25)	-	-	61,725	-	-	-	-	(61,725)	
Dividends proposed (Note 25)	-	-	-	-	-	-	-	(103,325)	(103,325)
Interest on shareholders' equity								(189,991)	(189,991)
Recording of tax benefit reserve (Note 25)	-	112,793	-	-	-	-	-	(112,793)	
Recording of expansion reserve (Note 25)	-	-	-	766,973	-	-	-	(766,973)	
Dividends recorded directly in shareholder's equity	-	-	-	23,179	-	-	-	-	
Total contributions from shareholders and distributions to shareholders	-	123,416	61,725	790,152	-	(13,118)	-	(1,234,507)	(1,234,507)
<b>Balances as at December 31, 2017</b>	9,866,298	1,687,565	718,759	5,894,060	-	(16,487)	989		- 18,000

The accompanying notes are an integral part of these consolidated financial statements.







**TIM PARTICIPAÇÕES S.A. AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENT OF CASH FLOWS**

Years ended December 31

(In thousands of *Reais*)

	<b>Note</b>	<b>2017</b>	<b>2016</b>	<b>2015</b>
Operations				
Income before income tax and social contribution		1,435,516	1,013,316	3,001,033
Adjustments to reconcile income with net cash from operations:				
Depreciation and amortization		4,013,671	3,785,172	3,361,971
(Gain) loss on sale of property, plant and equipment (leaseback)	1b and 29	1,801	(44,036)	(1,210,980)
Residual value of property, plant and equipment, and intangible assets written off		54,104	19,528	11,704
Interest on provision for decommissioning costs	24	428	1,146	3,961
Provision for administrative and legal proceedings	23	372,469	375,242	359,973
Monetary adjustment of judicial deposits, administrative and judicial proceedings		97,805	41,010	28,857
Interest, monetary and exchange variations of borrowing and other financial adjustments		521,570	625,865	743,992
Lease interest payable	31	257,305	246,280	145,274
Lease interest receivable	30	(22,709)	(25,756)	(24,045)
Losses from doubtful accounts	28	316,387	266,442	230,357
Stock options	26	10,923	3,802	4,504
Cash from operating activities		7,059,270	6,308,011	6,656,601
Decrease (increase) in operating assets:				
Trade accounts receivable		99,674	(291,825)	535,736
Taxes and contributions recoverable		162,705	206,143	157,232
Inventory		20,149	(2,214)	122,313

Prepaid expenses		(40,490)	80,524	71,561
Judicial deposits		(53,217)	(128,256)	(70,491)
Other current assets		(26,129)	26,064	(75,204)
Increase (decrease) in operating liabilities:				
Payroll and related charges		50,171	12,906	(9,256)
Suppliers		523,419	(296,014)	(1,808,097)
Tax, charges and contributions		(474,557)	(214,353)	(493,936)
Authorizations payable		(895,964)	199,163	(247,806)
Payment on legal and administrative proceedings	23	(439,670)	(413,209)	(429,261)
Deferred revenue		(415,651)	(337,806)	11,552
Other non-current liabilities		(165,598)	(156,886)	(142,760)
<b>Net cash from operations</b>		<b>5,404,112</b>	<b>4,992,248</b>	<b>4,278,184</b>
Cash from investment activities				
Investment activities				
Financial assets at fair value		(288,658)	119,461	(558,264)
Cash received from property, plant and equipment sales	1.b	13,850	133,708	2,498,421
Additions to property, plant and equipment and intangible assets		(4,147,907)	(4,502,397)	(4,764,239)
Receipt of financial leases		22,140	20,929	19,148
<b>Net cash (used in) received from investment activities</b>		<b>(4,400,575)</b>	<b>(4,228,299)</b>	<b>(2,804,934)</b>
Cash from financing activities				
New borrowing		646,853	1,304,492	1,262,351
Repayment of borrowing		(3,270,570)	(2,685,938)	(1,711,497)
Payment of finance leases		(219,189)	(199,747)	(101,240)
Financial instruments		17,677	305,336	304,994
Purchase of treasury shares, net of disposals		(13,118)	-	-
Dividends and interest on equity paid		(332,658)	(460,309)	(360,447)
<b>Net cash used in financing activities</b>		<b>(3,171,005)</b>	<b>(1,736,166)</b>	<b>(605,839)</b>
<b>Increase (decrease) in cash and cash equivalents, net</b>		<b>(2,167,468)</b>	<b>(972,217)</b>	<b>867,411</b>
<b>Cash and cash equivalents at the beginning of the year</b>		<b>5,128,186</b>	<b>6,100,403</b>	<b>5,232,992</b>
<b>Cash and cash equivalents at the end of the year</b>		<b>2,960,718</b>	<b>5,128,186</b>	<b>6,100,403</b>

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Supplementary disclosure on the consolidated statement of cash flows

	<b>2017</b>	<b>2016</b>	<b>2015</b>
Interest paid	584,853	573,538	456,076
Income tax and social contribution paid	297,079	364,563	222,450
Additions to property, plant and equipment and intangible assets – without cash effects	(48,957)	(137,199)	(1,244,803)
Increase in lease obligations – without cash effects	48,957	137,199	1,244,803

The accompanying notes are an integral part of these consolidated financial statements.

## **TIM PARTICIPAÇÕES S.A. AND SUBSIDIARIES**

### NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

At December 31, 2017

(In thousands of *Reais*, unless otherwise indicated)

## **1. Operations**

### **1.a Corporate Structure**

TIM Participações S.A. (“TIM Participações” and/or the “Company”) is a publicly-held corporation based in the city of Rio de Janeiro, State of Rio de Janeiro, and a subsidiary of TIM Brasil Serviços e Participações S.A. (“TIM Brasil”). TIM Brasil is a subsidiary of the Telecom Italia Group and holds 66.58% of the capital of TIM Participações as of December 31, 2017, (66.58% as of December 31, 2016). The main purpose of the Company and its subsidiaries (the “Group”) is to control companies providing telecommunications services, including personal mobile telecom services and others, in their licensed areas. The services provided by TIM Participações’ subsidiaries are regulated by Agência Nacional de Telecomunicações (“Anatel”).

The Company’s shares are traded on B3 (formerly BM&F/Bovespa). Additionally, TIM Participações trades its Level II American Depositary Receipts (“ADRs”) on the New York Stock Exchange (“NYSE”) in the US. Accordingly, the Company is subject to the rules of the Brazilian Securities Commission (Comissão de Valores Mobiliários or “CVM”) and the US Securities and Exchange Commission (“SEC”). In accordance with good market practice, TIM Participações adopts the practice of simultaneously releasing its financial information in Reais in both markets, in Portuguese and English.

### **Corporate Reorganization**

On July 25, 2017, the meeting of the Board of Directors of the Company approved the corporate restructuring of the subsidiaries TIM Celular S.A. and Intelig Telecomunicações Ltda. (“Intelig”) through the takeover of TIM Celular by Intelig. On September 6, 2017, the corporate action involving the transformation of Intelig’s articles of association from a Limited Liability Company to a Limited Liability Corporation (not listed), and Intelig has its corporate

name changed to TIM S.A. as the first phase of the restructuring. The corporate reorganization is expected to take place in 2018, which may have an impact on the financial statements of the Company as a result of the potential recording of deferred income tax and social contribution assets on tax losses carried forward and the negative base of social contribution generated by TIM S.A., as presented in Note 10.

Direct subsidiaries

(a) TIM Celular S.A. (“TIM Celular”)

The Company holds 100% of TIM Celular’s capital stock. This subsidiary provides Landline Telephone Services (“STFC”) - Domestic Long Distance and International Long Distance voice services, Personal Mobile Services (“SMP”) and Multimedia Communication Services (“SCM”) in all Brazilian states and in the Federal District.

(b) TIM S.A. (formerly called “Intelig”)

The Company also holds 100% of TIM S.A.’s shares of capital stock. This company provides STFC – Local voice services and SCM services in all Brazilian states and in the Federal District.

**TIM PARTICIPAÇÕES S.A. AND SUBSIDIARIES**

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

At December 31, 2017

(In thousands of *Reais*, unless otherwise indicated)

**2. Basis for preparation and disclosure of the financial statements**

The financial statements have been prepared in accordance with the International Financial Reporting Standards (“IFRS”) issued by the International Accounting Standards Board (“IASB”), and disclose all (and only) the applicable significant information related to the financial statements, which is consistent with the information utilized by management in the performance of its duties.

The significant accounting policies applied to the preparation of these financial statements are described below and/or presented in the respective notes. These policies have been consistently applied to the years presented, unless otherwise indicated.

a. General preparation and disclosure criteria

The financial statements were prepared taking into account the historical cost as the value basis, with financial assets and liabilities (including derivative financial instruments) measured at fair value.

Assets and liabilities are reported according to their degree of liquidity and collectability. They are reported as current when they are likely to be realized or settled over the next 12 months. Otherwise, they are recorded as non-current. The only exception to this procedure involves deferred income tax and social contribution balances, both assets and liabilities are classified as long term.

b. Functional currency and presentation currency

The presentation currency for the financial statements is the the Brazilian Real (R\$), which is also the functional currency for all the companies consolidated in these financial statements.

Transactions in foreign currency are recognized at the exchange rate on the date of the transaction. Monetary items in foreign currency are converted into Reais at the exchange rate on the date of the balance sheet as informed by the Central Bank of Brazil. Exchange gains and losses linked to these items are recorded in the statement of income.

c. Segment information

Operating segments are the entity's components which carry out business activities in relation to which revenue can be obtained and expenses incurred. Their operating results are regularly reviewed by the entity's chief operating decision maker to make decisions on the allocation of resources and to assess the performance of each segment. For a component to be deemed a segment, separate financial information must be available for it.

The Company's chief operating decision maker, responsible for allocating resources and for periodic performance evaluation, is the Executive Board. The Executive Board and the Board of Directors are jointly responsible for making strategic decisions and for managing the Group.

The Group's strategy is to optimize the consolidated results of TIM Participações. This strategy includes optimizing the operations of each group company, in addition to taking advantage of the synergies generated between them. Notwithstanding the various business activities, the chief operating decision maker sees the Group as a single business segment, and does not take into account specific strategies intended for a particular line of service. All decisions on strategic, financial, purchasing, investment and investment planning are made on a consolidated basis. Therefore, the Group's goal is to maximize the consolidated result obtained by exploiting the SMP, STFC and SCM licenses.



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d. Consolidation procedures

Subsidiaries are all entities over which the Group has control. The Group controls an entity when it is liable or has rights to variable returns from its involvement with the subsidiaries, and has the ability to affect those returns through its power over the investee. Subsidiaries are fully consolidated from the date on which control is transferred to the Group. Consolidation is discontinued from the date on which the Group loses the control over that entity.

The purchase accounting method is used for recording acquisitions of subsidiaries by the Group. The acquisition cost is measured at the fair value of assets offered, equity instruments (e.g. shares) issued and liabilities incurred or assumed by the acquirer at the date on which control is exchanged. Identifiable assets acquired, contingencies and liabilities assumed in a business combination are initially measured at their fair value as at the acquisition date, irrespective of the proportion of any minority interest. The excess of the acquisition cost over the fair value of the Group's share of the identifiable net assets acquired is recorded as goodwill. If the cost of acquisition is less than the fair value of the net assets of the subsidiary acquired, the difference is recognized directly in the statement of income as revenue, after a review of the concepts and calculations used.

Transactions between Group companies, as well as balances and unrealized gains and losses on these transactions, are eliminated. The accounting policies of subsidiaries have been adjusted to ensure consistency with the accounting policies adopted by TIM Participações. The date of the financial statements used in the consolidation is the same for all Group companies.

e Approval of the financial statements

The financial statements were approved by the Company's Board of Directors on April 5, 2018.

f. New standards, changes and interpretations of standards not yet in force

(i) The following amendments to standards published by the International Accounting Standards Board (IASB) are effective for annual periods beginning on or after January 1, 2017:

**Improvements to IFRS 2014-2016:** The annual improvements projects provide a tool for making non-urgent, but necessary amendments to IFRSs, with the aim of removing inconsistencies and clarifying the meaning of certain paragraph of the standard. The amendments related to IFRS 12 Disclosure of Interests in other Entities, aimed clarifying the scope of the standard, are effective for annual periods beginning on or after January 1, 2017, whereas the rest of the improvements are effective for annual periods beginning on or after January 1, 2018. The amendments related to such IFRSs do not have an impact on the Company's consolidated financial statements since, as of December 31, 2017, the Company does not have interests that are classified as held for sale, as held for distribution or as discontinued operations.

**Amendments to IAS 7, Disclosure Initiative:** The amendments to IAS 7 require entities to provide disclosures that enable users of financial statements to evaluate changes in liabilities arising from financing activities, including both changes arising from 2017 Consolidated Financial Statements cash flows, such as the issuance and repayments of loans, and non-cash changes, such as unpaid acquisitions, sales and exchange differences. The Company has considered these amendments in the preparation of these consolidated financial statements, as disclosed at Note 37.

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**Amendments to IAS 12, Recognition of Deferred Tax Assets for Unrealised Losses:**

The amendments clarify the requirements on recognition of deferred taxes when the tax base of an asset exceeds its fair value. These amendments do not have a significant impact on the results or financial position of the Company's consolidated financial statements as at December 31, 2017.

(ii) The following new standards were issued by the IASB, but are not effective for the fiscal year 2017. The early adoption of these standards, although encouraged by the IASB, has not been implemented by management.

**IFRS 9 - Financial instruments**

In July 2014, the International Accounting Standards Board ("IASB") issued the final version of IFRS 9, which replaced IAS 39 and all previous versions of IFRS 9. This standard is applicable to years beginning on or after January 1, 2018.

This standard is applicable to financial assets and liabilities, and covers issues relating to the classification, measurement, impairment and derecognition of financial assets and liabilities, as well as a new and less restrictive accounting model for hedging, requiring an economic relationship between the hedged item and the hedging instrument being the same as determined by the Company at inception date. Likewise, the new standard modifies the criteria for documentation of hedging relationships.

With regard to classification, this standard requires entities to classify their financial assets as measured at amortized cost, at fair value through other comprehensive income, or at fair value through profit or loss, based on the following assumptions:

- (i) Business model of the entity relating to the management of financial assets; and
- (ii) Characteristics of the contractual cash flow of the financial asset.

Regarding the classification of financial liabilities, this standard substantially maintains the requirements set forth in IAS 39, according to which entities must classify most financial liabilities as subsequently measured at amortized cost, except for derivative financial instruments, financial guarantee agreements and commitments to grant loans at interest rates that are lower than those used in the market, among others.

Regarding impairment, the new standard establishes the recognition of the expected credit loss, according to which the entities must recognize a provision for expected losses in financial assets measured at amortized cost. The Company will apply the the simplified approach and record the expected losses on the financial assets lifetime.

The Company understands that the principal impacts of the adoption of the new standards relate to: (i) the documentation of the business model for financial assets, which may give rise to changes to the measurement and classification of financial assets into three possible categories; and (ii) the new model for the calculation of impairment of financial assets, particularly regarding trade receivables which, in some cases, will result in the early recognition of these losses at the initial measurement.

The Company estimates that the impact from the adoption of the new impairment model will increase by approximately R\$ 130 million in the Allowances for doubtful accounts previously recognized under IAS 39.

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**IFRS 15 – Revenue from Contracts with Customers**

In May 2014, the IASB issued IFRS 15, which replaced IAS 18. This standard is applicable to years beginning on or after January 1, 2018.

IFRS 15 provides for the principles to be used by entities regarding the disclosure of useful information to users of the financial statements regarding the nature, amount, period and uncertainty of revenue and cash flow originated from contracts with customers. The basic principle of this pronouncement is that the entity must recognize revenue from the transfer of goods or services promised to customers at an amount that reflects the consideration that the company expects to receive in exchange for these goods or services. By applying this pronouncement, the entity must take into account the terms of the contracts, and all material facts and circumstances.

In accordance with this standard, the entities must apply this pronouncement using one of the following methods:

- (i) Retrospectively to each prior reporting period presented in accordance with IAS 8 - Accounting Policies, Changes in Estimates and Correction of Errors, subject to the expedients provided for in this standard (“full retrospective method”); or
- (ii) Retrospectively with the cumulative effect of the initial application of this pronouncement being recognized at the date of initial application (“modified retrospective method”).

The Company decided to adopt IFRS 15 retrospectively, with the cumulative effect of the initial application being recognized as at the date of the initial application on January 1, 2018.

Accordingly, as provided for in this standard, the Company will record the cumulative effect as at the date of the initial application of the standard as an adjustment to the initial balance of retained earnings (or another component of shareholders' equity, as appropriate). In accordance with this transition method, the entity will use this pronouncement retrospectively only for contracts that are still in force as at the date of the initial application.

Currently, the Company offers commercial packages that basically combine equipments or mobile handsets with fixed or mobile telecom services, being that the revenue from services is recognized separately, in accordance with their nature and based on their relevant fair values.

#### *Identification of contracts*

The Company performed a comprehensive review of the commercial offers in force, in order to identify the relevant contractual clauses and other contractual elements that may be significant in terms of the adoption of the new accounting standard.

#### *Identification of performance obligations*

Upon the adoption and effectiveness of the contract, the entity must assess the goods or services that were contractually promised to the customer, identifying as a "performance obligation" each commitment made to customers regarding the transfer of the following items:

- (i) Distinct goods or services (or a bundle of goods or services); or
  
- (ii) Distinct goods or services that are substantially the same, and that have the same pattern of transfer the customers.

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Goods or services promised to customers are deemed to be “distinct” when the following criteria are fulfilled:

(a) Customers are able to benefit from the goods or services, whether separately or jointly with other resources that are readily available to them (that is, the good or service is deemed to be “distinct”); and

(b) The entity’s promise to transfer the good or service to customers can be separated from other commitments undertaken under the contract (that is, the commitment to transfer the good or service is “distinct” within the context of the contract).

Upon reviewing its contracts, the Company concluded that its currently commercial package have only two performance obligations being provided on a “bundle offering”: (i) sale and/or rental of equipment or mobile handsets; and (ii) fixed or mobile telecom services and broadband (internet) services. Accordingly, the Company will recognize revenue when, or to the extent that, it satisfies the performance obligations by transferring the goods or services that were promised to the customer. An asset will be deemed to be “transferred” when, or to the extent that, the customer obtains the control of the asset.

*Allocation of price to performance obligation*

The entity must take into account the contractual terms, as well as its usual business practices, to determine the price of a transaction. The “transaction price” is the consideration that the entity is entitled to receive in exchange for the goods or services promised to the customer, which may include both fixed and variable amounts.

The Company must allocate the transaction price to each performance obligation (each distinct good or service) at an amount that reflects the consideration that the Company expects to receive in exchange for the transfer of the distinct goods or services promised to the customer, while the transaction price will be proportionally allocated to each performance obligation identified in the contract, based on the individual sales price of each good or service.

The standalone selling price has been defined by the Company, based on a price list that considers costs plus margin, and the individual sales price of the Company or the market, or the contract price, which would be similar to that provided for in contracts with similar conditions.

Therefore, the adoption of the new revenue standard will result in the early recognition of revenue from sales of equipment or mobile handsets, which are usually recognized upon the transfer of control to the customer, basically due to the allocation of discounts to the two performance obligations related to the sale of packages that include telecom services, plus equipment/handsets. The difference between the carrying value of the sales of the equipment and/or mobile handsets, and the amount received from the customer will be recorded as a contractual asset and/or liability at the beginning of the contract. Revenue from telecom services, in turn, will be recognized in the income statements based on the allocation of the transaction price, and to the extent that services are being provided to customers.

#### *Costs of obtaining the contract*

The entity must recognize in assets the incremental costs of obtaining the contract if the entity expects to recover such costs. "Incremental costs" are those incurred by the entity to obtain a contract, but which would not have been incurred if the company had not obtained the contract.



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Therefore, these amounts will be recognized in assets, and subsequently amortized affecting the income statement, in accordance with the transfer to the customer of the goods or services to which the asset refers. Also, the Company will recognize impairment losses in the income statement, to the extent that the carry value of the recognized asset exceeds the remaining amount of the consideration that the Company expects to receive in exchange for the goods or services relating to the asset.

*Financial impact*

Based on the analysis performed, the Company expects an acceleration of the revenue recognition on equipment or mobile handsets, due to the allocation of discounts to the two performance obligations (equipment and services), in detriment of ongoing telecom revenue services, as well as higher amount of deferred costs related to incremental costs to obtain customer's contract.

As a result, the Company estimates that the impact from the adoption of the new standard will increase retained earnings ranging from R\$ 40 million to R\$ 70 million, excluding impact of taxes.

**IFRS 16 – Leases**

In July 2014, IASB issued IFRS 16, which replaced IAS 17 and refers to annual periods beginning on or after January 1, 2019.

The new standard establishes the principles regarding the recognition, measurement, reporting and disclosure of leases, and requires the recognition by lessees of assets and liabilities arising from lease agreements, except for short term contracts, that is, contracts with a term of 12 months or less, or contracts where the value of underlying assets is low. In accordance with this standard, lessees must apply this pronouncement to lease agreements in two ways:

- (i) Retrospectively to each prior reporting period presented in accordance with IAS 8 - Accounting Policies, Changes in Estimates and Correction of Errors; or
  
- (ii) Retrospectively, with the cumulative effect of the initial application of this pronouncement, recognized as at the date of the initial application.

The Company decided to adopt IFRS16 retrospectively, while the cumulative effect of the initial application is recognized as at the date of initial application, that is, January 1, 2019.

The Company has a significant number of lease agreements under which it is the lessee. Currently, a part of these contracts is recognized as operating leases, and their payments are recorded on a straight line basis throughout the period of the contract.

The Company is currently analyzing its lease agreements, as well as their financial impacts, and it expects a significant increase in total assets and liabilities upon the initial adoption of the standard, due to the recognition of the rights to use "leased" assets and the liabilities under leases, respectively.

Additions of liabilities arising from leases due to the recognition of rights to use assets result in the corresponding increase in net debt, while depreciation and interest expenses are recognized in the statement of income, replacing operating lease expenses ("rent"). This accounting treatment will result in a positive impact on Earnings Before Interest, Tax, Depreciation and Amortization ("EBITDA"), with a corresponding increase in net cash from operations reported in cash flow.

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The accounting effects will be examined as part of the implementation of IFRS 16. However, as a result of the volume of contracts and information required to determine the quantitative impact, the Company believes that the current estimate is not reasonably precise to be disclosed. Regarding the qualitative aspects, the main categories of transactions impacted by the new standard include: rental of vehicles, rental of stores and kiosks, rental of the towers and sharing of infrastructure.

There are no other present IFRS standards or IFRIC interpretations not yet in force that could have a significant impact on the financial statements of the Group.

**3. Use of estimates and critical judgment in the application of the Company's accounting policies**

Uses of accounting estimates and judgment are continuously reassessed. They are based on the Company's historical experience and other factors, including expectations of future events, considering the circumstances as at the date of the financial statements.

By definition, the accounting estimates resulting from such assumptions rarely equal the actual outcome. The estimates and assumptions that present a significant risk of causing relevant adjustments to the book values of assets and liabilities for subsequent fiscal years are shown below:

*(a) Impairment losses on non-financial assets*

Impairment losses take place when the book value of an asset or cash generating unit exceeds the respective recoverable value, which is considered as the fair value less costs to sell or the value in use, whichever is greater. The calculation of fair value less costs to sell is based on information available from sales transactions involving similar assets or market prices, less any additional costs that would be incurred to dispose of those assets. The value in use is based on the discounted cash flow model. Cash flow derives from the Company's business plan. Since this is an ongoing business, from the fifth projection year a perpetual rate of nominal growth of cash flow was estimated (Note 14).

Any reorganization activities to which the Company has not committed itself as at the financial statements disclosure date, or any material future investments aimed at improving the asset base of the cash generating unit being tested, are excluded for the purposes of impairment testing.

The recoverable value is sensitive to the discount rates used under the discounted cash flow method, as well as to the expected future cash receivables and the growth rates of revenue and expenses used for extrapolation purposes. Adverse economic conditions may lead to significant changes in these assumptions.

The main non-financial assets valued using this method include goodwill based on future profitability recorded by the Company (note 14).

*(b) Income tax and social contribution (current and deferred)*

*Income tax and social contribution (current and deferred) are calculated in accordance with interpretations of the legislation currently in force. This process normally includes complex estimates to define the taxable income and temporary differences. In particular, deferred tax assets arising from income tax and social contribution losses and temporary differences are recognized to the extent that it is probable that future taxable income will be available against which they can be offset. The measurement of the recoverability of deferred income tax and social contribution losses carried forward, and of temporary differences, takes into account the estimates of taxable income (Note 10).*

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*(c) Provision for legal and administrative proceedings*

Legal and administrative proceedings are analyzed by the Company's Management and internal and external legal advisors. The Company's reviews take into account factors such as the hierarchy of laws, the available case law, recent court decisions, their relevance to the hierarchy of laws, as well as the disbursement history of judicial proceedings. Such reviews involve the use of Management's judgment (Note 23).

*(d) Fair value of derivatives and other financial instruments*

Financial instruments presented at fair value in the balance sheet are measured using valuation techniques that take into account observable data derived from the market (Note 37).

*(e) Unbilled revenue*

Considering that some billing cut-off dates occur at intermediate dates during each month, there is revenue already earned by the Company but not effectively billed to the customers at the end of each month. This unbilled revenue is recorded based on estimates which take into account customer's usage data and the number of days since the last billing date, among other factors (Note 27).

*f) Sale and leaseback*

Sale and leaseback transactions involve the Group selling an asset and immediately acquiring the right to use the same asset by entering into a lease agreement with the buyer. The accounting treatment of sale and leaseback transactions depends on the substance of each transaction (by applying the principles of lease classification).

For financial sale and leaseback transactions, the total gain is deferred and amortized over the lease term. For operational sale and leaseback, generally the assets are sold at fair value, and consequently the gain or loss on the sale is immediately recognized in the income statement.

At the beginning of the lease term, the Company recognizes finance leases as assets and liabilities on its balance sheet at amounts equal to the fair value of the leased property or, if lower, the present value of the minimum lease payments, each determined at the beginning of the lease.

The discount rate used in a sale and leaseback transaction is determined based on observable market transactions where the lessee would have to pay an amount on a similar lease contract or loan. The discount rates applied by Management to the transactions carried out during the year were significant to the calculation of the portion of the gain recorded through profit and loss, as well as the portion of the deferred gain which is amortized over the lease term. Please see Note 15(ii) for further details on the financial impact on such transaction.

#### **4. Cash and cash equivalents**

These are financial assets classified as loans and receivables, which are accounted for at amortized cost using the effective interest rate method. The Company's Management determines the classification of its financial assets upon initial recognition.

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	<b>2017</b>	<b>2016</b>
Cash and banks	40,283	92,860
Short term bank deposits:		
CDBs/Repurchases	2,920,435	5,035,326
	2,960,718	5,128,186

Bank Deposit Certificates (“CDBs”) and Repurchases are nominative securities issued by banks and sold to the public as a means of raising funds. Such securities can be traded throughout the contracted period, at any time, without any significant loss of value, and are used to repay the short term obligations of the Company.

The annual average return of the Company’s investments regarding CBDs and Repurchases is 100.92% (101.10% as at December 31, 2016) of the Interbank Deposit Certificate (“CDI”) rate.

**5. Marketable Securities**

	<b>2017</b>	<b>2016</b>
Foreign exchange fund	-	479,953
FUNCINE <sup>(3)</sup>	2,997	
FIC: <sup>(1)</sup>		
Government Securities	284,075	-
Repo Transactions <sup>(2)</sup>	236,095	-
Financial Bill	161,789	-
Other	83,655	-
	768,611	479,953
Current portion		
Non-current portion	(765,614)	(479,953)



(1) In August 2017, the Company invested in open-ended Investment Fund Units (“FICs”). These Funds are mostly made up of government securities and instruments of first-tier institutions. The average yield accrued in the period by FICs since the initial investment/inception is 104.17% of the CDI variation.

(2) “Repo Transactions” are securities issued by banks with a commitment to repurchase within one day at pre-established rates. These repo transactions are backed by federal government bonds, and they are used by the Fund to remunerate the capital available in cash.

(3) In December 2017, the Company opened a National Film Industry Financing Fund (“FUNCINE”) in the amount of R\$3 million in order to obtain certain tax benefits for income taxes purposes.

Shares in a non-exclusive foreign exchange fund were purchased during 2015. The investment was intended to reduce foreign exchange risk on repayments to suppliers in foreign currency. For the year ended December 31, 2017, the Company redeemed the Foreign Exchange Fund entirely, in line with its financial strategy.

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(In thousands of *Reais*, unless otherwise indicated)**6. Trade accounts receivable**

These are financial assets classified as borrowing and receivables, which refer to accounts receivable from users of telecommunications services, from network use (interconnections) and from the sale of handsets and accessories. Accounts receivable are recorded at the price charged at the time of the transaction. The balances of accounts receivable also include services provided and not billed (“unbilled”) up to the balance sheet date. Accounts receivable from clients are initially recognized at fair value and subsequently measured at amortized cost using the effective interest rate method less the allowance for doubtful accounts (“impairment”).

Allowances for doubtful accounts were recognized as a reduction in the accounts receivable based on the profile of the subscriber portfolio, the overdue aging of accounts receivable, the economic situation, the risks involved in each case and the collection curve, at an amount deemed sufficient to support future losses.

The fair value of trade accounts receivable equals the book value recorded as of December 31, 2017 and 2016. A portion of the accounts receivable from clients is used to secure the total amount of BNDES borrowing (Note 19).

	<b>2017</b>	<b>2016</b>
Billed services	1,390,616	1,175,091
Unbilled services	610,570	653,333
Network use	367,894	527,179
Sale of goods	661,180	956,056
Other accounts receivable	1,548	2,062
	<b>3,031,808</b>	<b>3,313,721</b>
Allowances for doubtful accounts	(464,745)	(370,452)
	<b>2,567,063</b>	<b>2,943,269</b>

Current portion	(2,540,856)	(2,919,177)
Non-current portion	26,207	24,092

Changes to the allowances for doubtful accounts were as follow:

	<b>2017</b>	<b>2016</b>
Opening balance	370,452	351,381
Additions	316,387	266,442
Write-off	(222,094)	(247,371)
Closing balance	464,745	370,452

The aging of the accounts receivable is as follows:

	<b>2017</b>	<b>2016</b>
Current	2,028,983	2,378,345
Past due for up to 30 days	271,560	231,024
Past due for up to 60 days	113,584	107,584
Past due for up to 90 days	109,568	135,164
–Past due for more than 90 days	508,113	461,604
	3,031,808	3,313,721

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(In thousands of *Reais*, unless otherwise indicated)**7. Inventory**

Inventory is stated at the average cost of acquisition. A loss is recognized to adjust the cost of handsets and accessories to the net realizable value (selling price) when this amount is less than the average acquisition cost.

	<b>2017</b>	<b>2016</b>
Mobile handsets and tablets	107,195	132,857
Accessories and other	16,156	18,115
TIM SIM cards	10,548	13,114
	133,899	164,086
Losses on adjustment to realizable amount	(10,114)	(20,152)
	123,785	143,934

**8. Indirect taxes and contributions recoverable**

	<b>2017</b>	<b>2016</b>
ICMS	1,296,255	1,465,088
Other	39,332	35,909
	1,335,587	1,500,997
Current portion	(386,001)	(633,854)
Non-current portion	949,586	867,143

ICMS (value added tax on goods and services) amounts recoverable primarily refer to: (i) credits on the acquisition of property, plant and equipment directly related to the provision of

telecommunications services (credits divided into 48 months), and (ii) ICMS amounts paid under the tax substitution regime from goods acquired for resale, mainly mobile handsets, SIM cards, tablets and modems sold by TIM.

## 9. Direct taxes and contributions recoverable

	<b>2017</b>	<b>2016</b>
Income tax ("IR") and social contribution ("CS") (i)	434,823	431,005
PIS/COFINS (ii)	53,509	52,879
Other	44,211	51,820
	532,543	535,704
Current portion	(323,040)	(334,806)
Non-current portion	209,503	200,898

(i) The amounts of income and social contribution taxes refer to prepayments over the year.

(ii) The PIS/COFINS amounts recoverable refer to: (i) credits arising from a lawsuit with a final decision favorable to the Company regarding the unconstitutionality of broadening the calculation base for these contributions under Law 9718/98; and (ii) credits calculated on goods and services used as inputs in its industrial process, in accordance with the applicable legislation.

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**10. Deferred taxes**

Deferred income tax and social contribution are recognized on: (1) accumulated income tax losses carried forward and social contribution negative basis, and (2) temporary differences arising from differences between the tax bases of assets and liabilities and their carrying values in the financial statements. Deferred income tax is determined using the tax rates (and tax laws) enacted or substantially enacted up to the balance sheet date. Subsequent changes in tax rates or tax legislation may modify the deferred tax credit and debit balances.

Deferred tax assets on income tax and social contribution are recognized only in the event of a profitable track record and/or when the annual forecast prepared by the Company, examined by the Fiscal Council and Statutory Audit Committee and approved by other management bodies, indicates the likelihood of the future realization of those tax balances.

The balances of deferred income tax and social contribution assets and liabilities are shown in the balance sheet at their net amounts, when there is both a legal right and an intention to offset them at the time when current taxes are ascertained, usually in relation to the same legal entity and the same taxation authority. Thus, deferred tax assets and liabilities belonging to different entities are in general shown separately, rather than at their net amounts.

As at December 31, 2017 and 2016, the prevailing tax rates were 25% for income tax and 9% for social contribution. The tax incentives shown in Note 32 are also being considered as part of deferred taxes.

The amounts recorded are as follow:

	<b>2017</b>	<b>2016</b>
Losses carried forward – income tax	117,411	204,940
Losses carried forward - Social contribution	55,879	87,389
Temporary differences:		
Provision for legal and administrative proceedings	196,589	114,742
Losses on doubtful accounts	164,707	120,096
Adjustment to net present value – 3G license	11,066	13,008
<i>Deferred tax on IFRS adjustments</i>		
Acquisition of stocks from minority shareholders	53,569	53,569
Other	6,270	8,200
Leases of LT Amazonas Infrastructure	19,003	16,144
Profit sharing	40,902	26,470
Taxes with suspended enforceability	12,872	12,872
Amortized goodwill – TIM Fiber	(370,494)	(328,152)
Derivative financial instruments	(16,432)	(46,053)
Capitalized interests on 4G authorization	(258,175)	(173,408)
Deemed cost – TIM S.A.	(94,912)	(108,358)
Other	65,686	31,114
	3,941	32,573
Unrecognized deferred income tax and social contribution	(102,860)	(99,241)
	(98,919)	(66,668)
Deferred tax assets	-	41,690
Deferred tax liabilities	(98,919)	(108,358)

**TIM PARTICIPAÇÕES S.A. AND SUBSIDIARIES**

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

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(In thousands of *Reais*, unless otherwise indicated)

**TIM Celular**

The subsidiary TIM Celular has set up deferred income tax and social contribution assets on its total carried forward income tax, social contribution and temporary differences, based on the historical profitability and projected future taxable earnings.

Based on these projections, the subsidiary expects to recover the deferred tax assets as follows:

	Deferred income tax and social contribution
2018	116,022
2019	-
Losses carried forward	116,022
Temporary differences	(190,758)
<b>Total</b>	<b>(74,736)</b>

The estimates regarding the recovery of tax assets were calculated taking into account the financial and business assumptions available at 2017 year end.

The subsidiary TIM Celular used credits related to carried forward income tax and social contribution in the amount of R\$132,389 in the year ended December 31, 2017 (R\$127,216 as at December 31, 2016).



Unrecognized deferred tax assets

Considering that TIM Participações S.A. does not carry out activities that may generate a taxable profit, deferred tax credits arising from income tax and social contribution tax losses and temporary differences, totaling R\$102,860 as at December 31, 2017 (R\$99,241 as at December 31, 2016), were not recognized.

In relation to the subsidiary TIM S.A, considering that the entity has provided constant history of taxable income and estimates sufficient future taxable income to offset the tax losses and negative base, the available tax credits totaling R\$1,032,588 as at December 31, 2017 (R\$1,126,463 as at December 31, 2016), of which R\$961,183 refers to tax losses and negative base of social contribution and R\$71,405 to temporary differences, were not recognized.

However, a deferred tax asset of R\$70,729 was recognized in the year 2017, comprised by carry forward losses and temporary differences in the amount of R\$10,364 and R\$60,364, respectively, which are recorded net of deferred liabilities in the amount of R\$94,912 related to the deemed cost on Property, Plant and Equipment accounted for in prior years.

**TIM PARTICIPAÇÕES S.A. AND SUBSIDIARIES**

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

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(In thousands of *Reais*, unless otherwise indicated)**11. Prepaid expenses**

	<b>2017</b>	<b>2016</b>
Advertising not broadcasted (*)	124,387	85,905
Rentals and insurance	49,185	58,366
Network swap (**)	20,191	28,932
Other	14,069	11,563
	<b>207,832</b>	<b>184,766</b>
Current portion	(168,366)	(130,392)
Non-current portion	39,466	54,374

(\*) Represent prepaid expenses for the advertising of TIM brand's products and services, which are recognized in income for the period when the advertising are broadcasted by the Agency.

(\*\*) On April 1, 2010, the subsidiary TIM S.A entered into onerous contract and a reciprocal agreement for the assignment of fiber optic infrastructure (network swap) with GVT, in order to expand their respective areas of operations. Given the economic nature of the transaction, the amount was recognized in (current and non-current) prepaid expenses and deferred revenue (current and non-current). Both amounts are being recorded in the income statement in the same proportion over a period of ten years.

**12. Judicial deposits**

These are recorded at their historical cost and updated according to the legislation in force:

	<b>2017</b>	<b>2016</b>
Civil	344,204	471,922
Labor	493,705	468,009
Tax	286,375	291,745
Regulatory	111	111
Online attachment (*)	242,181	62,338
Non-current portion	1,366,576	1,294,125

(\*) This amount refers to judicial deposits that have been restricted by Judge directly in the Company's bank accounts, due to certain judicial proceedings against the Company. As soon as the Company's management identifies the lawsuit related to such pledges, the restricted amount is reclassified from the "on line attachment" caption to the specific caption as stated above.

#### Civil

These are court deposits guaranteeing the execution of civil proceedings where the Company is challenging the amounts involved. Most of these proceedings refer to lawsuits filed by customers, involving issues related to consumers rights, among others.

There are lawsuits involving various issues, including challenging the amounts fixed by ANATEL for leaving certain frequency bands, to allow the implementation of 4G technology, after TIM Celular won the auction. In this case, the updated court deposit amounts to R\$63,869 (R\$59,546 as at December 31, 2016).

**TIM PARTICIPAÇÕES S.A. AND SUBSIDIARIES**

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(In thousands of *Reais*, unless otherwise indicated)

Labor

These are amounts deposited in court in relation to guarantees of execution and the filing of relevant appeals, where the matters or amounts involved are still being discussed. The total balance is distributed among the several claims filed by the Company's employees and third party service providers.

Tax

The Company and its subsidiaries have placed court deposits for tax issues to back various current court proceedings. These deposits refer mainly to the following matters:

(i) 2% increase in the ICMS rate for the Fund for the Eradication of Poverty ("FECF") in the State of Bahia on prepaid telephone services provided by the Company. The current value of these deposits is R\$92,066 (R\$87,093 as at December 31, 2016).

(ii) Use of credit for the purchase of electricity used directly by the companies for production purposes. The court is tending towards to provide a favorable decision to the taxpayers in such matter. The current value of these deposits is R\$71,722 (R\$67,697 as at December 31, 2016).

(iii) Liability for the Provisional Contribution on Financial Transactions ("CPMF") on the Company's capitalization of loans; recognition of the right not to pay contributions allegedly due on changes to the ownership of current accounts as a result of a takeover. The current value of these deposits is R\$9,687, considering the recent conversion into income in favor of the Federal Government (R\$33,489 as at December 31, 2016).

(iv) Constitutionality of collection of the Operations Monitoring Charge ("TFF") by a number of municipal authorities. The current value of these deposits is R\$15,824 (R\$13,542

as at December 31, 2016).

(v) Failure to approve the offsetting of federal debts against credits for Withholding Tax (“IRRF”) because it is alleged that the credits are insufficient, as well as the deposit placed to ensure the issue of a Tax Clearance Certificate (“CND”). The current value of these deposits is R\$10,539 (R\$10,036 as at December 31, 2016).

(vi) Liability for Services Tax (Imposto sobre Serviços - ISS”) on import services and outsourced services; alleged failure to pay for land clearance and Base Transceiver Station (“BTS”) maintenance services, and liability for ISS on the Company’s services and on Co-billing services and software licensing (Blackberry). The Company is seeking for its right to take advantage of the spontaneous complaint in order to remove the confiscatory fines for late payment. The current value of these deposits is R\$7,056 (R\$6,453 as at December 31, 2016).

(vii) Ancillary services provided for in ICMS Agreement 69/98 related to ICMS levied on communication services of amounts charged for access, joining, activation, enabling, availability, subscription and use of services, among others. The current value of these deposits is R\$5,937 (R\$5,745 as at December 31, 2016).

(viii) Volunteered reports of tax debits and consequent cancellation of charges of fines for late payment. The current value of these deposits is R\$4,381 (R\$4,222 as at December 31, 2016).

## **TIM PARTICIPAÇÕES S.A. AND SUBSIDIARIES**

### NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

At December 31, 2017

(In thousands of *Reais*, unless otherwise indicated)

(ix) Deposit made by TIM S.A. related to the unconstitutionality and illegality of charging by the Telecommunications Services Universalization Fund (“FUST”). Plea for the recognition of the right not to pay FUST, and not to include in its calculation base revenue from interconnection and Industrial Exploration of Dedicated Lines (“EILD”), as well as for the right not to be charged retroactively for differences arising from failure to comply with ANATEL Ruling 7/2005. The current value of these deposits is R\$53,128 (R\$48,873 as at December 31, 2016).

### **13. Property, Plant and Equipment**

Property, plant and equipment are stated at their acquisition and/or construction cost, less accumulated depreciation and impairment losses (the latter only if applicable). Depreciation is calculated based on the straight line method over terms that take into account the expected useful lives of the assets and their residual values.

The estimated costs of dismantling towers and equipment on rented properties are capitalized and depreciated over the estimated useful lives of these assets. The Company recognizes the present value of these costs in property, plant and equipment with a counter-entry to liabilities account “Provision for future asset retirement”. Interest incurred on updating the provision is classified within financial expenses.

Gains and losses from disposals are determined by comparing the amounts of these disposals with their carrying values at the time of the transaction, and are recognized in “other income (expenses), net” in the statement of income.

On January 1, 2009 TIM S.A., on its first adoption of IFRS, used deemed cost to measure its property, plant and equipment assets. After this its property, plant and equipment have been demonstrated based on the historical cost of acquisition and/or construction. Both (deemed cost and historical cost) are deductible from the accumulated depreciation and from the

impairment losses, if applicable.

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**TIM PARTICIPAÇÕES S.A. AND SUBSIDIARIES**

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

At December 31, 2017

(In thousands of *Reais*, unless otherwise indicated)

## (a) Changes in property, plant and equipment

	<b>2016</b>	Additions (depreciation)	Disposals	Transfers	<b>2017</b>
<b>Cost of property, plant and equipment, gross</b>					
Commutation/transmission equipment	17,232,254	28,694	(57,683)	1,563,575	18,766,840
Fiber optic cables	600,504	3	-	83,464	683,971
Leased handsets	2,071,334	-	(10,502)	120,798	2,181,630
Infrastructure	5,269,043	238	(15,195)	398,754	5,652,840
Informatics assets	1,550,614	113	(1)	64,599	1,615,325
General use assets	675,682	18	(258)	63,997	739,439
Land	40,794	-	-	-	40,794
Construction in progress	1,819,606	2,279,913	5,359	(2,618,812)	1,486,066
<b>Total property, plant and equipment, gross</b>	<b>29,259,831</b>	<b>2,308,979</b>	<b>(78,280)</b>	<b>(323,625)</b>	<b>31,166,905</b>
<b>Accumulated depreciation</b>					
Commutation/transmission equipment	(11,969,208)	(1,417,827)	14,054	(22)	(13,373,003)
Fiber optic cables	(242,709)	(47,990)	-	-	(290,699)
Leased handsets	(1,905,228)	(114,370)	3,580	-	(2,016,018)
Infrastructure	(2,224,932)	(482,463)	9,211	306	(2,697,878)
Informatics assets	(1,372,663)	(76,080)	1	48	(1,448,694)
General use assets	(460,561)	(41,491)	258	(331)	(502,125)
<b>Total accumulated depreciation</b>	<b>(18,175,301)</b>	<b>(2,180,221)</b>	<b>27,104</b>	<b>1</b>	<b>(20,328,417)</b>
<b>Property, plant and equipment, net</b>					
Commutation/transmission equipment					



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	5,263,046	(1,389,133)	(43,629)	1,563,553	5,393,837
Fiber optic cables	357,795	(47,987)	-	83,464	393,272
Leased handsets	166,106	(114,370)	(6,922)	120,798	165,612
Infrastructure	3,044,111	(482,225)	(5,984)	399,060	2,954,962
Informatics assets	177,951	(75,967)	-	64,647	166,631
General use assets	215,121	(41,473)	-	63,666	237,314
Land	40,794	-	-	-	40,794
Construction in progress	1,819,606	2,279,913	5,359	(2,618,812)	1,486,066
<b>Total property, plant and equipment, net</b>	<b>11,084,530</b>	<b>128,758</b>	<b>(51,176)</b>	<b>(323,624)</b>	<b>10,838,488</b>

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**TIM PARTICIPAÇÕES S.A. AND SUBSIDIARIES**

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

At December 31, 2017

(In thousands of *Reais*, unless otherwise indicated)

	<b>Balance in</b>				<b>Balance in</b>
	<b>2015</b>	Additions	Disposals	Transfers	<b>2016</b>
		(depreciation)			
<b>Cost of property, plant and equipment, gross</b>					
Commutation/transmission equipment	16,164,178	-	(57,363)	1,125,439	17,232,254
Fiber optic cables	563,995	-	(19)	36,528	600,504
Leased handsets	1,952,079	7	(26,089)	145,337	2,071,334
Infrastructure	4,933,743	107,828	(127,470)	354,942	5,269,043
Informatics assets	1,501,480	-	(5,482)	54,616	1,550,614
General use assets	650,580	-	(24,163)	49,265	675,682
Land	40,794	-	-	-	40,794
Construction in progress	1,119,800	2,433,983	31,950	(1,766,127)	1,819,606
<b>Total property, plant and equipment, gross</b>	<b>26,926,649</b>	<b>2,541,818</b>	<b>(208,636)</b>	<b>-</b>	<b>29,259,831</b>
<b>Accumulated depreciation</b>					
Commutation/transmission equipment	(10,653,118)	(1,366,859)	50,769	-	-(11,969,208)
Fiber optic cables	(200,123)	(42,589)	3	-	-(242,709)
Leased handsets	(1,783,940)	(136,262)	14,974	-	-(1,905,228)
Infrastructure	(1,884,692)	(416,085)	75,845	-	-(2,224,932)
Informatics assets	(1,296,837)	(81,267)	5,441	-	-(1,372,663)
General use assets	(440,591)	(40,944)	20,974	-	-(460,561)
<b>Total accumulated depreciation</b>	<b>(16,259,301)</b>	<b>(2,084,006)</b>	<b>168,006</b>	<b>-</b>	<b>-(18,175,301)</b>
<b>Property, plant and equipment, net</b>					
Commutation/transmission equipment					

	5,511,060	(1,366,859)	(6,594)	1,125,439	5,263,046
Fiber optic cables	363,872	(42,589)	(16)	36,528	357,795
Leased handsets	168,139	(136,255)	(11,115)	145,337	166,106
Infrastructure	3,049,051	(308,257)	(51,625)	354,942	3,044,111
Informatics assets	204,643	(81,267)	(41)	54,616	177,951
General use assets	209,989	(40,944)	(3,189)	49,265	215,121
Land	40,794	-	-	-	40,794
Construction in progress	1,119,800	2,433,983	31,950	(1,766,127)	1,819,606
<b>Total property, plant and equipment, net</b>	<b>10,667,348</b>	457,812	(40,630)		<b>- 11,084,530</b>

Part of the amount classified as “Construction in progress” corresponds to the cost of intangible assets incurred during their construction and installation, until the date when the assets are ready for operations, at which time they are transferred to their relevant asset accounts.

Therefore, the amount of R\$323,625 in the “Transfers” column was reclassified from the “construction in progress” account in property, plant and equipment, to the “intangible assets in progress” account in intangible assets for better presentation according to the nature of the assets.

**TIM PARTICIPAÇÕES S.A. AND SUBSIDIARIES**

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

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(In thousands of *Reais*, unless otherwise indicated)

## (b) Depreciation rates

	<b>Annual rate %</b>
Commutation/transmission equipment	8 to 14.29
Fiber optic cables	4 to 10
Leased handsets	14.28 to 50
Infrastructure	4 to 20
Informatics assets	10 to 20
General use assets	10 to 20

In 2017, pursuant to IAS 16, the Company and its subsidiaries assessed the useful life estimates for their property, plant and equipment, concluding that there were no significant changes to the circumstances on which the estimates were based that would justify changes to the useful lives currently in use. To determine the useful lives of the assets, the Company considers not just the type of the asset, but also the way it is used and the conditions to which the asset is subjected during its use.

**14. Intangible assets**

Intangible assets are measured at historical cost less accumulated amortization and impairment losses (if applicable), and reflect: (i) the purchase of authorizations and rights to use radio frequency bands; and (ii) software in use and/or development. Intangibles also include: (i) purchases of the right to use the infrastructure of other companies; (ii) customer lists; (iii) goodwill on purchases of companies; and (iv) costs of commission paid to dealers to obtain new clients.

Amortization charges are calculated on the straight line method over the estimated useful life of the assets contracted and over the terms of the authorizations and, in the case of costs of commission over the term of the agreement, as mentioned in Note (h) below. The estimated useful lives of intangible assets are reviewed regularly.

Any financial charges on funds raised (that is, without a specific purpose) and used to obtain qualifying assets, which are assets that necessarily require a significant time to be ready for use, are capitalized as a portion of the cost of the asset when it is likely to bring future economic benefits for the entity, and such costs can be accurately measured. These costs are amortized throughout the estimated useful lives of the assets.

The amounts of the SMP authorization and rights to use radio frequencies, as well as software, goodwill and other items, were recorded as follows:

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**TIM PARTICIPAÇÕES S.A. AND SUBSIDIARIES**

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

At December 31, 2017

(In thousands of *Reais*, unless otherwise indicated)

## (a) Changes in intangibles

	<b>2016</b>	Additions (amortization)	Transfers	Disposals	Capitalized Interests	<b>2017</b>
<b>Cost of intangible assets, gross</b>						
Software rights to use	14,612,475	-	1,345,333	-	-	15,957,808
Authorizations	5,399,023	50,045	942,326	-	-	6,391,394
Goodwill	1,527,219	-	-	-	-	1,527,219
Cost of deferred commission to dealers	203,892	180,563	-	-	-	384,455
List of clients	95,200	-	-	-	-	95,200
Right to use infrastructure of LT Amazonas	198,202	-	-	-	-	198,202
Other assets	198,198	17,425	55,064	-	-	270,687
Intangible assets under development	3,794,582	1,684,811	(2,019,098)	-	264,292	3,724,587
<b>Total intangible assets, gross</b>	<b>26,028,791</b>	<b>1,932,844</b>	<b>323,625</b>	<b>-</b>	<b>264,292</b>	<b>28,549,552</b>
<b>Accumulated amortization</b>						
Software rights to use	(10,880,739)	(1,377,294)	-	(7,358)	-	(12,265,391)
Authorizations	(4,235,831)	(261,927)	-	-	-	(4,497,758)
Cost of deferred commission to dealers	(101,911)	(153,783)	-	-	-	(255,694)
List of clients	(86,800)	(8,400)	-	-	-	(95,200)
Right to use infrastructure of LT Amazonas	(32,621)	(9,910)	-	-	-	(42,531)
Other assets	(58,314)	(22,137)	-	-	-	(80,451)

<b>Total accumulated amortization</b>	(15,396,216)	(1,833,451)	-	(7,358)		-(17,237,025)
<b>Intangible assets, net</b>						
Software rights to use (c)	3,731,736	(1,377,294)	1,345,333	(7,358)	-	3,692,417
Authorizations	1,163,192	(211,882)	942,326	-	-	1,893,636
Goodwill (d)	1,527,219	-	-	-	-	1,527,219
Cost of deferred commission to dealers (h)	101,981	26,780	-	-	-	128,761
List of clients (e)	8,400	(8,400)	-	-	-	-
Right to use infrastructure of LT Amazonas (f)	165,581	(9,910)	-	-	-	155,671
Other assets	139,884	(4,712)	55,064	-	-	190,236
Intangible assets under development (g)	3,794,582	1,684,811	(2,019,098)	-	264,292	3,724,587
<b>Total Intangible assets, net</b>	<b>10,632,575</b>	<b>99,393</b>	<b>323,625</b>	<b>(7,358)</b>	<b>264,292</b>	<b>11,312,527</b>

**TIM PARTICIPAÇÕES S.A. AND SUBSIDIARIES**

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

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	<b>2015</b>	Additions (amortization)	Transfers	Disposals	Capitalized Interests	<b>2016</b>
<b>Cost of intangible assets, gross</b>						
Software rights to use	13,033,544	29,372	1,551,252	(1,693)	-	14,612,475
Authorizations	5,189,022	152,201	57,800	-	-	5,399,023
Goodwill	1,527,219	-	-	-	-	1,527,219
Cost of deferred commission to dealers						
	28,991	174,901	-	-	-	203,892
List of clients	95,200	-	-	-	-	95,200
Right to use infrastructure of LT Amazonas	198,202	-	-	-	-	198,202
Other assets	167,125	-	31,073	-	-	198,198
Intangible assets under development	3,416,633	1,734,493	(1,640,125)	-	283,581	3,794,582
<b>Total intangible assets, gross</b>	<b>23,655,936</b>	<b>2,090,967</b>	<b>-</b>	<b>(1,693)</b>	<b>283,581</b>	<b>26,028,791</b>
<b>Accumulated amortization</b>						
Software rights to use	(9,591,782)	(1,290,650)	-	1,693	-	-(10,880,739)
Authorizations	(3,962,749)	(273,082)	-	-	-	-(4,235,831)
Cost of deferred commission to dealers						



	(1,688)	(100,223)	-	-	-	(101,911)
List of clients	(70,000)	(16,800)	-	-	-	(86,800)
Right to use infrastructure of LT Amazonas	(22,711)	(9,910)	-	-	-	(32,621)
Other assets	(47,813)	(10,501)	-	-	-	(58,314)
<b>Total accumulated amortization</b>	(13,696,743)	(1,701,166)	-	1,693	-	(15,396,216)
<b>Intangible assets, net</b>						
Software rights to use (c)	3,441,762	(1,261,278)	1,551,252	-	-	3,731,736
Authorizations	1,226,273	(120,881)	57,800	-	-	1,163,192
Goodwill (d)	1,527,219	-	-	-	-	1,527,219
Cost of deferred commission to dealers (h)						
	27,303	74,678	-	-	-	101,981
List of clients (e)	25,200	(16,800)	-	-	-	8,400
Right to use infrastructure of LT Amazonas (f)	175,491	(9,910)	-	-	-	165,581
Other assets	119,312	(10,501)	31,073	-	-	139,884
Intangible assets under development (g)	3,416,633	1,734,493	(1,640,125)	-	283,581	3,794,582
<b>Total intangible assets, net</b>	<b>9,959,193</b>	<b>389,801</b>	<b>-</b>	<b>-</b>	<b>283,581</b>	<b>10,632,575</b>

Intangible assets under development represents the cost of projects in progress related to the acquisition of 4G authorizations and/or other intangible assets during their construction and installation, up to the moment they are ready for operations, when they will be transferred to the corresponding accounts for these assets.

**TIM PARTICIPAÇÕES S.A. AND SUBSIDIARIES**

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

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(b) Amortization rates

	<b>Annual rate %</b>
Software rights to use	20
Authorizations	5 to 50
Cost of deferred commission to dealers	50
List of clients	18
Right to use infrastructure	5
Other assets	7 to 10

(c) Software rights to use

The costs associated with maintaining software are recognized as expenses as they are incurred. Identifiable and unique development costs that are directly attributable to the design and testing of software products, and which are controlled by the Group, are recognized as intangible assets when all of the capitalization criteria are met.

Directly attributable costs, which are capitalized as part of the software product, include costs for employees directly allocated to its development.

(d) Goodwill from previous years

The Company and its subsidiaries have the following goodwill based on expectations of future profitability as at December 31, 2017 and 2016:

Goodwill on acquisition of TIM S.A. - The goodwill arising from the acquisition of TIM S.A. (formerly, Intelig) in December 2009 in the amount of R\$210,015 is represented by/based on the subsidiary's expected profitability. The recoverability of goodwill is tested annually through impairment testing.

Goodwill from acquisitions of TIM Fiber SP and TIM Fiber RJ - TIM Celular acquired, at the end of 2011, Eletropaulo Telecomunicações Ltda. (which subsequently had its trade name changed to TIM Fiber SP Ltda. – “TIM Fiber SP”) and AES Communications Rio de Janeiro S.A. (which subsequently had its trade name changed to TIM Fiber RJ S.A. – “TIM Fiber RJ”). These companies were SCM providers to the main municipalities of the Greater São Paulo and Greater Rio de Janeiro areas, respectively.

TIM Fiber SP Ltda. and TIM Fiber RJ. S.A. were merged into TIM Celular S.A. on August 29, 2012.

The subsidiary TIM Celular recorded the goodwill allocation related to the purchase of the companies TIM Fiber SP and TIM Fiber RJ at the end of the process of purchase price allocation, at the amount of R\$1,159,648.

Goodwill on the acquisition of minority interests in TIM Sul and TIM Nordeste - In 2005, the Company acquired all the shares of the minority shareholders of TIM Sul and TIM Nordeste, in exchange for shares issued by TIM Participações, converting these companies into full subsidiaries. The goodwill resulting from this transaction amounted to R\$157,556.

As required by accounting standards, the Company annually tests the goodwill on business combinations involving TIM Group companies for impairment, and the methods and assumptions used by Management for such impairment testing of goodwill are summarized below:

**TIM PARTICIPAÇÕES S.A. AND SUBSIDIARIES**

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The Company's Management understands that the smaller cash generating unit used for testing the impairment of goodwill on purchases of the aforementioned companies encompasses the business at a consolidated level, and therefore should be assessed assessment at the level of TIM Participações. This methodology is aligned with the strategic direction of the Company and its subsidiaries, as well as with the market generally, in the sense of integrating the mobile and landline segments, in accordance with the assumptions below:

(i) At the time of purchase of these companies, the key reason for the purchase was to support and increase the competitiveness of the mobile business, to enter the residential and corporate broad band business, and to access the wholesale market, either directly or through swaps with other market operators in areas where TIM was not yet operating. In previous years, the Company believed that the cash generated by the Fiber and Intelig businesses could be regarded as being independent of the other lines of business, and so the goodwill impairment testing took into account only the cash flow directly related to these CGUs, which no longer makes sense due to the interdependence and/or synergies between mobile, landline and broadband operations;

(ii) In recent years there has been a migration of the usage of (and revenue from) voice services to data services, internationally and in particular in Brazil. The growing use of data has become a major challenge in terms of infrastructure, since the mobile sites now demand high capacity to provide an efficient data service. The main solution adopted by TIM was to introduce the Fiber to the Site ("FTTS") approach, connecting towers/sites with a fiber optics network and installing small cells connected to this network, especially in Rio de Janeiro and São Paulo, in order to reduce congestion at mobile sites, increasing the transmission capacity and improving the quality of service. This led to a huge increase in the use of the TIM Fiber and TIM S.A. (Intelig) backbone for mobile services. This sharing of the network between mobile and fixed services makes it impossible to keep cash disbursements for CAPEX and OPEX separate between these two segments;

(iii) The behavior of telephone services customers is changing to become more data-centered, where customers are always “connected”, using either the operator network or public or private Wi-Fi, made possible as handsets become ever more advanced. Thus the telecoms companies are offering services and data packages to obtain income from the constant usage of data. Introducing offers as packages has made it impossible to separate cash revenue from the mobile segment and the fixed segment; and

(iv) From an organizational standpoint, the businesses of TIM Fiber and TIM S.A. (Intelig) are totally integrated into the mobile business.

Consequently, the impairment testing of said goodwill used this CGU (TIM Participações) and the value in use method as its basis, with the following principal assumptions:

- Percentages of growth in the number of clients, in line with the Company’s business plan, prepared for 3+2 years;
- Progressive decrease in the base of clients for prepaid services and, in accordance with the historical trend and the wider market, this is being offset with greater the penetration of postpaid services, in line with the Company’s business plan and prepared for 3+2 years, when the cash flow will stabilize and the growth can be estimated based on a perpetual growth rate;
- Operation and maintenance costs estimates considering changes in the base of clients, occasional scale gains and inflation effects. The inflation rate expected by the Company for operational expenses (4.00% p.a. on average) is in line with the estimates prepared by representative market institutions;
- Considering that is a going concern business, from the fifth year, a perpetual nominal growth growth of cash flow of 2.50% p.a. was estimated;

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- The discount rate (post-tax rate) for estimated future cash flow was 11.10% p.a., 15.24% is the equivalent discount rate to the same value in use excluding the impact of income taxes on future cash flow (pre-tax rate).

The result of impairment testing carried out as at December 31, 2017, showed no evidence of the need to recognize any losses.

(e) List of clients

As part of the purchase price allocation process involving the acquisitions of TIM Fiber SP Ltda. and TIM Fiber RJ S.A., contractual rights were identified for the companies acquired to provide future services. These contractual rights were evaluated based on their fair value as at the acquisition date and are being amortized in accordance with their estimated useful life as at the same date.

(f) Infrastructure use rights - LT Amazonas

The subsidiary TIM Celular signed agreements for the right to use infrastructure with companies that operate electric power transmission lines in Northern Brazil. Such agreements fall within the scope of IFRIC 4 and are classified as financial leases.

Additionally TIM Celular entered into network infrastructure sharing contracts with Telefônica Brasil S.A., also in the Northern Region. Under these contracts, both operators optimize resources and reduce their operational costs (Note 16).

(g) Auction of and payment for 4G License 700 MHz

Intangible assets in progress are substantially represented by costs for the development of 4G technology, which include: (i) amounts paid to obtain 4G Licenses; (ii) costs for cleaning the 700 MHZ frequency band; and (iii) financial costs capitalized on qualifiable assets, as detailed below:

(i) On September 30, 2014, TIM Celular purchased Lot 2 in the Auction of the 700 MHz band for the amount of R\$1,739 million. In December 2014, the Company paid R\$1,678 million. The balance of R\$61 million was recorded as a debt, as provided for in the call notice.

TIM Celular is challenging the remaining balance with Anatel, which is subject to interest rates of 1% p.m. and monetary adjustment by IGP-DI. These amounts are capitalized by the Company. The impact on the balance for the year ended December 31, 2017, was R\$8,313 (R\$8,586 as at December 31, 2016) of interest and R\$443 (R\$3,659 as at December 31, 2016) of monetary adjustments.

(ii) Additionally, as determined in the call notice, the Company has borne the costs for the cleaning of the frequency band purchased. The nominal amount due from the Company for the cleaning of the 700 MHz frequency for the lot purchased was R\$904 million. The Company had also an additional cost of R\$295 million related to the portion that has not been bought at the auction and that was subsequently split by Anatel among the companies that won the auction, totaling R\$1,199 million to be paid.

In order to perform the activities for cleaning the spectrum, in March 2015, TIM, together with the other companies that won the auction, constituted a Redistribution and Digitalization Management Entity for TV and RTV Channels, named "EAD". From 2015 to 2018, TIM and the other companies that won the auction, will disburse amounts, according to the schedule provided for in the public notice, to afford, by means of the EAD, with the costs related to this cleaning activities. As the amount payable by TIM of R\$1,199 million relates to a long term obligation, it was reduced by R\$47 million through adjustment to present value ("AVP"). Monthly AVP interest is appropriated, as well as monetary adjustments based on the IGP-DI index. For the year ended December 31, 2017, the impact generated by the appropriation of AVP interest amounted to R\$4,073 (R\$14,239 as at December 31, 2016), while the impact from indexation was R\$20,331 (R\$43,619 as at December 31, 2016).

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At April 9, 2015 and January 26, 2017, payments in the amounts of R\$370,379 and R\$858,991, respectively, were made to EAD.

The license mentioned above relates to the concept of a qualifying asset. Consequently, the finance charges on funds raised without a specific purpose, and used to obtain a qualifying asset, are capitalized at the average rate of 9.48% per annum in connection with the borrowing and financing valid for the period. The amount capitalized in the year ended December 31, 2017, was R\$251,904 (R\$260,756 as at December 31, 2016).

(h) Cost of deferred commission to dealers

Beginning 2015, the Company launched new offers to corporate clients whereby contracts provide a minimum contract period of 24 months with a penalty clause in the case of early cancellation. This kind of contract allows amounts disbursed on commission to dealers for the acquisition of these clients to be capitalized as intangible assets with finite useful lives. The capitalized costs of these contracts will be amortized over the contract term, net of impairment adjustments.

**15. Financial Leases**

Leases under which the Company, as lessee, holds substantially all of the risks and benefits of ownership are classified as financial leases, which are capitalized at the beginning of the lease at the lower of the fair value of the leased item and the present value of the payments provided for in the agreement. Interest related to the lease is taken to income as financial expenses over the contract term.



The subsidiary TIM Celular entered into tower lease agreements as a lessee, arising from a sale and financial leaseback operation involving the sale of an asset and the concomitant leasing of the same asset by the purchaser to the seller.

The subsidiary TIM Celular recognized a liability corresponding to the present value of the compulsory minimum installments of the agreement.

Leases under which the Company, as lessor, transfers substantially all of the risks and benefits of ownership to the other party (lessee) are classified as financial leases. These lease values are transferred from the intangible assets of the Company and are recognized as lease receivables at the lower of the fair value of the leased item and the present value of the payments provided for in the agreement. Interest related to the lease are taken to income as financial income over the contract term.

Asset leases are financial assets recorded within borrowing and receivables.

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(In thousands of *Reais*, unless otherwise indicated)Assets

	<b>2017</b>	<b>2016</b>
LT Amazonas	205,331	204,762
	205,331	204,762
Current portion	(19,773)	(2,818)
Non-current portion	185,558	201,944

LT Amazonas

As a result of the agreement entered into with LT Amazonas, the subsidiary TIM Celular entered into network infrastructure sharing agreements with Telefônica Brasil S.A. Under these agreements, TIM Celular and Telefônica Brasil S.A. share investments in the Northern region of Brazil. The subsidiary has receivables against Telefônica Brasil S.A. that have to be paid on a monthly basis for a period of 20 years. These amounts are annually restated annually by the IPC-A (Customer Index Price). The consolidated nominal amount of future receivable by TIM Celular is R\$510,592.

The table below includes the schedule of cash receipts of the agreement currently in force. The amounts represent the cash receipts estimated in the signed agreements, and are stated at their nominal amounts, which include the inflation projected up to the end of the agreement, and at their present values:

	<b>Nominal amount</b>	<b>Present value</b>
Up to December 2018	21,905	19,773
January 2019 to December 2022	99,668	41,287
January 2023 onwards	389,019	144,271

510,592

205,331

The present value of installments receivable is R\$205,331 (R\$204,762 in 2016), of which R\$185,558 of principal and R\$19,773 of interest were accrued to December 31, 2017. These amounts were estimated as at the date of execution of the agreements entered into with the transmission companies, projecting future cash receipts discounted at 12.56% per annum.

### Liabilities

	<b>2017</b>	<b>2016</b>
LT Amazonas (i)	351,063	351,798
Sale of Towers (leaseback) (ii)	1,466,895	1,411,055
Other (iii)	69,214	39,385
	1,887,172	1,802,238
Current portion	(176,925)	(96,604)
Non-current portion	1,710,247	1,705,634

#### i) LT Amazonas

The subsidiary TIM Celular executed agreements for the right to use infrastructure owned by companies that operate electrical power transmission lines in Northern Brazil ("LT Amazonas"). The terms of these agreements are for 20 years, counted from the date on which the infrastructure is ready to operate. The contracts provide for monthly payments to the electrical power transmission companies, annually restated at the IPC-A.

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The table below presents the future payment schedule for the agreements in force. These amounts represent the estimated disbursements under the agreements executed, and are shown at their nominal amounts, which include the inflation projected to the end of the agreement, and at their present values. These balances differ from those shown in the books value since are presented at present value:

	<b>Nominal amount</b>	<b>Present value</b>
Up to December 2018	41,607	38,062
January 2019 to December 2022	189,311	70,033
January 2023 onwards	739,159	242,968
	970,077	351,063

The consolidated nominal value of future installments due from TIM Celular is R\$970,077. The present value is R\$351,063, composed of R\$313,001 for the principal and R\$38,062 for interest as at December 31, 2017, was estimated as at the date on which the agreements were signed with the transmission companies by projecting the future payments and discounting these at 14.44% per annum. Additionally, the amount of the right to use LT Amazonas also considers R\$70,759 related to investments in property, plant and equipment made by TIM Celular and subsequently donated to the electrical power transmission companies. These donations are already included in the contracts signed by the parties.

ii) Sale and Leaseback of Towers

The subsidiary TIM Celular entered into two Sales Agreements with American Tower do Brasil Cessão de Infraestruturas Ltda. ("ATC") in November 2014 and January 2015 for up to 6,481 telecommunications towers then owned by TIM Celular, for approximately R\$3 billion, and a

Master Lease Agreement (“MLA”) for part of the physical space on these towers for a period of 20 years from the date of transfer of each tower, under a sale and leaseback transaction, with a provision for monthly rental amounts depending on the type of tower (greenfield or rooftop). The sales agreements provided for the towers to be transferred in tranches to ATC in order to meet certain conditions precedent.

Until December 31, 2017, a total of six transfers have occurred, such as: on April 29, 2015, September 30, 2015, December 16, 2015, June 9, 2016, December 20, 2016, and on June 30, 2017. Therefore, 5,873 towers (336 in 2016 and 5,483 in 2015) have been transferred, representing 90.6% of the total agreement.

The effects on the accounts were as follow:

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(In thousands of *Reais*, unless otherwise indicated)

	<b>2017</b>	<b>2016</b>	<b>2015</b>
Numbers of towers sold	54	336	5,483
Sales amount	19.118	133,708	2,498,421
<b>Residual asset value, net of transaction costs</b>	<b>(7.812)</b>	<b>(32,014)</b>	<b>(487,795)</b>
<b>Gain on transaction</b>	<b>11.306</b>	<b>101,694</b>	<b>2,010,626</b>
Effect on sales revenue:			
<b>Income from disposal of assets</b>	233	42,207	1,253,618
<b>Asset residual value and transaction costs</b>	<b>(2.598)</b>	<b>(10,401)</b>	<b>(247.572)</b>
<b>Net impact of decommissioning costs reversal</b>	563	12,230	204.934
<b>Effect on pre-tax income (heading "other operating income (expenses), net")</b>	<b>(1.802)</b>	<b>44,036</b>	<b>1,210,980</b>
<b>Income and social contribution taxes</b>	957	(12,565)	(372,140)
<b>Net effect on income for the year</b>	<b>(845)</b>	<b>31,471</b>	<b>838,840</b>
<b>Deferred revenue</b>	15.141	70,856	1,002,393
<b>Property, plant and equipment leased back</b>	19.263	92,835	1,244,803
<b>Finance lease obligation ("leaseback")</b>	19.263	92,835	1,244,803

The table below includes the schedule of payments under the agreement in force regarding the MLA. The amounts represent the disbursements estimated in the agreements signed and are stated at their nominal amounts, which include the inflation projected up to the end of the agreement, and at their present values:

	<b>Nominal amount</b>	<b>Present value</b>
Up to December 2018	180,551	112,121
January 2019 to December 2022	771,486	361,189

January 2023 onwards	3,701,703	993,585
	4,653,740	1,466,895

The consolidated nominal amount of the sum of future installments payable by TIM Celular is R\$4,653,740. The present value is R\$1,466,895, of which R\$1,337,638 of principal and R\$129,257 of interest as at December 31, 2017. The present value was estimated by projecting the future payments discounted at the discount rates used as at the dates of the transactions, ranging from 11.01% to 17.08% per annum, and which were determined on the basis of observable market transactions that the Company (lessee) would have to pay under a similar lease or loan.

iii) Substantially represented by the financial leases of new transmission towers and, in the year 2017, rights to use new towers were acquired in the amount of R\$29,634, as provided for in the agreements entered into with American Tower on November 21, 2014.

## **16. Regulatory credits recoverable**

These refer to regulatory credit amounts (known as “FISTEL”, which is the fees due to the Telecommunications Inspection Fund) arising from the reduction of the client base, which may be offset against future changes in the base of subscribers or a reduction in future obligations to ANATEL.

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Supplier accounts payable are obligations to pay for goods or services that were purchased in the normal course of business. They are initially recognized at fair value and subsequently measured at amortized cost using the effective interest rate method. Given the short maturity terms of these obligations, in practical terms they are usually recognized at their invoice values.

	<b>2017</b>	<b>2016</b>
Local currency		
Suppliers of materials and services (a)	3,649,543	3,108,497
Interconnection (b)	155,114	181,580
Roaming (c)	1,051	3,349
Co-billing (d)	62,895	85,554
	<b>3,868,603</b>	<b>3,378,980</b>
Foreign currency		
Suppliers of materials and services (a)	80,869	67,511
Roaming (c)	37,085	14,590
	<b>117,954</b>	<b>82,101</b>
Current portion	<b>3,986,557</b>	<b>3,461,081</b>

(a) Represents the amount to be paid to suppliers for the acquisition of materials and the provision of services relating to tangible and intangible assets or for consumption during operations, maintenance and management, as provided for in the agreement between the parties.

(b) This refers to the use of the networks of other landline and mobile telephone operators, with calls being initiated from TIM's network and ending on the networks of other operators.



(c) This refers to calls made by customers outside their registration areas, who are therefore considered visitors to other operators' networks.

(d) This refers to calls made by a customer who chooses another long-distance operator.

## 18. Authorizations payable

As at December 31, 2017, the Company and its subsidiaries have the following commitments to ANATEL:

	<b>2017</b>	<b>2016</b>
Renewal of authorizations (i)	262,513	254,515
700 MHz frequency band cleaning, net of AVP (ii)	141,659	976,246
Updated ANATEL Debt (ii)	98,451	89,695
Authorizations payable (iii)	-	57,524
Guarantee insurance on authorizations	4,077	8,652
	506,700	1,386,632
Current portion	(233,173)	(486,494)
Non-current portion	273,527	900,138

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(i) In order to provide SMP services, the subsidiary TIM Celular obtained radio frequency authorizations for a fixed period, renewable for a further fifteen (15) years. The extension of the right of use includes the payment of an amount equal to 2% of the net revenue recorded in the regions covered by the Authorization, at the end of each biannual period. As at December 31, 2017, TIM Celular had accounts past due related to the renewal of Authorizations in the amount of R\$262,513 (R\$254,515 as at December 31, 2016).

(ii) At December 5, 2014, the subsidiary TIM Celular signed the Instrument of Authorization regarding the 700 MHz band (extract published in D.O.U. on December 8, 2014). The subsidiary paid an amount equivalent to R\$1,678 million, recording the remaining balance of R\$61 million as a financial debt, according to the payment method provided for in the call notice. With no bids for some lots in the Call Notice for the 700 MHz band, TIM Celular, along with other bidders, had to bear a proportion of the costs regarding these unsold lots, as a result of the redistribution and digitalization of TV and RTV channels and solutions for interference problems with radio communications systems. Thus, the Digitalization Regulatory Entity (*Entidade Administradora da Digitalização*, or "EAD") was organized, with respect to which the total commitment assumed by TIM Celular was R\$1,199 million, to be paid in four (04) installments adjusted by the IGP-DI index, the first installment in the amount of R\$370 million (30%) being deposited on April 9, 2015 (Note 14.g).

As a result of this additional cost assumed by TIM Celular, it should have been entitled to a discount on the final amount to be paid for the Authorization to use the 700 MHz band. However, the methodology used by ANATEL to calculate this amount was different from that included in the Call Notice, and so TIM Celular filed an administrative appeal, which was heard and denied in December 2014 (as were the appeals of the other Winning Bidders). As at June 30, 2015, TIM Celular filed a lawsuit questioning a surplus charge of R\$61 million (R\$98 million as at December 31, 2017), which is still pending trial (Note 14.g).

On February 15, 2016, the subsidiary TIM Celular signed an Addendum to the Terms of Authorization for the 700 MHz band (extracts published in the Federal Gazette on March 8, 2016), extending the date of payment of the second installment of 30% to the EAD, previously

payable on January 31, 2016. The agency thus received from TIM Celular, on January 31, 2017, the amount of R\$859 million, an installment of 60%, with respect to the installments for the years 2016 and 2017, with the remaining 10% payable on January 31, 2018, adjusted according to the IGP-DI.

On March 4, 2015, ANATEL: (i) accepted the request for the withdrawal of the application to extend the period of radio frequency use for Lot 208 (part of AR 92) of Bid No. 004/2012/PVCP/SPV-ANATEL; (ii) granted the application to extend the authorization for radio frequency use for lot 222 (part of AR 31) of the said bid; and (iii) granted the application for an extension of the period of authorization for radio frequency use in Bands D and E. On July 22, 2015, an Authorization Act extended the authorization to use the above radio frequencies.

(iii) On December 17, 2015, TIM Celular was ranked as the best bidder for the acquisition of two Type B lots (E-30 - AR41, Curitiba and metropolitan region and E-68 - AR81, Recife and metropolitan region) relating to Bidding Process 002/2015-SOR /SPR/ANATEL, at an offer price of R\$57.5 million. The result was approved by the Steering Committee of ANATEL on June 1, 2016, and the Licensing Agreements were entered into on July 26, 2016, being 10% of the amount paid in July 2016, and the remainder being paid in June 2017.

The Authorizations held on a primary basis by TIM Celular as at December 31, 2017, as well as their maturity dates, are detailed below:

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<b>Authorization Instruments</b>	<b>450 MHz</b>	<b>800 MHz, 900 MHz and 1,800 MHz</b>	<b>Additional frequencies 1,800 MHz</b>	<b>Maturity date</b>		<b>2,500 MHz (P** Band) (4G)</b>	<b>700 MHz (4G)</b>
				<b>1,900 MHz and 2,100 MHz (3G)</b>	<b>2,500 MHz V1 Band (4G)</b>		
Amapá, Roraima, Pará, Amazonas and Maranhão	-	March, 2031*	April, 2023	April, 2023	October, 2027	Part of AR92 (PA) – February, 2024* Part of AR21 (RJ) – February, 2024*	December, 2029
Rio de Janeiro and Espírito Santo	October, 2027	March, 2031*	ES - April, 2023	April, 2023	October, 2027	(RJ) – February, 2024*	December, 2029
Acre, Rondônia, Mato Grosso, Mato Grosso do Sul, Tocantins, Distrito Federal, Goiás, Rio Grande do Sul (except the municipality of Pelotas and region) and the municipalities of Londrina and Tamarana, in Paraná	PR - October, 2027	March, 2031*	April, 2023	April, 2023	October, 2027	Part of AR61 (DF) – February, 2024*	December, 2029
São Paulo	-	March, 2031*	Countryside - April, 2023	April, 2023	October, 2027	-	December, 2029
Paraná (except the municipalities	October, 2027	September, 2022*	April, 2023	April, 2023	October, 2027	AR 41, except	December, 2029

of Londrina and Tamarana)						Curitiba and Metropolitan Region - February, 2024*	
						AR41, Curitiba and Metropolitan Region -July, 2031	
Santa Catarina Municipality and region of Pelotas, in the State of Rio Grande do Sul	October, 2027	September, 2023* April, 2024*	April, 2023	April, 2023	October, 2027	-	December, 2029
	-		-	April, 2023	October, 2027	-	December, 2029
Pernambuco	-	May, 2024*	-	April, 2023	October, 2027	Part of AR81-July, 2031	December, 2029
Ceará	-	November, 2023*	-	April, 2023	October, 2027	-	December, 2029
Paraíba	-	December, 2023*	-	April, 2023	October, 2027	-	December, 2029
Rio Grande do Norte	-	December, 2023*	-	April, 2023	October, 2027	-	December, 2029
Alagoas	-	December, 2023*	-	April, 2023	October, 2027	-	December, 2029
Piauí	-	March, 2024*	-	April, 2023	October, 2027	-	December, 2029
Minas Gerais (except the municipalities of the PGO sector 3 for 3G, radio frequencies and others)	-	April, 2028*	April, 2023	April, 2023	October, 2027	Part of AR31 - February, 2030*	December, 2029
Bahia and Sergipe	-	August, 2027*	-	April, 2023	October, 2027	-	December, 2029

\*Agreements already renewed for 15 years; therefore, TIM is not entitled to a further renewal period.

\*\* Only complementary areas in particular States.



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These are recorded as financial liabilities measured at amortized cost, represented by non-derivative financial liabilities that are not usually traded before maturity.

Initially, it is recognized at fair value, and subsequently measured based on the effective interest rate method. The appropriation of financial expenses according to the effective interest rate method is recorded in the statement of income under caption “financial expenses”.

<b>Description</b>	<b>Currency</b>	<b>Charges</b>	<b>Maturity</b>	<b>2017</b>	<b>2016</b>
BNDES (1)	URTJLP	TJLP to TJLP + 3.62%p.a.	Jul/18 to Jul/22	1,945,140	2,546,627
BNDES (1)	UMIPCA	UMIPCA + 2.62% p.a.	Jul/17	-	36,552
BNDES (1)	UM143	SELIC + 2.52% p.a.	Jul/22	1,911,383	2,068,629
BNDES (PSI) (1)	R\$	2.50% to 4.50% p.a.	Jul/18 to Jan/21	263,972	444,847
Banco BNP Paribas (3)	USD	Libor 6M + 2.53% p.a.	Dec/17	-	78,065
Banco Europeu de Investimento ("BEI") (2)	USD	Libor 6M + 0.941% to 1.32% p.a.	Aug/19 to Feb/20	-	622,980
Bank of America (Res. 4131) (4)	USD	Libor 3M + 2.00% p.a.	Sep/18	-	324,860
KFW (3)	USD	Libor 6M+ 1.35% p.a.	Apr/19	110,937	182,046
KFW Finnvera (3)	USD	Libor 6M+ 0.75% p.a.	Jan/24	260,522	121,038
Cisco Capital (4)	USD	1.80% to 2.50% p.a.	Sep/18 to Dec/20	198,990	294,138
<b>Total</b>				<b>4,690,944</b>	<b>6,719,782</b>
<b>Current portion</b>				<b>(1,351,860)</b>	<b>(1,145,225)</b>
<b>Non-current portion</b>				<b>3,339,084</b>	<b>5,574,557</b>

**Guarantees:**

- (1) Guaranteed by the Company and as collateral some receivables of TIM Celular
- (2) Bank escrow and Company as guarantor.
- (3) Guaranteed by the Company
- (4) No guarantee

The parent company TIM Participações does not have any borrowing or financing as at December 31, 2017.

The financing arranged by TIM Celular with BNDES was raised for the purpose of expanding the mobile phone network. It included covenants requiring certain financial ratios to be met, calculated semiannually. The subsidiary TIM Celular has complied with these financial ratios.

In April 2017, the Company obtained new loan from KfW/Finnvera by amount of nearly R\$149 million. For the purpose of eliminating any risk of changes in the foreign exchange rate, a swap transaction was contracted in advance.

In April 2017, the Company prepaid the financing agreement signed in 2011 with the European Investment Bank, totaling R\$602 million. This line was originally expected to mature in August 2019 and February 2020.

In March 2017, the Company prepaid the existing loan granted by Bank of America ("BOA"), in the amount of R\$315 million. The original maturity of this debt was estimated to occur in September 2018.

In December 2017, the Company prepaid R\$800 million of the debt to BNDES, reducing the debt balance of the facility. The prepayment did not change the original payment schedule, the last installment of which matures in July 2022. In January 2018, a further R\$500 million was settled in advance without, however, changing the payment schedule.



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All prepayments made were intended to enable the Company's effective management of indebtedness and cash.

The table below sets forth the status of the financing and credit facilities available:

<b>Type</b>	<b>Currency</b>	<b>Date of Opening</b>	<b>Term</b>	<b>Total amount</b>	<b>undrawn balance</b>	<b>Amount used as at December 31, 2017</b>
BNDES (1)	R\$	Dec/15	Dec/17	60,995	-	-
BNDES (1)	TJLP	Dec/15	Dec/18	2,940	2,940	-
<b>Total R\$</b>				63,935	2,940	-
<b>KFW Finnvera (2)</b>	USD	Dec/15	Jun/18	150,000	51,094	93,088

Purpose:

(1) Financing of TIM's Innovation Projects for the years 2016, 2017 and 2018. To date, the Company has opted not to draw down the credit facility available.

(2) Financing of purchases of imported equipment and services for the years 2015, 2016 and 2017. The amount of US\$93 million was equivalent to R\$310 million on the date of payment.

The PSI (Investment Sustainment Program) financing lines, obtained from BNDES, refer to specific programs of this institution and have interest rates lower than those used in BNDES' ordinary operations. The balance as at December 31, 2017, corresponding to the adjustment

of the subsidy granted by the BNDES for all the PSI lines is approximately R\$89 million. This amount was recorded in “Deferred Revenue” under “Government Subsidies” (Note 22) line and deferred for the useful life of the asset being financed and appropriated to income in “Subsidy income” (Note 29).

The subsidiary TIM Celular has swap transactions to protect itself fully against any devaluation of the Brazilian currency against the US Dollar in relation to its borrowing and financing transactions. Nevertheless, this is not classified as hedge accounting.

The long term portions of borrowing and financing as at December 31, 2017, mature as follow:

2019	1,193,992
2020	857,304
2021	768,270
2022	461,909
2023	18,883
2024	38,726
	3,339,084

The table below includes the schedule of nominal values of borrowing and financing estimated until the termination of the agreements.

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	<b>Nominal Value</b>
2018	1,673,562
2019	1,429,560
2020	1,007,078
2021	847,626
2022	477,307
2023	20,129
2024	39,170
	5,494,432

Borrowing and financing fair value

In Brazil there is no consolidated long term debt market with the characteristics of the BNDES facilities. In addition to the returns on long term debt, the institutions take into account the social benefits of each project for which financing is granted. For the purpose of fair value analysis, given the absence of a similar market and the requirement that the projects address governmental interests, the fair value of the borrowing is usually taken to be as shown in the accounting records.

The amounts of PSI credit lines are recorded at fair value as at the withdrawal date, and the fair value is calculated considering the CDI rate at the withdrawal date.

Another transaction contracted with extremely specific features is the loan obtained from KFW Finnvera. This transaction is secured by Finnvera, a Finnish agency that operates as a development institution. Given the features of this transaction, the Company believes that its fair value is equal to the amount shown in the Company's balance sheet.

Regarding the funds raised with Cisco Capital and KFW, current market conditions do not indicate the existence of any factor that might lead to a fair value for these transactions different to that shown in the accounting records.

## 20. Indirect taxes, charges and contributions payable

	<b>2017</b>	<b>2016</b>
ICMS	236,230	381,659
ANATEL taxes and charges	20,431	19,537
ISS	47,485	45,325
Other	3,647	6,721
	<b>307,793</b>	<b>453,242</b>
Current portion	(305,266)	(453,130)
Non-current portion	2,527	112

## 21. Direct taxes, charges and contributions payable

The current income tax and social contribution charges are calculated based on the tax laws enacted or substantially enacted up to the balance sheet date.

Brazilian tax legislation allows companies to choose quarterly or monthly payments of income tax and social contribution. From 2016 onward, the Company chose to make monthly payments of income tax and social contribution.

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	<b>2017</b>	<b>2016</b>
Income tax and social contribution	391,813	507,915
PIS/COFINS	38,880	59,811
Other (*)	36,881	54,840
	467,574	622,566
Current portion	(260,786)	(363,726)
Non-current portion	206,788	258,840

(\*) Refers basically to the subsidiary TIM Celular joining, in 2009, the REFIS program, a federal fiscal program that permits the Companies to pay the debts due on federal taxes (PIS, COFINS, IR and CSLL) in installments, the final maturity of which will be on October 31, 2024.

**22. Deferred revenue**

	<b>2017</b>	<b>2016</b>
Prepaid services to be provided (1)	388,301	716,650
Government grants (2)	89,036	117,758
Network swap (3)	20,191	28,932
Anticipated receipts	22,627	18,554
Deferred revenue from sale of towers (4)	951,208	991,750
	1,471,363	1,873,644
Current portion	(480,431)	(812,340)
Non-current portion	990,932	1,061,304

(1) This refers to top-ups of voice and data credit not yet used by customers, involving pre-paid system services, which are appropriated to income when customers actually use these services.

(2) Refers to the release of funds under the credit facility from the BNDES Investment Sustainability Program (“BNDES PSI”). The total sum of the subsidies granted by the BNDES through December 31, 2017 was R\$203 million. This amount is being amortized according to the useful life of the asset being financed and appropriated to the “Other income (expenses), net” (Note 29).

(3) Refers mainly to the transfer of onerous contracts and reciprocal infrastructure of fiber optics (Note 11).

(4) Refers to amounts to be appropriated from sales of towers (Note 15).

### **23. Provision for legal and administrative proceedings**

The Company and its subsidiaries are parties to legal and administrative proceedings in the civil, labor, tax and regulatory spheres which arise in the normal course of their business.

The provision is set up at an amount deemed sufficient and adequate to cover losses and risks considered probable, based on an analysis by the Company’s legal consultants and by Management. Situations where losses are considered probable and possible are subject to disclosure for their adjusted amounts, and those where losses are considered remote are not disclosed.

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The updated provision set up for legal and administrative proceedings is made up as follows:

	<b>2017</b>	<b>2016</b>
Civil (a)	132,422	141,988
Labor (b)	184,311	90,789
Tax (c)	180,643	216,423
Regulatory (d)	30,944	29,282
	528,320	478,482

The changes to the provision for legal and administrative proceedings can be summarized as follow:

	<b>2016</b>	<b>Additions, net of reversals</b>	<b>Payments</b>	<b>Monetary adjustment</b>	<b>2017</b>
Civil (a)	141,988	261,995	(345,035)	73,474	132,422
Labor (b)	90,789	70,775	(9,597)	32,344	184,311
Tax (c)	216,423	38,973	(84,215)	9,462	180,643
Regulatory (d)	29,282	726	(823)	1,759	30,944
	478,482	372,469	(439,670)	117,039	528,320

The Company and its subsidiaries are subject to various legal and administrative proceedings filed against them by consumers, suppliers, service providers and consumer protection agencies, in connection with a number of issues that arise in the regular course of business of the entities. The main cases are summarized as follow:

a. Civil Claims

*a.1. Consumer lawsuits*

The subsidiaries are parties to lawsuits that refer to some claims that have been filed by consumers at the legal and administrative levels. These claims, which amount to R\$88,636 (R\$105,112 as at December 31, 2016), refer basically to alleged incorrect collections, contract cancellation, service quality, deficiencies and failures in equipment delivery, and unjustified inclusion in credit protection services.

*a.2. Procon and Public Prosecutor's Office*

TIM is a party to court and administrative lawsuits filed by the Public Prosecutor's Office and Procon (the Consumer Protection Agency) arising from consumer complaints that include: (i) alleged failure in relation to the provision of network services; (ii) challenges regarding the quality of client assistance; (iii) alleged violation of SAC Decrees; (iv) alleged violation of agreements; (v) alleged false advertising; and (vi) discussion about the charging of a loyalty fine in the case of thefts of handsets. The amounts involved total R\$4,551 (R\$4,705 as at December 31, 2016).



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*a.3. Former trade partners*

TIM is a defendant in lawsuits filed by former trade partners claiming, among others, amounts based on alleged non-compliance with agreements. The amounts involved total R\$13,152 (R\$8,661 as at December 31, 2016).

*a.4. Others*

TIM is a defendant in other non-consumer lawsuits filed by different agents to challenge, among other: (i) renewal of lease agreements; (ii) share subscription; (iii) indemnities; (iv) alleged non-compliance with agreements; and (v) collection suit. The amounts involved total R\$18,224 (R\$20,120 as at December 31, 2016).

*a.5 Social, environmental and infrastructure*

The subsidiaries are parties to lawsuits involving different agents that challenge several licensing aspects, such as environmental licensing and structure licensing (installation/operation). The amounts involved total R\$3,157 (R\$3,390 as at December 31, 2016).

**b. Labor claims**

The main outstanding labor claims are summarized below:

Claims filed by former employees in relation to matters such as salary differences, wage parity, payments of variable compensation/commission, additional legal payments, overtime and other provisions established during the period prior to privatization, as well as by former employees of service providers who, in accordance with the labor legislation in force, have filed claims against the Company and/or its subsidiaries on the grounds that they are responsible for labor-related obligations that were not satisfied by service provider companies.

Of the 1,845 labor claims as at December 31, 2017, (1,074 as at December 31, 2016) filed against the Company and its subsidiaries, most of them relate to employment claims filed by employees as well as claims that involve former employees of service providers. The provision for these cases amounts to R\$172,467, monetarily restated (R\$81,876 as at December 31, 2016).

A significant portion of this provision relates to the organizational restructuring processes, especially the closure of the Client Relationship Centers (call centers), as well as processes relating to the internal sites of TIM, which resulted in the termination of staff. As at December 31, 2017, the provision for these cases amounts to R\$21,758, monetarily restated (R\$10,742 as at December 31, 2016).

c. Tax processes

	<b>2017</b>	<b>2016</b>
Federal taxes	33,907	57,393
State taxes	59,403	64,280
Municipal taxes	1,738	1,629
TIM S.A. proceedings (purchase price allocation)	85,595	93,121
	<b>180,643</b>	<b>216,423</b>

The total provision recorded is substantially composed of the following proceedings, and the amounts indicated are estimated based on the indices established by the federal, state and/or municipal governments for taxes in arrears, being substantially linked to the variations in the SELIC (Special Settlement and Custody System) rate:



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Federal taxes

The provision is substantially composed of the following proceedings:

(i) The provision for TIM Celular has been made in twelve cases referring to challenges to the taxes levied on Contribution for Intervention in the Economic Domain (“CIDE”), Provisional Contribution on Financial Transactions (“CPMF”), Social Contribution on Net Income (“CSLL”) and Withholding Income Tax (“IRFF”) transactions, the voluntary reporting of the penalty regarding FUST payments and ancillary obligations. Based on these cases, the main amounts relate to court actions in which TIM intends to assert its right not to pay the CPMF, allegedly due to simultaneous purchase and sale transactions of foreign currency and changes to accountholders as a result of mergers, the provision amounts for which, consider the recent conversion into income in favor of the Federal Government, currently total R\$9,092 (R\$33,172 as at December 31, 2016), as well as the amount corresponding to fines and interest on FUST contributions for the year 2009, which does not include benefits from voluntary reporting, for which the amount provisioned in August 2015 and updated is R\$13,516 (R\$12,683 as at December 31, 2016).

(ii) The provision for Intelig regarding federal taxes has been made for three cases challenging federal tax offsetting using the negative balance of IRPJ and the CSLL carried forward from periods prior to offsetting, totaling the updated amount of R\$5,914 (R\$6,077 as at December 31, 2016).

State taxes

The provision substantially relates to the following proceedings:

(i) The provision for TIM Celular covers forty-three proceedings, of which the most important are the amounts of tax assessments challenging the use of ICMS debits, as well as the documentation supporting the credits appropriated by the Company, for which the updated amount provided is R\$14,610 (R\$13,652 as at December 31, 2016), as well as amounts allegedly not subject to taxation, regarding the provision of telecommunication services, for which the updated amount is R\$4,605 (R\$4,183 as at December 31, 2016).

(ii) The provision for TIM S.A referring to state taxes covers seven proceedings, and includes the amounts of assessment questioning the documentation that supported the credits appropriated by the Company, for which the updated amount provided is R\$6,940 (R\$14,414 as at December 31, 2016).

#### Municipal taxes

These include the amounts involved in assessments questioning the withholding and payment of the ISS (Tax on Services) on services provided by third parties with no employment relationship, as well as the payment of own ISS regarding co-billing services.

#### TIM S.A. PPA

Tax proceedings arising from the acquisition of TIM S.A. and included in its purchase price allocation process, amount to R\$85,595 (R\$93,121 as at December 31, 2016).

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d. Regulatory processes

ANATEL has brought administrative proceedings against the subsidiaries for: (i) failure to meet certain quality service indicators; (ii) defaults on certain obligations assumed under the Instruments of Authorization; and (iii) non-compliance with the regulations of SMP and STFC, among others.

As at December 31, 2017, the amount classified as representing a probable risk related to Procedures to Verify Breaches of Obligations (“PADOs”), after monetary adjustment, is R\$30,796 (R\$29,282 as at December 31, 2016).

e. Legal and administrative processes involving possible losses

Civil, labor, tax and regulatory actions have been filed against the Company and its subsidiaries involving a risk of loss that is classified as possible by the Company’s legal advisors and the Management. No provisions have been set up for these legal and administrative proceedings, and no materially adverse effects are expected on the financial statements, as shown below:

	<b>2017</b>	<b>2016</b>
Civil (e.1)	1,286,252	1,698,901
Labor and social security (e.2)	763,505	678,290
Tax (e.3)	14,528,617	13,832,157
Regulatory (e.4)	178,908	69,572
	<b>16,757,282</b>	<b>16,278,920</b>

The administrative and legal proceedings assessed as representing possible losses and monitored by Management are disclosed at their updated values.

The main actions where the risk of loss is classified as possible are described below:

e.1. Civil

	<b>2017</b>	<b>2016</b>
Actions filed by consumers (e.1.1)	453,231	679,577
ANATEL (e.1.2)	217,012	202,777
Procon and Public Prosecutor's Office (e.1.3)	158,620	316,007
Former trade partners (e.1.4)	182,843	203,314
Social, environmental and infrastructure (e.1.5)	158,287	130,894
Other	116,259	166,332
	<b>1,286,252</b>	<b>1,698,901</b>

e.1.1. Lawsuits filed by consumers

These actions refer mainly to alleged undue billing, contract cancellation, service quality, deficiencies and failures in equipment delivery, and unjustified inclusion in bad debtors' lists.

e.1.2. ANATEL

The subsidiaries are parties to lawsuits filed against ANATEL, due to the following reasons: (i) debit regarding the collection of 2% on the revenue obtained from value-added services – VAS and interconnection; (ii) *pro rata* monetary restatement applied to the price proposal established in the call notice for use of 4G frequencies; and (iii) alleged non-compliance with service quality targets.

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e.1.3. Procon and Public Prosecutor's Office

TIM is a party to court and administrative lawsuits filed by the Public Prosecutor's Office and Procon (Consumer Protection Agency) arising from consumer complaints that include: (i) alleged failure in relation to the provision of network services; (ii) alleged failure in relation to the delivery of devices; (iii) alleged non-compliance with state legislation; (iv) contract model and alleged undue charging of Value-Added Services ("VAS"); (v) alleged violation of SAC Decrees; (vi) alleged violation of agreements; and (vii) blocking of data.

e.1.4. Former trade partners

TIM is a defendant in lawsuits filed by several former trade partners who are claiming, among others, amounts on the basis of alleged noncompliance with agreements.

e.1.5. Social, environmental and infrastructure

The subsidiaries are parties to lawsuits involving different agents challenging aspects related to: (1) Environmental licensing and Structure licensing (installation/operation); and (2) (i) electromagnetic radiation emitted by the Telecom structures; (ii) renewal of leasing land agreements to install sites; (iii) eviction from land leased to install sites; and (iv) presentation of registration data; among others.

e.2. Labor claims



There are 6,476 labor claims filed against the Company and its subsidiaries as at December 31, 2017, (6,039 as at December 31, 2016) related to claims made by former employees of service providers in the updated amount of R\$763,505 (R\$678,290 as at December 31, 2016).

A significant percentage of the existing proceedings relate to organizational restructuring processes, in particular the closure of the Client Relationship Centers (call centers), as well as processes relating to the internal sites of TIM, which resulted in the termination of employees. In addition, there are also lawsuits filed by outsourced service providers alleging an employment relationship with TIM, in the total updated amount of R\$27,775 (R\$9,256 as at December 31, 2016).

The Company is a party to public civil actions filed by the Labor District Attorney's Office alleging irregular outsourcing practices and with collective moral damages due to outsourcing in the total updated amount of R\$60,711 (R\$60,351 as at December 31, 2016).

A group of actions has been filed in the State of Paraná, involving claims for damages in connection with contractual provisions stamped in the employees' work register. According to an internal rule, TELEPAR undertook to supplement the retirement benefits of employees hired up until 1982. Prior to privatization, TELEPAR had proposed to implement this benefit by means of the payment of a certain amount in cash in the amount of R\$3,210 as a possible risk and the amount of R\$5,654 as a probable risk (R\$3,521 updated as possible risk and R\$711 updated as probable risk as at December 31, 2016).

It should also be pointed out that there is a group of labor claims, particularly in São Paulo and Rio de Janeiro, from former Gazeta Mercantil, Jornal do Brasil and JB Editora employees who have filed claims requesting the inclusion of Holdco as a defendant. Prior to the merger with TIM Participações, Holdco belonged to the Docas economic group, of which Gazeta Mercantil and Jornal do Brasil are part.

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The remaining amounts relate to various labor claims lawsuits filed by former own employees and former employees of third parties.

*e.2.1. Social Security*

TIM Celular received a Debit Assessment Notice referring to alleged irregularities in the payment of social security contributions in connection with the payment of profit-sharing in the updated amount of R\$4,995 (R\$5,372 as at December 31, 2016). TIM Celular was also assessed for social security contributions that were allegedly due in connection with hiring bonuses, non-adjusted bonuses, payments to self-employed persons and sales incentives in the updated amount of R\$9,868 (R\$5,686 as at December 31, 2016).

TIM S.A. received Tax Assessments regarding alleged irregularity in the payment of social security contributions levied on profit sharing; the retention of 11% on service agreements; failure to pay Management's fees and failure to properly fill out the FGTS–GFIP tax form, and erroneous GFIP declaration in the updated amount of R\$43,756 (R\$43,496 as at December 31, 2016).

e.3. Tax

	<b>2017</b>	<b>2016</b>
Federal Taxes (e.3.1)	3,752,877	3,560,440
State Taxes (e.3.2)	7,407,881	6,982,809
Municipal Taxes (e.3.3)	658,783	509,613
FUST, FUNTTEL and EBC (e.3.4)	2,709,076	2,779,295

14,528,617

13,832,157

The amounts are adjusted based on an estimate of the SELIC rate. The historical amount involved is equivalent to R\$9,836,184.

*e.3.1. Federal Taxes*

Assessment against TIM Group for federal taxes amounting to R\$3,752,877 as at December 31, 2017, (R\$3,560,440 as at December 31, 2016). Of this total, the following issues stand out:

(i) Alleged error regarding the use of tax credits due to a reverse merger, amortization of goodwill paid on the acquisition of mobile phone companies, deduction of goodwill amortization expenses, exclusion of goodwill reversal, other effects and the disallowance of offsetting and estimated deductions paid, allegedly improper use of SUDENE benefits caused by a lack of formalization on these benefits on Federal Revenue Department (“RFB”) and a failure to pay the estimated IRPJ and CSLL amounts. The amount involved is R\$2,552,068 (R\$2,190,975 as at December 31, 2016).

(ii) Method of offsetting tax losses and negative bases. The amount involved is R\$192,417 (R\$93,245 historically) (R\$185,001 as at December 31, 2016).

(iii) Collection of CSLL on monetary variations for swap transactions, registered through on a cash basis. The amount involved is R\$62,312 (R\$58,914 as at December 31, 2016).

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(iv) Payment of IRRF on revenue from overseas residents, including those remitted for international roaming and payment to unidentified beneficiaries, as well as the collection of CIDE on royalties remitted overseas, including remittances for international roaming. The amount involved for Tim Celular is R\$241,431 (R\$229,061 as at December 31, 2016) and, for TIM S.A., the amount is R\$56,469 (R\$52,963 as at December 31, 2016).

(v) Charging of IRPJ, PIS/COFINS and CSLL debts for the non-approval or partial approval of offsetting carried out by the Company using credits from withholding tax on financial investments and negative IRPJ balance. The amount involved is R\$396,103 (R\$412,741 as at December 31, 2016).

*e.3.2. State Taxes*

Assessment against TIM Group for state taxes amounted to R\$7,407,881 as at December 31, 2017 (R\$6,982,809 as at December 31, 2016). Of the total amount, the following issues stand out:

(i) Failure to include unconditional discounts offered to customers in the ICMS calculation base, and a fine for alleged failure to comply with related ancillary obligations, including failure to submit Register 60i of the SINTEGRA file. The amount involved is R\$1,244,936 (R\$1,200,113 as at December 31, 2016).

(ii) Use of tax benefit (Program for Promoting the Integrated and Sustainable Economic Development of the Federal District – “PRÓ-DF”) granted by the tax authority itself, but subsequently declared unconstitutional, and the alleged undue crediting of ICMS on interstate purchases of goods with tax benefits granted in the state of origin. The amount involved is R\$1,055,667 (R\$985,842 as at December 31, 2016).

(iii) Credit reversal and late use of credit for purchase of fixed assets. The amount involved for TIM Celular is R\$784,654 (R\$907,777 as at December 31, 2016), and the amount involved for TIM S.A. is R\$19,950 (R\$19,534 as at December 31, 2016).

(iv) ICMS credits booked and debits reversed, as well as the identification and supporting documentation for amounts and information passed to customer bills, such as tax rates and credit granted, as well as credits related to transactions with tax substitution, and exempt and non-taxable transactions. The amount involved for TIM Celular is R\$1,698,409 (R\$1,230,516 as at December 31, 2016), and the amount involved for TIM S.A. is R\$128,875 (R\$111,625 as at December 31, 2016).

(v) The use of credit to purchase electricity for the companies' production processes. The amount involved is R\$131,625 (R\$322,722 as at December 31, 2016).

(vi) Alleged failure to pay tax on network lease operations where the tax originally deferred was allegedly not paid in the subsequent phase, pursuant to Agreement 128/98. The amount involved is R\$120,880 (R\$112,537 as at December 31, 2016).

(vii) Liability for ICMS and FECOP (State Anti-Poverty Fund) on fixed asset purchases and other transactions, and on the provision of telecommunications services in specific cases determined by the law. The amount involved is R\$175,729 (R\$169,431 as at December 31, 2016).

(viii) The alleged conflict between the ancillary obligations data and the payment of the tax, and specific questioning regarding the fine charged due to noncompliance with ancillary obligations. The amount involved is R\$253,443 (R\$234,006 as at December 31, 2016).

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(ix) Alleged failure to pay ICMS arising from debts reversed regarding pre-paid services, as well as alleged undue ICMS credit regarding outgoing goods allegedly benefiting from a reduction in the calculation base. The amount involved is R\$73,722 (R\$69,195 as at December 31, 2016).

(x) Taxation of international roaming services. The amount involved is R\$45,917 (R\$39,665 as at December 31, 2016).

(xi) Credits booked for the return of cell phones on free leases. The amount involved is R\$185,526 (R\$105,418 as at December 31, 2016).

(xii) Cancellation of telecommunications services due to improper invoicing/subscription fraud, and the alleged incorrect use of credit and the duplication of ICMS. The amount involved is R\$23,797 (R\$22,499 as at December 31, 2016).

(xiii) Collection of ICMS tax on subscription services excluded from the ICMS calculation base due to their classification as non-telecoms services. The amount involved is R\$112,848, with no corresponding amount as at December 31, 2016.

*e.3.3. Municipal Taxes*

The total assessment against TIM Group for municipal taxes is R\$658,783 as at December 31, 2017 (R\$509,613 as at December 31, 2016). Of this amount, the following issues stand out:

(i) Payment of ISS and of a punitive fine for failure to pay the alleged tax on various revenue accounts of the Company. The amount involved is R\$136,732 (R\$128,145 as at December 31, 2016).

(ii) Collection of ISS on imports of services. The amount involved is R\$269,547 (R\$183,962 as at December 31, 2016).

(iii) Constitutionality of collection of the Operations Monitoring Charge ("TFF") by municipal authorities in several locations. The amount involved is R\$107,519 (R\$66,939 as at December 31, 2016).

#### *e.3.4. FUST and FUNTTEL*

The amount assessed against TIM Group for contributions to FUST and FUNTTEL is R\$2,709,076 as at December 31, 2017 (R\$2,779,295 as at December 31, 2016). The principal discussion involves the payment of the contributions to FUST and FUNTTEL (Telecommunications Technical Development Fund) from the issue by ANATEL of Ruling No. 07/2005, relating primarily to the payment of the FUST and FUNTTEL contributions on interconnection revenue earned by telecommunications service providers, from the effective date of Law N<sup>o</sup>. 9998/2000.

#### e.4. Regulatory issues

ANATEL has filed administrative proceedings against the subsidiaries for: (i) not complying with certain quality indicators; (ii) defaulting on other obligations under Instruments of Authorization and; (iii) not complying with SMP and STFC regulations, among others.





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As at December 31, 2017, the amount stated for Breach of Obligation procedures (locally PADOs), considering the monetary restatement that was considered a possible loss was R\$178,908 (R\$69,572 as at December 31, 2016).

On obtaining an extension of the authorization to use radio frequencies associated with SMP, the subsidiary TIM Celular incurs contractual charges on net revenue from service plans sold under each authorization. However, ANATEL has included interconnection revenue in the calculation base for these charges since 2011, and revenue from value-added services since 2012. In our opinion, this revenue should not be included because it is not expressly stipulated in the original Instruments of Authorization, and therefore the charges received are discussed in the administrative and/or legal spheres.

**24. Provision for decommissioning costs**

The changes in the provision for decommissioning costs are set forth below:

	<b>2017</b>	<b>2016</b>
Opening balance	21,726	31,609
Reversals/write-offs recorded throughout the year, net of additions	649	(11,029)
Monetary adjustments for the year	428	1,146
Closing balance	22,803	21,726

The provision is recorded based on the following assumptions:

- The unitary dismantling costs are estimated, taking into account the services and materials involved in the process. The estimate is prepared by the network department based on the information currently available;
- A timetable for the dismantling is estimated based on the useful lives of the assets and the estimated initial costs are allocated through this timetable, updated by the expected inflation rate. The expected inflation rate is aligned with the projections prepared by the main market institutions; and
- The rate used to discount the cash flow is the Company's average debt cost, that was 8.92% p.a. as at December 31, 2017 (12.43% p.a. as at December 31, 2016).

## **25. Shareholders' equity**

### a. Share captial

The share capital is stated at the amount effectively raised from shareholders, net of the costs directly linked to the issuance process.

When a company within the Group purchases shares in the Company, aiming at holding them as treasury shares, the amount paid, including any directly attributable additional costs, is deducted from the Company's shareholders' equity until the shares are cancelled or reissued. When these shares are reissued subsequently, any amount received, net of additional costs directly attributable to the transaction, is included in shareholders' equity.

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The Company is authorized to increase its capital based on a resolution by the Board of Directors, without amending the bylaws, up to the limit of 4,450,000,000 common shares.

The subscribed and paid up capital is represented as follows:

	<b>2017</b>	<b>2016</b>
Value paid up	9,913,415	9,913,415
(-) Funding costs	(47,117)	(47,117)
Net value paid up	9,866,298	9,866,298
Number of common shares	2,421,032,479	2,421,032,479

b. Capital reserves

The use of capital reserves is in compliance with the provisions of Article 200 of Law No. 6404/76, which refers to joint stock companies. These reserves are comprised of:

	<b>2017</b>	<b>2016</b>
Special goodwill reserve	380,560	380,560
Stock options	35,601	24,678
Tax benefit reserve	1,271,404	1,158,911
	1,687,565	1,564,149

*b.1 Special goodwill reserve*

The special goodwill reserve arose from the following transactions:

*(i) Takeover of the former subsidiaries TIM Sul and TIM NE - acquisition of minority shares*

In 2005, the Company acquired all the shares held by the minority shareholders of TIM Sul S.A. and TIM Nordeste Telecomunicações S.A. This acquisition was carried out by issuing new shares in TIM Participações S.A., converting those companies into full subsidiaries. At that time, this transaction was recorded at the book value of the shares, with no goodwill being recorded arising from the difference between the market value and the shares negotiated.

When first adopting IFRS, the Company used the exemption that allows a subsidiary, when it adopts international accounting practices subsequent to its parent company having adopted IFRS, to consider the balances previously reported to the parent company for consolidation purposes. In the balance sheet, upon the transition to IFRS, the Company recorded the acquisition price based on the market value of the shares of TIM Participações S.A. at that time, recording goodwill amounting to R\$157,556.

*(ii) Acquisition of the shares of Holdco - purchase of TIM S.A*

On December 30, 2009, the Special General Meeting of TIM Participações approved the takeover of Holdco, a company that held 100% of the equity of Intelig, by TIM Participações. As a result of this transaction, the Company issued 127,288,023 shares.

Based on the former Brazilian accounting principles ("BR GAAP"), the acquisition was recorded at the net book value of the assets acquired as at the base date of November 30, 2009.

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When IFRS was first adopted, the acquisition was recorded as at the base date of December 31, 2009, taking into account the market value of the common and preferred shares of TIM Participações as at December 30, 2009, amounting to R\$739,729. The difference between this amount and the book value recorded under the former BR GAAP (R\$516,725) created goodwill against capital reserves of R\$223,004.

*b.2 Stock options*

The balances recorded for these items represent the expenses of the Company and its subsidiaries for the stock options granted to their employees (Note 26).

During 2017, as a result of the Stock Option Plan (Note 26), the Company disposed of 1,548,732 shares, being 197,132 shares at a unit cost of R\$4.16, which is equivalent to R\$821, and 1,351,600 shares at a unit cost of R\$10.21, which is equivalent to R\$13,796. Additionally, by means of the Stock Repurchase Program launched in October 2017, the Company acquired 2,354,685 shares at the unit price of R\$11.70, which is equivalent to R\$27,734. As a result, the net effect on the stock repurchase transaction was R\$13,118.

*b.3 Tax benefit reserve*

TIM Celular enjoys tax benefits that provide restrictions on the distribution of profits of this subsidiary. According to the legislation establishing such tax benefits, the amount of taxes waived as a result of exemptions and reductions in the tax charge may not be distributed to shareholders, and must be registered as a tax incentive reserve of the legal entity. This reserve should only be used for the offsetting of losses or a capital increase. The accumulated amount of benefits enjoyed by TIM Celular as at December 31, 2017 and December 31, 2016 was R\$1,271,404 and R\$1,158,911, respectively.

The aforementioned tax benefit basically corresponds to a reduction in the income tax charges estimated on the exploitation profit from the Company's operation in the incentive region or "exploitation zone". The Company operates in the area of the former Superintendence for the Development of the Amazon ("SUDENE/SUDAM"), and the tax benefit reports are granted by the state, for a period of ten years, subject to extension.

c Profit reserves

c.1 Legal reserve

This refers to 5% of the profit for every year ended December 31, until the legal reserve equals 20% of the capital stock. Also, the Company is authorized to stop setting up a legal reserve when, together with the capital reserves, it exceeds 30% of the capital stock.

This reserve can be used only for a capital increase or for the offsetting of accumulated losses.

c.2 Statutory reserve for expansion

This reserve is set up based on paragraph 2, Article 46 of the Company's bylaws, and is intended for the expansion of the Company's business.

The balance of profits that are not compulsorily allocated to other reserves and not allocated for the payment of dividends, is allocated to this reserve, which may not exceed 80% of the capital stock. Once this limit has been reached, it is incumbent on the shareholders' meeting to decide if such reserve should be either distributing to shareholders or increasing the capital.

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(In thousands of *Reais*, unless otherwise indicated)d. Dividends and Interest on shareholders' equity (JCP)

Dividends are calculated in accordance with the bylaws and Brazilian Corporate Law.

As stipulated in the latest bylaws approved on April 12, 2016, the Company must distribute a mandatory dividend for each business year ended December 31, provided that funds are available for distribution, equivalent to 25% of the profit. As provided for in the Company's bylaws, dividends not claimed within three years will be reversed to the Company.

As at December 31, 2017, dividends and interest on equity were calculated as shown below:

	<b>2017</b>	<b>2016</b>
Net income for the year	1,234,507	750,427
(-) Legal reserve constitution	(61,725)	(37,521)
(-) Tax incentives not to be distributed	(112,493)	(118,250)
Profit	1,060,289	594,656
Minimum dividends calculated considering 25% of the profit	265,072	148,664
Breakdown of dividends payable and interest on equity:		
Interest on shareholders' equity	189,991	-
Dividends	103,325	148,664
Total dividends distributed and proposed	293,316	148,664
IRRF tax on interest on equity	(28,244)	-

Total dividends and interest on shareholders' equity, net	265,072	148,664
Dividends per share (Reais per share)	0.11	0.06

The balance of dividends and interest on shareholders' equity payable as at December 31, 2017 includes amounts not settled in previous years, in the amount of R\$40,266 (R\$57,447 as at December 31, 2016).

Changes in dividends and interest on equity to be paid is detailed below:

<b>Balance as at December 31, 2016</b>	<b>206,112</b>
Intermediate interest on equity (after IRRF)	161,492
Statute of limitations of dividends	(23,179)
Payment of dividends and interest on equity	(304,415)
Withholding tax on interest on equity for tax-exempt shareholders	256
Dividends proposed	103,325
<b>Balance as at December 31, 2017</b>	<b>143,591</b>

Interest on shareholders' equity paid and/or payable is recorded against financial expenses which, for the purposes of presentation of the financial statements, are reclassified and disclosed as part of the allocation of net income for the year, in changes in shareholders' equity. Interest on shareholders' equity received and/or receivable is recorded against financial revenue, with an



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impact on the equity accounting income. For disclosure purposes, the impacts on income are eliminated, and a reduction is recorded in the investment balance.

Regarding the statement of cash flow, interest on shareholders' equity and dividends paid to shareholders were classified as "Financing Activities" .

**26. Stock options**

**2011-2013 Plan and 2014-2016 Plan**

At the annual meeting on August 5, 2011, and April 10, 2014, the shareholders of TIM Participações S.A. approved the long term incentives plans, respectively the "2011-2013 Plan" and the "2014-2016 Plan," for senior management and the key executives of the Company and its subsidiaries.

The exercise of options under the 2011-2013 Plan depends on the achievement of specific performance targets, while the exercise of options under the 2014-2016 Plan is not subject to this condition. The Exercise Price is calculated with an upward or downward adjustment to the Base Share Price, according to share performance, as provided for in each Plan.

Stock options are effective for six years, and TIM Participações has no legal or informal obligation to repurchase or settle the options in cash.

There were no new grants in 2017, only ascertainments regarding the next vestings, being the 3<sup>rd</sup> related to the 2014 grant, the 2<sup>nd</sup> related to the 2015 grant and the 1<sup>st</sup> related to the 2016 grant.

The variations in the quantity of options are presented below:

Date of grant	Stock Options Granted	Maturity date	Exercise price	Balance at the beginning of the year	Granted in the year	Exercised in the year	Forfeited in the year	Falling due in the year	Balance at the end of the year
<b>2017</b>									
2014-2016									
Plan – 3 <sup>rd</sup> grant	3,922,204	Sep/22	R\$8.10	10,922,204		(788,374)	(323,752)	-	2,810,078
2014-2016									
Plan – 2 <sup>nd</sup> grant	3,355,229	Oct/21	R\$8.42	2,575,085		(760,358)	(713,561)	-	1,101,166
2014-2016									
Plan – 1 <sup>st</sup> grant	1,687,686	Sep/20	R\$13.42	2,064,659	-	-	(405,939)	-	658,720
2011-2013									
Plan – 3 <sup>rd</sup> grant	3,072,418	Jul/19	R\$8.13	1,091,464	-	-	(246,550)	-	844,914
2011-2013									
Plan – 2 <sup>nd</sup> grant	2,661,752	Sep/18	R\$8.96	502,289	-	-	(246,733)	-	255,556
2011-2013									
Plan – 1 <sup>st</sup> grant	2,833,595	Aug/17	R\$8.84	-	-	-	-	-	-
<b>Total</b>	<b>17,532,884</b>			<b>9,155,701</b>	<b>(1,548,732)</b>	<b>(936,535)</b>	<b>-</b>	<b>-</b>	<b>5,670,434</b>

Average weighted price for the year **R\$8.72**

(\*) No options were exercised in 2017 for the “2011-2013 plan”, since minimum performance conditions have not been met. With regard to the 2<sup>nd</sup> grant for the 2014-2016 plan, during the first semester of 2017, 197,132 options were exercised at the price of R\$8.73 (R\$8.45 adjusted according to the performance goal at 3.33%). During the months of Oct-Dec, 109,470 options of the 2<sup>nd</sup> 2014-2016 grant were exercised at the prices of R\$8.73 and R\$8.16, with respect to the 1<sup>st</sup> and 2<sup>nd</sup> vestings, respectively. Also, in the same period, 1,242,130 options of the 1<sup>st</sup> vesting of the 2016 grant were exercised at the price of R\$7.69 (adjusted for the performance goal at -5%).

<b>Date of grant</b>	<b>Stock Options Granted</b>	<b>Maturity date</b>	<b>Exercise price</b>	<b>Balance at the beginning of the year</b>	<b>Granted in the year</b>	<b>Exercised in the year</b>	<b>Forfeited in the year</b>	<b>Falling due in the year</b>	<b>Balance at the end of the year</b>
<b>2016</b>									
2014-2016 Plan - 3 <sup>rd</sup> grant	3,922,204	set/22	R\$8.10	3,922,204	-	-	-	-	3,922,204
2014-2016 Plan 2 <sup>nd</sup> grant	3,355,229	out/21	R\$8.45	3,355,229	-	(780,144)	-	-	2,575,085
2014-2016 Plan - 1 <sup>st</sup> grant	1,687,686	set/20	R\$13.42	1,305,562	-	(240,903)	-	-	1,064,659
2011-2013 Plan - 3 <sup>rd</sup> grant	3,072,418	jul/19	R\$8.15	1,531,984	-	(440,520)	-	-	1,091,464
2011-2013 Plan - 2 <sup>nd</sup> grant	2,661,752	set/18	R\$8.96	513,904	-	(11,615)	-	-	502,289
2011-2013 Plan - 1 <sup>st</sup> grant	2,833,595	ago/17	R\$8.84	-	-	-	-	-	-
<b>Total</b>	<b>17,532,884</b>			<b>6,706,679</b>	<b>2,922,204</b>	<b>(1,473,182)</b>			<b>9,155,701</b>
Average weighted price for the year			<b>R\$8,87</b>						

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Below are the significant data included in the model:

<b>Date of grant</b>	<b>Weighted average price of shares on the date of grant</b>	<b>Volatility</b>	<b>Expected useful life of the option</b>	<b>Annual interest rate without risk</b>
2011 Grant	R\$8.31	51.73% p.a	6 years	11.94% p.a
2012 Grant	R\$8.96	50.46% p.a	6 years	8.89% p.a
2013 Grant	R\$8.13	48.45% p.a	6 years	10.66% p.a
2014 Grant	R\$13.42	44.60% p.a	6 years	10.66% p.a
2015 Grant	R\$8.45	35.50% p.a	6 years	16.10% p.a
2016 Grant	R\$8.10	36.70% p.a	6 years	11.73% p.a

The Base Share Price was calculated using the weighted prices of the shares of TIM Participações, during the following periods:

- **2011-2013 Plan – 1<sup>st</sup> Grant** – The volume traded and the trading price of the shares in TIM Participações in the period of 30 days prior to July 20, 2011 (the date when the Board of Directors of TIM Participações approved the benefit).
- **2011-2013 Plan – 2<sup>nd</sup> Grant** – The volume traded and the trading price of TIM Participações shares during the period from July 1, 2012 to August 31, 2012.
- **2011-2013 Plan – 3<sup>rd</sup> Grant** – The volume traded and the trading price of TIM Participações shares during the period of 30 days preceding July 20, 2013.

- **2014-2016 Plan – 1<sup>st</sup> Grant** – The volume traded and the trading price of TIM Participações shares during the period of 30 days preceding the date determined by the Board of Directors of TIM Participações (September 29, 2014).

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- **2014-2016 Plan – 2<sup>nd</sup> Grant** - The volume traded and the trading price of TIM Participações shares during the period of 30 days preceding the date determined by the Board of Directors of TIM Participações (September 29, 2015).
- **2014-2016 Plan– 3<sup>rd</sup> Grant** – The volume traded and the trading price of TIM Participações shares during the period of 30 days preceding the date determined by the Board of Directors (September 29, 2016).

Using the accruals basis of accounting, the expenses related to the long term benefit plan are being accounted for on a monthly basis and, at the end of the year, totaled R\$12,789 (R\$3,802 as at December 31, 2016).

## **27. Revenue**

### Revenue from services rendered

The principal service revenue derives from monthly subscription, the provision of separate voice, SMS and data services, and user packages combining these services, roaming charges and interconnection revenue. The revenue is recognized as the services are used, net of sales taxes and discounts granted on services. This revenue is recognized only when the amount of services rendered can be estimated reliably.

The revenue is recognized monthly via invoicing, and billable revenue between the billing date and the end of the month (unbilled) are identified, processed and recognized in the month in which the service was rendered. Calculations of unbilled revenue from the previous month are reversed, and unbilled amounts are calculated at the end of each month, considering the revenue billed in the previous month.

Interconnection traffic and roaming revenue are recorded separately, without offsetting the amounts owed to other telecom operators (the latter are accounted for as operating costs).

The minutes not used by customers and/or top-up credits in the possession of commercial partners regarding the prepaid service system are recorded as deferred revenue and allocated to income when these services are actually used by customers.

### Revenue from product sales

Revenue from product sales (telephones, mini-modems, tablets and other equipment) are recognized when the significant risks and benefits of the ownership of such products are transferred to the buyer.

	<b>2017</b>	<b>2016</b>	<b>2015</b>
Service revenue – Mobile	20,147,585	20,188,962	22,121,450
Service revenue – Landline	1,285,930	1,178,856	1,003,185
Service revenue	21,433,515	21,367,818	23,124,635
Goods sold	1,177,559	1,377,771	2,646,866
Gross operating revenue	22,611,074	22,745,589	25,771,501
Deductions from gross revenue			
Taxes	(5,027,406)	(5,694,886)	(6,248,310)
Discounts given	(1,329,600)	(1,394,223)	(2,213,041)
Returns and other	(20,109)	(39,067)	(167,885)
	(6,377,115)	(7,128,176)	(8,629,236)
Total revenue	16,233,959	15,617,413	17,142,265

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(In thousands of *Reais*, unless otherwise indicated)**28. Operating costs and expenses**

	2017			2016		
	Cost of services provided and goods sold	Selling expenses	General and administrative expenses	Cost of services provided and goods sold Total	Selling expenses	General and administrative expenses
Personnel	(48,802)	(602,578)	(305,036)	(956,416)	(673,571)	(272,699)
Third party services	(544,036)	(2,049,994)	(429,597)	(3,023,627)	(1,965,329)	(433,396)
Interconnection and means of connection	(2,632,593)	-	-	(2,632,593)	-	-
Depreciation and amortization	(3,018,597)	(162,020)	(571,126)	(3,751,743)	(181,916)	(445,536)
Taxes, fees and contributions	(36,625)	(919,018)	(11,963)	(967,606)	(1,047,416)	(13,474)
Rent and insurance	(609,595)	(92,363)	(62,954)	(764,912)	(101,731)	(72,276)
Cost of goods sold	(846,839)	-	-	(846,839)	-	-
Publicity and advertising	-	(410,982)	-	(410,982)	(438,837)	-
Losses on doubtful	-	(316,387)	-	(316,387)	(266,442)	-



accounts  
Other

(3,063)	(21,835)	(43,967)	(68,856)	(43,787)	(21,341)
(7,740,150)	(4,575,177)	(1,424,643)	(13,399,740)	(4,719,029)	(1,258,722)

**2015**

	Cost of services provided and goods sold (1)	Selling expenses (2)	General and administrative expenses (3)	Total
Personnel	(91,026)	(687,629)	(265,198)	(1,043,853)
Third party services	(490,872)	(2,187,616)	(483,624)	(3,162,112)
Interconnection and means of connection	(2,805,364)	-	-	(2,805,364)
Depreciation and amortization	(2,535,683)	(162,267)	(319,106)	(3,017,056)
Taxes, fees and contributions	(26,331)	(874,619)	(13,756)	(914,706)
Rent and insurance	(495,550)	(93,265)	(67,465)	(656,280)
Cost of goods sold	(1,856,668)	-	-	(1,856,668)
Publicity and advertising	-	(560,558)	-	(560,558)
Losses on doubtful accounts	-	(230,357)	-	(230,357)
Other	(5,363)	(26,663)	(46,128)	(78,154)
	(8,306,857)	(4,822,974)	(1,195,277)	(14,325,108)

The Company and its subsidiaries contribute to public and private pension insurance plans in a mandatory, contractual or voluntary manner during the time when the employee is working at the Company and its subsidiaries. These plans do not originate any additional obligation for the Company. When the employee leaves the Company or its subsidiaries during the period required for entitlement to receive the contributions made by the sponsors, the amounts to which the employee ceased to be entitled, and that may represent a reduction in the future contributions of the Company and its subsidiaries to its active employees, or a refund in cash of these amounts, are recorded in assets.

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In the year ended December 31, 2017, the Company recorded the amounts of R\$4,111, R\$4,352 and R\$5,286 (R\$3,596, R\$4,229 and R\$3,732 in December 31, 2016) for post-employment benefits in the groups of cost of services provided and goods sold, sales expenses and general and administrative expenses respectively.

**29. Other income (expenses), net**

	<b>2017</b>	<b>2016</b>	<b>2015</b>
Income			
Subsidy income, net	28,722	28,134	21,513
Fines on telecommunications services	41,699	39,639	37,630
Income from disposals of assets (*)	2,865	57,563	1,459,067
Other income	171,273	181,234	50,528
	244,559	306,570	1,568,738
Expenses			
FUST/FUNTTTEL (**)	(140,878)	(163,955)	(168,351)
Taxes, fees and contributions	(4,466)	(2,980)	(3,970)
			(348,339)
Provision for legal and administrative proceedings, net of reversals	(366,476)	(352,154)	
Expenses from disposals of assets (*)	(6,618)	(14,473)	(245,756)
Other expenses	(24,831)	(21,987)	(23,124)
	(543,269)	(555,549)	(789,540)
Amortization of authorizations	(261,927)	(273,081)	(344,915)
	(805,196)	(828,630)	(1,134,455)
Other income (expenses), net	(560,637)	(522,060)	434,283

(\*) During the year 2017, 54 towers were transferred under the 6<sup>th</sup> tranche to ATC, in accordance with the agreements entered into between the parties (Note 15). Leaseback arrangements were analyzed and classified as a financial lease, considering the requirements provided for in IAS17, approved by a Resolution of the CVM.

The risks and benefits of the assets were transferred to the purchaser as at the date of each transfer, and a net expense involving the disposal of these assets in the amount of R\$1,802 in the period was recognized as other operating revenue (expenses).

(\*\*) Expenses incurred with contributions on several telecommunications revenue due to ANATEL, according to the legislation in force.

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## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

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(In thousands of *Reais*, unless otherwise indicated)**30. Financial income**

	<b>2017</b>	<b>2016</b>	<b>2015</b>
Interest on financial investments	369,517	477,667	647,629
Interest received from clients	38,227	43,340	60,208
Swap interest	32,300	129,179	50,611
Interest on leasing	22,709	25,756	24,045
Monetary adjustments	39,694	61,628	71,888
Other income	10,118	12,880	8,327
	512,565	750,450	862,708

**31. Financial expenses**

	<b>2017</b>	<b>2016</b>	<b>2015</b>
Interest on borrowing and financing	(211,108)	(199,077)	(179,726)
Interest paid to suppliers	(998)	(21,474)	(142,092)
Interest on taxes and fees	(5,712)	(28,944)	(21,124)
Swap interest	(85,362)	(230,642)	(308,216)
Interest on leasing	(257,305)	(246,280)	(145,274)
Monetary adjustments	(278,272)	(269,031)	(178,904)
Discounts granted	(52,683)	(61,082)	(64,004)

Other expenses	(118,213)	(99,955)	(76,184)
	(1,009,653)	(1,156,485)	(1,115,524)

### 32. Foreign exchange variations, net

	2017	2016	2015
Gain			
Loans and financing	287,777	1,162,987	-
Suppliers	4,124	12,238	9,107
Swaps	130,971	512,824	1,109,006
Other	7,146	10,996	29,902
	430,018	1,699,045	1,148,015
Loss			
Loans and financing	(271,286)	(714,773)	(1,108,309)
Suppliers	(6,819)	(8,213)	(28,949)
Swaps	(147,356)	(960,635)	-
Other	(5,305)	(20,269)	(8,348)
	(430,766)	(1,703,890)	(1,145,606)
Foreign exchange variations, net	(748)	(4,845)	2,409

The exchange variation for the year relates to borrowing and financing and suppliers in foreign currency. Derivative transactions were used to reduce their effects (Note 37).

**TIM PARTICIPAÇÕES S.A. AND SUBSIDIARIES**

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

At December 31, 2017

(In thousands of *Reais*, unless otherwise indicated)**33. Income Tax and Social Contribution expenses**

	<b>2017</b>	<b>2016</b>	<b>2015</b>
Current income tax and social contribution			
Income tax for the year	(203,932)	(309,695)	(358,188)
Social contribution for the year	(77,148)	(110,997)	(132,754)
Tax incentive – SUDENE/SUDAM (*)	112,493	118,250	93,123
	(168,587)	(302,442)	(397,819)
Deferred income tax and social contribution			
Deferred income tax	(23,976)	29,482	(378,168)
Deferred social contribution	(8,631)	9,947	(136,140)
	(32,607)	39,429	(514,308)
Provision for income tax and social contribution	185	124	(3,464)
	(32,422)	39,553	
	(201,009)	(262,889)	(915,591)

The reconciliation of income tax and social contribution expenses calculated at the applicable tax rates, plus the amounts reflected in the statement of income, is set out below:

<b>2017</b>	<b>2016</b>	<b>2015</b>
		3,001,033
1,435,516	1,013,316	

Income before income tax and social contribution			
Combined tax rate	34%	34%	34%
Combined tax rate on income tax and social contribution			
	(488,075)	(344,527)	(1,020,351)
(Additions)/Exclusions:			
Unrecognized/recognized tax losses and temporary differences	68,716	6,611	(4,106)
Permanent additions and exclusions:			
Non-deductible expenses for tax purposes	(6,638)	(18,634)	(24,410)
Financial lease impact	(35,872)	(30,700)	27,546
Tax benefit of interest on shareholders' equity allocated	64,597	-	-
SUDENE/SUDAM tax incentive (*)	112,498	118,250	93,123
Use of previously unrecognized tax losses	11,176	-	-
Other amounts	72,589	6,111	12,607
	287,066	81,638	104,760
Income tax and social contribution recorded in income for the year	(201,009)	(262,889)	(915,591)
Effective tax rate	14.00%	25.94%	30.51%

(\*) As mentioned in Note 25 b.3, according to Article 443, item I, of Decree N°. 3000/1999, investments in subsidiaries are not to be considered within the taxable income, and must be recorded as capital reserves, to be used only to offset losses or increase the capital stock. The subsidiary TIM Celular has tax benefits compliant with these rules.

### 34. Earnings per share

#### (a) Basic

Basic earnings per share are calculated by dividing the income attributable to the shareholders of the Company by the weighted average number of shares issued during the period.

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	<b>2017</b>	<b>2016</b>	<b>2015</b>
Income attributable to shareholders of the Company	1,234,507	750,427	2,085,442
Weighted average number of common shares issued (thousands)	2,420,016	2,420,237	2,420,237
Basic earnings per share (expressed in R\$)	0.51	0.31	0.86

**(b) Diluted**

Diluted earnings per share are calculated by adjusting the weighted average number of shares outstanding to assume the conversion of all dilutive potential shares.

	<b>2017</b>	<b>2016</b>	<b>2015</b>
Income attributable to shareholders of the Company	1,234,507	750,427	2,085,442
Weighted average number of common shares issued (thousands)	2,241,072	2,420,241	2,420,325
Diluted earnings per share (expressed in R\$)	0.51	0.31	0.86

The calculation of the diluted earnings per share considered 1,056 thousand shares (4.53 thousand shares in 2016) related to the 2<sup>nd</sup> and 3<sup>rd</sup> Grantings of Plan 2011-2013, and the 2<sup>nd</sup> and 3<sup>rd</sup> grantings of the 2014-2016 Plan, as mentioned in Note 26.

### 35. Transactions with Telecom Italia Group

The consolidated balances of transactions with the companies of Telecom Italia Group are as follow:

	<b>Assets</b>	
	<b>2017</b>	<b>2016</b>
Telecom Italia Sparkle (1)	1,416	5,246
TI Sparkle (4)	1,544	2,471
TIM Brasil (6)	13,619	12,587
Grupo Havas (8)	115,840	-
Other	709	674
Total	133,128	20,978
	<b>Liabilities</b>	
	<b>2017</b>	<b>2016</b>
Telecom Italia S.p.A. (2)	35,288	29,094
Telecom Italia Sparkle (1)	10,686	22,898
TI Sparkle (4)	9,223	7,822
TIM Brasil	4,903	4,877
Vivendi Group (7)	6,430	3,947
Gruppo Havas (8)	29,008	-
Other	107	38
Total	95,645	68,676

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	<b>2017</b>	<b>Revenue 2016</b>	<b>2015</b>
Telecom Italia S.p.A. (2)	665	3,090	3,668
Telecom Argentina Group (1)	-	8,232	5,771
Telecom Italia Sparkle (1)	5,281	4,694	5,223
TI Sparkle (4)	692	1,627	1,590
Total	6,638	17,643	16,252

	<b>2017</b>	<b>Costs/Expenses 2016</b>	<b>2015</b>
Telecom Italia S.p.A. (2)	8,440	6,801	9,769
Telecom Italia Sparkle (1)	26,775	39,913	35,626
Telecom Argentina Group (1)	-	713	3,109
TI Sparkle (4)	30,734	52,938	51,806
Generali (5)	3,254	194	1,053
Vivendi Group (7)	16,361	8,075	7,669
Gruppo Havas (8)	127,730	-	-
Other	3,102	1,834	588
Total	216,396	110,468	109,620

(1) These amounts refer to roaming, value-added services (“VAS”), international voice data – wholesale, among others. The “Telecom Argentina Group” consists of the companies Telecom Personal, Telecom Argentina and Nucleo. On March 8, 2016, Telecom Italia concluded the sale of its 100% interest in Telecom Argentina Group.

- (2) These amounts refer to international roaming, technical post-sales assistance and VAS.
- (3) These amounts refer to the development and maintenance of software used in invoicing for telecommunications services.
- (4) These amounts refer to the lease of links and EILD, lease of means (submarine cables) and signaling services.
- (5) These amounts refer to insurance coverage taken out for operating risks, civil liability and health insurance among others.
- (6) These amounts refer mainly to judicial deposits related to labor lawsuits.
- (7) These amounts refer to VAS.
- (8) These amounts refer to publicity services.

In the third quarter of 2017, "Lan Group" changed its name to "TI Sparkle."

The balance sheet account balances are recorded in the following groups: trade accounts receivable, prepaid expenses, suppliers and other current assets and liabilities.

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The Company's social initiatives include donations, projects undertaken by the TIM Institute, and sponsorships. In 2017, the Company invested R\$5,014 million of its own funds in social benefits.

**36. Management Remuneration**

Key Management personnel include the statutory officers and the Board of Directors. The compensation paid to key Management personnel for services rendered is shown below:

	<b>2017</b>	<b>2016</b>
Salaries and other short term benefits	21,757	18,523
Share-based payments	6,791	1,200
	<b>28,548</b>	<b>19,723</b>

**37. Financial instruments and risk management**

The financial instruments registered by the Company and its subsidiaries include derivatives, which are financial liabilities measured at fair value through profit or loss. At each balance sheet date they are measured at their fair value. Interest, monetary adjustments, exchange variations and variations arising from measurement at fair value, where applicable, are recognized in income when incurred, under financial revenue or expenses.

Derivatives are initially recognized at fair value as at the date of the derivative agreement, and subsequently revised to fair value. The method used for recognizing any gain or loss depends on whether or not the derivative is assigned a hedge instrument in cases where hedge accounting is adopted.

Through its subsidiaries, the Company performs non-speculative derivative transactions, to: i) reduce the exchange variation risks; and ii) manage exposure to the interest risks involved. The Company's derivative financial transactions consist specifically of swaps and foreign exchange fund contracts.

The Company's financial instruments are presented, through its subsidiaries, in compliance with IAS 32.

Accordingly, the major risk factors to which the Company and its subsidiaries are exposed are as follow:

(i) Exchange variation risks

Exchange variation risks refer to the possibility of subsidiaries incurring: i) losses on unfavorable exchange rate fluctuations, which would increase the outstanding balances of borrowing contracted in the market along with the related financial expenses; or ii) increases in the cost of commercial agreements affected by exchange variations. In order to reduce this kind of risk, the subsidiaries: i) enter into swap contracts with financial institutions with the purpose of avoiding the impact of exchange rate variations on borrowing and financing; and ii) invest in foreign exchange funds with the purpose of reducing the impacts on commercial agreements.

On December 31, 2017, the borrowing and financing of the subsidiaries indexed to foreign currencies were fully hedged by swap contracts in terms of time and amount. Any gains or losses

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arising from these swap contracts are charged to the earnings of the subsidiaries.

Besides the risks mentioned above, no other significant financial assets and liabilities are indexed to foreign currencies.

(ii) Interest rate risks

Interest rate risks relate to:

- The possibility of variations in the fair values of TJLP-indexed financing obtained by the subsidiary TIM Celular, when these rates are not proportional to the CDI. As at December 31, 2017, the subsidiary TIM Celular has no swap transactions linked to the TJLP.

- The possibility of unfavorable changes in interest rates would result in higher finance costs for the subsidiaries due to indebtedness and obligations assumed by the subsidiaries under the swap contracts indexed to floating interest rates (CDI percentage). However, as at December 31, 2017, the subsidiaries' financial funds were invested in CDI, which considerably reduces such risk.

(iii) Credit risk inherent to the provision of services

This risk involves the possibility of the subsidiaries incurring losses arising from the inability of subscribers to pay the amounts billed to them. To minimize this risk, the subsidiaries engage in preventive credit analysis of all requests submitted by the sales area and monitor the accounts receivable from subscribers, freezing their ability to use the services, among other

actions, in the event that customers do not pay their debts. No single customer contributed more than 10% of the net accounts receivable or revenue from services rendered as at December 31, 2017, December 31, 2016 or December 31, 2015.

(iv) Credit risk inherent in the sale of handsets and prepaid telephone cards

The policy of the subsidiaries when selling handsets and distributing prepaid telephone cards is directly related to the acceptable levels of credit risk during the normal course of business. The choice of partners, the diversification of the portfolio of accounts receivable, the monitoring of borrowing conditions, positions and order limits established for traders and the constitution of guarantees are among the procedures adopted by the subsidiaries to contain possible problems in collecting from their business partners. There are no customers that contributed more than 10% of net accounts receivable or sales revenue as at December 31, 2017, December 31, 2016 or December 31, 2015.

(v) Financial credit risk

The cash flow estimates are made and aggregated by the finance and treasury departments of the Company. This department monitors the ongoing estimated liquidity requirements to ensure that the Company has sufficient cash to meet its operating needs. This estimate takes into account investment plans, debt financing, compliance with contractual clauses, compliance with internal goals and, if applicable, compliance with regulatory, external or legal requirements.

This risk relates to the possibility of the Company and its subsidiaries incurring losses due to difficulty realizing their short term investments and swap contracts due to bankruptcy of the counterparties. The subsidiaries minimize the risk associated with these financial instruments by only contracting with sound financial institutions, and adopting policies that establish maximum risk concentration levels by institution.



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## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

At December 31, 2017

(In thousands of *Reais*, unless otherwise indicated)Fair values of derivative financial instruments

The consolidated balances of transactions involving derivative financial instruments are as follow:

	<b>2017</b>			<b>2016</b>		
	<b>Assets</b>	<b>Liabilities</b>	<b>Net</b>	<b>Assets</b>	<b>Liabilities</b>	<b>Net</b>
Transactions with derivatives	80,790	(32,463)	48,327	216,922	(81,473)	135,449
Current portion	53,875	(14,044)	39,831	82,454	(36,163)	46,291
Non-current portion	26,915	(18,419)	8,496	134,468	(45,310)	89,158

The consolidated balances of transactions involving financial derivative instruments with long term maturities as at December 31, 2017 are as follow:

	<b>Assets</b>	<b>Liabilities</b>
2019	20,006	6,588
2020	1,382	6,588
2021	1,382	1,747
2022 onwards	4,145	3,496
	26,915	18,419

Non-derivative financial liabilities are mainly comprised of suppliers, dividends payable and other obligations maturing in the next 12 months, except for loans and financing and financial leases, whose nominal payment flows are disclosed in Notes 19 and 15.

**Consolidated financial assets and liabilities valued at fair value:**

	<b>2017</b>		
	<b>Level 1</b>	<b>Level 2</b>	<b>Total balance</b>
<b>Assets</b>			
Financial assets at fair value			
Securities	765,614	-	765,614
Derivatives used for hedging purposes	-	80,790	80,790
Total assets	765,614	80,790	846,404
<b>Liabilities</b>			
Financial liabilities at fair value through profit loss			
Derivatives used for hedging purposes	-	32,463	32,463
Total liabilities	-	32,463	32,463
	<b>12/2016</b>		
	<b>Level 1</b>	<b>Level 2</b>	<b>Total balance</b>
<b>Assets</b>			
Financial assets valued at fair value			
Securities	479,953	-	479,953
Derivatives used for hedging purposes	-	216,922	216,922
Total assets	479,953	216,922	696,875
<b>Liabilities</b>			
Financial liabilities at fair value through profit loss			
Derivatives used for hedging purposes	-	81,473	81,473
Total liabilities	-	81,473	81,473

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The fair values of financial instruments traded on active markets are based on quoted market prices at the balance sheet date. A market is regarded as active if quoted prices are readily and regularly available from an exchange, dealer, broker, industry group, pricing service or regulatory agency, and those prices represent actual and regularly occurring market transactions on an arm's length basis. These instruments are included in Level 1. The instruments included in Level 1 mainly represent investments in Bank Deposit Certificates ("CDBs") and Repurchases ("Repos") classified as trading securities.

The fair values of financial instruments that are not traded on an active market (for example over-the-counter derivatives) are determined using valuation techniques. These valuation techniques maximize the use of observable market data, where available, and rely to the minimum extent possible on entity specific estimates. If all significant inputs required to determine the fair value of an instrument are observable, the instrument is included in Level 2.

If one or more of the significant inputs is not based on observable market data, the instrument is included in Level 3.

Specific valuation techniques used to value financial instruments include:

- Quoted market prices or financial institution quotes or dealer quotes for similar instruments.
- The fair value of interest rate swaps is calculated as the present value of the estimated future cash flow based on observable yield curves.
- Other techniques, such as discounted cash flow analysis, are used to determine the fair values of the remaining financial instruments.

The fair values of derivative financial instruments of the subsidiaries were determined based on the future cash flow (asset and liability position), taking into account the contracted conditions and bringing those flows to present value by means of discounting future interest rates disclosed in the market. The fair values were estimated at a specific time, based on information available and on the Company's own valuation methodologies.

### **Financial instruments by category**

The Company's financial instruments by category can be summarized as follow:

	<b>Borrowing and Receivables</b>	<b>Assets valued at fair value</b>	<b>Total</b>
<b>December 31, 2017</b>			
Assets, per balance sheet			
Derivative financial instruments	-	80,790	80,790
Trade accounts receivable and other accounts receivable, excluding prepayments	2,567,063	-	2,567,063
Marketable securities		768,611	768,611
Cash and cash equivalents	2,960,718	-	2,960,718
Financial leases	205,331	-	205,331
Judicial deposits	1,366,576	-	1,366,576
Other assets to be offset	68,571	-	68,571
	7,168,259	849,401	8,017,660



	<b>Liabilities valued at fair value through profit or loss</b>	<b>Other financial liabilities</b>	<b>Total</b>
<b>December 31, 2016</b>			
Liabilities per balance sheet			
Borrowing and financing	-	6,719,782	6,719,782
Derivative financial instruments	81,473	-	81,473
Suppliers and other obligations, excluding legal obligations	-	3,461,081	3,461,081
Financial leases	-	1,802,238	1,802,238
Dividends payable	-	206,112	206,112
	81,473	12,189,213	12,270,686

Regular purchases and sales of financial assets are recognized as at the trade date - the date on which the Company undertakes to buy or sell the asset. Investments are initially recognized at fair value. After initial recognition, changes in the fair value are booked in income for the year as finance income and expenses.

**Financial risk hedge policy adopted by the Company - Synthesis**

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The Company's policy states that mechanisms must be adopted to hedge against financial risks arising from borrowing in foreign currency, so as to manage the exposure to the risks associated with exchange variations.

Derivative financial instruments against exchange variations must be acquired simultaneously with the payment of the debt that gave rise to that exposure. The coverage level to be taken out for this exchange exposure is 100% of the risk, both in terms of maturity date and amount.

As at December 31, 2017, no types of margin or collateral apply to the Company's or its subsidiaries' transactions involving derivative financial instruments.

The criteria for choosing the financial institutions take into account the ratings provided by reliable risk rating agencies, shareholders' equity and the levels of concentration of transactions and funding.

Transactions involving derivative financial instruments entered into by the subsidiaries and outstanding as at December 31, 2017 and December 31, 2016 are shown in the table below:

December 31, 2017

<b>Currency</b>	<b>SWAP Type</b>	<b>COUNTERPARTY</b>		<b>Total Debt</b>	<b>Total Swap (Asset Side)</b>	<b>% Coverage</b>	<b>AVERAGE SWAP RATE</b>	
		<b>DEBT</b>	<b>SWAP</b>				<b>Asset Side</b>	<b>Liability Side</b>
<b>USD</b>	LIBOR X DI	KfW	JP Morgan	110,937	110,937	100%	LIBOR 6M + 1.35% p.a.	102.50% of CDI
				260,522	260,522	100%		
<b>USD</b>				198,990	198,990	100%		

	LIBOR X DI	KFW/ Finnvera	JP Morgan and BOFA				LIBOR 6M + 0.75% p.a.	80.29% of CDI
<b>USD</b>	PRE X DI	CISCO	Santander and JP Morgan	110,937	110,937	100%	2.13% p.a.	87.54% of CDI

December 31, 2016

<b>Currency</b>	<b>Swap type</b>	<b>Debt</b>	<b>COUNTERPARTY</b>		<b>Total Swap (Asset Side)</b>	<b>% Coverage</b>	<b>AVERAGE SWAP RATE</b>	
			<b>SWAP</b>	<b>Total Debt</b>			<b>Asset Side</b>	<b>Liability Side</b>
<b>USD</b>	LIBOR X DI	BEI	BOFA	622,980	622,980	100%	LIBOR 6M + 1.22% p.a.	94.33% of CDI
<b>USD</b>	LIBOR X DI	BNP	CITI, JP Morgan	78,065	78,065	100%	LIBOR 6M + 2.53% p.a.	97.42% of CDI
<b>USD</b>	LIBOR X DI	KfW	JP Morgan	182,046	182,046	100%	LIBOR 6M + 1.35% p.a.	102.50% of CDI
<b>USD</b>	LIBOR X DI	BOFA	BOFA	324,860	324,860	100%	LIBOR 3M + 2.00% p.a.	103.60% of CDI
<b>USD</b>	LIBOR X DI	KFW/ Finnvera	JP Morgan	121,038	121,038	100%	LIBOR 6M + 0.75% p.a.	79.00% of CDI
<b>USD</b>	PRE X DI	CISCO	Santander and JP Morgan	294,138	294,138	100%	2.18% p.a.	88.05% of CDI



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In March and April 2017, in line with its goal to control cash and reducing indebtedness, the Company jointly decided that, together with the prepayment of the BOA borrowing and BEI financing, it would reverse the swaps contracted with BOFA for the purpose of hedging the Company against the risks of variations in foreign exchange and interest rates.

In addition to the swap transactions mentioned in the tables above, the Company took advantage of a favorable moment, at the end of June 2016, to close a forward swap transaction in advance to ensure an attractive cost of 81.5% of the CDI rate for a financing agreement in foreign currency. The disbursement of the funds occurred on April 20, 2017, to KfW/Finnvera. The swap was closed based on the same payment flow to ensure full hedging, and has a notional value of approximately US\$48 million. This transaction does not entail foreign exchange risk, since the initial US Dollar rates for this transaction (Debt and Swap) are equal at the inception date.

Sensitivity analysis – effect on the fair value of the swaps

In order to identify possible distortions arising from consolidated transactions involving derivative financial instruments currently outstanding, a sensitivity analysis was carried out taking into account three different scenarios (probable, possible and remote) and their respective impacts on the results, as follow:

<b>Description</b>	<b>2017</b>	<b>Probable Scenario</b>	<b>Possible Scenario</b>	<b>Remote Scenario</b>
Debt in USD (Cisco and KFW)	579,817	579,817	731,785	886,481
			<b>151,968</b>	<b>306,664</b>

**A) Δ Aggregate Debt Variation**

Fair value of the asset side of the swap	579,817	579,817	731,785	886,481
Fair value of the liability side of the swap	(531,489)	(531,489)	(530,824)	(530,387)
Swap result	48,327	48,327	200,961	356,094

**B) Δ Aggregate Swap Variation**

	<b>152,633</b>	<b>307,767</b>
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	665	1,103
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**C) Final result (B-A)**

Given the characteristics of the derivative financial instruments of the subsidiaries, the assumptions used basically took into account the effect of: i) the variations of the CDI; ii) LIBOR; and iii) the variations in the US Dollar used in the transactions, achieving the respective percentages and quotations indicated below:

<b>Risk variable</b>	<b>Probable scenario (current)</b>	<b>Possible scenario</b>	<b>Remote scenario</b>
CDI	6.89%	8.61%	10.34%
LIBOR	1.8371%	2.2963%	2.7556%
US dollar	3.3080	4.1350	4.9620

As the subsidiaries hold derivative financial instruments in order to hedge their respective financial debt, the variations in the scenarios are monitored from the respective subject designated as hedge, thereby showing that the counterpart of the effects involving the exposure created by the swaps will be reflected in the debt. In the case of these transactions, the subsidiaries disclosed the fair value of the subject matter (debt) and the derivative financial instrument of the hedge on separate lines, as shown in the sensitivity analysis position above, so as to reveal the net exposure of its subsidiaries in each of the three scenarios mentioned.

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Attention is drawn to the fact that the sole purpose of the transactions entered into by the subsidiaries involving derivative financial transactions is to protect their balance sheet positions. Therefore, any improvement or deterioration in their respective market values will represent an inverse movement in the corresponding installments of the financial debt contracted, which is the object of the subsidiaries' derivative financial instruments.

Sensitivity analyses referring to the derivative financial instruments outstanding as at December 31, 2017 were conducted, mainly taking into account the assumptions surrounding the variations in market interest rates and the variations in the US Dollar used in the swap agreements. The use of these assumptions in the analyses was driven by the characteristics of the derivative financial instruments, which represent exposure to interest rate and exchange variations only.

Position showing gains and losses on derivatives during the year

Net income from US\$ vs. CDI transactions	<b>2017</b> (69,446)
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**Capital management**

The Group's objectives when managing capital are to safeguard the Group ability to continue as a going concern in order to provide returns to shareholders and benefits to other stakeholders, and to maintain an optimal capital structure to reduce the cost of capital. In order to maintain or adjust its capital structure the Company can review its policy on paying dividends, return capital to the shareholders, issue new stock or sell assets to reduce its level of indebtedness, for example.

	<b>2017</b>	<b>2016</b>
Total borrowing and derivatives (Note 19 and 37)	4,642,617	6,584,333

Lease – Liabilities (Note 15)	1,887,172	1,802,238
Lease - Assets (Note 15)	(205,331)	(204,762)
ANATEL debts (Note 18)	98,451	147,219
Less: Cash and cash equivalents (Note 4)	(2,960,718)	(5,128,186)
Foreign exchange funds (Note 5)	-	(479,953)
FIC (Note 5)	(765,614)	-
Net Debt - Unaudited	2,696,577	2,720,889
EBITDA (1) (last 12 months) - Unaudited	5,947,023	5,209,368
Financial leverage ratio (*) - Unaudited	0.45	0.52

## (1) Reconciliation with net Income for the year

	1,234,507	750,427
Depreciation and amortization	4,013,671	3,785,172
Net financial income	497,836	410,880
Income and social contribution taxes	201,009	262,889
EBITDA (Unaudited) (**)	5,947,023	5,209,368

(\*) The variation in the ratio includes the effect of the sale of towers.

(\*\*) Earnings before interest, tax, depreciation and amortization.

**Changes in financing activities**

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Below the changes in liabilities arising from financing activities, such as borrowings and financing, finance lease and financial instruments:

	Borrowings and financing	Finance lease	Financial instruments (assets) liabilities
<b>December 31, 2016</b>	6,719,782	1,802,238	(135,449)
Additions	646,854	48,957	17,675
Financial interests	611,369	257,305	53,062
Foreign exchange variations, net	(16,491)		16,385
Payments	(3,270,570)	(219,189)	-
Other		(2,139)	-
<b>December 31, 2017</b>	<b>4,690,944</b>	<b>1,887,172</b>	<b>(48,327)</b>

**38 Insurance**

The Company and its subsidiaries have a policy for monitoring the risks inherent to their operations. Accordingly, on December 31, 2017, the Company and its subsidiaries had insurance coverage against operating risks, third party liability and health risks, among others. The Management of the Company and its subsidiaries consider that the insurance coverage contracted is sufficient to cover eventual losses. The table below shows the main assets, liabilities or interests insured, and their respective amounts:

<b>Types</b>	<b>Amounts insured</b>
Operating risks	R\$38,171,870
General Third Party Liability - RCG	R\$80,000
Vehicles (Executive and Operational Fleets)	R\$1,000 for Civil Liability Optional (Property Damages and Personal Injury) and R\$100 for Moral Damages.

### **39 Commitments**

#### **Rentals**

The Company and its subsidiaries rent equipment and property under many rental agreements with different maturity dates. Below is a list of the minimum committed rental payments under such agreements:

2018	779,585
2019	812,717
2020	845,226
2021	879,035
2022	914,196
	4,230,759

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#### **40 Other Material Information**

On June 20, 2016, Oi S.A., Telemar Norte Leste S.A., Oi Móvel S.A., Copart 4 Participações S.A., Copart 5 Participações S.A., Portugal Telecom International Finance B.V. and Oi Brasil Holdings Coöperatief U.A. (jointly "Oi"), filed for judicial reorganization with the 7<sup>th</sup> Business Court of Rio de Janeiro. The complaint states that the purpose of the action was to protect Oi's cash and assets while it negotiated a judicial reorganization plan with its creditors, so that it can continue to operate. The judicial reorganization was granted by the Court on June 29, 2016.

Oi's judicial reorganization plan was approved by the general meeting of its creditors held on December 19, 2017, and ratified by the Court of the judicial reorganization on January 8, 2018. The decision on the approval of the plan has not yet been published in the Official Gazette.

The judicial reorganization plan establishes that the partner supplier creditors will be paid under favorable conditions.

The conditions for the payment of the listed debts to creditors classified as suppliers/partners are as follow:

- Payment of R\$150, 20 days after the termination of the credit payment option; and
- Payment of the remaining balance at a 10% discount in four annual installments (the first being on December 31, 2019, if the approval decision is published in 2018) plus the Reference Rate ("TR") + 0.5% per annum.

For suppliers classified in the general payment modality, the payment of the listed credits is as follows:

- 20-year grace period from the publication of the decision on the approval of the judicial reorganization;
- Repayment of the principal in five annual and successive installments;
- Payment of TR accumulated in the period only, together with the last installment;
- Payments to creditors under this modality will be limited to a maximum of R\$70 billion, and, if the credits exceed such amount, they will be subject to a *pro rata* reduction.

The relationship between TIM and OI arises principally from regulated interconnection operations and the sharing of infrastructure, which are necessary for both operators. Thus, the net asset position of TIM in relation to the judicial reorganization of OI as at June 20, 2016 is as follows:

Interconnection	14,248
Other commercial relationships for infrastructure sharing	1,677
Total	15,925

On the basis of the information available as at the date of preparation of the financial statements, considering the approval of the judicial reorganization plan, TIM's Management does not expect any significant loss with respect to accounts receivable outstanding with OI as at December 31, 2017.

#### **41. Subsequent events**

##### OI S.A.

The Company entered into a memorandum of understanding with OI S.A. in relation to the latter's Judicial Reorganization, initiating an important stage of negotiations that aims to equalize their respective complaints and opens a new cycle of planning for infrastructure sharing, based on the same model of partnerships already used in the Brazilian telecommunication market. Based on such memorandum the Company will enter in a swap transaction with OI in order to exchange for certain operational assets (fiber optical).





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Judicial proceedings

On February 19, 2018, the Company obtained a tax assessment notice issued by the State of São Paulo, in the amount of approximately R\$344 million, challenging certain ICMS (Value-Added Tax) credits arising from part of the amounts paid as Whithhold Tax on purchases of certain products. In a preliminary risk analysis performed by the Company's management, the process is assessed as a possible loss.

On February 21, 2018, the Company obtained a tax assessment notice issued by the State of São Paulo in the amount of approximately R\$ 335 million, challenging for a reduction of the ICMS tax basis (Value-Added Tax) due to the exclusion of prepaid credits granted to its customers. The Company understands that if they were included in the tax calculation basis, it would incur double taxation, therefore, in a preliminary risk analysis, this lawsuit is assessed as a possible loss.

\* \* \*

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