

***TIM Participações S.A.,  
TIM Participações S.A. and  
Subsidiary***

*FINANCIAL STATEMENTS  
as at December 31, 2019*

(A free translation of the original in Portuguese)

**TIM PARTICIPAÇÕES S.A. and  
TIM PARTICIPAÇÕES S.A. e SUBSIDIARY**

**FINANCIAL STATEMENTS**

**December 31, 2019 and 2018**

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# **Independent auditor's report on individual and consolidated financial statements**

To the board of directors and shareholders of  
**TIM Participações S.A.**

## **Opinion**

We have audited the individual and consolidated financial statements of TIM Participações S.A. (the "Company"), identified as Individual and Consolidated, respectively, which comprise the balance sheet as at December 31, 2019, and the statements of income, of comprehensive income, of changes in shareholders equity and cash flows for the year then ended, and notes to the financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying financial statements present fairly, in all material respects, the individual and consolidated financial position of TIM Participações S.A. as at December 31, 2019, and its individual and consolidated financial performance and cash flows for the year then ended in accordance with the accounting practices adopted in Brazil and with the International Financial Reporting Standards (IFRS) issued by the International Accounting Standards Board (IASB).

## **Basis for opinion**

We conducted our audit in accordance with Brazilian and International Standards on Auditing. Our responsibilities under those standards are further described in the Auditor's responsibilities for the audit of the individual and consolidated financial statements section of our report. We are independent of the Company and its subsidiaries in accordance with the relevant ethical principles set forth in the Code of Professional Ethics for Accountants, the professional standards issued by the Brazil's National Association of State Boards of Accountancy (CFC) and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

## **Key audit matters**

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements of the current period. These matters were addressed in the context of our audit of the individual and consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters. For each matter below, our description of how our audit addressed the matter, including any commentary on the findings or outcome of our procedures, is provided in that context.

We have fulfilled the responsibilities described in the Auditor's responsibilities for the audit of the individual and consolidated financial statements section of our report, including in relation to these matters. Accordingly, our audit included the performance of procedures designed to respond to our assessment of the risks of material misstatement of the financial statements. The results of our audit procedures, including the procedures performed to address the matters below, provide the basis for our audit opinion on the accompanying financial statements.

### **Provision for tax contingencies**

The Company has tax matters under discussion at various procedural levels, in the amount of R\$ 16,529 million, for which, based on opinion and its legal counsel, a provision for contingencies of R\$ 333 million was set up in the consolidated statement of financial position, while R\$ 16,196 million were disclosed by the Company as possible losses as disclosed in note 24.

The determination of the amount of the provision and the amounts disclosed depends on critical judgments made by management, based on the analysis of the proceedings and the corresponding prognosis for their final resolution by its legal advisors. The audit of management's assessment of the likelihood of loss in tax proceedings is complex, highly subjective and based on interpretations of tax legislation and court decisions, since there is significant uncertainty in the estimates as to the outcome of court decisions, how formerly adjudged cases have evolved and the position of the tax authorities.

In addition, in view of the magnitude of the amounts involved, any changes in estimates or assumptions that impact the determination of the loss prognosis may have significant impacts on the Company's financial statements. Accordingly, this was considered a key audit matter.

### **How our audit conducted this matter**

Our audit procedures included, among others:

We requested and obtained confirmation from all internal and external legal advisors who are involved in the tax proceedings of the Company, confirming the amounts and prognosis of proceedings losses, as determined by the Company's management.

To test the Company's assessment of the likelihood of loss in tax proceedings, our audit procedures included, among others, the involvement of our internal Tax Controversy experts to support us in discussions regarding the forecasts made by Company's external lawyers for the most significant tax contingencies;

Additionally, for the most significant tax proceedings, we obtained additional legal opinions from other legal advisors to assess the reasonableness of the prognosis determined by the Company's legal advisors in charge of the respective proceedings, and we evaluated the arguments, case law and/or strategy of defense adopted by the Company's legal advisors.

Based on the result of audit procedures performed in the provision for tax contingencies and related disclosures, which is consistent with management's assessment, we understand that the measurement of tax claims assessed as probable and possible loss, as well as the respective disclosures in Note 24 are acceptable in the context of the financial statements taken as a whole.

## **PIS and Cofins tax recoverable**

The Company recorded tax credits in the amount of R\$ 3,023 million under “Direct taxes, charges and contribution recoverable” in the consolidated statement of financial position, arising from the favorable court judgments from the Tax Authorities in lawsuits in favor of the Company’s subsidiary during 2019. These lawsuits recognized the right to exclude State VAT (ICMS) from the Contribution Taxes on Gross Revenue for Social Integration Program (PIS) and for Social Security Financing (COFINS) computation bases for the periods covered by the lawsuits as disclosed in note 9. The Company received authorization from the competent authority in Brazil to start offsetting these credits against federal tax liabilities, since part of the Company’s lawsuits seeks to ensure the continuity of the offsetting of those credits.

The audit of management’s assessment regarding the amount of credit is complex and subjective, mainly due to the following factors: (i) the amount of the credit and the calculation basis are not expressly stated in the court decision as to the method of calculating the credit favorable to the Company; (ii) the estimate of the term and amount of the use of tax credits entails the estimate of the Company’s future revenues, among other key assumptions.

For these reasons, the assessment, measurement and disclosure of this matter was considered a key audit matter.

### **How our audit conducted this matter**

Our audit procedures included, with the assistance of our tax experts, the following, among others: (i) we read the decisions and evaluated and discussed with management the conclusions obtained by the Company, also grounded on the opinions of renowned and independent specialists, as to the appropriate moment of recognition of the tax credit resulting from final and unappealable decisions favorable to the Company, as well as its amount; (ii) we obtained and audited the calculations prepared by the Company to measure the amounts of recoverable taxes and the corresponding monetary adjustment applicable for the period covered by the lawsuit; (iii) we understood and evaluated Management assumptions on the measurement of the asset.

As a result of the application of our audit procedures are consistent with the assessment, assumptions and conclusion of Company’s management as well as the disclosure stated in Note 9, 29 and 30 in the context of the consolidated financial statements and taken as a whole.

### **Adoption of the Accounting Standard on Leases (CPC 06 (R2) / IFRS 16)**

The Company adopted CPC 06 (R2)/IFRS 16 “Leases” retrospectively, with the cumulative effect of the initial adoption recognized on its date, that is, as at January 1, 2019. The initial adoption of this standard resulted in the recognition of right-of-use assets and lease liabilities in the amount of R\$ 5,256 thousand at January 1, 2019.

The Company’s management completed a study of the impacts of this new standard on its consolidated financial statements, which included: (i) estimate of the lease term, considering a non-cancellable period and the periods covered by options to extend the lease term, when this term depends solely on the Company and is reasonably certain; (ii) detailed review of the nature of the various lease contracts inherent in the telecommunications sector; (iii) use of assumptions in calculating the discount rate, which was based on the incremental interest rate for the contract period; (iv) design and implementation of internal controls to adequately

capture modification or cancellation of contracts due to the course of the lease expiration and identification of new lease contracts.

The validation of reports and tools implemented by the Company's management to ensure the totality and integrity of the lease contracts, as well as the appropriate data collection and measurement of the balances and transactions recorded in the consolidated financial statements were highly complex due to the high number of leases within the scope of the new accounting standards with a significant volume of operational lease contracts due to various network infrastructure sharing leases amongst various telecom operators in the market, with payments recorded on a linear basis over the contract term.

In addition, there are certain aspects of the adoption of CPC 06 (R2)/IFRS 16 that require of management to make judgment assumptions, such as determining the incremental borrowing rate and classifying individual leases based on their contractual terms.

Accordingly, the assessment, measurement and disclosure of this matter was considered a key audit matter.

### **How our audit conducted this matter**

Our audit procedures included, among others: (i) analysis and examination of contracts in the as of the adoption date and executed in 2019, to assess whether the leasing population is complete; (ii) comparison of the contract population provided by the procurement department, and others, with the contracts considered in the scope of the new accounting standard, checking if any of contracts that have not been considered. (iii) on a sampling basis, whether the input data used by the Company is consistent with the original contracts; (iv) whether the adequacy of the discount rate used by the Company is consistent with the accounting standard; (v) the adequacy of the model used by the Company to determine lease liabilities; (vi) evaluation of consolidated financial statement disclosure

As a result of the application of our audit procedures are consistent with the assessment, assumptions and conclusion of Company's management as well as the disclosure stated in Note 2, 14 and 16 in the context of the consolidated financial statements and taken as a whole.

## **Other matters**

### **Statements of value added**

The individual and consolidated statements of value added (SVA) for year ended December 31, 2019, prepared under the responsibility of Company management, and presented as supplementary information for purposes of IFRS, were submitted to audit procedures conducted together with the audit of the Company's financial statements. To form our opinion, we evaluated if these statements are reconciled to the financial statements and accounting records, as applicable, and if their form and content comply with the criteria defined by NBC TG 09 – Statement of Value Added. In our opinion, these statements of value added were prepared fairly, in all material respects, in accordance with the criteria defined in abovementioned accounting pronouncement, and are consistent in relation to the overall individual and consolidated financial statements.

### **Prior-year corresponding figures**

The individual and consolidated financial statements of the Company for the year ended December 31, 2018, were audited by another auditor who expressed an unmodified opinion on those financial statements on February 19, 2019.

### **Other information accompanying the individual and consolidated financial statements and the auditor's report**

Management is responsible for such other information, which comprise the Management Report.

Our opinion on the individual and consolidated financial statements does not cover the Management Report and we do not express any form of assurance conclusion thereon.

In connection with our audit of the individual and consolidated financial statements, our responsibility is to read the Management Report and, in doing so, consider whether this report is materially inconsistent with the financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated. If, based on the work we have performed, we conclude that there is a material misstatement of the Management Report, we are required to report that fact. We have nothing to report in this regard.

### **Responsibilities of management and those charged with governance for the individual and consolidated financial statements**

Management is responsible for the preparation and fair presentation of the individual and consolidated financial statements in accordance with the accounting practices adopted in Brazil and with the International Financial Reporting Standards (IFRS) issued by the International Accounting Standards Board (IASB), and for such internal control as management determines is necessary to enable the preparation of financial statements that are free of material misstatement, whether due to fraud or error.

In preparing the individual and consolidated financial statements, management is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Company or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Company's and its subsidiaries' financial reporting process.

### **Auditor's responsibilities for the audit of the individual and consolidated financial statements**

Our objectives are to obtain reasonable assurance about whether the individual and consolidated financial statements as a whole are free of material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Brazilian and International standards on Auditing will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with Brazilian and International Standards on Auditing, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identified and assessed the risks of material misstatement of the individual and consolidated financial statements, whether due to fraud or error, designed and performed audit procedures responsive to those risks, and obtained audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtained an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's and its subsidiaries' internal control.
- Evaluated the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Concluded on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the individual and consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Company to cease to continue as a going concern.
- Evaluated the overall presentation, structure and content of the financial statements, including the disclosures, and whether the individual and consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtained sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the individual and consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the scope and timing of the planned audit procedures and significant audit findings, including deficiencies in internal control that we may have identified during our audit.

We also provided those charged with governance with a statement that we have complied with relevant ethical requirements, including applicable independence requirements, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, we determined those matters that were of most significance in the audit of the financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

Rio de Janeiro, February 11, 2020.

ERNST & YOUNG  
Auditores Independentes S.S.  
CRC-2SP015199/O-6

Fernando Alberto S. Magalhães  
Accountant CRC-1SP133169/O-0

**TIM PARTICIPAÇÕES S.A., TIM PARTICIPAÇÕES S.A. AND SUBSIDIARY**

**BALANCE SHEETS**

December 31, 2019 and December 31, 2018

(In thousands of Reais)

	Notes	Parent Company		Consolidated	
		12/2019	12/2018	12/2019	12/2018
<b>Asset</b>		<b>23,133,188</b>	<b>20,275,453</b>	<b>40,348,924</b>	<b>31,957,889</b>
<b>Current Assets</b>		<b>677,929</b>	<b>457,534</b>	<b>8,454,129</b>	<b>5,998,126</b>
Cash and cash equivalents	4	762	167	2,284,810	1,075,530
Marketable securities	5	12,167	13,378	654,479	784,841
Trade accounts receivable	6	1,844	444	3,184,780	2,838,808
Inventory	7	-	-	203,278	183,059
Dividends and interest on shareholders' equity receivable	13	597,550	362,436	-	-
Indirect taxes, charges and contributions recoverable	8	-	-	420,284	280,254
Direct taxes, charges and contributions recoverable	9	28,383	45,278	1,395,193	347,505
Prepaid expenses	11	2,729	2,460	175,868	272,060
Derivative Financial Instruments	37	-	-	16,602	50,769
Financial leases	16	-	-	4,931	22,491
Regulatory credits recoverable	17	-	-	33,090	41,612
Other current assets		34,494	33,371	80,814	101,197
<b>Non-current assets</b>		<b>22,455,259</b>	<b>19,817,919</b>	<b>31,894,795</b>	<b>25,959,763</b>
<b>Long-term receivables</b>		<b>88,077</b>	<b>133,848</b>	<b>4,614,305</b>	<b>4,074,137</b>
Marketable securities	5	-	-	3,849	5,229
Trade accounts receivable	6	-	-	103,075	130,308
Indirect taxes, charges and contributions recoverable	8	-	-	823,349	912,511
Direct taxes, charges and contributions recoverable	9	-	-	2,367,607	558,016
Deferred income tax and social contribution	10	-	-	-	801,971
Judicial Deposit	12	87,049	131,270	1,006,899	1,345,113
Prepaid expenses	11	1,028	2,578	69,656	74,381
Derivative Financial Instruments	37	-	-	29,909	30,639
Financial leases	16	-	-	151,447	185,558
Other current assets		-	-	58,514	30,411
Investment	13	22,209,626	19,526,515	-	-
Property, plant and equipment	14	-	-	17,612,164	11,203,622
Intangible	15	157,556	157,556	9,668,326	10,682,004

The accompanying notes are an integral part of the financial statements.

**TIM PARTICIPAÇÕES S.A., TIM PARTICIPAÇÕES S.A. AND SUBSIDIARY**

**BALANCE SHEETS**

December 31, 2019 and December 31, 2018

(In thousands of Reais)

	Notes	Parent Company		Consolidated	
		12/2019	12/2018	12/2019	12/2018
<b>Total liabilities and shareholders' equity</b>		23,133,188	20,275,453	40,348,924	31,957,889
<b>Total Liability</b>		701,370	480,616	17,917,106	12,163,052
<b>Current Assets</b>		624,194	441,024	8,117,479	7,075,379
Suppliers	18	6,987	11,770	3,923,035	4,323,374
Loans and financings	20	-	-	1,384,180	698,728
Financial leases	16	-	-	873,068	205,048
Derivative Financial Instruments	37	-	-	858	2,373
Payroll and related charges		898	2,344	218,421	211,685
Indirect taxes, charges and contributions payable	21	530	447	463,606	451,169
Direct taxes, charges and contributions payable	22	25,816	47,285	296,305	332,333
Dividends and interest on shareholders' equity payable	25	577,837	370,105	577,837	370,105
Authorizations payable	19	-	-	88,614	65,464
Deferred revenues	23	-	-	281,930	406,867
Other current liabilities		12,126	9,073	9,625	8,233
<b>Non-current assets</b>		77,176	39,592	9,799,627	5,087,673
Loans and financings	20	-	-	644,908	964,289
Derivative Financial Instruments	37	-	-	3,547	9,245
Financial leases	16	-	-	6,907,802	1,735,026
Indirect taxes, charges and contributions payable	21	-	-	2,997	2,772
Direct taxes, charges and contributions payable	22	-	-	212,310	209,880
Deferred income tax and social contribution	10			47,734	-
Provision for legal and administrative proceedings	24	47,423	9,837	840,637	849,408
Pension plan and other post-employment benefits	38	-	-	5,782	2,850
Authorizations payable	19	-	-	237,723	348,336
Deferred revenues	23	-	-	827,182	906,600
Other current liabilities		29,753	29,755	69,005	59,267
<b>Shareholders' equity</b>	25	22,431,818	19,794,837	22,431,818	19,794,837
Capital Stock		9,866,298	9,866,298	9,866,298	9,866,298
Capital reserves		410,650	412,091	410,650	412,091
Profit reserves		12,159,162	9,524,124	12,159,162	9,524,124
Accumulated other comprehensive income		(1,088)	847	(1,088)	847
Treasury shares		(3,204)	(8,523)	(3,204)	(8,523)

The accompanying notes are an integral part of the financial statements.

**TIM PARTICIPAÇÕES S.A., TIM PARTICIPAÇÕES S.A. AND SUBSIDIARY**  
**STATEMENTS OF INCOME**

Periods ended December 31, 2019 and 2018

(In thousands of Reais, except as otherwise stated)

	Notes	Parent Company		Consolidated	
		2019	2018	2019	2018
Net revenue	27	-	-	17,377,194	16,981,329
Costs of services provided and goods sold	28	-	-	(7,433,731)	(7,701,418)
Gross income		-	-	9,943,463	9,279,911
Operating income (expenses):					
Selling expenses	28	-	-	(4,986,289)	(4,970,780)
General and administrative expenses	28	(24,755)	(29,745)	(1,717,859)	(1,608,319)
Income from equity accounting	13	3,865,255	2,672,647	-	-
Other revenues (expenses), net	29	(54,865)	(837)	1,275,542	(283,289)
		3,785,635	2,642,065	(5,428,606)	(6,862,388)
Operating income		3,785,696	2,642,065	4,514,857	2,417,523
Financial income (expenses):					
Financial income	30	2,671	1,978	1,430,171	412,733
Financial expenses	31	(169,399)	(95,687)	(1,408,053)	(951,439)
Foreign exchange variations, net	32	(26)	(9)	(908)	1,373
		(166,754)	(93,718)	21,210	(537,333)
Income before income and social contribution taxes		3,618,881	2,548,347	4,536,067	1,880,190
Income tax and social contribution	33	3,246	(3,246)	(913,940)	664,911
Net income for the year		3,622,127	2,545,101	3,622,127	2,545,101
<i>Earnings per share attributed to the Company's shareholders (in R\$ per share)</i>					
Basic earnings per share	34	1.50	1.05	1.50	1.05
Diluted earnings per share	34	1.50	1.05	1.50	1.05

The accompanying notes are an integral part of the financial statements.

**TIM PARTICIPAÇÕES S.A., TIM PARTICIPAÇÕES S.A. AND SUBSIDIARY****COMPREHENSIVE INCOME STATEMENT**

Periods ended December 31, 2019 and 2018

(In thousands of Reais)

	Parent Company		Consolidated	
	2019	2018	2019	2018
Net income for the year	3,622,127	2,545,101	3,622,127	2,545,101
Other components of comprehensive income				
Item not to be reclassified to income:				
Pension plan and other post-employment benefits	(2,932)	(215)	(2,932)	(215)
Deferred taxes	997	73	997	73
Total comprehensive income for the period	<u>3,620,192</u>	<u>2,544,959</u>	<u>3,620,192</u>	<u>2,544,959</u>

The accompanying notes are an integral part of the financial statements.

**TIM PARTICIPAÇÕES S.A., TIM PARTICIPAÇÕES S.A. AND SUBSIDIARY**

**STATEMENT OF CHANGES IN SHAREHOLDERS' EQUITY**

Fiscal years ended December 31

(In thousands of Reais)

	Profit reserves								Total
	Capital Stock	Capital reserves	Legal reserve	Reserve for expansion	Tax benefit reserve	Treasury shares	Accumulated other comprehensive	Retained earnings	
<b>Balances as at January 1, 2019</b>	9,866,298	412,091	838,692	7,267,574	1,417,858	(8,523)	847	-	19,794,837
Impact of initial adoption of new accounting pronouncements (note 2.f)	-	-	-	-	-	-	-	-	-
<b>Balances as at January 1st, 2019, adjusted</b>	9,866,298	412,091	838,692	7,267,574	1,417,858	(8,523)	847	-	19,794,837
Total comprehensive income for the period									
Net income for the year								3,622,127	3,622,127
Remeasurement of post-employment benefit obligation (Note 13)	-	-	-	-	-	-	(1,935)	-	(1,935)
Total comprehensive income for the period	-	-	-	-	-	-	(1,935)	3,622,127	3,620,192
Total contributions from shareholders and distributions to shareholders									
Stock options (Note 25.b)	-	(1,441)	-	-	-	-	-	-	(1,441)
Purchases of treasury shares, net of disposals	-	-	-	-	-	5,319	-	-	5,319
Allocation of net profit for the year:									
Legal Reserve (note 25)	-	-	171,398	-	-	-	-	(171,398)	-
Interest on equity (note 25)	-	-	-	-	-	-	-	(995,438)	(995,438)
Constitution of tax benefit reserve (note 25)	-	-	-	-	194,161	-	-	(194,161)	-
Constitution of reserve for expansion (note 25)	-	-	-	2,261,130	-	-	-	(2,261,130)	-
Unclaimed dividends (note 25)	-	-	-	8,349	-	-	-	-	8,349
Total contributions from shareholders and distributions to shareholders	-	(1,441)	171,398	2,269,479	194,161	5,319	-	(3,622,127)	(983,211)
<b>Balances as at December 31, 2019</b>	9,866,298	410,650	1,010,090	9,537,053	1,612,019	(3,204)	(1,088)	-	22,431,818

**TIM PARTICIPAÇÕES S.A., TIM PARTICIPAÇÕES S.A. AND SUBSIDIARY**

**STATEMENT OF CHANGES IN SHAREHOLDERS' EQUITY**

Fiscal years ended December 31

(In thousands of Reais)

	Profit reserves								Total
	Capital Stock	Capital reserves	Legal reserve	Reserve for expansion	Tax benefit reserve	Treasury shares	Accumulated other comprehensive income	Retained earnings	
<b>Balances as at January 1, 2018</b>	9,866,298	416,162	718,759	5,894,060	1,271,403	(16,487)	989	-	18,151,184
Impact of initial adoption of new accounting pronouncements (note 2.f)	-	-	-	(62,119)	-	-	-	-	(62,119)
<b>Balances as at January 1st, 2018, adjusted</b>	9,866,298	416,162	718,759	5,831,941	1,271,403	(16,487)	989	-	18,089,065
Total comprehensive income for the period									
Net income for the year								2,545,101	2,545,101
Remeasurement of post-employment benefit obligation (Note 13)	-	-	-	-	-	-	(142)	-	(142)
Total comprehensive income for the period	-	-	-	-	-	-	(142)	2,545,101	2,544,959
Total contributions from shareholders and									
Stock options (Note 25.b)	-	(4,071)	-	-	-	-	-	-	(4,071)
Purchases of treasury shares, net of disposals	-	-	-	-	-	7,964	-	-	7,964
Allocation of net profit for the year:									
Legal Reserve (note 25)	-	-	119,933	-	-	-	-	(119,933)	-
Interest on equity (note 25)	-	-	-	-	-	-	-	(849,994)	(849,994)
Constitution of tax benefit reserve (note 25)	-	-	-	-	146,455	-	-	(146,455)	-
Constitution of reserve for expansion (note 25)	-	-	-	1,428,719	-	-	-	(1,428,719)	-
Unclaimed dividends (note 25)	-	-	-	6,914	-	-	-	-	6,914
Total contributions from shareholders and	-	(4,071)	119,933	1,435,633	146,455	7,964	-	(2,545,101)	(839,187)
<b>Balances as at December 31, 2018</b>	9,866,298	412,091	838,692	7,267,574	1,417,858	(8,523)	847	-	19,794,837

The accompanying notes are an integral part of the financial statements.

**TIM PARTICIPAÇÕES S.A., TIM PARTICIPAÇÕES S.A. AND SUBSIDIARY**

**STATEMENT OF CASH FLOWS**

Fiscal years ended December 31

(In thousands of Reais)

	Notes	Parent Company		Consolidated	
		2019	2018	2019	2018
<b>Operating activities</b>					
Income before income and social contribution taxes		3,618,881	2,548,347	4,536,067	1,880,190
Adjustments to reconcile income with net cash from operations					
Depreciation and amortization		-	-	5,128,981	3,954,321
Income from equity accounting	13	(3,865,255)	(2,672,647)	-	-
Residual value of property, plant and equipment and intangible assets written off		-	-	32,411	9,700
Interest from obligations arising from asset retirement obligation		-	-	226	648
Provision for legal and administrative proceedings	24	56,710	4,180	547,691	551,191
Monetary adjustments to deposits, administrative and legal proceedings		50,838	4,507	200,469	297,529
Interest, monetary and exchange variations of borrowings and other financial adjustments		-	-	(950,675)	(35,450)
Lease interest payable	31	-	-	821,463	266,328
Lease interest receivable	30	-	-	(6,422)	(25,664)
Provision for doubtful debts	28	-	-	748,291	544,881
Stock options	26	652	(4,593)	3,443	(1,424)
		(138,174)	(120,206)	11,061,945	7,442,250
<b>Decrease (increase) in operating assets</b>					
Trade accounts receivable		(1,400)	(115)	(1,027,131)	(1,028,791)
Taxes and contributions recoverable		194,344	(33,601)	(1,601,276)	175,116
Inventory		-	-	(20,219)	(59,274)
Prepaid expenses		1,281	1,532	100,917	56,792
Dividends and interest on shareholders' equity received		770,436	734,685	-	-
Judicial Deposit		44,441	(18,794)	296,486	30,478
Other current assets		(1,123)	(13,665)	5,059	133,831
<b>Increase (decrease) in operating liabilities</b>					
Payroll and related charges		(1,446)	(4,105)	6,736	(50,765)
Suppliers		(4,784)	8,418	(401,200)	331,736
Taxes, charges and contributions		(27,359)	15,955	40,045	187,170
Authorizations payable		-	-	(100,182)	(104,582)
Payments for legal and administrative proceedings	24	(70,182)	(1,690)	(715,203)	(536,646)
Deferred revenues		-	-	(204,355)	(193,599)
Other current liabilities		3,055	(308)	(215,063)	(40,373)
<b>Cash generated by operations</b>		<b>769,089</b>	<b>568,106</b>	<b>7,226,559</b>	<b>6,343,343</b>
Income tax and social contribution paid		-	-	(161,833)	(213,956)
<b>Net Cash from Operations</b>		<b>769,089</b>	<b>568,106</b>	<b>7,064,726</b>	<b>6,129,387</b>
<b>Cash from Investment Activities</b>					
Marketable securities		1,210	(13,378)	131,742	(21,460)
Additions to property, plant and equipment and intangible assets		-	-	(3,853,484)	(3,831,906)
Receipt of financial leases		-	-	9,100	22,946
<b>Net cash (used in) from investment activities</b>		<b>1,210</b>	<b>(13,378)</b>	<b>(3,712,642)</b>	<b>(3,830,420)</b>

Cash from financing activities				
New borrowing	-	-	1,000,000	166,548
Repayment of borrowing	-	-	(723,500)	(3,359,074)
Interest paid – borrowing and financings	-	-	(96,649)	(193,333)
Payment of financial lease	-	-	(800,621)	(9,898)
Interest paid - Leases	-	-	(785,091)	(242,512)
Derivative Financial Instruments	-	-	32,761	37,044
Purchases of treasury shares, net of disposals	435	5,317	435	5,317
Dividends and interest on shareholders' equity paid	(770,139)	(588,247)	(770,139)	(588,247)
<b>Net cash used in financing activities</b>	<b>(769,704)</b>	<b>(582,930)</b>	<b>(2,142,804)</b>	<b>(4,184,155)</b>
<b>Increase (decrease) in cash and cash equivalents</b>	<b>595</b>	<b>(28,202)</b>	<b>1,209,280</b>	<b>(1,885,188)</b>
<b>Cash and cash equivalents at the beginning of the year</b>	<b>167</b>	<b>28,369</b>	<b>1,075,530</b>	<b>2,960,718</b>
<b>Cash and cash equivalents at the end of the year</b>	<b>762</b>	<b>167</b>	<b>2,284,810</b>	<b>1,075,530</b>

	Consolidated	
	2019	2018
<u>Non-cash transactions</u>		
Additions to property, plant and equipment and intangible assets, without cash effects	(6,653,985)	(38,944)
Increase in lease liabilities, without cash effects	6,653,985	38,944

The accompanying notes are an integral part of the financial statements.

**TIM PARTICIPAÇÕES S.A., TIM PARTICIPAÇÕES S.A. AND SUBSIDIARY**  
**STATEMENTS OF VALUE ADDED**  
**Fiscal years ended December 31**  
**(In thousands of Reais)**

	Parent Company		Consolidated	
	2019	2018	2019	2018
<b>Revenue</b>				
Gross operating revenue	-	-	25,182,831	24,232,404
Other revenues	-	-	1,795,000	-
Losses from doubtful debts	-	-	(748,291)	(544,881)
Discounts granted, refunds and other	-	-	(2,865,657)	(2,087,278)
	-	-	23,363,883	21,600,245
<b>Inputs purchased from third parties</b>				
Costs of services provided and goods sold	-	-	(2,575,465)	(3,929,961)
Materials, energy, third-party services and other	(59,416)	(4,675)	(3,346,565)	(3,237,372)
	(59,416)	(4,675)	(5,922,030)	(7,167,333)
<b>Withholding</b>				
Depreciation and amortization	-	-	(5,128,981)	(3,954,320)
Net value added produced	(59,416)	(4,675)	12,312,872	10,478,592
<b>Value added received by transfer</b>				
Equity Income	3,865,255	2,672,647	-	-
Financial income	2,705	1,989	1,518,362	510,265
	3,867,960	2,674,636	1,518,362	510,265
Total value added for distribution	3,808,544	2,669,961	13,831,234	10,988,857
<b>Distribution of value added</b>				
<b>Personnel and charges</b>				
Direct compensation	6,274	22,591	517,505	503,198
Benefits	852	1,479	178,796	181,502
FGTS (unemployment fund)	212	268	58,381	55,765
Others	10,842	87	116,514	102,254
	18,180	24,425	871,196	842,719
<b>Taxes, charges and contributions</b>				
Federal	(1,207)	4,806	3,050,397	1,655,868
State	60	-	3,907,216	4,000,551
Municipal	-	-	111,860	104,710
	(1,147)	4,806	7,069,473	5,761,129
<b>Remuneration of third-party capital</b>				
Interest	169,370	95,613	1,495,444	1,046,256
Rents	14	16	768,787	789,015
	169,384	95,629	2,264,231	1,835,271
<b>Others</b>				
Social Investment	-	-	4,207	4,637
	-	-	4,207	4,637
<b>Remuneration of shareholders' equity</b>				
Dividends and interest on shareholders' equity	995,438	849,994	995,438	849,994
Retained earnings	2,626,689	1,695,107	2,626,689	1,695,107
	3,622,127	2,545,101	3,622,127	2,545,101

The accompanying notes are an integral part of the financial statements.

## MANAGEMENT DISCUSSION AND ANALYSIS FOR 2019 RESULTS

COMMENTARY ON THE FINANCIAL STATEMENTS FOR THE FISCAL YEAR ENDED ON DECEMBER 31, 2019

Dear shareholders,

The management of TIM Participações S.A. ("TIM Participações", "Company" or "TIM") presents the Management and Analysis Report of the 2019 Results, together with the Individual and Consolidated Financial Statements and the Independent Auditors' Report for the fiscal year ended on December 31, 2019.

The Financial Statements have been prepared in accordance with Brazilian Standards and the IFRS (International Financial Reporting Standards), as defined by the IASB.

The operational and financial information for 2019, unless stated otherwise, is presented in reais (R\$) based on the consolidated amounts and pursuant to Brazilian corporate law.

### Company Profile

TIM Participações is a publicly-held company with shares listed on the São Paulo Stock Exchange (B3) and ADRs (American Depositary Receipts) listed on the New York Stock Exchange (NYSE). In 2019, TIM confirmed its permanence for the twelfth consecutive year in the select group of companies that integrate the ISE (Corporate Sustainability Index) portfolio, reinforcing its commitment to economic, social and environmental sustainability. Moreover, TIM is the only telecommunication company to participate in Novo Mercado (New Market), a segment recognized by B3's highest level of corporate governance

TIM Participações is controlled by TIM Brasil Serviços e Participações S.A., a subsidiary of the Telecom Italia group. Through the sharing of experiences and the adoption of a good practices policy, the Company exchanges experiences with its parent company and accumulates synergies that benefit all of its clients. Through its subsidiary TIM S.A., TIM operates in the mobile, fixed telephony, long distance and data transmission markets throughout the Brazilian territory and in the ultra-broadband market encompassing certain states of the country.

# MANAGEMENT DISCUSSION AND ANALYSIS FOR 2019 RESULTS

COMMENTARY ON THE FINANCIAL STATEMENTS FOR THE FISCAL YEAR ENDED ON DECEMBER 31, 2019

## 1. Message from Management

The year 2019 saw the Company's capacity to enhance operating and financial aspects, making certain adjustments in its approach and strategy. Our focus on execution enabled the development of areas in need of adjustment: (i) agility in decision-making; (ii) focus on key business areas; (iii) boost to accountability culture and (iv) recovery of innovation leadership in offers and communication.

The first and second halves of the year were strikingly different, both on the macroeconomic side and in the intensity of competition within mobile telecommunications, forcing TIM to demonstrate great resiliency in the first half of the year. In the second half, the engines of growth had more room to evolve. This is evidenced by the acceleration of annual growth rates for service revenues (+3.1% in 2H from +1.7% in 1H) and EBITDA (+7.5% in 2H versus 5.8% in 1H).

Were fundamental to this performance: (i) continued evolution from volume to value; (ii) adjustments in the portfolio and in the communication with customers; (iii) image recovery in all segments of the base; (iv) continued development of our mobile and fixed networks; (v) solid execution in costs and investments efficiency.

### Resiliency and Evolution of Mobile Service

At the beginning of the year, the mobile segment faced increasingly aggressive offers, while the economic activity remained sluggish. We started the adjustments in communication and in the portfolio to keep our competitiveness, without the need to add to competition. We adapted our approach in order to manage a slower pace of customer migration from prepaid to postpaid, without losing the focus on value over volume. We kept working on the second wave of the upselling process, with intra-segment migrations (within prepaid and within postpaid) and brought a few innovations such as TIM Chip Top for prepaid and TIM Black Família in postpaid.

The positive impact of these adjustments were evident:

- Prepaid: (i) higher number of rechargers; (ii) 2.5% increase YoY average spending from rechargers (iii) 4.2% ARPU growth YoY and (iv) reclaiming of first place in Top of Mind survey;
- Postpaid: (i) reduced level of disconnections; (ii) maintenance of good sales level (+13.8% throughout the year); (iii) reacceleration of growth of client-generated revenues and (iv) ARPU (ex-M2M) growth 0.6% YoY.

### Residential Broadband - An Opportunity Materializes

Residential broadband was one of the year's highlights, keeping strong revenue growth as adjustments in the operations accelerated the coverage rollout and client acquisition (~40,000 in 1H and ~60,000 in 2H). The geographic expansion that started in 2018 continued and we ended the year present in 25 cities, of them 23 with FTTH.

## MANAGEMENT DISCUSSION AND ANALYSIS FOR 2019 RESULTS

COMMENTARY ON THE FINANCIAL STATEMENTS FOR THE FISCAL YEAR ENDED ON DECEMBER 31, 2019

The focus on a value offer for clients, providing fiber optic broadband and content through partnerships with APPs, enabled 8% growth YoY for ARPU while TIM Live won two awards for best broadband service in the country.

### Infrastructure Development: furthering the mobile and fixed segments

The development of our infrastructure is a fundamental pillar in the strategy of enhancing customer experience. Therefore, in 2019 we stressed investments with a direct impact on the quality of mobile and fixed services.

For another year, TIM ensured its leadership in 4G with the largest and best coverage in this technology. We ended 2019 with over 3,400 thousand cities, 85.7% network availability and the lowest latency among all operators, according to Tecnoblog news from Jan/20. In order to maintain this position as a competitive differential, we continued to bring technological innovations, running tests with 5G and using the Massive MIMO for 4G. Meanwhile, we maintained the efficient approach with the refarming of frequencies to expand the capacity of our network.

On the fixed network side, we exceeded 100,000 km of fiber optic in backbone and backhaul, demonstrating the commitment to improve our transport network. We also expanded the coverage of our TIM Live residential broadband, reaching 2.3 million households.

### Efficiency and Cash Generation

The efficiency approach is more and more Company-wide, across different processes in all areas. Also, the digital transformation process, which impacts the Company's costs and customer satisfaction, keeps advancing at an excellent speed, with expressive results in the adoption of digital channels such as the Meu TIM app (+18% of number of unique users on the platform), electronic payments (+14% of access making these payments) and digital invoices (+18% of invoices delivered), among other indicators.

The program's goals are not restricted to cost savings, but also involve tax efficiency and improvements in financial expenses. Amid this context, we activated and started to utilize tax credits stemming from court decisions, and we maintained the trajectory of optimizing the Company's financing lines.

The combination of all these elements on the operational and financial fronts yielded the biggest EBITDA in TIM's history, reaching R\$ 6.8 billion with a margin that exceeded 39% in the year, and an excellent level of operating cash flow at R\$ 2.1 billion. This enabled the highest ever shareholder compensation in TIM's history, close to R\$ 1 billion.

### Conclusion and Perspectives

The capacity to make adjustments without creating fracture, maintaining our focus on strategy execution, were the highlights of 2019, making it possible to fulfill targets and continue our history of sustainable and consistent growth.

## MANAGEMENT DISCUSSION AND ANALYSIS FOR 2019 RESULTS

COMMENTARY ON THE FINANCIAL STATEMENTS FOR THE FISCAL YEAR ENDED ON DECEMBER 31, 2019

The year 2020 may bring sizable opportunities with a quickening economy and the evolution of the consolidation process in the mobile segment, as well as from definitions over how the country sees the 5G technology, the opening of new revenue fronts, and more. This way, the focus on execution and a well-defined strategy will be the key to reach our strategic goals.

# MANAGEMENT DISCUSSION AND ANALYSIS FOR 2019 RESULTS

COMMENTARY ON THE FINANCIAL STATEMENTS FOR THE FISCAL YEAR ENDED ON DECEMBER 31, 2019

## 2. Economic and Industrial Overview

### 2.1. Macroeconomic Environment

In 2019, the Brazilian economy did not meet market expectations, although it closed the year in an optimistic tone amid factors such as a record high for the Ibovespa, the main index on B3 – Brasil, Bolsa, Balcão, which ended the year above 115,000, the SELIC base rate at an all-time low of 4.5% per year and the recovery of the retail sector, which accelerated sharply at the end of the period despite a more sluggish pace during the year.

Said frustration stems from market forecasts in early 2019, pointing to Gross Domestic Product (GDP) growth of 2.5% for the year, according to the first FOCUS<sup>1</sup> report of 2019. However, the last FOCUS<sup>2</sup> report for the period signals modest growth of 1.1%.

Inflation as measured by the Ample Consumer Price Index (IPCA) ended 2019 at 4.31%, the highest annual rate since 2016. IPCA exceeded the midpoint of the target, which was 4.25% for the year. Inflation was mostly impacted by a rise in the price of meat at the end of the year and by an increase in administered prices, such as fuels and electricity.

On the currency front, the US dollar appreciated sharply vis-à-vis the real in 2019, ending the year at R\$ 4.03<sup>3</sup> after reaching R\$ 4.25<sup>4</sup> in November, the highest nominal exchange rate since the implementation of the Brazilian real. The rate showed strong volatility during the year amid factors such as uncertainty about the Brazilian economy, in addition to international factors, especially the trade war involving the US and China, with mutual taxation on imports. The trade balance ended the year with a US\$ 47 billion<sup>5</sup> surplus, down by 19.6% compared to 2018 and the lowest figure in four years.

As to the international scenario, the trade war between the US and China remained at the forefront during 2019 and contributed to the volatility seen in international markets, as well as to the reduced growth forecasts for the global economy. This situation eased slightly at the end of the year, as the two main global economies concluded the first phase of a deal, favoring emerging countries as proved by the significant reduction in Brazil's country risk.

### 2.2. Particularities of the Telecommunications Sector

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."

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<sup>1</sup> Estimated by the latest FOCUS report issued by the Central Bank (BACEN) on January 4, 2019

<sup>2</sup> Estimated by the latest FOCUS report issued by the Central Bank (BACEN) on January 6, 2020

<sup>3</sup> Source: Central Bank

<sup>4</sup> Source: Central Bank

<sup>5</sup> Source: Economy Ministry

## MANAGEMENT DISCUSSION AND ANALYSIS FOR 2019 RESULTS

### COMMENTARY ON THE FINANCIAL STATEMENTS FOR THE FISCAL YEAR ENDED ON DECEMBER 31, 2019

However, such strategy was impacted by fiercer competition in the Brazilian market, seen through the presence of more aggressive offers considering the content provided to clients and a reduction in the prices offered by operators in general, which to a certain extent limited the Company's capacity to pass on cost increases or to propose adhesion to high-value offers.

The sector continued the trend of strong growth in data consumption, demanding from the operators the capacity to adapt their networks, facing the challenge of delivering an increasingly robust infrastructure in an environment of more rational investments in projects such as the densification of sites, frequency refarming and carrier aggregation in two or three frequencies. Moreover, TIM has advanced its sharing initiatives focused on 4G and transport network. This evolution in the Company's network allows the significant expansion of traffic on the 4G network, providing clients with a better user experience, both in terms of performance, with higher download and upload speeds and lower latency, and indoor coverage and greater penetration.

News about 5G technology has yielded discussions worldwide. The implementation of this technology will bring highly significant results, enabling new business models, encouraging an increasingly connected society and clearing the way for the implementation of advances in research and development.

Last, the growing demand for Fixed Broadband consolidated the view of internet access as an essential resource for the population, which was confirmed by the evolution of the client base and TIM Live's net additions.

## MANAGEMENT DISCUSSION AND ANALYSIS FOR 2019 RESULTS

COMMENTARY ON THE FINANCIAL STATEMENTS FOR THE FISCAL YEAR ENDED ON DECEMBER 31, 2019

### 3. TIM Services

#### 3.1. Business

TIM is recognized by its strong brand and the reputation of an innovative and disruptive company, capable of defining new consumption standards for the market. The proactive approach allows the Company a leading position in the transformation of the business model in telecommunications. The change in the clients' consumption profile and the emergence of new technologies foster a rupture in the telecommunications industry, based on the consumption of data, contents and digital services.

The offers' pioneering and innovative spirit are the Company's trademarks, which has a complete portfolio both for individual clients and corporate solutions for small, medium and large companies. In addition to the traditional voice and data services, TIM offers fixed ultra-broadband, TIM Live and fixed broadband service through the mobile network, utilizing WTTx technology.

Also, in the portfolio, the Company offers a series of digital contents and services in its packages, increasing the mobile devices' functionalities within its clients' routines. The capacity to manage a complete and diversified portfolio gives TIM the possibility to offer customized packages to its clients and propose convergent offers in certain regions.

Demonstrating this differential, in 2019, TIM introduced the concept of entertainment hub in the high-value post-paid segment with the launch of the TIM Black Família offer. With this offer, in addition to the traditional features of family plans (sharing and consumption control), the Company sought to place greater emphasis on digital content (films, series, music, newspapers and magazines), seeking to meet consumer demand for new forms of entertainment. Today TIM Black Família represents over 60% of high value postpaid sales.

For prepaid, innovation came by simplifying offers with TIM Pré TOP. With this proposition, the Company sought to give greater visibility to the expenses that customers in this segment have with the use of services, in addition to offering a package with more attractive voice and data services. With this launch and consistent communication, TIM returned to being a leader in Top of Mind research conducted internally.

#### 3.2. Strategy

TIM's strategy aims to accelerate the digital transformation and improve the customer experience with more quality and a more attractive value proposition, taking advantage of the 2<sup>nd</sup> wave of Mobile upselling, FTTH and other sources of revenue (such as B2B and digital services).

For 2019 was planned around 5 strategic fronts focused on its main stakeholders: customers, employees and shareholders.

In the Company's view, these strategic fronts represent four growth waves capable of bolstering results. In addition to the Efficiency Plan, these have the potential to make TIM the best value of choice in market value for telecommunications, increase shareholder returns and have more engaged employees in a customer-centered culture.

## MANAGEMENT DISCUSSION AND ANALYSIS FOR 2019 RESULTS

COMMENTARY ON THE FINANCIAL STATEMENTS FOR THE FISCAL YEAR ENDED ON DECEMBER 31, 2019

The growth waves mentioned previously are concentrated in the areas below:

### Consumer:

The actions aimed for the B2C segment have distinct approaches for the audiences in prepaid and postpaid. While the actions for the prepaid audience are intended to simplify offers with the subsequent improvement in customer experience and recharge recurrence, for postpaid customers the approach based on value, thus stimulating for higher planes - in addition to the leadership in 4G and in loyalty initiatives - drove this growth wave, seeking to compound the profitability of the customer base and speed the movement toward value.

### B2B:

In order to expand its market share and increase the weight of this segment relative to the Company's revenues, TIM has been working focused on specific verticals, such as agribusiness. With initiatives as ConectarAgro the intention is to bring connectivity through the IoT with 4G to Brazilian countryside, helping to modernize and automatize the farms and crops.

### Digital:

On the Digital front, TIM sought new revenue sources as a platform provider (analytics, BD, mobile marketing, etc), aiming to operate beyond simple connectivity. In addition, the inclusion of content offers was adopted to underpin revenue growth from mobile/fixed services.

### Infrastructure:

The development of a robust infrastructure capable of meeting the demand for capacity and quality is one of the pillars of TIM's business, as well as a relevant guideline for the earmarking of investments made by the Company. In this sense, the Company operates with a Smart Capex approach, seeking to make investments more efficient and providing better monetization of them. To this end, TIM develops spectrum refarming projects to expand the capacity of the mobile network, tests and implements new technologies such as 5G and Massive-MIMO antennas, strengthens its participation in the wholesale fixed network market through partnerships and builds joint infrastructure with other market players. The results of expanding coverage for the 4G and 4.5G mobile network, as well as expanding the scope of the fiber optic transport network and coverage in FTTH are demonstrations of the results of this strategy.

## MANAGEMENT DISCUSSION AND ANALYSIS FOR 2019 RESULTS

COMMENTARY ON THE FINANCIAL STATEMENTS FOR THE FISCAL YEAR ENDED ON DECEMBER 31, 2019

### 4. Human Resources

The Human Resources Department is structured to ensure the best practices in people management, to support the evolution process at the Company, aligned with the technological transformations and business challenges that include the commitment to sustainability and promotion of diversity and inclusion.

It is fundamental to rely on an engaged team to exceed challenges and fetch better results. At TIM, transparency and respect at all levels strengthen the pride of belonging and the clarity about our direction, as both are differentials for our brand.

In 2019, certain practices were highlighted in the annual Climate Survey, which showed significant results such as increased general favorability by 6 p.p., reaching 81% and placing the Company among the 10% best results in the Korn Ferry (P90) ranking, consultancy responsible for research. Among the highlighted factors, compared to 2018, Learning and Development rose +12 p.p. and is +4 p.p. above the average for P90. Clarity and Direction (+9 p.p.) and Trust in the Leadership (+8 p.p.) also featured a relevant evolution, which attest the recognition of employees regarding the communication of the strategy and the leadership's commitment to TIM's values.

Innovation, our market positioning, also stand out among the most recognized factors for our employees, reflecting the deep engagement with this theme and the success of actions such as the 5G campaign, ConectarAGRO and 4G TIM no Campo.

The results of the climate survey at TIM in 2019 consolidate the elevated engagement of the team and indicate an agenda to be prioritized in 2020, including organizational support, which presented significant growth compared to 2018 but still needs attention, confirming the importance of the Renova TIM project. Started in 2019, the project includes changes and renovation of premises and replacement of equipment.

#### 4.1. People

TIM ended 2019 with 9,700 employees across Brazil. The employees, with their stories and knowledge, represent the Company's intellectual capital and are the engines of business development.

Approximately 70.1% of the employees have completed higher education or attend college and 9.8% have postgraduate degrees. The numbers and results show that TIM has a diverse and highly-qualified staff to meet its challenges. The workforce is complemented by 210 interns and 257 young apprentices.

## MANAGEMENT DISCUSSION AND ANALYSIS FOR 2019 RESULTS

COMMENTARY ON THE FINANCIAL STATEMENTS FOR THE FISCAL YEAR ENDED ON DECEMBER 31, 2019

### 4.2. Development and Training

TIM employees have access to training and development, in a structured offer for the individual to evolve within the company and build a successful career. In line with organizational values, their careers are traced from their own professional experiences and knowledge, acquired with the company's investment. In this regard, TIM invested more than R\$ 8.8 million training and developing its employees in 2019.

To guide its employees' careers, TIM identify and monitors individual performance to direct the activities more assertively. In addition to encouraging and providing real growth opportunities, the Company recognizes the dedication and differentiated performance of its professionals through different performance management tools (360° or 270°).

In order to attract the best students and train our future professionals, the Trainee Program brings to TIM young people with energy, determination, drive, team spirit and, especially, interest in challenges and innovation.

As we believe that diversity and inclusion are essential for valuing and engaging people, and also play a fundamental role in the innovation process, we reinforce our position and commitment to the theme through an editorial line of internal and external communication focused on valuing diversity and we brought in TIM Talks, our development week dedicated to all employees, actions with an approach and representativeness of the different dimensions of diversity.

In addition to these initiatives, in July 2019, the People Caring & Inclusion Management area was created with the mission of building and managing policies, programs and initiatives of diversity and inclusion, aligned with the business strategy and organizational culture, valuing the contribution of each employee at TIM. The diversity and inclusion plan provides for the creation of a committee, diversity and inclusion groups and implementation of actions focused on the pillars of gender, LGBTI +, race, generations and people with disabilities. Initial training actions were carried out in 4Q 2019 and the plan in its entirety will be implemented throughout 2020.

### 4.3. Long-Term Incentive Plan

The Long-Term Incentive Plan aims to grant TIM Participações shares or options for the purchase of shares to employees of the Company and its subsidiaries, thus seeking to promote the expansion, achievement and success of corporate goals, and ensuring the alignment of interests of shareholders and TIM's management.

On August 5<sup>th</sup>, 2011, April 10<sup>th</sup>, 2014<sup>th</sup>, and April 19<sup>th</sup>, 2018, TIM Participações S.A.'s General Shareholders' Meeting approved the long-term incentive plans; "Plan 2011-2013", "Plan 2014-2016" and "Plan 2018-2020", respectively, granted to the high management and those holding key positions at the Company and its subsidiaries.

The Plans for 2011-2013 and 2014-2016 cover the granting of options for the purchase of shares, while Plan 2018-2020 provides for the granting of shares.

## MANAGEMENT DISCUSSION AND ANALYSIS FOR 2019 RESULTS

### COMMENTARY ON THE FINANCIAL STATEMENTS FOR THE FISCAL YEAR ENDED ON DECEMBER 31, 2019

The exercise of options from Plan 2011-2013 is subject to specific performance targets, while Plan 2014-2016 does not include the premise of targets and its exercise is subject to the favorability of market price at the time of exercise, compared to the Exercise Price. The Exercise Price of both Plans is calculated based on the Base Price of the Share, adjusted as a result of the share's performance, considering the criteria provided for in each Grant.

Regarding the exercise of Plan 2018-2020, the granting of Company shares is subject to time and performance conditions (fulfillment of specific targets). Such performance conditions may also impact the number of granted shares, resulting from criteria defined in each Grant.

The options for the 2011-2013 and 2014-2016 Plans are effective for 6 years. For the 2018-2020 Plan, the term is valid for 3 years, which is the same related to its grace period (Vesting).

As approved by the Company's General Meeting, the Plans' management is looked after by the Board of Directors, subject to the Company's By-laws.

Specifically for 2017, as the Company started the process to restructure its long-term incentive plan, on an exceptional basis and duly approved by the Board of Directors, the long-term incentive plan happened as bonus, with payment subject to the fulfillment of certain financial ratios at TIM and split in three annual installments.

#### 4.3.1. Cycle for Option of Shares 2011-2013

Plan	Granted Options	Exercised Options	Expired Options	Options Not Exercised
<b>Plan 2011 - 2013</b>	<b>8,567,765</b>	<b>-3,399,832</b>	<b>-5,167,933</b>	<b>0</b>
<b>1st Grant</b>	2,833,595	-1,532,132	-1,301,463	0
<b>2nd Grant</b>	2,661,752	-896,479	-1,765,273	0
<b>3rd Grant</b>	3,072,418	-971,221	-2,101,197	0

#### 4.3.2. Cycle for Option of Shares 2014-2016

Plan	Granted Options	Exercised Options	Expired Options	Options Not Exercised
<b>Plan 2014 - 2016</b>	<b>8,965,119</b>	<b>-3,411,676</b>	<b>-4,622,968</b>	<b>930,475</b>
<b>1st Grant</b>	1,687,686	-59,935	-1,249,465	<b>378,286</b>
<b>2nd Grant</b>	3,355,229	-1,576,301	-1,646,080	<b>132,848</b>
<b>3rd Grant</b>	3,922,204	-1,775,440	-1,727,423	<b>419,341</b>

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### 4.3.3. Shares Cycle 2018-2020

Plan	Granted shares	Exercised shares	Expired shares	shares Not Exercised
<b>Plan 2018 - 2020</b>	<b>1,780,594</b>	<b>-115,949</b>	<b>-514,064</b>	<b>1,150,581</b>
<b>1st Grant</b>	849,932	-115,949	-480,646	253,337
<b>2nd Grant</b>	930,662	0	-33,418	897,244
<b>3rd Grant</b>	0	0	0	0

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### 5. Network

Infrastructure is one of the strategic pillars at the Company and TIM reassures its investment commitment in 2020, seeking to offer more and better services. The recent changes in the consumption pattern, as well as the increasing demand for quality requires a structured network expansion plan, supported by more robust technical analyses regarding the consumption pattern and the customers' needs, as well as a cultural transformation.

In spectrum usage, TIM continues its successful refarming project, expanding toward the 2.1GHz frequency, aiming for more efficiency and better performance. Regarding fiber, the Company continues its network expansion project to support the ultra-broadband converging network, increasing the availability of FTTH and FTTS.

As for sites, TIM plans to increase site density by using Biosites, which are sustainable, cheaper structures that are easier to install and have no visual impact on cities. In the context of big data, the Company is constantly evolving its analytical tools from a more complete and proactive approach, aiming for a more efficient deployment of investments.

When it comes to corporate culture, the new technologies and customer expectations rupture the traditional model of telecommunications operators. In this scenario, TIM seeks to develop, motivate and engage its employees so that they can perform in a dynamic, innovative and collaborative environment based on an agile and flexible operating model.

#### 5.1. Nationwide Coverage

TIM's infrastructure has a national reach, covering approximately 94% of the Brazilian urban population, being present in almost 3,500 cities. The Company also has extensive data coverage, maintaining its leading position in 4G coverage in the country.

Of the R\$ 3.85 billion invested in 2019, 93.4% were dedicated to network and information technology in line with the previous years, aiming to meet the growing data consumption. Infrastructure improvement and growth are supported by different projects, among them one can highlight the expansion of fiber optic network (backbone, backhaul and FTTH), densification of sites, frequency refarming and the aggregation of carriers in two or three frequencies, depending on the geographic location. Moreover, TIM has advanced its sharing initiatives focused on 4G and transport network.

Regarding the major ongoing projects focused on the continuous modernization and enhancement of our infrastructure, we highlight:

- Expansion of refarming of 2.1 GHz frequency in 4G, reaching approximately 298 cities;
- Infrastructure virtualization project;
- Installation of multiple data centers to enhance experience (35 at the end of 4Q), of which 14 DCC (Data Center Core) and 21 DCE (Data Center Edge);
- Expansion of VoLTE, available in more than 3,400 cities;

## MANAGEMENT DISCUSSION AND ANALYSIS FOR 2019 RESULTS

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- Signing of agreements with Vivo toward sharing 2G, 3G and 4G mobile network infrastructure;
- Implementation of “5G Living Lab TIM” – benchmark centers for testing 5G, focused on promoting the applicability of the technology and exploring opportunities in new business models;
- Expansion of network capacity through the solution Massive MIMO;
- Consolidation of the NB-IoT network present in more than 3,300 cities. This coverage will enable the creation of IoT solutions not only in large cities, but also in those farther from the capitals. TIM has pioneered the simultaneous launch of this platform with such broad coverage, aiming to boost the ecosystem of solution developers.

TIM maintained its leadership in 4G coverage, reaching 3,477 cities or 94% of the country’s urban population at the end of 2019, registering a 36% YoY increase in network elements in this technology in the time period.

In addition, the usage of 700MHz frequency for the development of the LTE network continues to evolve, providing a significant improvement in customer experience both in terms of performance (higher download and upload speeds and lower latency), and indoor coverage, higher penetration.

DESCRIPTION	2019	2018	% YoY
<b>4G Cities</b>	<b>3,477</b>	<b>3,272</b>	<b>6.3%</b>
of which 700 MHz enabled	2,313	1,426	62.2%
of which VoLTE enabled	3,401	2,522	34.9%
<b>Urban Population Coverage (4G)</b>	<b>94%</b>	<b>93%</b>	<b>1.3p.p.</b>
of which 700 MHz enabled	81%	65%	16.2p.p.
of which VoLTE enabled	93%	76%	17.0p.p.
3G Cities	3,283	3,169	3.6%
Urban Population Coverage (3G)	92%	92%	0.3p.p.

**At the end of the year, TIM had 19,812 sites** and 61% of them were connected through high capacity backhaul.

In relation to transport infrastructure, **the Company reached 100,000 km of fiber optic for backbone and backhaul**, an increase of 11.9% YoY.

Residential fixed broadband continues to evolve, with 2.3 million households in FTTH, 3.6 million in FTTC, totaling 5.5 million households in 25 cities<sup>6</sup>.

Infrastructure development is also in line with the Company’s corporate social responsibility values. TIM continues to implement the Biosites installation project, a solution for the densification of the mobile access network (antennas/towers) with a very low visual impact. Biosites also contribute to harmonization with the environment and urban infrastructure – a multifunctionality beyond the

<sup>6</sup> Rio de Janeiro (RJ), São Gonçalo (RJ), Nilópolis (RJ), Nova Iguaçu (RJ), São João do Meriti (RJ), Duque de Caxias (RJ), São Paulo (SP), Mauá (SP), Poá (SP), Suzano (SP), Francisco Morato (SP), Franco da Rocha (SP), Diadema (SP), Salvador (BA), Lauro de Freitas (BA), Camaçari (BA), Feira de Santana (BA), Recife (PE), Goiânia (GO), Aparecida de Goiânia (GO), Anápolis (GO) and Manaus (AM).

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transmission of telecommunications, lighting and security cameras – these structures are cheaper and faster to install. **At the end of 2019, TIM reached a total of 1,582 active Biosites.**

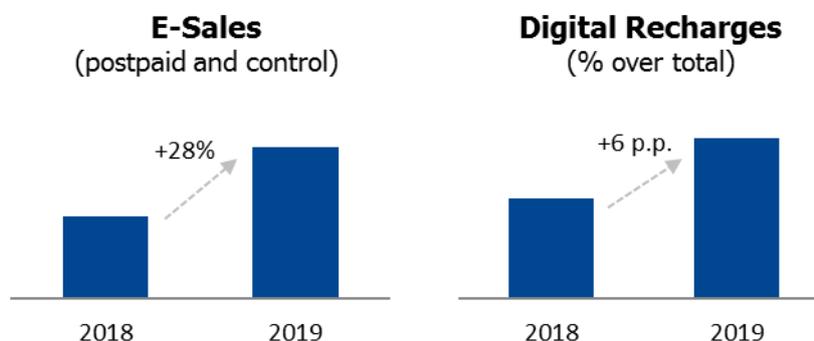
Currently, the Company is authorized to use more than 110 MHz, with 36 MHz in frequencies below 1 GHz distributed as follows:

Average Spectrum Weighted by Population					
700 MHz	850 MHz	900 MHz	1.800 MHz	2.100 MHz	2.500 MHz
20	11	5	35	22	20

### 5.2. Customer Service and Quality

During 2019, TIM accelerated in several innovative digital transformation initiatives, such as: (i) development of solutions using artificial intelligence to operate more efficiently in its sales, service and communication channels; (ii) new solutions that bring greater empowerment to the user, through our self-caring, self-provision and self-healing mentality; (iii) Based on this perspective, our results for the year prove that we have been successful in this process.

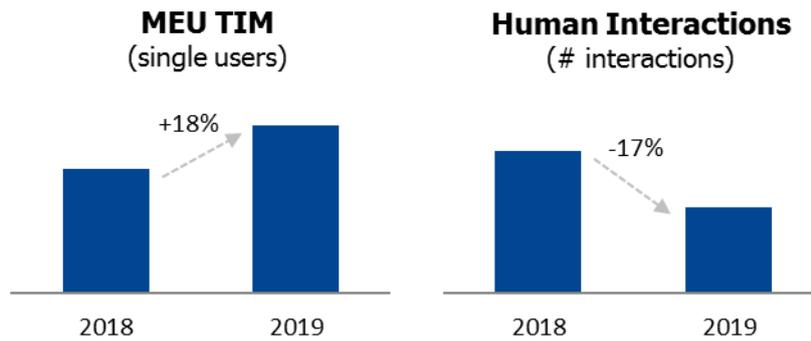
Sales through digital channels, in postpaid and consumer control grew 28% YoY in 2019. Meanwhile, the mix for electronic recharging keeps obtaining more relevance among sales channels, with growth of 6 p.p in 2018.



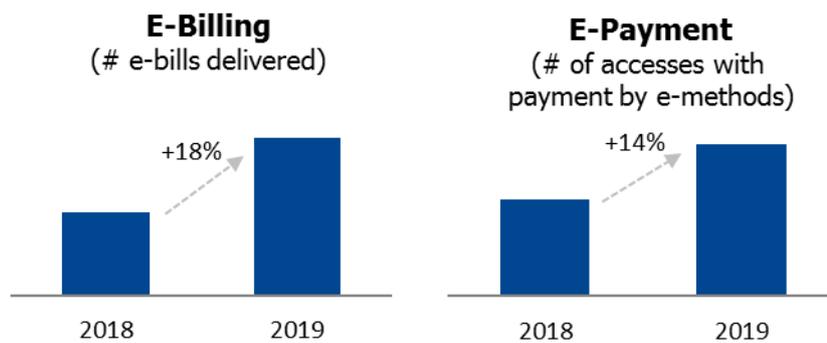
With the aim of offering the best customer service, Meu TIM app delivered consistent results throughout the year, simplifying the caring processes – reducing communication via call centers – and providing greater transparency and control to customers. In 2019, the 18% growth YoY in the number of unique users on the platform, alongside the reduction of 17% YoY in human interactions, reinforce the importance of this channel.

## MANAGEMENT DISCUSSION AND ANALYSIS FOR 2019 RESULTS

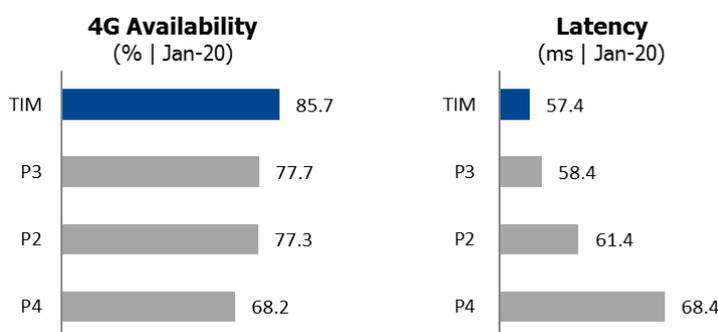
COMMENTARY ON THE FINANCIAL STATEMENTS FOR THE FISCAL YEAR ENDED ON DECEMBER 31, 2019



The digital mechanisms for billing and payments again reported accelerated growth during 2019. The invoices delivered via digital channels rose 18% YoY, while the number of users paying through digital channels advanced 14% YoY. Also, during the year, TIM offered its clients solutions for a new digital channel: the possibility to check balance, add credit, and receive invoices on WhatsApp.



As a result of this evolution, **4G data traffic exceeded 85% of the total** (a 9 p.p. rise) compared to the previous year. This important milestone allowed TIM to confirm once more the superior quality of its 4G network, according to news released by Tecnoblog in January 2020. This means that our clients used 4G more often – 85.7% of their time online (performance 8 p.p. above the second-placed provider). In addition, the Company was **the leader in terms of latency with 57.4 ms**, equaling the time it takes for the information to be sent to the user.



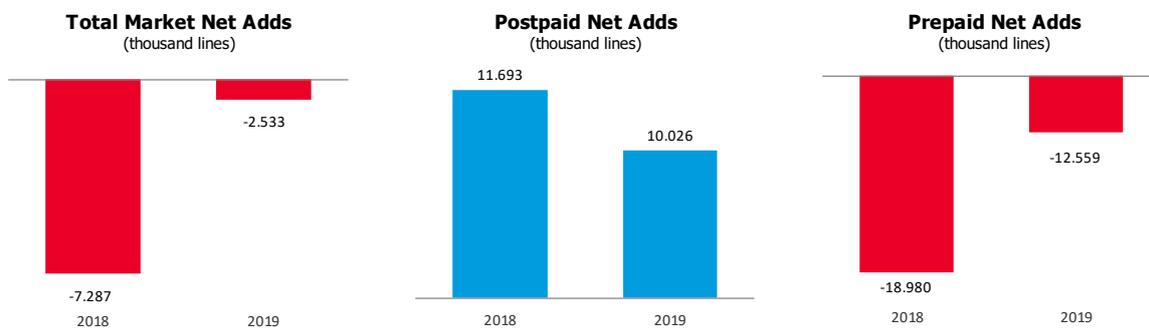
# MANAGEMENT DISCUSSION AND ANALYSIS FOR 2019 RESULTS

COMMENTARY ON THE FINANCIAL STATEMENTS FOR THE FISCAL YEAR ENDED ON DECEMBER 31, 2019

## 6. Operational Performance

### 6.1. Overview of the Brazilian Market

The Brazilian mobile market saw a retreat in the number of users for the 19<sup>th</sup> consecutive quarter. The consolidation dynamic for prepaid sim cards recurred in 4Q19. Despite this factor, which was intensified by the seasonal effect of higher disconnections in the last quarter of the year, the 13.0 million user decline seen in the last 12 months was the best relative performance for the segment in five years. Postpaid net additions reached 10.0 million users during the year. Slightly over half of this result came from human lines (ex-M2M), whose positive contribution to the sector has been slowing YoY since 2Q18, reaching in this period the lowest level since the end of 2016, i.e., +6.5% YoY.



Source: Anatel

### 6.2. TIM's Performance

**TIM ended 2019 with a base of 54.4 million active lines**, a 2.6% reduction YoY. Despite the solid postpaid performance, disconnection in the prepaid segment negatively impacted the total base.

**The postpaid customer base totaled 21.5 million users** at the end of 2019, a 6.1% rise YoY, adding 1.2 million customers to the base, whose main reason for growth was the new additions.

**In prepaid, the base totaled 33.0 million customers at the end of 2019.** Net disconnections numbered 2.7 million lines in the year, a result of prepaid dynamics, characterized simultaneously by high volumes of activations and cancelations. The launch of TIM Pré Top has proved to be the right strategy, bringing consistency to the offer and leading to improved recurring acquisitions, increased spending per recharger and a better perception of the clients.

#### Breakdown of customer base by technology:

- **The number of 4G users reached 38.6 million.** Year-on-year, growth was +12.0%, explained by the migration of 3G users to 4G;
- M2M and Data Terminals base closed the quarter with 3.6 million lines, +67.5% YoY.

## MANAGEMENT DISCUSSION AND ANALYSIS FOR 2019 RESULTS

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### 6.3. Fixed Segment

**The TIM Live base totaled 566,000 customers in 2019**, growth of 21.1% YoY. Net adds totaled 99,000 in the year, of which 119,000 in FTTH technology (Fiber To The Home).

TIM Live continues to focus investments in the expansion of connection technology, with higher speed offers and optimal connection stability. In December, the Company already had 25 cities, being present in 23 of those with FTTH.

## MANAGEMENT DISCUSSION AND ANALYSIS FOR 2019 RESULTS

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### 7. Financial Performance

To better represent financial performance and business trends, TIM normalizes some lines of its Financial Statements, eliminating the impact of non-recurring items. These movements are pointed out when required.

#### 7.1. Operating Revenues

DESCRIPTION	2019	2018	% YoY
R\$ million			
<b>Net Revenues</b>	<b>17,377</b>	<b>16,981</b>	<b>2.3%</b>
<b>Services Revenues</b>	<b>16,597</b>	<b>16,206</b>	<b>2.4%</b>
<b>Mobile Service</b>	<b>15,648</b>	<b>15,354</b>	<b>1.9%</b>
Client Generated	14,372	14,044	2.3%
Interconnection	477	712	-33.0%
Others	799	598	33.5%
<b>Fixed Service</b>	<b>949</b>	<b>852</b>	<b>11.3%</b>
of which TIM Live	491	376	30.6%
<b>Product Revenues</b>	<b>780</b>	<b>775</b>	<b>0.6%</b>

In 2019, **Total Net Revenues reached R\$ 17,377 million, growth of 2.3% YoY** supported by **Net Service Revenues, which advanced 2.4% YoY** and by Net Product Revenues which increased 0.6% YoY. This demonstrates the better sales mix contributing to a higher average price of handsets sold, compensating for a lower sales volume.

**The breakdown of Net Revenues and other highlights are presented below:**

**Mobile Service Revenues (MSR) advanced R\$ 294 million, or 1.9%**, reaching R\$ 15,648 million in the fiscal year ended December 31, 2019. The expansion is mainly due to mobile ARPU (Average Monthly Revenues per User), influenced mostly by higher spending by prepaid customers, in addition to the company's ongoing efforts to monetize its postpaid client base via migrations to high-value plans.

**Client Generated Revenues (CGR) composed by Local Voice Revenues, Long Distance Voice and Data & Content grew 2.3% YoY in 2019**, driven by the migrations process between segments and intra segments seeking to raise the penetration of higher-value offers.

**Interconnection Revenues declined 33.0%, reaching R\$ 477 million** in the fiscal year ended December 31, 2019. The result remains impacted by a reduction of VU-M tariffs and a smaller growth of incoming traffic.

**Other Mobile Revenues ended 2019 up 33.5% YoY, at R\$ 799 million** in the year. This performance remains impacted mainly by revenues generated by network sharing and swap agreements. The rise in network sharing volume is aligned with the strategy to expand fiber (backbone and backhaul) with greater efficiency in asset allocation (Capex and Opex).

## MANAGEMENT DISCUSSION AND ANALYSIS FOR 2019 RESULTS

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**In 2019, Fixed Service Revenues totaled R\$ 949 million**, an 11.3% rise YoY, boosted by growth in TIM Live (+30.6%) more than offsetting the 3.9% drop in revenues from other businesses in the fixed segment (corporate and wholesale).

**Live ARPU was R\$ 80.9, 8.0% higher than 2019.** The performance is explained by the penetration of high-value offers with faster speeds.

**Product Revenues totaled R\$ 780 million, an increase of 0.6%** compared to 2018, reflecting a better sales mix that contributed to a higher average price of handsets, making up for an inferior sales volume.

### 7.2. Operating Costs and Expenses

DESCRIPTION	2019	2018	% YoY
R\$ million			
<b>Reported Operating Expenses</b>	<b>(9,049)</b>	<b>(10,609)</b>	<b>-14.7%</b>
<b>Normalized* Operating Expenses</b>	<b>(10,579)</b>	<b>(10,610)</b>	<b>-0.3%</b>
Personnel	(1,005)	(994)	1.1%
Selling and Marketing	(3,428)	(3,626)	-5.5%
Network & Interconnection	(3,510)	(3,661)	-4.1%
General & Administrative	(628)	(579)	8.6%
Cost Of Goods Sold (COGS)	(932)	(884)	5.4%
Bad Debt	(748)	(545)	37.3%
Other operational revenues (expenses)	(328)	(322)	1.9%
<b>Normalized* Operating Expenses Ex-COGS</b>	<b>(9,647)</b>	<b>(9,726)</b>	<b>-0.8%</b>

\*Operating Costs normalized by adjustments to the sale-leaseback contract of towers (+R\$ 11,000 in 2Q19, +R\$ 1.5 million in 1Q19, +R\$ 431,000 in 4Q18, +R\$ 1.1 million in 2Q18 and +R\$ 220,000 in 1Q18), tax credit due to the exclusion of ICMS from the calculation basis for PIS/COFINS (-R\$ 75.2 million in 3Q19, -R\$ 1,720 million in 2Q19 and -R\$ 159.1 million in 4Q18), legal services connected to the PIS/COFINS court decision (R\$ +4.4 million in 3Q19 and +R\$ 3.5 million in 2Q19), revision of loss prognosis for labor contingencies related to employees, tax contingencies and civil contingencies (R\$ +11.2 million in 3Q19, +R\$ 221.8 million in 2Q19 and +R\$ 156.5 million in 4Q18) and contract losses (+R\$ 22.4 million in 3Q19).

**Costs and Expenses totaled R\$ 9,049 million in 2019**, a 14.7% improvement from 2018. This line was impacted by non-recurring expenses of R\$ 1,530 million, a net result of the effects related to items explained in the footnote to the chart above. **Without the non-recurring effects, Total Normalized Costs and Expenses declined 0.3% in the year, totaling R\$ 10,579 million in 2019.**

The efficiency plan reached approximately 80% of the target for 2019. Despite the strict cost control, bad debt was a relevant offender impacting the annual guidance. Excluding these effects, the achievement would be higher than 110%. In the year, the plan initiatives generated economies that totaled approximately R\$ 600 million.

**An analysis detailing the operational expenses for the year is presented below:**

**Normalized Personnel reached R\$ 1,005 million in 2019, up 1.1% from 2018** impacted mostly by inflation in the previous year, which updated the salaries and benefits base.

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**Selling and Marketing declined 5.5% YoY, reaching R\$ 3,428 million** reflecting gains in efficiencies generated by process digitization and lower spending on FISTEL. Such effects were partially impacted by the right of using the TIM trademark<sup>7</sup>.

**Network and Interconnection decreased 4.1% YoY compared to 2018.** This result was influenced by (i) decline in termination rate (VU-M), and (ii) lower pressure from traffic to other operators. The Network subgroup saw an opposite movement and was negatively impacted by higher costs with infrastructure sharing and rental.

**Normalized General and Administrative Expenses (G&A) ended 2019 with growth of 8.6% compared to 2018,** with a minor increase in its participation within total normalized Opex, to 5.9%.

**Cost of Goods Sold (COGS) was R\$ 932 million, a 5.4% rise YoY.** In the period, despite the reduction of sales volume in the period, high-value products were more relevant in the mix.

**Provisions for Doubtful Accounts (Bad Debt) in 2019 reached R\$ 748 million, a 37.3% rise from 2018** explained by an increase in the revenues base exposed to delinquency due to a larger postpaid base, in addition to a challenging macroeconomic environment (unemployment, income and indebtedness of families). We also had changes in internal systems and processes during the first half, and an added level of Bad Debt resulting from an increased number of customers that the company disconnected.

**Other Normalized Operating Revenues totaled R\$ 328 million, up 1.9% YoY** given that the revenue reduction was compensated for by the decrease in the FUST/FUNTEL contribution, leaving its participation over total normalized OPEX at 3.1%, just 0.1 p.p. higher than in 2018.

**Subscriber Acquisition Costs (SAC = subsidy + commissioning + advertising expenses) totaled R\$ 51.7 per gross addition in 2019,** a decrease of 5.1% YoY.

Despite the increase in SAC, **the SAC/ARPU ratio (indicating payback per client) remained at a healthy level of 2.2 months in 2019, compared to 2.4 months in 2018.**

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<sup>7</sup> On May 17, 2018, TIM Participações and Telecom Itália entered into a trademark license agreement, formally granting Tim Part and its subsidiaries the right to use the "Tim" trademark in exchange for the payment of royalties in the amount of 0.5% of the company's net revenues.

## MANAGEMENT DISCUSSION AND ANALYSIS FOR 2019 RESULTS

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### 7.3. From EBITDA to Net Income

DESCRIPTION	2019	2018	% YoY
R\$ million			
<b>Reported EBITDA</b>	<b>8,328</b>	<b>6,372</b>	<b>30.7%</b>
Reported EBITDA Margin	47.9%	37.5%	10.4p.p.
<b>Depreciation &amp; Amortization</b>	<b>(4,189)</b>	<b>(3,954)</b>	<b>5.9%</b>
Depreciation	(2,313)	(2,250)	2.8%
Amortization	(1,876)	(1,704)	10.1%
<b>EBIT</b>	<b>4,139</b>	<b>2,418</b>	<b>71.2%</b>
EBIT Margin	23.8%	14.2%	9.6p.p.
<b>Net Financial Results</b>	<b>614</b>	<b>(537)</b>	<b>n.a.</b>
Financial expenses	(816)	(951)	-14.3%
Financial income	1,430	413	246.5%
Net exchange variation	(1)	1	n.a.
<b>Income before taxes</b>	<b>4,753</b>	<b>1,880</b>	<b>152.8%</b>
Income tax and social contribution	(988)	665	n.a.
<b>Net Income</b>	<b>3,765</b>	<b>2,545</b>	<b>47.9%</b>
<b>Normalized* EBITDA</b>	<b>6,798</b>	<b>6,371</b>	<b>6.7%</b>
Normalized* EBITDA Margin	39.1%	37.5%	160.3%
<b>Normalized* EBIT</b>	<b>2,609</b>	<b>2,417</b>	<b>8.0%</b>
Normalized* EBIT Margin	15.0%	14.2%	0.8p.p.
<b>Normalized* Net Financial Results</b>	<b>(504)</b>	<b>(604)</b>	<b>-16.6%</b>
Normalized* Income tax and social contribution	(57)	(262)	-78.3%
<b>Normalized* Net Income</b>	<b>2,049</b>	<b>1,552</b>	<b>32.1%</b>
Total Normalized Items	1,716	994	72.7%

\* EBITDA normalized according to the items in the Costs section (-R\$ 37.1 million in 3Q19, -R\$ 1,494 million in 2Q19, +R\$ 1.5 million in 1Q19, -R\$ 2.1 million in 4Q18, +R\$ 1.1 million in 2Q18 and +R\$ 220,000 in 1Q18). Net income normalized by monetary correction on tax credit and labor, tax and civil contingencies (-R\$ 66.4 million in 3Q19, -R\$ 1,051 million in 2Q19 and -R\$ 66.2 million in 4Q18). Net Income normalized by tax credit and other effects (+35.2 million in 3Q19, +R\$ 865 million in 2Q19 and +23.4 million in 4Q18), by adjustment of deferred taxes (+R\$ 30.3 million in 1Q19) and by tax credit due to the incorporation of TIM Celular by TIM S.A. (-R\$ 950 million in 3Q18).

### EBITDA

**Normalized EBITDA totaled R\$ 6.8 billion in 2019, a robust growth of 6.7% YoY.** The main levers were: (i) growth of Mobile Service Revenues, (ii) acceleration in growth of fixed service revenues and (iii) maintenance of a strict cost/expenses control.

**Normalized EBITDA Margin ended 2019 at 39.1%**, a 1.6 p.p. addition YoY, maintaining the growth trajectory of the past 5 years.

EBITDA exposure to VU-M rose 0.2 p.p., ending 2019 with the exposure at 0.03%. The dynamics for this indicator tend to be a little bit more volatile and linked to the dynamics of off-net traffic (incoming vs. outgoing).

### Depreciation and amortization (D&A) / EBIT

**D&A increased 5.9% YoY in 2019**, explained mostly by growth in investment in software dedicated to the digitalization process and by the 700MHz license (license starts to be

## MANAGEMENT DISCUSSION AND ANALYSIS FOR 2019 RESULTS

### COMMENTARY ON THE FINANCIAL STATEMENTS FOR THE FISCAL YEAR ENDED ON DECEMBER 31, 2019

amortized once the cities are activated). **Normalized EBIT increased 8.0% YoY in the year**, while reported EBIT grew 71.2% YoY in 2019. The normalized EBIT margin closed the year at 15%, expanding 0.8 p.p. against 2018.

#### Net financial result

Normalized Net Financial Result was negative by R\$ 504 million, a R\$ 100 million improvement compared to 2018. Financial Result was positive by R\$ 614 million.

#### Income tax and social contribution

Income Tax and Social Contribution in 2019 was negative by R\$ 988 million, or -R\$ 57 million in a normalized view (vs. R\$ 665 million positive in 2018, impacted by tax credit due to the incorporation of TIM Celular by TIM S.A., or R\$ 262 million negative in the normalized view). **In the year, the adjusted effective rate was -2.7%.**

#### Net income

**Net Income Normalized by the effects described previously totaled R\$ 2.0 billion, an increase of 32.1% YoY**, while Earnings per Share (EPS) was R\$ 0.85 compared to R\$ 0.64 in the previous year.

Net Income totaled R\$ 3.8 billion, an increase of 47.9% YoY with EPS of R\$ 1.56 compared to R\$ 1.05 in 2018.

## MANAGEMENT DISCUSSION AND ANALYSIS FOR 2019 RESULTS

COMMENTARY ON THE FINANCIAL STATEMENTS FOR THE FISCAL YEAR ENDED ON DECEMBER 31, 2019

### 7.4. Cash Flow, Debt and CAPEX

DESCRIPTION	2019	2018	% YoY
R\$ million			
Normalized* EBITDA	6,798	6,372	6.7%
Capex	(3,853)	(3,831)	0.6%
<b>Normalized* EBITDA - Capex</b>	<b>2,945</b>	<b>2,541</b>	<b>15.9%</b>
<b>Working Capital</b>	<b>(829)</b>	<b>372</b>	<b>n.a.</b>
Non recurring operating items	-	1	-100.0%
<b>Operating Free Cash Flow Ex-licenses</b>	<b>2,116</b>	<b>2,912</b>	<b>-27.3%</b>
Clean UP 700MHZ	-	(143)	-100.0%
<b>Operating Free Cash Flow</b>	<b>2,116</b>	<b>2,769</b>	<b>-23.6%</b>

\* EBITDA normalized according to the items in the Costs section (-R\$ 37.1 million in 3Q19, -R\$ 1,494 million in 2Q19 and +R\$ 1.5 million in 1Q19). Working Capital normalized according to the items in the Costs section (-R\$ 37.1 million in 3Q19, -R\$ 1,494 million in 2Q19 and +R\$ 1.5 million in 1Q19) and according to the items in the Net Financial Results section (+R\$ 66.4 million in 3Q19 and +R\$ 1,051 million in 2Q19), reallocated under Cash Flow of non-operating activities.

**Normalized Operating Cash Flow (FOCF) for 2019, excluding the 700 MHz license, was positive by R\$ 2,116 million, a reduction of R\$ 653 million compared to 2018.** This result stems mostly from a working capital variation that was more negative by R\$ 1,200 million, mainly prompted by a reduction in Suppliers in addition to an increase in accounts receivable resulting from a higher revenue base from the postpaid segment.

### CAPEX

**In 2019, investments advanced 0.6% YoY and totaled R\$ 3,853 million, still allocated to infrastructure (93.4%), mainly projects in IT, 4G technology through 700MHZ, transport network and FTTH expansion.**

### Debt and cash

**Gross Debt at the end of 2019 was R\$ 3,415 million, growth of R\$ 80 million YoY.** The current balance includes (i) leasing recognition in the total amount of R\$ 1,428 million (related to the sale of towers, the LT Amazonas project and other financial leasing operations) and (ii) hedge position in the amount of R\$ 42 million (reducing gross debt).

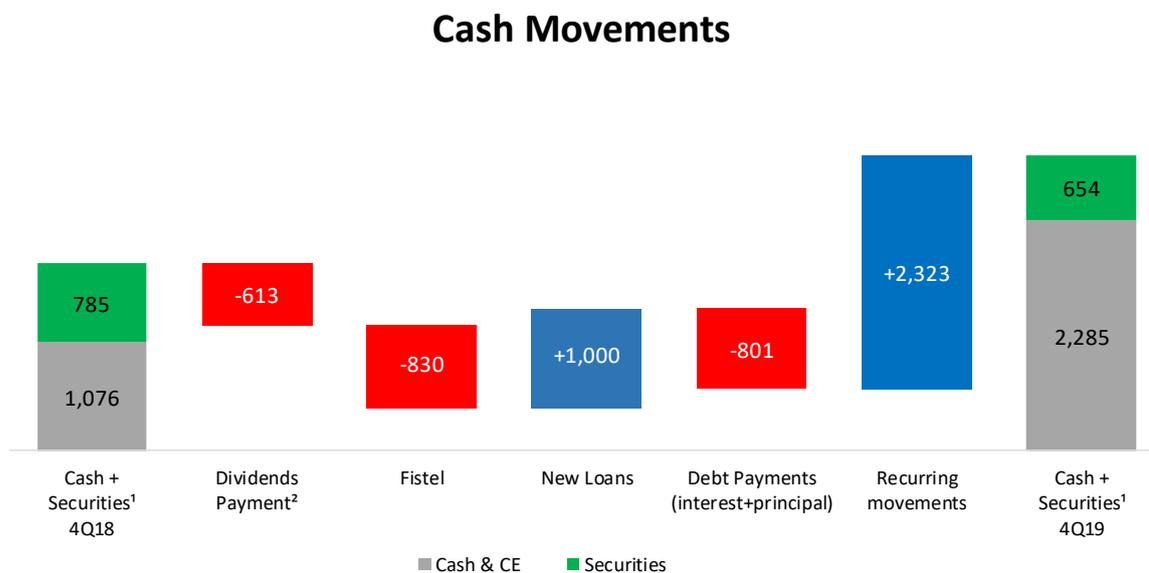
TIM's debt is concentrated in long-term contracts (59% of the total) consisting mainly of BNDES financing and Debentures. Approximately 11% of the total debt is denominated in foreign currency (USD) and is fully hedged in local currency. **The average cost of debt excluding leasing was 5.7% p.y., down compared to 8.2% p.y. in 2018.**

## MANAGEMENT DISCUSSION AND ANALYSIS FOR 2019 RESULTS

COMMENTARY ON THE FINANCIAL STATEMENTS FOR THE FISCAL YEAR ENDED ON DECEMBER 31, 2019



In 2019, Cash and Securities totaled R\$ 2,939 million, an increase of R\$ 1,079 million YoY. The main movements that affected cash and securities in the last 12 months are presented below:



<sup>1</sup> Securities: Fixed Fund  
<sup>2</sup> IOC net of income tax

In the year, the average financial yield was 5.9% p.y. compared to 6.5% p.y. in the same period of the previous year, following the reduction in the Selic rate.

The Net Debt/EBITDA ratio was 0.07x in 2019, down from 0.23x in 2018. In 2019, Net Debt totaled R\$ 476 million, a R\$ 989 million decrease compared to the same period of the previous year, when net debt was R\$ 1,465 million.

## MANAGEMENT DISCUSSION AND ANALYSIS FOR 2019 RESULTS

COMMENTARY ON THE FINANCIAL STATEMENTS FOR THE FISCAL YEAR ENDED ON DECEMBER 31, 2019

### 8. Social Responsibility

The Company's Social and Environmental Responsibility Policies guide actions and initiatives and are based on the principles of the UN Global Compact, a voluntary commitment to which TIM has been a signatory since 2008. The ten principles of the Global Compact organized in human rights, work, environment and fighting corruption are used as guidelines for conducting the Company's business.

In November, 2019, the company was confirmed for the 12<sup>th</sup> consecutive year in B3's Corporate Sustainability Index (ISE), portfolio includes actions of companies that have a high degree of commitment to sustainability and corporate governance. TIM remain as the telecommunications industry company for more consecutive years on the list.

The Company has a Climate Change Policy that establishes guidelines for the management of its emissions of greenhouse gases and also publishes an inventory of its greenhouse gases pursuant to GHG Protocol methodology. In 2019 for the seventh year the inventory was qualified with the gold seal.

#### Instituto TIM

Founded in July, 2013, Instituto TIM (<https://en.institutotim.org.br/>) has the mission of developing resources and strategies for the democratization of science, technology and innovation through mathematical and scientific education projects for children and young people and the development of free technologies that contribute to the implementation of public policies.

Instituto TIM's actions have already reached approximately 500 municipalities, in all 26 states and the Federal District, benefiting more than 700,000 people, among them, 500,000 students and 15,000 teachers.

Throughout 2019, the Instituto TIM-OBMEP Scholarships were offered to 200 medalists from the Brazilian Public Schools Mathematics Olympiad (OBMEP) who have entered public universities and come from low-income families. The aid to students is the result of the partnership between Instituto TIM and the National Institute for Pure and Applied Mathematics (IMPA). In addition to offering scholarships, Instituto TIM also sponsors the OBMEP National Awards Ceremony, where medalists from across the country receive recognition for their achievements. The event is attended by ministers and officials and this year took place in July.

Academic Working Capital (AWC) is the entrepreneurial education program developed by Instituto TIM that offers mentoring and financial support to college students who want to turn their course conclusion papers into technology-based businesses. Throughout the year, selected students attend workshops and are guided by mentors to develop their businesses. Since its inception in 2015, about 150 projects from 400 university students have been supported by the program. In 2019, three out of five finalists of the HackBrazil competition - an international competition organized by the Brazil Conference at Harvard & MIT - were AWC

## MANAGEMENT DISCUSSION AND ANALYSIS FOR 2019 RESULTS

### COMMENTARY ON THE FINANCIAL STATEMENTS FOR THE FISCAL YEAR ENDED ON DECEMBER 31, 2019

participating projects, with Aqualuz winning 2<sup>nd</sup> place and its founding partner, Anna Luísa Beserra, awarded as an UN Young Champion of the Earth.

Science education is one of Instituto TIM's lines of action. In 2019, Instituto TIM continued its partnership with Garatea - ISS, a science and aerospace education program for children. The aim of the program is to arouse students' interest in science in a practical and fun way. In July, the winning project of the 2018/2019 Edition of the program left the US Space Agency (NASA) base towards the International Space Station (ISS) and was successfully executed in space. Now the students are evaluating the results of this experiment. In December, the winning project of the 2019/2020 Edition was selected: "The influence of microgravity on lactose degradation and the development of gut flora bacteria" was developed by high school students at Regina Coeli High School (Sorriso-MT). The project will be sent to space in 2020.

### Energy

In accordance with the principles of its Environmental and Climate Change Management Policies, TIM considers the energy theme as one of its challenges. The expected increase in energy consumption due to the expansion of the network infrastructure is accompanied by energy efficiency actions. Projects include temporary or permanent shutdown of idle equipment; Decommissioning - shutdown and removal of equipment from the site in order to save energy and free up physical space for new projects, among others.

Energy consumption	2019	2018
Electricity (MWh)	718,193 <sup>1</sup>	702,681
Fuels (L)	1,240,491 <sup>1</sup>	1,385,456

<sup>1)</sup> Data subject to change after external verification.

TIM has been seeking alternative sources of energy. In 2019, TIM consumed over 350 GWh from renewable energy sources, representing about 50% of TIM's consumption. By 2020, the forecast is to increase the share of renewable sources to 60% of the company's total consumption.

At the end of 2019, TIM reached a total of 1,582 active biosites. Biosites are structures with significant reduction in visual impact and, in addition to telecommunications transmission, also add lighting and security through surveillance cameras.

For more information, see the Sustainability Report, which brings the main financial, social and environmental results. The Sustainability Report presents the most important topics for the Company's business and sustainability governance, as well as TIM's commitment to sustainable development.

## MANAGEMENT DISCUSSION AND ANALYSIS FOR 2019 RESULTS

### COMMENTARY ON THE FINANCIAL STATEMENTS FOR THE FISCAL YEAR ENDED ON DECEMBER 31, 2019

The social investment initiatives include donations, TIM Institute projects and sponsorships. In 2019 more than R\$ 10 million were invested in social benefit, as detailed below:

<b>Private Social Investment 2019 (R\$'000)</b>	
<b>Donations</b>	<b>124</b>
<b>TIM Institute Projects</b>	<b>3,733</b>
Education	2,585
Investments	-
Work	621
Inclusion	457
Other	70
<b>Community Initiatives<sup>1</sup></b>	<b>6,550</b>
Sports sponsorships	-
Cultural sponsorships	6,450
Other	100
<b>Total</b>	<b>10,407</b>

<sup>1</sup> Tax incentives are included in the total amount invested in this category and represent approximately 95% of the investment in Community Initiatives.

## MANAGEMENT DISCUSSION AND ANALYSIS FOR 2019 RESULTS

COMMENTARY ON THE FINANCIAL STATEMENTS FOR THE FISCAL YEAR ENDED ON DECEMBER 31, 2019

### 9. Corporate Governance

#### 9.1. The Only Telecom Company in Novo Mercado

On August 3<sup>rd</sup>, 2011 TIM joined the "Novo Mercado", a segment that concentrates companies committed to the best corporate governance practices.

The migration to Novo Mercado resulted in benefits for all shareholders. The required rules, aligned with the best corporate governance practices of markets such as the United States and Europe, promote greater liquidity and valuation of shares, allowing broader access to international markets, in addition to promoting the strengthening of the institutional image and increasing confidence in the Company.

Additionally, TIM belongs to the select group of companies that comprise the portfolios of the Corporate Governance Index (IGC), the Stock Index with Differentiated Tag Along of B3 (ITAG) and of the Corporate Sustainability Index (ISE), made of companies committed to managing risks deriving from economic, environmental and social developments.

#### 9.2. Corporate Governance at TIM

TIM Participações is a publicly-held Company, managed by the Board of Directors and an Executive Board and supervised by a Fiscal Council and a Statutory Audit Committee.

The duties and responsibilities of the Board of Directors, the Executive Board, the Fiscal Council and the Statutory Audit Committee are determined by Brazilian law, the Company's Bylaws, the Novo Mercado Listing Regulation, the Internal Rules of the Board of Directors, the Internal Rules of the Fiscal Council and the Internal Rules of the Statutory Audit Committee.

As active members responsible for the community in which they operate, the Company and its managers must guide their actions by legality and ethics, based on three fundamental principles: transparency, honesty and loyalty.

In conducting its business guided by good faith, in addition to ethics and loyalty, the Company seeks to: (i) act with transparency in business, (ii) promote fair competition; (iii) act with competitive excellence in the market; (iv) serve the welfare and growth of the community in which it operates; (v) enhance human resources; and (vi) promote sustainable development.

#### 9.3. Disclosure Policy

In 2002, TIM Participações adopted a Disclosure/Negotiation Policy and Differentiation of Corporate Governance from NYSE, which the Company's management adhered to by signing the term of acceptance. As part of this policy, a code of conduct was established to be followed by all employees with access to privileged information and restrictions were imposed on negotiations with the Company's shares in certain periods.

## MANAGEMENT DISCUSSION AND ANALYSIS FOR 2019 RESULTS

### COMMENTARY ON THE FINANCIAL STATEMENTS FOR THE FISCAL YEAR ENDED ON DECEMBER 31, 2019

The Company's Disclosure Policy provides the possibility of using the Portal Agência Estado, which can be accessed through the link: <http://economia.estadao.com.br/fatos-relevantes/>, pursuant to CVM instruction no. 547/2014 which allowed the disclosure of material facts in free access news portals.

#### 9.4. Board of Directors

The Board of Directors comprises at least 5 (five) and at most 19 (nineteen) members, with a two-year tenure. Reelection is allowed. On December 31<sup>st</sup>, 2019, the Board of Directors was formed by 9 (nine) members, of whom 4 (four) were independent. In 2019, the Board of Directors met 14 (fourteen) times in the exercise of its functions.

All decisions taken by the Board of Directors are recorded in minutes, published and placed in the Board of Directors' minute books, archived in the Company's headquarters.

The Board meets ordinarily once a quarter and extraordinarily upon a call made by its Chairman, or by any two board Members, or by the Company's Chief Executive Officer. The Chairman of the Board may invite any member of the Executive Board, other executives of the Company and third parties who may contribute opinions or recommendations related to the matters to be deliberated. Those invited to attend meetings of the Board shall not have voting right.

The Board of Directors has 2 (two) advisory committees, the Compensation Committee and the Control and Risks Committee, and one or more members may participate in both Committees simultaneously. The Board of Directors also has an advisory and instruction agency directly linked to it, the Statutory Audit Committee.

#### 9.5. Executive Board

The Executive Board is the representative and executive management body of the Company, comprising at least two (2) and at most twelve (12) executive officers, elected by the Board of Directors for a two-year tenure, reelection allowed. They may be dismissed by the same agency at any time. On December 31<sup>st</sup>, 2019, the Company's Executive Board was formed by 7 (seven) members.

#### 9.6. Fiscal Council

The Fiscal Council is the supervisory body for the acts of the Company's management and for communication with shareholders, and it must function permanently. The Fiscal Council is formed of at least 3 (three) and at most 5 (five) effective members, all independent professionals recognized by the market, with no other ties to the Company, each with a respective alternate, whether shareholders or not, elected by the General Meeting. On December 31<sup>st</sup>, 2019, the Company's Fiscal Council was formed by 3 (three) members. In 2019, the Fiscal Council met 9 (nine) times in the exercise of its functions.

## MANAGEMENT DISCUSSION AND ANALYSIS FOR 2019 RESULTS

COMMENTARY ON THE FINANCIAL STATEMENTS FOR THE FISCAL YEAR ENDED ON DECEMBER 31, 2019

### 9.7. Statutory Audit Committee

The Statutory Audit Committee is a body directly linked to the Board of Directors, specializing in advisory and instruction, formed by at least 3 (three) and at most 5 (five) members, all of them independent. Currently, the Statutory Audit Committee has 3 (three) members.

The Statutory Audit Committee aims to supervise the quality and integrity of the financial reports, adherence to legal, regulatory and statutory standards, the adequacy of processes related to risk management and the activities of both internal and independent auditors, as well as to supervise and evaluate the signing of contracts of any type between the Company or its subsidiaries, on one side, and the controlling shareholder or its associated, colligated companies, which are subject to common control or parent company control, or that otherwise constitute Company related parties, on the other side. Besides its ordinary attributions, the Statutory Audit Committee performs the function of the Company's Audit Committee, in accordance with the provisions of the Sarbanes Oxley Act, to which the Company is subject because it is registered in the US Securities and Exchange Commission – SEC. In 2019, the Statutory Audit Committee met 22 (twenty-two) times in the exercise of its functions.

The Statutory Audit Committee members analyzed the Financial Statements together with the Independent Auditor's Report and the Annual Management Report for the fiscal year ended on December 31<sup>st</sup>, 2019 ("Annual Financial Statements for 2019"). Considering the information provided by the Company's Executive Board and the external audit of Ernst & Young Auditores Independentes S/S. ("EY"), as well as the proposal for allocation of the results for the year 2019, the Statutory Audit Committee assessed that this information and documents adequately reflect, in all relevant respects, the patrimonial and financial positions of the Company and its subsidiaries. For this reason, they unanimously recommend the approval of the aforementioned documents by the Company's Board of Directors for referral to the Annual General Meeting, pursuant to the Brazilian Corporate Law.

### 9.8. Control and Risks Committee

The Control and Risks Committee is a collegiate advisory agency directly linked to the Board of Directors and should consist of at least 3 (three) members and at most 5 (five) members of the Company's Board of Directors. On December 31<sup>st</sup>, 2019, the Control and Risks Committee was composed by 4 (four) members, of whom 2 (two) independent. In 2019, the Control and Risks Committee met 4 (four) times in the exercise of its functions.

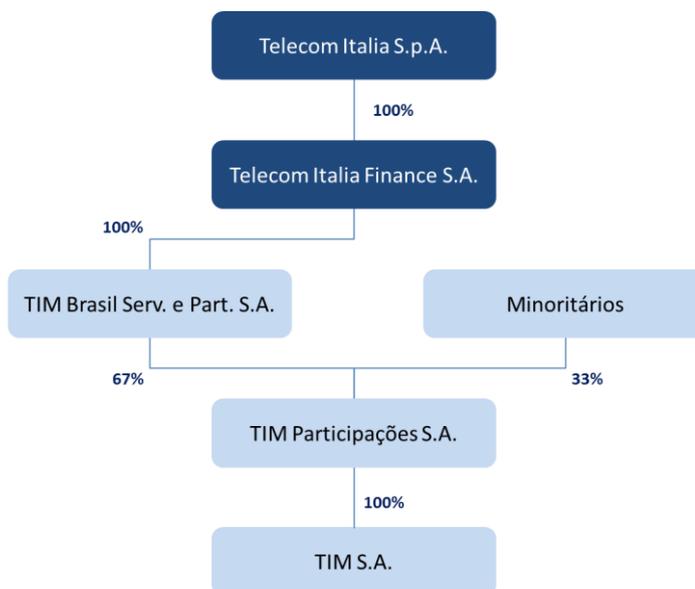
### 9.9. Compensation Committee

The Compensation Committee is a collegiate advisory agency directly linked to the Board of Directors and must comprise 3 (three) members of the Company's Board of Directors. In December 2019, the Compensation Committee was formed by 3 (three) members, of whom 1 (one) was independent. In 2019, the Compensation Committee met 4 (four) times in the exercise of its functions.

# MANAGEMENT DISCUSSION AND ANALYSIS FOR 2019 RESULTS

COMMENTARY ON THE FINANCIAL STATEMENTS FOR THE FISCAL YEAR ENDED ON DECEMBER 31, 2019

## 9.10. Shareholder Structure



\* Telecom Italia S.p.A. has one share from TIM Brasil Serv. E Part. S.A.

The Company ended 2019 with share capital in the amount of R\$ 9,913,414,421.74 represented by 2,421,032,479 common shares. TIM Brasil Serviços e Participações S.A. holds share control of TIM Participações with approximately 67% of the shares.

## 9.11. Dividend Policy

According to the Bylaws, the Company must distribute as mandatory dividend, for each fiscal year ended on December 31<sup>st</sup>, as long as there are amounts available for distribution, the amount equivalent to 25% of adjusted net income.

It is mandatory to maintain a legal reserve, to which the Company must allocate 5% of the net income of each fiscal year until the value of this reserve is equivalent to 20% of the capital.

The distribution of annual dividends is resolved by the Annual General Meeting.

## 9.12. Subsequent Events

### Fitch assigns initial rating “AAA (bra)” to TIM Participações

On February 10<sup>th</sup>, 2020, the credit rating agency Fitch Ratings (“Fitch”) assigned to the Company the Initial Long-Term Rating on a National Scale “AAA(bra)”, with a stable outlook. In Fitch's view, TIM's initial rating reflects its strong business profile, supported by its relevant participation in the mobile telephony sector, as well as in relation to its conservative financial indicators, with reduced financial leverage and robust liquidity position. The assessment also

## MANAGEMENT DISCUSSION AND ANALYSIS FOR 2019 RESULTS

### COMMENTARY ON THE FINANCIAL STATEMENTS FOR THE FISCAL YEAR ENDED ON DECEMBER 31, 2019

incorporates the expectation that the Company will present an increasing cash flow from operations and points out that the Company is prepared to deal with the competitive and regulated telecommunications sector in Brazil.

#### Financing contract with Banco do Nordeste do Brasil

On January 31<sup>st</sup>, 2020, TIM S.A., Company's wholly-owned subsidiary signed a financing agreement with Banco do Nordeste do Brasil, in the total amount of R\$ 752,479, of which: (i) R\$ 325,071 at the cost of IPCA + 1.4386% and subject a 15% default bonus; and, (ii) R\$ 427,408 at the cost of IPCA + 1.7582% and subject to a 15% default bonus. The purpose of the credit line is to finance Capex in the Northeast and North regions of the states of Minas Gerais and Espírito Santo from the period 2019 to 2022 with a total payment period of 8 years, with a 3-year grace period and 5 years of amortization. The operation will be guaranteed by (i) bank guarantee proportional to 100% of the amount of each disbursement; and (ii) linkage of receivables proportional to 5% of the amount of each disbursement. To date, there have been no disbursements.

#### CVM category A registration request for TIM S.A.

On October 28<sup>th</sup>, 2019, the Company's Board of Directors approved the submission of a request for registration as a publicly-held company in category "A" for TIM S.A ("TSA") to the CVM (without a securities offer), in keeping with CVM Instruction 480/09, with the appropriate reformulation and consolidation of its Bylaws. The Company and the TSA emphasized that there will be no request for registration of a Securities Offer, which is why this event should not be considered as a public offering of shares or other securities by the Company or the TSA.

#### Conduct Adjustment Term between TIM and ANATEL

On August 22<sup>nd</sup>, 2019, Anatel's Board of Directors unanimously approved TIM's Conduct Adjustment Term, which was under negotiation since June 2018. The agreement covers a sanction reference value of R\$ 627 million. TIM's commitment foresees improvement actions in three pillars - customer experience, quality and infrastructure - through initiatives associated with improvements in the licensing process of stations, efficient use of numbering resources, evolution of digital caring channels, reducing complaint rates, repairing users and strengthening transport and access networks. In addition, it includes an additional commitment to bring mobile broadband through the 4G network to 366 municipalities with less than 30,000 inhabitants reaching over 3.4 million people. The new infrastructure will be implemented in three years - more than 80% in the first two years –with the sharing regime with the other providers being guaranteed by the Company.

#### Infrastructure Sharing MOU Between TIM and VIVO

On July 23<sup>rd</sup>, 2019, TIM Participações S.A. and Telefônica Brasil S.A. signed a memorandum of understanding ("MOU") to start negotiations regarding: (i) sharing of single-grid 2G network; (ii) establishment of new infrastructure sharing agreements for the 4G network in 700Mhz, directed to cities with fewer than 30,000 inhabitants, which in the future may be expanded to

## MANAGEMENT DISCUSSION AND ANALYSIS FOR 2019 RESULTS

### COMMENTARY ON THE FINANCIAL STATEMENTS FOR THE FISCAL YEAR ENDED ON DECEMBER 31, 2019

larger cities; (iii) other network sharing opportunities in other frequencies and technologies; and (iv) other opportunities in efficiency and cost reduction in Operations and Network Maintenance. TIM and Vivo see as beneficial the possible developments from these discussions toward service enhancement at both carriers, as well as efficiency in investment allocation and operating costs.

On July 23<sup>rd</sup>, 2019, TIM Participações S.A. and Telefônica Brasil S.A. signed a memorandum of understanding (“MOU”) to start discussions regarding network sharing projects in several frequencies and technologies. As the discussions and negotiations advanced well, the MOU was renewed for another 60 days so the companies can complete the details of the sharing agreements.

### Dividends Payment and Interest on Capital (IOC)

In July 2019, the Company released a Material Fact informing its shareholders and the market in general about the projected payment of approximately R\$ 1 billion as IOC, related to the fiscal year ending on December 31<sup>st</sup>, 2019, being allocated to the minimum dividend mandatory for the fiscal year and ad referendum at the Ordinary General Meeting of 2020.

TIM made the following payments of IOC totaling approximately R\$ 995 million, within the guidance provided by the Company to the market, which account for 30.6% of the Net Income reported above.

Payment Date	Amount Paid	Per Share
01/29/2020	247,747	0.102353024
1/24/2020	378,750	0.156471242
10/8/2019	368,941	0.152419292

### Tax credit related to the exclusion of ICMS from the calculation basis of PIS and COFINS payments

In June 2019, due to the final disposal in favor of the Company acknowledging the right to exclude the ICMS from the calculation basis of PIS and COFINS payments, the amount of R\$ 2,875 million was ascertained and registered, of which R\$ 1,720 million in principal and R\$ 1,155 million in monetary correction (amounts related to TIM Celular S.A, incorporated by TIM S.A in October 2018).

In September 2019, due to its final and unappealable decision, the amount of R\$ 148 million was recorded, of which R\$ 75 million of principal and R\$ 73 million of monetary restatement, values related to TIM SA itself (when it still had the name of Intelig Telecomunicações Ltda.).

## MANAGEMENT DISCUSSION AND ANALYSIS FOR 2019 RESULTS

### COMMENTARY ON THE FINANCIAL STATEMENTS FOR THE FISCAL YEAR ENDED ON DECEMBER 31, 2019

In March 2017, the Supreme Court (STF) recognized the unconstitutionality of the addition of ICMS to the calculation basis of PIS and COFINS payments. TIM Participações through its subsidiary TIM S.A. (prior name of Intelig Telecomunicações Ltda., in the condition of incorporator of TIM Celular S.A. and of the remaining existing entities in the Group in the past, assignees of lawsuits of the same nature), has discussed this subject judicially since 2006, with retroactive effect by five years, as permitted by law.

#### Change of independent auditor

The Company's Board of Directors approved on April 24<sup>th</sup>, 2019, the hiring of Ernst & Young Auditores Independentes S/S. ("EY") as the independent audit provider for the Company for the year ending December 31<sup>st</sup>, 2019, being responsible for revising the Quarterly Financial Information from the second quarter of 2019, replacing PricewaterhouseCoopers Auditores Independentes ("PwC").

With the aim of ensuring a rotation of independent audit providers also at the non-listed companies in compliance with the best practices in the market, the Company decided to replace PwC with EY. Moreover, the Company has the opportunity to capture operating and financial synergies from the perspective of Telecom Italia Group. PwC agreed with the reason for the replacement, in keeping with article 28 of CVM Instruction no. 308/99. 28 of CVM Normative Instruction 308/99.

#### Adoption of IFRS 16

On January 1<sup>st</sup>, 2019, IFRS 16 / CPC 06 (R2) came into force, a new accounting standard issued in July 2014. The standard requires that lessees recognize the assets and liabilities arising from lease agreements ("rent"; leases), except for short-term contracts, that is 12 months or less, or contracts in which the underlying asset is of low value. In this sense, the increase in the lease liability, due to the recognition of the right to use the assets, results in an increase in the Company's net debt, with depreciation and interest being recognized in the income statement as a replacement for operating lease expenses.

## MANAGEMENT DISCUSSION AND ANALYSIS FOR 2019 RESULTS

COMMENTARY ON THE FINANCIAL STATEMENTS FOR THE FISCAL YEAR ENDED ON DECEMBER 31, 2019

### 10. Independent Audit – CVM Normative Instruction 381

In 2019, Ernst & Young Auditores Independentes S.S. provided auditing services for our financial statements and other non-audit services, which are related to the review of the Company's Sustainability Report.

Such services did not exceed the level of 5% of the total fees related to the external audit service.

In the opinion of the external auditors, the provision of other professional services not related to the external audit, described above, does not affect the independence or objectivity in conducting the external audit examinations carried out. The auditors have internal processes to ensure that these other services are evaluated internally, as well as pre-approved before any proposal is presented to TIM.

The Company also points out that it is subject to a policy, approved by the Board of Directors of its Parent Company on 07/30/2019, which governs the process of hiring external auditors as well as any services not related to the audit of the financial statements, establishing, among other things, that the contracting must be submitted to prior analysis by the Statutory Audit Committee (CAE) of the Parent Company. This document also defines an exemplary list of services not related to the audit whose contracting is prohibited.

## MANAGEMENT DISCUSSION AND ANALYSIS FOR 2019 RESULTS

COMMENTARY ON THE FINANCIAL STATEMENTS FOR THE FISCAL YEAR ENDED ON DECEMBER 31, 2019

### 11. Capital Market

The common shares of TIM Participações are traded on the São Paulo Stock Exchange (B3) under the TIMP3 code and the ADRs, American Depositary Receipts, on the New York Stock Exchange (NYSE) under the TSU code.

The São Paulo Stock Exchange Index (Ibovespa) closed 2019 at 115,645 points, accumulating a 31.6% increase when compared to the previous year, and a market cap of R\$ 3.5 trillion.

#### TIM Participações's Stocks Performance

(Base 100 on December 31, 2018;  $\Delta\%$  Dec-18 x Dec-19)



Source: Bloomberg

The Company ended 2019 with its common shares at R\$ 15.57 on B3, an increase of 33.1%, while the ADRs on NYSE ended at US\$ 18.99, an increase of 25.4% YoY. In terms of market cap, TIM ended the year valued at R\$ 37.9 billion or US\$ 9.3 billion.

## MANAGEMENT DISCUSSION AND ANALYSIS FOR 2019 RESULTS

COMMENTARY ON THE FINANCIAL STATEMENTS FOR THE FISCAL YEAR ENDED ON DECEMBER 31, 2019

### Final Considerations

TIM Participações S.A., with the permanent objective of maintaining a continuous, balanced and sustainable growth, thanks its customers for their loyalty and reiterates the commitment to tirelessly seek mechanisms to return the preference through quality and a differentiated service. Acknowledgements also extend to the commercial partners, suppliers and financial institutions, for their support and trust, and especially to the employees, without whom the objectives would not have been achieved, and, finally to the shareholders, for the support and trust in the management of the business.

The Management

# TIM PARTICIPAÇÕES S.A. AND TIM PARTICIPAÇÕES AND SUBSIDIARY

## NOTES TO THE FINANCIAL STATEMENTS

As at December 31

(In thousands of Reais, except as otherwise stated)

### 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 held 66.58% of the capital of TIM Participações as at December 31, 2019 and 2018.

The main purpose of the Company and its subsidiary (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’ subsidiary are regulated by the 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”) – USA. Accordingly, the Company is subject to the rules of the Brazilian Securities Commission (Comissão de Valores Mobiliários or “CVM”) and the U.S. Securities and Exchange Commission (“SEC”). In accordance with market best 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 act transforming Intelig into a closely-held joint stock company was annotated, and its corporate name was changed to TIM S.A. On September 30, 2018, the Company’s Management had obtained from third parties all approvals and consents required to perform the said restructuring. As a result, the Company’s Management proceeded with the merger on October 31, 2018, based on the net book assets of TIM Celular, in the amount of R\$17,035,254, in accordance with the valuation report issued by independent experts. Also, as a result of this corporate restructuring, the amount of R\$952,368 relating to deferred income tax assets arising from tax losses and the negative base of TIM S.A. were recognized on September 30, 2018 (Note 10).

The changes in TIM Celular’s equity between the date of the report and the merger were transferred, absorbed and incorporated into the operating income of TIM S.A., as set forth in the protocol of the merger. As a result of the merger, all TIM Celular operations were transferred to TIM S.A., which succeeded it in all its assets, rights and liabilities, universally and for all purposes of the law.

#### Direct subsidiary – TIM S.A.

TIM S.A. (current name of INTELIG TELECOMUNICAÇÕES LTDA. and successor by merger of TIM CELULAR S.A.)

The Company holds 100% of TIM S.A.’s capital. This subsidiary provides Landline Telephone Services (“STFC”) - Domestic Long-Distance and International Long-Distance Voice Services, Personal Mobile Service (“SMP”) and Multimedia Communication Services (“SCM”) in all Brazilian states and in the Federal District.

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**2. Basis for preparation and disclosure of the financial statements**

The individual and consolidated financial statements has been prepared in accordance with the accounting practices adopted in Brazil, which include the rulings issued by the CVM and the pronouncements, guidance and interpretations issued by the Accounting Pronouncements Committee (“CPC”) and the International Financial Reporting Standards (“IFRS”) issued by the International Accounting Standards Board (“IASB”), and provide all material information required for such financial statements, and only such information, which is consistent with the information used by Management in the course of its duties. In addition, the Company has taken into account the guidance provided in Technical Guidance OCPC 07 in the preparation of its financial statements. Thus, the relevant information in the financial statements is being evidenced and corresponds to that used by the Management in its management.

The significant accounting policies applied to the preparation of this financial statements are described below and/or presented in the respective notes. These policies were 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 base value as well as financial assets and liabilities (including derivative financial instruments) measured at fair value.

The individual and consolidated financial statements were prepared in accordance with accounting practices adopted in Brazil issued by the Accounting Pronouncements Committee (CPC) and in accordance with International Financial Reporting Standards (IFRS) issued by the International Accounting Standards Board (IASB). Due to the fact that accounting practices adopted in Brazil applied in the individual financial statements, as from 2014, do not differ from the IFRS applicable to the separate financial statements, since this standard now allows the application of the equity method in subsidiaries, affiliates and joint ventures in the separate statements, they also comply with the International Financial Reporting Standards (IFRS), issued by the International Accounting Standards Board (IASB). These individual statements are disclosed together with the consolidated financial statements.

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 exception to this procedure involves deferred income tax and social contribution balances (assets and liabilities) and contingent liabilities that are fully classified as long-term.

The presentation of the individual and consolidated Statement of Value Added (Demonstração do Valor Adicionado – “DVA”) is required by the Brazilian Corporate Legislation and accounting practices adopted in Brazil applicable to listed companies. The DVA was prepared according to the criteria set forth in CPC Technical Pronouncement No. 09 - “Statement of Value Added”. IFRS does not require the presentation of this statement. As a consequence, according to the IFRS, this statement is presented as supplementary information, without affecting the financial statements.

Interests paid are classified as financing cash flow in the statement of cash flows as it represents costs of obtaining financial resources.

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b. Functional currency and presentation currency

The presentation currency for the financial statements is the *Real* (R\$), which is also the functional currency for the company 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 published 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 components of the entity that develop business activities from which revenue can be obtained and in relation to which expenses are 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 segment to exist, it must have separate financial information available.

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 decision makers see the Group as a single business segment and do not take into account specific strategies intended for a particular line of service. All decisions on strategic, financial, purchasing, investment and fund investment planning are made on a consolidated basis. The aim is to maximize the consolidated result obtained by exploring the SMP, STFC and SCM licenses.

d. Consolidation procedures

Subsidiaries are all entities over which the Group holds control. The Group controls an entity when it is liable or has rights to variable returns on the basis of 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. The consolidation is discontinued from the date that the Group loses control over that entity.

The purchase accounting method is used to record the acquisition of subsidiaries by the Group. The acquisition cost is measured as the fair value of the acquired assets, equity instruments (e.g. shares) issued and liabilities incurred or assumed by the acquirer at the date when 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 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 applied.

Transactions between Group companies, as well as balances, unrealized gains and losses related to these transactions, are eliminated. The accounting policies of the subsidiary were adjusted to ensure consistency with the accounting policies adopted by TIM Participações. The dates of the financial

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statements used in the consolidation are the same for all Group companies.

e. Approval of the financial statements

These financial statements were approved by the Company's Board of Directors on February 11, 2020.

f. New standards, amendments and interpretations of standards

l) Among the new standards and/or interpretations that became effective as of January 1, 2019, issued by the Accounting Pronouncements Committee (CPC) and by the IASB, the following standards and/or interpretations has a material impact on the Company's financial statements:

**IFRS 16/CPC 06 (R2) – “Leases”**

In July 2014, the IASB issued IFRS 16, which replaced IAS 17 and refers to annual periods beginning on or after January 1, 2019 and approved by the CVM on December 21, 2017.

The new standard establishes the principles for 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, with a term of 12 months or less, or contracts in which the value of the underlying assets is low. In accordance with this standard, lessees must apply this pronouncement to lease agreements in two ways:

- (i) Retrospectively for each previous period presented in accordance with IAS 8/CPC 23 (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 an adjustment to the opening balance of retained earnings (or other component of the shareholders' equity, as appropriate) as at the date of initial application.

The Company decided to adopt IFRS16 /CPC 06 (R2) retrospectively, while the cumulative effect of the initial application is recognized on the date of initial application, that is, January 1, 2019. Additionally, the Company decided to take practical steps in its initial adoption of the standard, such as: (i) non-revaluation of financial lease agreements previously recognized according to CPC 06 (IAS 17) upon initial measurement of financial lease liabilities, according to the new accounting pronouncement, and ICPC 03 (IFRIC 4); (ii) exclusion of lease agreements expiring in the next 12 months and unlikely to be renewed by the Company and the exclusion of leasing contracts considered of low value; (iii) non-application of this new standard to agreements not previously identified as leases, using CPC 06 (IAS 17) and ICPC 03 (IFRIC 4); and (iv) application of a single discount rate to the leasing portfolio with reasonably similar characteristics (such as leasing with a similar remaining leasing period for a similar class of underlying assets in a similar economic setting).

The Company had a significant number of lease agreements under which it is the lessee. Currently, a portion of these contracts are recognized as operating leases, and their payments are recorded on a straight-line basis throughout the period of the contract. The Company concluded the study of impacts of this new standard on its financial statements, which included: (i) an estimation of the lease term, considering a non-cancelable period and the periods covered by options to extend the lease term, where such exercise depends only on the Company and is reasonably certain; (ii) a detailed review of the nature of the various lease agreements inherent in the telecommunications industry; (iii) use of assumptions to calculate the discount rate, which was based on the incremental interest rate for the period of the agreement, among other things. Furthermore, given the relevance of the

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infrastructure lease agreements, specifically for transmission towers, the Company decided to separately recognize the lease and non-lease components for this class of assets.

The increase in lease liabilities due to the recognition of the right-of-use of the assets results in an increase in the Company's net debt, being the depreciation and interest charges recognized in the statement of income as a replacement of the operating lease expenses.

In qualitative terms, the main transactions to be impacted by the new standard include: lease of vehicles, lease of stores and kiosks in shopping malls, lease of sites, land and sharing of infrastructure.

The table below presents the principal effects of the adoption of IFRS16/CPC06 (R2) in the opening balances as at January 1, 2019.

	<b>Consolidated</b>		
	<b>Originally reported</b>	<b>Adjustments</b>	<b>Balances under IFRS 16</b>
	<b>Jan 1<sup>st</sup>, 2019</b>		<b>Jan 1<sup>st</sup>, 2019</b>
<b>Assets</b>	31,957,889	5,256,114	37,214,003
<b>Current assets</b>	5,998,126	(8,742)	5,989,384
Trade accounts receivable	2,838,808	-	2,838,808
Inventories	183,059	-	183,059
Prepaid expenses (a)	272,060	(8,742)	263,318
Other assets	2,704,199		2,704,199
<b>Non-current assets</b>	25,959,763	5,264,856	31,224,619
<b>Long-term receivables</b>	4,074,137	(471)	4,073,666
Trade accounts receivable	130,308		130,308
Prepaid expenses (a)	74,381	(471)	73,910
Other assets	3,869,448		3,869,448
Property, plant and equipment (b)	11,203,622	5,265,327	16,468,949
Intangible assets	10,682,004		10,682,004
<b>Liabilities and Shareholders' Equity</b>	31,957,889	5,256,114	37,214,003
<b>Total Liabilities</b>	12,163,052	5,256,114	17,419,166
<b>Current Liabilities</b>	7,075,379	785,065	7,860,444
Financial leasing (c)	205,048	785,065	990,113
Other liabilities	6,870,331		6,870,331
<b>Non-Current Liabilities</b>	5,087,673	4,471,049	9,558,722
Financial leasing (c)	964,289	4,471,049	5,435,338
Deferred income tax and social contribution	-		-
Other Liabilities	4,123,384		4,123,384
<b>Shareholders' Equity</b>	19,794,837	-	19,794,837
Capital stock	9,866,298		9,866,298
Revenue reserves	9,928,539		9,928,539

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During the fiscal year ended December 31, 2019, the new accounting standards had the following impact on the income statement:

Statements of income - Consolidated			
	Balances without IFRS 16	Adjustments	Balances with IFRS 16
Net revenue from services	16,597,155	-	16,597,155
Net revenue from products	780,039	-	780,039
Net revenue	17,377,194	-	17,377,194
Cost of services provided and goods sold (a), (d)	(4,494,914)	1,193,407	(3,301,507)
	12,882,280	1,193,407	14,075,687
	(4,554,127)	122,277	(4,431,850)
<b>Operating income (expenses)</b>			
Selling expenses (e)	(4,800,325)	70,934	(4,729,391)
General and administrative expenses (f)	(1,029,343)	51,343	(978,000)
Other revenues (expenses), net	1,275,541	-	1,275,541
	8,328,153	1,315,684	9,643,837
Depreciation and amortization (g)	(4,188,837)	(940,144)	(5,128,981)
<b>Financial income (expenses)</b>	613,533	(592,323)	21,210
<b>Income before income and social contribution taxes</b>	4,752,849	(216,782)	4,536,067
<b>Income and social contribution taxes (h)</b>	(987,646)	73,706	(913,940)
<b>Net income for the year</b>	3,765,203	(143,076)	3,622,127

There is no material impact on other comprehensive results or basic diluted earnings per share.

Statement of Cash Flows – Consolidated			
	Balances without IFRS 16	Adjustments	Balances with IFRS 16
Net income for the period before income tax and social contribution	4,752,850	(216,783)	4,536,067
Adjustments to reconcile net income to net cash generated by activities			
Lease interest payable	229,139	592,324	821,463
Depreciation and amortization	4,188,837	940,144	5,128,981
Net cash from operations	5,749,042	1,315,684	7,064,726
Net cash invested in investment activities	(3,721,742)	-	(3,721,742)
Net cash used in financing activities	(827,120)	(1,315,684)	(2,142,804)
<b>Increase in cash and cash equivalents</b>	<b>1,209,280</b>	<b>-</b>	<b>1,209,280</b>
<b>Cash and cash equivalents at the beginning of the year</b>	<b>1,075,530</b>	<b>-</b>	<b>1,075,530</b>
<b>Cash and cash equivalents at the end of the year</b>	<b>2,284,810</b>	<b>-</b>	<b>2,284,810</b>

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The principal adjustments arising from the new standard are as follows:

- (a) Reclassification of the agreement for reciprocal assignment with consideration for fiber optic infrastructure previously classified as prepaid expenses (Note 11) for property, plant and equipment – right-of-use under lease;
- (b) Recognition of the asset – right-of-use under lease of the lease payments eligible for the new standard;
- (c) Increase in the Company’s net debt due to the recognition of the lease liability as required by the standard;
- (d) Leasing – infrastructure (network, land and fiber optics);
- (e) Leasing – stores & kiosks and vehicles;
- (f) Leasing – administrative buildings and vehicles;
- (g) Recognition of the depreciation of the assets mentioned above;
- (h) Tax impact on the adjustments from the new standard.

**IFRIC 23 / ICPC 22 – Uncertainty about the treatment of income taxes**

The Interpretation deals with the accounting of taxes on profit in cases where the tax treatments involve uncertainty affecting the application of IAS 12 / CPC 32 - Income Tax and does not apply to taxes outside the scope of IAS 12, nor specifically includes the requirements relating to interest and fines associated with uncertain tax treatments. The Interpretation specifically addresses the following:

- How to apply the tax legislation to specific transactions or circumstances;
- Or if the tax authorities would accept a specific tax treatment adopted by the entity. If the entity considers that a given tax treatment may not be accepted, the entity must use estimates (most probable or expected amount) to determine the tax treatment (taxable income, tax bases, tax liabilities not used, tax assets not used), income tax rates and others. This decision must rely on the method that provides the best estimates for resolution of the uncertainty.

The Company’s Management concluded that the application of this standard did not significantly impact the financial statements, since the most important judicial proceedings involving income tax and social contribution, as disclosed in Note 24, are considered by the administration and the legal counsels as being “more likely than not” in the arguments of the judicial spheres.

II) The following new standards were issued by the Accounting Pronouncements Committee (CPC) and by International Standards Board (IASB) but are not in force for the period ended December 31, 2019.

- **CPC 11 – Insurance contracts**

In May 2017, the IASB issued IFRS 17 – Insurance Contracts, a standard not yet issued by CPC in Brazil but which will be codified as CPC 50 – Insurance Contracts and will replace CPC 11 – Insurance Contracts. The general purpose of IFRS 17 is to provide an accounting model for insurance contracts that is most useful and consistent for insurers.

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- **Changes to CPC 15 (R1): Definition of business**

In October 2018, the IASB issued changes to the business definition in IFRS 3, these changes being made in CPC revision 14 amending CPC 15 (R1) to help entities determine whether an acquired set of activities and assets consists of or not in a business. They clarify the minimum requirements for a company, eliminate the assessment of whether market participants are capable of replacing any missing elements, include guidance to help entities assess whether an acquired process is substantive, better delimit business and product definitions, and introduce an optional fair value concentration test. New illustrative cases have been provided along with the changes.

As the changes apply prospectively to transactions or other events that occur on or after the first application, the Company will not be affected by these changes on the transition date.

- **Amendments to CPC 26 (R1) and IAS 8: Definition of material omission**

In October 2018, the IASB issued amendments to IAS 1 and IAS 8 Accounting Policies, Changes in Accounting Estimates and Errors, these amendments being reflected in Revision 14 of the CPC, amending CPC 26 (R1) and CPC 23 to align the definition of 'material misstatement' or 'material misstatement' across the standards and clarify certain aspects of the definition. The new definition states that: "the information is material if its omission, misstatement or obscurity could reasonably influence decisions that major users of general purpose financial statements make on the basis of those financial statements, which provide financial information about entity-specific reporting.

These changes are not expected to have a significant impact on the Company's individual and consolidated financial statements.

### **3 Estimates and areas where judgment is significant in the application of the Company's accounting policies**

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 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 in the book values of assets and liabilities in subsequent fiscal years are shown below:

(a) *Impairment losses on non-financial assets*

Losses due to impairment take place when the book value of an asset or cash generating unit exceeds its respective recoverable value, which is considered as the fair value less costs to sell and/or the value in use, whichever is greater. The calculation of the fair value less costs to sell is based on information available from sales transactions involving similar assets or market prices, less additional costs that would be incurred to dispose of those assets. The value in use is based on the discounted cash flow model.

Any reorganization activities to which the Company has not yet committed itself on 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 purpose of impairment testing.

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The main non-financial assets valued this way were goodwill based on the future profitability recorded by the Company (Note 15) and its tangible assets.

*(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 and CPC 32 / IAS 12. This process normally includes complex estimates to define the taxable income and temporary 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 measurement of the recoverability of deferred income tax and social contribution losses carry-forward and of temporary differences takes into account the history of taxable income, as well as estimates of future taxable income (Note 10).

*(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 review takes into account factors such as the hierarchy of laws, case law available, recent court decisions, their relevance to the legal order, as well as payment history. Such reviews involve Management's judgment (Note 24).

*(d) Fair value of derivatives and other financial instruments*

Financial instruments presented at fair value in the balance sheet are measured using evaluation techniques that take into account observable data or observable data derived from the market (Note 37).

*(e) Unbilled revenue*

Considering that some billing cut-off dates occur on intermediate dates within the months, at the end of each month there will be revenue already earned by the Company but not effectively billed to the customers. This unbilled revenue is recorded based on estimates which take into account data on usage, the number of days since the last billing date, among other factors (Note 27).

*(f) Leasing*

The Company has a significant number of lease agreements in which it is the lessee, whereby with the adoption of accounting standard IFRS 16/CPC 06(R2) – Leasing, as disclosed in Note 2.f., the Company's Management made certain judgments when measuring the lease liability and the right-of-use assets, such as: (i) an estimation of the lease term, considering a non-cancelable period and the periods covered by options to extend the lease term, where such exercise depends only on the Company and is reasonably certain; (ii) use of certain assumptions to calculate the discount rate.

The Company is not able to readily determine the interest rate implicit in the lease and therefore considers its incremental rate on loans to measure lease liabilities. The incremental rate is the interest rate that the Company would have to pay when borrowing, for a similar term and with similar collateral, the resources necessary to obtain the asset with similar value to the asset with similar right of use in a similar economic environment. Therefore, this assessment requires management to consider estimates when no observable rates are available. Or when they need to be adjusted to reflect the terms and conditions of a lease. The Company estimates the incremental rate using observable data (such as market interest rates) when available and considers in this estimate aspects

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that are specific to the Company (such as the cost of the subsidiary's debt). The Company's average incremental rate is 10.55% for an average lease term as described in note 14.

#### 4 Cash and cash equivalents

These are financial assets measured at amortized cost through the effective interest rate method. The Company's Management determines the classification of its financial assets upon initial recognition.

	Parent Company		Consolidated	
	12/2019	12/2018	12/2019	12/2018
Cash and banks	61	167	101,928	93,960
Unrestrictedly available financial investments:				
CDBs/Repurchases	701	-	2,182,882	981,570
	<u>762</u>	<u>167</u>	<u>2,284,810</u>	<u>1,075,530</u>

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 during 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 on the Company's investments in CBDs and Repurchases is 99.95% (100.27% at December 31, 2018) of the Interbank Deposit Certificate ("CDI") rate.

#### 5 Marketable securities

	Consolidated	
	12/2019	12/2018
FUNCINE (3)	3,849	5,229
Fundo Soberano (4)	7,329	14,472
FIC: (1)		
Government securities	179,390	292,708
Repo transactions (2)	216,196	289,352
Financial bills	105,857	96,868
Other (5)	145,707	91,441
	<u>658,328</u>	<u>790,070</u>
Current portion	(654,479)	(784,841)
Non-current portion	3,849	5,229

(<sup>1</sup>) In August 2017, the Company invested in open-ended Investment Funds in Units ("FICs"). The Funds are mostly made up of government securities and instruments of first-tier financial institutions. In 2019, the average yield of FICs was 99.67% (100.81 % as in December 31, 2018) of the variation of the CDI rate.

(<sup>2</sup>) "Repo transactions" are securities issued by banks with a commitment to repurchase within one

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day at pre-established rates. These repo transactions are backed by federal government bonds and are used by the fund with the purpose of remunerating the capital available in cash.

(<sup>3</sup>) In December 2017, in order to use the tax benefit of deductibility for income and social contribution tax purposes the Company invested the amount of R\$3 million in the National Film Industry Financing Fund (“FUNCINE”). In 2018, the Company opted to make new investments in FUNCINE in the months of October and December in the total amount of R\$2.4 million. In June 2019, the Company made new investments in the amount of R\$2.2 million. The average remuneration in 2019 of FUNCINE was 9.18%.

(<sup>4</sup>) “Fundo Soberano” includes federal securities only. The average remuneration in 2019 was 97.62% of the variation of the CDI rate.

(<sup>5</sup>) Represented by: Debentures, FIDC, Trade Bills, Promissory Notes, Bank Credit Notes.

The parent company has R\$12,167 invested in FIC units (R\$13,378 as of December 31, 2018).

## 6 Trade accounts receivable

These are financial assets measured at amortized cost, and refer to accounts receivable from users of telecommunications services, from network use (interconnection) and from sales 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 provision for expected credit losses (“impairment”).

The provision for expected credit losses was recognized as a reduction in accounts receivable based on the profile of the subscriber portfolio, the aging of overdue accounts receivable, the economic situation, the risks involved in each case and the collection curve, at an amount deemed sufficient by Management, as adjusted to reflect current and prospective information on macroeconomic factors that affect the customers’ ability to settle the receivables.

The fair value of trade accounts receivable equals the carrying value recorded as at December 31, 2019 and 2018. A portion of the accounts receivable from clients is used to secure the total amount of BNDES borrowing (Note 20).

	<b>Consolidated</b>	
	<b>12/2019</b>	<b>12/2018</b>
<b>Trade accounts receivable</b>	3,287,855	2,969,116
Gross accounts receivable	4,061,932	3,656,044
Billed services	2,076,569	1,733,229
Unbilled services	858,418	774,484
Network use (interconnection)	438,168	455,228
Sale of goods	670,573	691,312
Contractual asset (note 23)	15,142	130
Other accounts receivable	3,062	1,661
Provision for expected credit losses	(774,077)	(686,928)

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Current portion	(3,184,780)	(2,838,808)
Non-current portion	103,075	130,308

The non-current portion includes the amount of R\$68.639 (R\$102.960 on December 31, 2018) related to accounts receivable from other telephone carriers, recorded at present value considering the period and implicit interest rate in the transaction.

Change in provision for expected credit losses, recorded as an asset reducing account, were as follows:

	<b>12/2019</b>	<b>Consolidated 12/2018</b>
Opening balance	686,928	464,745
Setup of provision (note 28)	748,291	544,881
Impact of adopting IFRS 9 / CPC 48	-	130,137
Write-off of provision	(661,142)	(452,835)
Final Balance	774,077	686,928

The aging of accounts receivable is as follows:

	<b>12/2019</b>	<b>Consolidated 12/2018</b>
<b>Total</b>	<b>4,061,932</b>	<b>3,656,044</b>
Falling due	2,576,307	2,459,315
Overdue up to 30 days	328,457	308,744
Overdue up to 60 days	146,200	144,309
Overdue up to 90 days	149,852	117,759
Invoices overdue more than 90 days	861,116	625,917

## 7 Inventory

Inventories are stated at average acquisition cost. A loss is recognized to adjust the cost of handsets and accessories to their net realizable value (selling price) when this amount is less than the average acquisition cost.

	<b>12/2019</b>	<b>Consolidated 12/2018</b>
<b>Total inventories</b>	<b>203,278</b>	<b>183,059</b>
Inventory	214,889	189,826
Mobile handsets and tablets	146,295	145,819
Accessories and prepaid cards	61,436	33,621
TIM chips	7,158	10,386
Losses on adjustment to realizable amount	(11,611)	(6,767)

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**8. Indirect taxes, charges and contributions recoverable**

	<b>Consolidated</b>	
	<b>12/2019</b>	<b>12/2018</b>
<b>Indirect taxes, charges and contributions recoverable</b>	1,243,633	1,192,765
ICMS	1,201,502	1,152,741
Others	42,131	40,024
Current portion	(420,284)	(280,254)
Non-current portion	823,349	912,511

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 telecommunication services (credits divided over 48 months), and (ii) ICMS amounts paid under the tax substitution regime from goods acquired for resale, mainly mobile handsets, chips, tablets and modems sold by TIM.

**9. Direct taxes, charges and contributions recoverable**

	<b>Parent Company</b>		<b>Consolidated</b>	
	<b>12/2019</b>	<b>12/2018</b>	<b>12/2019</b>	<b>12/2018</b>
<b>Indirect taxes, charges and contributions</b>	28,383	45,278	3,762,800	905,521
Income tax (IR) and social contribution (CS) (i)	-	-	428,443	414,408
PIS / COFINS (ii)	-	-	3,244,549	384,093
Others	28,383	45,278	89,808	107,020
Current portion	(28,383)	(45,278)	(1,395,193)	(347,505)
Non-current portion	-	-	2,367,607	558,016

i) The amounts corresponding to income and social contribution taxes are substantially related to: (a) advances made over the period during which the use will take place at the closing of the current year and any balances in the next year; and (b) other income and social contribution tax credits from previous years whose current estimated period of use will be more than 12 months later.

(ii) The PIS/COFINS amounts recoverable mainly refer to credits from a legal proceedings filed by TIM Celular S.A. (ultimately merged into TIM S.A., as well as TIM S.A. itself, with a favorable final decision in Higher Courts which discussed the exclusion of the ICMS from the PIS and COFINS tax bases. According to the Company's internal evaluation, we expect to use such credits within the statute of limitations of up to 5 years.

In March 2017, the Federal Supreme Court ("STF") recognized the unconstitutionality of including ICMS amounts in the calculation base of PIS and COFINS contributions. TIM S.A. (previously named "Intelig Telecomunicações Ltda."), as the surviving company from the merger of TIM Celular S.A. and other entities existing in the Group in the past, which had filed proceedings of the same nature), has

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been challenging this issue in court since 2006, with effects retroactive to five years, as permitted by the legislation.

In June 2019, by reason of a final and without appeal decision and calculation of values, the amount of R\$2,875 million was recorded, being R\$1,720 million of which corresponds to the principal, and R\$1,155 million to monetary adjustments (amounts relating to TIM Celular S.A., which merged into TIM S.A. in October 2018).

In September 2019, because a final, non-appealable judgment was entered and amounts were awarded, the amount of R\$148 million was recorded, of which R\$75 million corresponds to the principal, and R\$73 million to monetary adjustments, and such amounts being related to TIM S.A. itself (when it still did business under the name Intelig Telecomunicações Ltda.).

The amount recorded are updated monthly at the interest rate equivalent to the reference rate of the Special Settlement and Custody System (Selic), available on the website of the Brazilian Federal Revenue.

#### **10. Deferred income tax and social contribution**

Deferred income tax and social contribution are recognized on: (1) accumulated income tax carried forward losses and negative basis of social contribution, 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 forecasts prepared by the Company, examined by the Supervisory Board and Statutory Audit Committee and approved by other Management bodies, indicate 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 the 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, not at their net amounts.

As at December 31, 2019 and 2018, the prevailing tax rates were 25% for income tax and 9% for social contribution. In addition, there is no statute of limitation in regard to the income tax and social contribution carried forward losses, which it can be offset by up to 30% of the taxable profit reached at each fiscal year, according to the current tax legislation.

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The amounts recorded are as follows:

	Parent Company		Consolidated	
	12/2019	12/2018	12/2019	12/2018
Losses carried forward – income tax and social contribution	-	-	800,711	896,100
Temporary differences:				
Provision for legal and administrative proceedings	18,931	3,345	295,853	293,349
Losses from doubtful accounts	-	-	271,611	244,428
Adjustments to present value – 3G license	-	-	7,182	9,124
Deferred income tax on accounting adjustments	53,569	53,569	56,208	58,268
Lease of LT Amazonas infrastructure	-	-	27,434	24,978
Profit sharing	165	624	23,704	22,181
Taxes with suspended enforceability	-	-	12,872	12,872
Amortized goodwill – TIM Fiber	-	-	(370,494)	(370,494)
Derivative financial instruments	-	-	(13,139)	(22,551)
Capitalized interest on 4G authorization	-	-	(291,783)	(301,525)
Deemed costs – TIM S.A.	-	-	(67,748)	(82,042)
Exclusion of ICMS from PIS and COFINS calculation bases	-	-	(1,023,928)	-
IFRS16 Lease			209,234	-
Other	-	-	87,214	74,821
	72,665	57,538	24,931	859,509
Unrecognized deferred income tax and social contribution Taxes with suspended enforceability	(72,665)	(57,538)	(72,665)	(57,538)
	-	-	(47,734)	801,971
Deferred tax assets portion	-	-	-	801,971
Deferred tax liabilities portion	-	-	(47,734)	-

**TIM S.A.**

As previously communicated to the market, TIM Celular S.A. merged into TIM S.A. (previously named “Intelig Telecomunicações Ltda.”) on October 31, 2018 with the main objective of reducing the operating costs of the companies involved, creating synergies and enabling the achievement of the corporate purposes of the two companies. Thus, after the merger, tax credits may also arise from tax losses and negative social contribution base on the income of TIM S.A., considering that the latter, based on the consolidated results of TIM Celular after the said merger, estimates that the taxable income will be sufficient to use the said deferred credits.

On September 30, 2018 the Company recorded total deferred tax assets of R\$952,368 arising from amounts that may be used as tax losses (R\$702,619) and the negative base of social contribution on income (R\$249,749), since all of the factors required for the merger were controlled by Management, such as: (i) the feasibility studies regarding the use of tax benefits was completed and approved by the Company’s governance bodies, as provided for in CVM 371/02; (ii) definition of the actual corporate restructuring schedule upon the merger; (iii) obtaining of approvals and/or consent of third parties (ANATEL and BNDES) by the Company, among other factors.

Due to the final unappealable decision issued by the Higher Courts in favor of TIM Celular S.A. (absorbed by TIM S.A.) in the action that discussed the exclusion of the ICMS from the base of calculation of PIS and COFINS contributions, a tax credit of R\$2,875.5 million (R\$ 2,862.7 million in December 31, 2019), including the principal amount and monetary adjustments, was recognized in the accounts in June 2019.

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In September 2019, due to a final unappealable decision and calculation of amounts, the amount of R\$148 million (R\$ 149 million in December 31, 2019), was recorded relating to TIM S.A.

For purposes of IRPJ and CSLL taxation, the Company's management, supported by the legal opinions of external counsels, decided to defer it until the moment that the credit is financially available. Thus, a deferred tax liability was recorded regarding the full amount of R\$1,039.7 million.

Expectation of recovery of tax credits

The estimates regarding the recovery of tax assets were calculated taking into account the financial and business assumptions available at the close of the tax year of 2019.

Based on these projections, the Company expects to recover the credits as follows:

	<b>Deferred income tax and social contribution</b>
2020	229,151
2021	275,425
2022	296,135
2023	-
Tax losses and negative base	800,711
Temporary differences	(848,445)
<b>Total</b>	<b>(47,734)</b>

The subsidiary has set up deferred income and social contribution tax credits on its total tax losses, negative basis of social contribution and temporary differences, based on the history of profitability and projected future taxable earnings.

The subsidiary used credits related to tax losses carried forward and the negative basis of social contribution in the amount of R\$91,731 for the period ended December 31, 2019 (R\$85,812 on December 31, 2018).

Unrecognized deferred tax assets

Considering that TIM Participações S.A. does not carry out activities that could generate taxable profits, deferred tax credits arising from income tax and social contribution tax losses and temporary differences, totaling R\$125,876 as at December 31, 2019 (R\$107,092 on December 31, 2018) were not recognized.

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**11. Prepaid expenses**

	<u>12/2019</u>	<u>Consolidated 12/2018</u>
	245,524	346,441
Advertising not released (1)	854	76,651
Rentals and insurance	75,809	78,005
Network Swap (2)	-	11,449
Incremental costs for obtaining customer contracts (3)	158,093	173,056
Others	10,768	7,280
Current portion	(175,868)	(272,060)
Non-current portion	69,656	74,381

(1) Represents the early payment of expenses from the advertising of TIM brand's products and services, which were recognized in income for the period during which the advertising was broadcast.

(2) On April 1, 2010, the subsidiary TIM S.A. and GVT entered into an onerous contract and a reciprocal agreement for the assignment of fiber optic infrastructure (network swap), in order to expand their respective areas of operation. Given the economic nature of the transaction, the amount was recognized in the (current and non-current) prepaid expenses and deferred revenue (current and non-current) and is amortized to income according to the contract's term. This contract is within the scope of IFRS 16/CPC 06 (02). Therefore, it was reclassified to right-of-use in leases under property, plant and equipment, as shown in Note 2.f.

(3) This is mainly represented by incremental costs related to sales commissions paid to sales agents in order to obtain customer contracts arising from the adoption of IFRS 15/ CPC 47, which are deferred to income according to the term and/or economic benefit of the contract, which is usually two years.

**12. Judicial deposits**

These are recorded at their historical costs and updated according to the legislation in force:

	<u>Parent Company</u>		<u>Consolidated</u>	
	<u>12/2019</u>	<u>12/2018</u>	<u>12/2019</u>	<u>12/2018</u>
	87,049	131,270	1,006,899	1,345,113
Civil	7,203	4,546	355,093	334,028
Labor	38,238	106,335	245,928	492,000
Tributary	1,828	1,763	203,110	299,310
Regulatory	-	-	111	111
Online attachment (*)	39,780	18,626	202,657	219,664

(\*) Refers to blocked judicial deposits directly on the Company's bank accounts and financial investments related to certain judicial proceedings. This amount is analyzed periodically and, when identified, is reclassified to one of the other specific accounts of judicial deposits.

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Civil

These are court deposits to guarantee 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 of consumer rights, among others.

There are some legal proceedings challenging the amounts fixed by ANATEL to leave certain transmission sub-bands to allow the implementation of 4G technology. In this case, the updated court deposit amounted to R\$69,326 (R\$66,700 as at December 31, 2018).

Labor

These are amounts deposited in court as guarantees for the execution and the filing of appropriate appeals, where the relevant matters or amounts involved are still being discussed. The total amount has been allocated between the various claims filed by registered employees and third-party service providers.

The reduction is substantially due to the closure of several court cases offset by the corresponding court deposits.

Tax

The Company and its subsidiary have made court deposits related to various current tax court proceedings. These deposits refer mainly to the following matters:

- (i) Use of credit for the purchase of electricity used directly by the companies for production purposes. The court is likely to give a favorable judgment. The current value of these deposits is R\$73,326 (R\$74,358 as at December 31, 2018).
- (ii) Liability for CPMF on the Company's capitalization of loans; recognition of the right not to pay contributions allegedly due on mere changes in the ownership of current accounts as a result of a takeover. The current value of these deposits is R\$10,342 (R\$10,026 as at December 31, 2018).
- (iii) Constitutionality of the collection of the Operations Monitoring Charge ("TFF") by a number of municipal authorities. The current value of these deposits is R\$18,401 (R\$16,719 as at December 31, 2018).
- (iv) 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. The current value of these deposits is R\$11,173 (R\$10,868 as at December 31, 2018).
- (v) Liability for ISS (Tax on Services) on import services and outsourced services; alleged failure to pay for land clearance and Base Transceiver Station ("BTS") maintenance services, for ISS on the Company's services and for ISS on co-billing services and software licensing (Blackberry). The Company's right is to take advantage of the benefit of spontaneous declaration in order to reverse confiscatory fines for late payment. The current value of these deposits is R\$7,878 (R\$7,519 as at December 31, 2018).

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- (vi) Ancillary services provided for in ICMS Agreement 69/98 related to ICMS levied on amounts related to communications services charged for access, subscription, activation, habilitation availability, subscription and use of services, among others. The current value of these deposits is R\$3,457 (R\$4,793 as at December 31, 2018).
- (vii) Requirement by ANATEL of the Public Price Referring to the Administration of Numbering Resources. The current value of these deposits is R\$3,471 (R\$3,380 as at December 31, 2018).
- (viii) 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 interconnection and Industrial Exploration of Dedicated Line (“EILD”) revenue, 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\$57,943 (R\$56,088 as at December 31, 2018).

### 13 Investment – Parent Company

The equity interest in the subsidiary is valued using the equity method only in the individual financial statements.

(a) Interest in subsidiary

	Consolidated	
	12/2019	12/2018
	TIM S.A	TIM S.A
Number of shares held	42,296,789,606	42,296,789,606
Interest in total capital	100%	100%
Shareholders' equity	22,209,626	19,526,515
Net income for the year	3,865,255	2,672,647
Equity in income from subsidiaries	3,865,255	2,672,647
Investment amount	22,209,626	19,526,515

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(b) Changes in investments in subsidiaries

	TIM Celular	TIM S.A	Total
Balance of investment as at December 31, 2017	16,724,656	1,231,926	17,956,582
Income from equity accounting	-	2,672,647	2,672,647
TIM Celular merger effect (note 1)	(16,724,656)	16,724,656	-
Stock options	-	3,170	3,170
Retirement complement	-	(142)	(142)
Interest on equity	-	(953,795)	(953,795)
Supplementary dividends	-	(89,828)	(89,828)
Impact from initial adoption of the new accounting standards		(62,119)	(62,119)
Balance of investments as at December 31, 2018	-	19,526,515	19,526,515
Income from equity accounting	-	3,865,255	3,865,255
Stock options	-	2,791	2,791
Retirement complement	-	(1,935)	(1,935)
Interest on equity	-	(1,183,000)	(1,183,000)
Balance of investments as at December 31, 2019	-	22,209,626	22,209,626

As of December 31, 2019, the Company (parent company) has a receivable balance of interest on equity and minimum mandatory dividends in the amount of R\$597,550 (R\$362,436 in 2018), and the settlement thereof is expected to take place in the beginning of the next year.

#### 14 Property, plant and equipment

Property, plant and equipment are stated at 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. At December 31, 2019 and 2018 the Company has no indication of impairment in its fixed assets.

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 the liability “provision for future asset retirement”. Interest incurred on updating the provision is classified within financial expenses.

Gains and losses on disposal are determined by comparing the amounts of these disposals with the carrying values at the time of the transaction and are recognized in “other operating expenses (revenue), net” in the statement of income.

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(a) Changes in property, plant and equipment

	Balance for Dec/18	Adoption of IFRS 16/ CPC 06 (R2)	Additions	Disposals	Transfers	Other changes (*)	Balance for Dec/19
<b>Total cost of property, plant and equipment, gross</b>	33,832,803	5,256,114	4,855,684	(183,384)	-	(408,118)	43,353,099
Commutation/transmission equipment	20,806,249	-	17,662	(133,789)	2,121,907	-	22,812,029
Fiber optic cables	762,175	-	-	-	51,414	-	813,589
Leased handsets	2,313,945	-	519	(20,194)	195,725	-	2,489,995
Infrastructure (i)	6,133,810	-	-	(18,684)	294,851	(313,130)	6,096,847
Informatics assets	1,679,328	-	-	(9,366)	51,289	-	1,721,251
General use assets	796,839	-	-	(623)	63,289	-	859,505
Rights-of-use in leases (ii) (Note 2.f)	-	5,256,114	1,772,290	-	-	(94,988)	6,933,416
Land	40,794	-	-	-	-	-	40,794
Construction in progress	1,299,663	-	3,065,213	(728)	(2,778,475)	-	1,585,673
<b>Total of Accumulated depreciation</b>	(22,629,181)	-	(3,262,726)	150,972	-	-	(25,740,935)
Commutation/transmission	(14,936,069)	-	(1,577,490)	129,998	-	-	(16,383,561)
Fiber optic cables	(345,532)	-	(65,035)	-	-	-	(410,567)
Leased handsets	(2,132,227)	-	(131,341)	6,705	-	-	(2,256,863)
Infrastructure (i)	(3,157,890)	-	(440,224)	4,281	-	-	(3,593,833)
Informatics assets	(1,512,114)	-	(62,561)	9,366	-	-	(1,565,309)
General use assets	(545,349)	-	(45,931)	622	-	-	(590,658)
Right-of-use in leases (ii) (Note 2.f)	-	-	(940,144)	-	-	-	(940,144)
<b>Total property, plant and equipment, net</b>	11,203,622	5,256,114	1,592,958	(32,412)	-	(408,118)	17,612,164
Commutation/transmission	5,870,180	-	(1,559,828)	(3,791)	2,121,907	-	6,428,468
Fiber optic cables	416,643	-	(65,035)	-	51,414	-	403,022
Leased handsets	181,718	-	(130,822)	(13,489)	195,725	-	233,132
Infrastructure (i)	2,975,920	-	(440,224)	(14,403)	294,851	(313,130)	2,503,014
Informatics assets	167,214	-	(62,561)	-	51,289	-	155,942
General use assets	251,490	-	(45,931)	(1)	63,289	-	268,847
Rights-of-use in leases (ii) (Note 2.f)	-	5,256,114	832,146	-	-	(94,988)	5,993,272
Land	40,794	-	-	-	-	-	40,794
Construction in progress	1,299,663	-	3,065,213	(728)	(2,778,475)	-	1,585,673

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	Balance for Dec/17	Additions/ Depreciation	Disposals	Transfers	Consolidated Balance for Dec/18
<b>Total cost of property, plant and equipment, gross</b>	31,166,905	2,746,039	(80,141)	-	33,832,803
Commutation/transmission equipment	18,766,840	8,974	(48,203)	2,078,638	20,806,249
Fiber optic cables	683,971	20	-	78,184	762,175
Leased handsets	2,181,630	-	(15,675)	147,990	2,313,945
Infrastructure	5,652,840	678	(4,562)	484,854	6,133,810
Informatics assets	1,615,325	9	(9,511)	73,505	1,679,328
General use assets	739,439	286	(2,018)	59,132	796,839
Land	40,794	-	-	-	40,794
Construction in progress	1,486,066	2,736,072	(172)	(2,922,303)	1,299,663
<b>Total Accumulated depreciation</b>	(20,328,417)	(2,371,362)	70,598	-	(22,629,181)
Commutation/transmission equipment	(13,373,003)	(1,610,326)	47,260	-	(14,936,069)
Fiber optic cables	(290,699)	(54,833)	-	-	(345,532)
Leased handsets	(2,016,018)	(124,709)	8,500	-	(2,132,227)
Infrastructure	(2,697,878)	(463,856)	3,844	-	(3,157,890)
Informatics assets	(1,448,694)	(72,885)	9,465	-	(1,512,114)
General use assets	(502,125)	(44,753)	1,529	-	(545,349)
<b>Total property, plant and equipment, net</b>	10,838,488	374,677	(9,543)	-	11,203,622
Commutation/transmission equipment	5,393,837	(1,601,352)	(943)	2,078,638	5,870,180
Fiber optic cables	393,272	(54,813)	-	78,184	416,643
Leased handsets	165,612	(124,709)	(7,175)	147,990	181,718
Infrastructure	2,954,962	(463,178)	(718)	484,854	2,975,920
Informatics assets	166,631	(72,876)	(46)	73,505	167,214
General use assets	237,314	(44,467)	(489)	59,132	251,490
Land	40,794	-	-	-	40,794
Construction in progress	1,486,066	2,736,072	(172)	(2,922,303)	1,299,663

The construction in progress represent the cost of projects in progress related to the construction of networks and/or other tangible assets in the period of their construction and installation, until the moment they come into operation, when they will be transferred to the corresponding accounts of these assets.

(\*) Other changes include:

- (i) In 2019, the "Sale of Towers (leaseback)" lease had its value remeasured for better alignment with the methodology of the new IFRS 16 / CPC 06 rule (R2), based on paragraph C11 of this new pronouncement and removed the projected inflation component on future receipts, in the amount of R\$ 313,130.
- (ii) In the fourth quarter of 2019, the Company implemented a new tool that allowed Management to control and calculate in an automated manner the accounting effects arising from lease agreements. Through this new tool, it was possible to identify adjustments in the amount of R\$94,988 of these assets (note 2).

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	Lease operation - network	Lease operation - vehicles	Lease operation - Stores & kiosks	Lease operation - Property	Lease operation - Land (Network)	Total
<b>Balances as at January 01, 2019</b>	2,625,145	6,792	375,286	1,540,685	708,206	5,256,114
Additions in the period, net of cancellation Remensuration	928,682	5,045	191,597	322,067	324,899	1,772,290
Depreciation	(387,526)	(4,349)	(93,306)	(183,872)	(271,091)	(940,144)
<b>Balances as at December 31, 2019</b>	3,172,142	6,988	479,472	1,539,913	794,757	5,993,272
Useful Life - %	10.98	44.81	21.04	11.97	31.25	

In the fourth quarter of 2019, the Company implemented a new tool that allowed Management to control and calculate in an automated manner the accounting effects arising from lease agreements. Therefore, this new tool allowed Management to make individualized calculations, both in relation to the measurement of the effects of assets and liabilities of leases, and also in relation to the monthly calculation of depreciation and interest that affect the result, which prior to the implementation of this new tool were made considering an average depreciation term and discount rate for each asset class (for example: land and infrastructure sharing).

Therefore, through this new tool, it was possible to re-measure the depreciation and amortization accounts, financial income (expenses) and, consequently, income tax and social contribution resulting from the individualized calculations that were made.

(b) Depreciation rates

	Annual Rate %
Commutation/transmission equipment	8 to 14.29
Fiber optic cables	4 to 10
Leased assets	14.28 to 50
Infrastructure	4 to 20
Informatic assets	10 to 20
General use assets	10 to 20

In 2019, pursuant to IAS 16 / CPC 27, approved by a CVM Deliberation, the Company and its subsidiaries assessed the useful life estimates for their property, plant and equipment, concluding that there were no significant changes or alterations to the circumstances on which the estimates were based that would justify changes to the useful lives currently in use.

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**15. 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) the purchase of the right to use the infrastructure of other companies, and (ii) goodwill on expectation of future profits in purchases of companies.

Amortization charges are calculated using the straight-line method over the estimated useful life of the assets contracted and over the terms of the authorizations. The useful life estimates of intangible assets are reviewed regularly.

Any financial charges on funds raised (that is, without a specific destination) and used to obtain a qualifying asset, meaning an asset that requires 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 to the entity and such costs can be accurately measured. These costs are amortized throughout the estimated useful lives of the assets. As at December 31, 2019 and 2018, the Company has no indication of impairment in its intangible assets of defined and indefinite useful life.

The amounts of the SMP authorizations and rights to use radio frequencies, as well as software, goodwill and other items, were recorded as follows:

(a) Changes in intangibles

	Consolidated				
	Balance for Dec/18	Additions/ Amortization	Transfers	Other Changes (g)	Balance for Dec/19
<b>Total cost of intangible assets, gross</b>	29,366,779	961,213	-	(98,633)	30,229,359
Right to use software	17,142,641	-	1,041,741	-	18,184,382
Authorizations	7,638,970	26,968	2,255,625	(109,770)	9,811,793
Goodwill	1,527,219	-	-	-	1,527,219
Right to use infrastructure - LT Amazonas	198,202	-	-	(28,874)	169,328
Other assets	307,654	-	19,708	-	327,362
Intangible assets under development	2,552,093	934,245	(3,317,074)	40,011	209,275
<b>Accumulated amortization</b>	(18,684,775)	(1,876,258)	-	-	(20,561,033)
Right to use software	(13,681,086)	(1,412,080)	-	-	(15,093,166)
Authorizations	(4,845,642)	(432,771)	-	-	(5,278,413)
Right to use infrastructure - LT Amazonas	(52,441)	(7,763)	-	-	(60,204)
Other assets	(105,606)	(23,644)	-	-	(129,250)
<b>Total intangible assets, net</b>	10,682,004	(915,045)	-	(98,633)	9,668,326
Right to use software (c)	3,461,555	(1,412,080)	1,041,741	-	3,091,216
Authorizations	2,793,328	(405,803)	2,255,625	(109,770)	4,533,380
Goodwill (d)	1,527,219	-	-	-	1,527,219
Right to use infrastructure - LT Amazonas (e)	145,761	(7,763)	-	(28,874)	109,124
Other assets	202,048	(23,644)	19,708	-	198,112
Intangible assets under development (f)	2,552,093	934,245	(3,317,074)	40,011	209,275

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	Consolidated					Balance for Dec/18
	Balance Dec/17	Additions/ Amortization	Transfers	Disposals	Capitalized interest	
<b>Total cost of intangible assets, gross</b>	28,549,552	1,139,993	(479,811)	(1,270)	158,315	29,366,779
Right to use software	15,957,808	-	1,186,103	(1,270)	-	17,142,641
Authorizations	6,391,394	94,148	1,153,428	-	-	7,638,970
Goodwill	1,527,219	-	-	-	-	1,527,219
Costs with commissions to deferred sales representatives	384,455	-	(384,455)	-	-	-
List of clients	95,200	-	(95,200)	-	-	-
Right to use infrastructure - LT Amazonas	198,202	-	-	-	-	198,202
Other assets	270,687	-	36,967	-	-	307,654
Intangible assets under development	3,724,587	1,045,845	(2,376,654)	-	158,315	2,552,093
<b>Accumulated amortization</b>	(17,237,025)	(1,799,914)	350,894	1,270	-	(18,684,775)
Right to use software	(12,265,391)	(1,416,965)	-	1,270	-	(13,681,086)
Authorizations	(4,497,758)	(347,884)	-	-	-	(4,845,642)
Costs with commissions to deferred sales representatives	(255,694)	-	255,694	-	-	-
List of clients	(95,200)	-	95,200	-	-	-
Right to use infrastructure - LT Amazonas	(42,531)	(9,910)	-	-	-	(52,441)
Other assets	(80,451)	(25,155)	-	-	-	(105,606)
<b>Total intangible assets, net</b>	11,312,527	(659,921)	(128,917)	-	158,315	10,682,004
Right to use software (c)	3,692,417	(1,416,965)	1,186,103	-	-	3,461,555
Authorizations	1,893,636	(253,736)	1,153,428	-	-	2,793,328
Goodwill (d)	1,527,219	-	-	-	-	1,527,219
Costs with commissions to deferred sales representatives (Note 11.3)	128,761	-	(128,761)	-	-	-
Right to use infrastructure - LT Amazonas (e)	155,671	(9,910)	-	-	-	145,761
Other assets	190,236	(25,155)	36,967	-	-	202,048
Intangible assets under development (f)	3,724,587	1,045,845	(2,376,654)	-	158,315	2,552,093

Intangible assets under development represents the cost of projects in progress related to the acquisition of 4G authorizations and/or other intangible assets during the period of their construction and installation, up to the moment when they enter into operation, whereupon they will be transferred to the corresponding accounts for these assets. In addition, these intangible assets were assessed for impairment as at December 31, 2019 and 2018, with no necessary adjustment.

(b) Amortization rates

	Annual rate %
Right to use software	20
Authorizations	5 to 50
Right to use infrastructure	5
Other assets	7 to 10

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(c) Right to use software

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 controlled by the Group are recognized as intangible assets when all 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 subsidiary have the following goodwill based on expectations of future profitability as at December 31, 2019 and 2018:

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 based on the subsidiary's expected profitability. The recoverability of goodwill is tested annually through impairment testing.

Goodwill from TIM Fiber SP and TIM Fiber RJ acquisitions - At the end of 2011, the subsidiary acquired 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 in 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 the subsidiary TIM S.A. on August 29, 2012.

The subsidiary recorded the goodwill allocation related to the purchase of the companies TIM Fiber SP and TIM Fiber RJ, at the end of the purchase price allocation process, in the amount of R\$1,159,648.

Goodwill from 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.

Impairment test

As required by the accounting standards, the Company tests goodwill on business combinations involving TIM Group companies annually for impairment, and the methods and assumptions used by Management in the impairment testing of goodwill mentioned above are summarized below:

The Company's Management understands that the smaller cash generating units, for the purposes of testing the impairment of goodwill on the purchase of the aforementioned companies, refer to the business at a consolidated level, and therefore should be assessed at the level of TIM Participações. This methodology is aligned with the strategic direction of the Company and its subsidiary.

In 2019 the impairment test was performed comparing the carrying amount with the fair value less the costs of disposal of the asset, as provided in IAS 36 / CPC 01.

The fair value calculation considered the hierarchy level within which the fair value measurement of the asset (cash generating unit) is classified. For TIM Participações as there is only one CGU this was

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classified in its entirety as Level 1, for the disposal costs we consider that it is irrelevant considering the variation between the fair value level 1 and the carrying amount of the cash generating unit.

The fair value of Level 1 instruments comprises instruments traded in active markets and based on quoted market prices at the balance sheet date. A market is viewed as active if quoted prices are readily and regularly available from an exchange, distributor, broker, industry group, pricing service or regulatory agency, and those prices represent actual and regularly occurring market transactions on a purely commercial basis.

In the case of TIM Participações, its securities are traded on BOVESPA with a code (TIMP3) and have a regular trading volume that allows the measurement (Level 1) as the product between the quoted price for the individual asset or liability and the quantity held by the entity.

The measurement was made based on the share value on the balance sheet date and sensitivity tests were also performed and in none of the scenarios was identified any indication of impairment, with the fair value being higher than the carrying amount. Therefore, as the fair value is higher than the carrying amount, it is not necessary to calculate the value in use.

(e) Infrastructure use rights - LT Amazonas

The subsidiary signed agreements for the right to use the infrastructure of companies that operate electric power transmission lines in Northern Brazil. Such agreements fell within the scope of IFRIC 4 / ICPC 3 and are classified as financial leases.

Additionally, the subsidiary entered into network infrastructure sharing contracts with Telefônica Brasil S.A. also in the Northern region. In these contracts, both operators optimize resources and reduce their operational costs (Note 16).

(f) Auction and payment of 4G License 700 MHz

In 2018 the Intangible assets in progress are substantially represented by costs for the development of 4G technology, which included: (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, the subsidiary purchased Lot 2 in the Auction of the 700 MHz band in the amount of R\$1,739 million. In December 2014, the Company made the payment of R\$ 1,678 million, recording the remaining balance payable in the amount of R\$ 61 million as a liability (note 19), as provided for in the announcement.

The subsidiary is challenging the remaining balance with ANATEL, which is subject to interest rates of 1% p.m. and monetary adjustment at the IGP-DI. These amounts are capitalized by the Company. The impact for the tax year ended December 31, 2019 was R\$1,636 (R\$6,611 on December 31, 2018) of interest and R\$735 (R\$5,930 on December 31, 2018) 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 in relation to the cleaning of the 700 MHz frequency of the lot purchased was R\$904 million. The Company also had an additional cost of R\$295 million related to the portion that has not been bought in the auction, and that was subsequently split by ANATEL among the companies that won the auction, totaling R\$1,199 million.

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In order to perform the spectrum cleaning activities, in March 2015 TIM, together with other companies that won the auction, have constituted a Redistribution and Digitalization Management Entity for TV and RTV Channels, named "*Entidade Administradora da Digitalização*", or "EAD". From 2015 to 2018, TIM, along with the other companies that won the auction, will disburse amounts in accordance with the schedule provided for in the public notice to cover the EAD costs related to these cleaning activities. Because the amount payable of R\$1,199 million relates to a long-term obligation, it was reduced by R\$47 million through an adjustment to Net Present Value ("NPV").

The Company made the payments as at April 9, 2015, January 26, 2017 and January 16, 2018 in the amounts of R\$370,379, R\$858,991 and R\$142,862, respectively.

The license mentioned above relates to the concept of a qualifying asset. Consequently, the finance charges on funds raised without a specific destination, used for the purpose of obtaining a qualifying asset, are capitalized at the average rate of 6.90 % per annum in connection with the borrowing and financing in force during the tax year. The amount capitalized during the tax year ended December 31, 2019 was R\$38,375 (R\$152,480 as at December 31, 2018).

In September 2019, the assets were considered in operation by Management and from this date on, the capitalization of interest and charges on this asset was closed

(g) Other changes

"Other changes" include:

- (i) the remeasurement of amounts of authorizations in accordance with Anatel Resolution 695/18 in the amount of R\$109,770;
- (ii) interest capitalized as a result of the acquisition of the 4G license, in accordance with IAS 23 / CPC 20(R1) in the amount of R\$40,011, since the respective license is an asset that qualifies for interest capitalization.
- (iii) In 2019, the item "Right to use infrastructure - LT Amazonas", had its value remeasured for better alignment with the methodology of the new IFRS 16 / CPC 06 rule (R2), removing the projected inflation component on future receipts, in the amount of R\$28,874.

## **16 Finance leases**

Leases in which the Company, as the lessee, substantially holds 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 leases is taken to income as financial costs over the term of the contract.

The subsidiary 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 lease of the same asset by the purchaser to the seller.

The subsidiary recognized a liability corresponding to the present value of the compulsory minimum installments under the agreement.

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Leases in which the Company, as lessor, substantially transfers the risks and benefits of the ownership to the other party (the lessee) are classified as financial leases. These lease values are transferred from the intangible assets of the Company and are recognized as a lease receivable at the lower of the fair value of the leased item and/or the present value of the receipts provided for in the agreement. Interest related to the lease is taken to income as financial income over the contractual term.

Asset leases are financial assets registered and/or measured at amortized cost.

**Assets**

	<b>Consolidated</b>	
	<b>12/2019</b>	<b>12/2018</b>
LT Amazonas	156,378	208,049
	<u>156,378</u>	<u>208,049</u>
Current portion	(4,931)	(22,491)
Non-current portion	151,447	185,558

**LT Amazonas**

As a result of the agreement entered into with LT Amazonas, the subsidiary entered into network infrastructure sharing agreements with Telefônica Brasil S.A. Under these agreements, the subsidiary and Telefônica Brasil S.A. make joint 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 by IPC-A (Price Index Rate). The consolidated nominal amount of future installments receivable by the subsidiary is R\$316,641 (R\$499,823 on December 31, 2018).

The table below includes the schedule of cash receipts for the agreement currently in force. The amounts represent the cash receipts estimated in the signed agreements and are stated at their nominal amounts. It is worthwhile noting that these balances differ from those shown in the books since, in the case of the latter, the amounts are shown at their present value:

	<b>Nominal amount</b>	<b>Present Value</b>
January 2020 to December 2020	23,206	4,931
January 2021 to December 2024	92,826	58,081
January 2025 onwards	200,609	93,366
	<u>316,641</u>	<u>156,378</u>

The present value of installments receivable is R\$156,379 (R\$208,049 as at December 31, 2018), consisting entirely of principal and estimated as at the date of execution of agreements entered into with the transmission companies, projecting future cash receipts discounted at 12.56% per annum. In 2019, its value was reassessed to better align it with the methodology of the new standard IFRS 16 / CPC 06 (R2), removing the component of projected inflation on future income, in the amount of R\$ 48,991.

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Liabilities

	<b>Consolidated</b>	
	<b>12/2019</b>	<b>12/2018</b>
LT Amazonas (i)	276,233	359,987
Sale of towers (leaseback) (ii)	1,192,596	1,501,695
Other (iv)	115,973	78,392
Subtotal	<u>1,584,802</u>	<u>1,940,074</u>
Other lease operations (Note 2.f) and (iii):		-
Lease- Network	3,294,261	-
Lease - Vehicles	3,005	-
Lease - Stores and kiosks	255,857	-
Lease - Properties	243,921	-
Lease - Land (network)	1,600,456	-
Lease - Fiber	798,568	-
Subtotal (IFRS/CPC 06 (R2))	<u>6,196,068</u>	-
Total	<u>7,780,870</u>	<u>1,940,074</u>
Current portion	<u>(873,068)</u>	<u>(205,048)</u>
Non-current portion	<u>6,907,802</u>	<u>1,735,026</u>

Interest paid in the period ended December 31, 2019 regarding IFRS16 / CPC 06 (R2) amounted to R\$592,323.

Changes to the financial liabilities of lease operations are shown in Note 37.

i) LT Amazonas

The subsidiary executed agreements for the right to use the infrastructure of companies that operate electric power transmission lines in Northern Brazil ("LT Amazonas"). The terms of these agreements are for 20 years, counted from the date on which the assets are ready to operate. The contracts provide for monthly payments to the electric power transmission companies, restated annually at the IPCA.

The table below presents the future payment schedule for the agreements in force. These amounts represent the estimated disbursements under the agreements executed with distributors and are shown at their nominal amounts. These balances differ from those shown in the books since, in the case of the latter, the amounts are shown at present value:

	<b>Nominal amount</b>	<b>Present value</b>
January 2020 to December 2020	44,079	8,451
January 2021 to December 2024	176,315	103,464
January 2025 onwards	<u>381,161</u>	<u>164,318</u>
	<u>601,555</u>	<u>276,233</u>

The consolidated nominal value of future installments due from the subsidiary is R\$601,555. Its present value is R\$276,233, composed entirely of principal and was estimated on the date on which the agreements were signed with the transmission companies by projecting the future payments and

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discounting these at 14.44% per annum. Additionally, the right to use balance of LT Amazonas also includes R\$70,759 related to investments in property, plant and equipment made by the subsidiary and subsequently donated to the electric power transmission companies. These donations are already included in the contract signed by the parties. In 2019, its value was reassessed according to the IFRS 16 / CPC 06 (R2) calculation methodology, removing the component of projected inflation on future payments and maintaining the original discount rate for calculating present value.

ii) Sale and leaseback of Towers

The subsidiary 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 an amount of approximately R\$3 billion, and a Master Lease Agreement (“MLA”) for part of the 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 provide for the towers to be transferred in tranches to ATC, due to the need to meet certain conditions precedent.

In total, 5,873 transfers of towers occurred, being 54, 336 and 5,483 in the years 2017, 2016 and 2015, respectively. This transaction resulted in a sales amount of R\$2,651,247, of which R\$1,088,390 was booked as deferred revenue and will be amortized over the period of the contract (Note 23).

The discount rate used in the transaction was determined on the basis of observable market transactions that the Company (the lessee) would have to pay under a similar lease or loan, as mentioned below.

The table below includes the schedule of payments of the agreement in force in relation to the MLA. The amounts represent the disbursements estimated in the agreement signed with ATC, stated at their nominal amounts. It should be noted that these balances differ from those shown in the books since, in the case of the latter, the amounts are shown at their present values:

	Nominal amount	Present value
January 2020 to December 2020	187,720	32,734
January 2021 to December 2024	750,881	449,470
January 2025 onwards	1,991,762	710,392
	2,930,363	1,192,596

The consolidated nominal amount of the sum of future installments payable by the subsidiary is R\$2,930,363. The present value is R\$1,192,596, consisting entirely of principal. The present value was estimated by projecting future payments discounted at the discount rates used on the transaction date, ranging from 11.01% to 17.08% per annum, and which were determined on the basis of observable market transactions that the Company (the lessee) would have to pay under a similar lease and/or loan. In 2019, its value was reassessed according to the IFRS 16 / CPC 06 (R2) calculation methodology, removing the component of projected inflation on future payments and maintaining the original discount rate for calculating present value.

(iii) Other lease operations

In addition to the lease operations mentioned above, the Company also has lease agreements that qualify within the scope of IFRS16 / CPC 06 (R2).

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The following table shows the payment schedule of those agreements in effect. The amounts represent the estimated disbursements within the agreements signed and are shown at their face value. The balances differ from those shown in the books, since in the latter case the amounts are shown at present value:

	Up to December 2020	January 2021 to December 2024	January 2025 onwards	Nominal amount	Present values
Total other lease operations	1,388,262	4,284,210	3,617,001	9,289,474	6,196,068
Lease operation - network	623,670	2,291,331	2,059,339	4,974,341	3,294,261
Lease operation - vehicles	5,039	2,848	-	7,886	3,005
Lease operation - Stores & kiosks	82,958	174,338	52,426	309,721	255,857
Lease operation - Property	51,317	176,575	156,560	384,452	243,921
Lease operation - Land (Network)	298,389	1,035,594	1,348,676	2,682,660	1,600,456
Lease operation - Fiber	326,889	603,524	-	930,414	798,568

The present value, principal and interest as at December 31, 2019 for the agreements above, was estimated on a monthly basis, based on the average incremental rate of the Company's loans, namely 10.55%.

Lease amounts considered low, or lower than 12 months, recognized in rental expenses amounted to R\$82,110 on December 31, 2019.

(iv) Substantially represented by the financial leases of transmission towers.

## 17. Regulatory credits recoverable

These refer to Fistel credit amounts arising from the reduction of the client base, which may be offset by future changes in the base, or used to reduce future obligations, and are expected to be used toward settlement of the TFF payable to Fistel annually in the month of March.

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**18. Suppliers**

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 practice they are usually recognized at the invoice value.

	Parent Company		Consolidated	
	12/2019	12/2018	12/2019	12/2018
	6,987	11,770	3,923,035	4,323,374
Local currency	6,624	11,490	3,769,298	4,158,599
Suppliers of materials and services (a)	6,624	11,490	3,667,152	4,027,092
Interconnection (b)	-	-	67,396	98,060
Roaming (c)	-	-	441	162
Co-billing (d)	-	-	34,309	33,285
Foreign currency	363	280	153,737	164,775
Suppliers of materials and services (a)	363	280	116,057	137,397
Roaming (c)	-	-	37,680	27,378
Current portion	6,987	11,770	3,923,035	4,323,374

(a) Represent the amounts to be paid to suppliers for acquisitions of materials and for the provision of services relating to tangible and intangible assets or for consumption in 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 area, who are therefore considered visitors to other operator networks.

(d) This refers to calls made by a customer who has used another long-distance operator.

**19. Authorizations payable**

As at December 31, 2019, the Company and its subsidiary had the following commitments to ANATEL:

	Consolidated	
	12/2019	12/2018
Renewal of authorizations (i)	199,363	300,253
Updated ANATEL liability (ii)	126,974	113,547
	326,337	413,800
Current portion	(88,614)	(65,464)
Non-current portion	237,723	348,336

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(i) In order to provide SMP services, the subsidiary obtained radio frequency authorizations for a fixed period, renewable for a further 15 years. The extension of the right-of-use includes the payment of 2% of the net revenue recorded in the regions covered by the authorization that ends every two years. As at December 31, 2019, the subsidiary had balance due related to the renewal of authorizations in the amount of R\$199,363 (R\$300,253 as at December 31, 2018).

(ii) On December 05, 2014 the subsidiary signed an Authorization Instrument for the 700 MHz band and paid an amount equivalent to R\$1,678 million, recording the remaining balance of R\$61 million as a trade liability, according to the payment method provided for in the call notice. Due to the absence of bids for some lots in the Call Notice for the 700 MHz band, the subsidiary, along with other bidders, had to bear a proportion of the costs of these lots. Thus, the EAD was organized, with respect to which the total commitment assumed by the subsidiary was R\$1,199 million. This amount was paid in four installments adjusted by the IGP-DI (Daily General Price Index) (Note 15.f).

As at June 30, 2015, the subsidiary filed a lawsuit challenging a surplus charge of R\$61 million (R\$127 million as at December 31, 2019), which is still pending trial.

The authorizations held on a primary basis by TIM S.A. as at December 31, 2019, as well as their maturity dates, are detailed below:

Authorization instruments	Maturity date						
	450 MHz	800 MHz, 900 MHz and 1,800 MHz	Additional frequencies 1,800 MHz	1,900 MHz and 2,100 MHz (3G)	2,500 MHz V1 Band (4G)	2,500 MHz (P** Band (4G)	700 MHz (4G)
Amapá, Roraima, Pará, Amazonas and Maranhão	-	March, 2031*	April, 2023	April, 2023	October, 2027	Part of AR92 (PA) – February, 2024*	December, 2029
Rio de Janeiro and Espírito Santo	October, 2027	March, 2031*	ES - April, 2023	April, 2023	October, 2027	Part of AR21 (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 of Londrina and Tamarana)	October, 2027	September, 2022*	April, 2023	April, 2023	October, 2027	AR41, except Curitiba and Metropolitan Region - February, 2024*	December, 2029
						AR41, Curitiba and Metropolitan Region - July, 2031	
Santa Catarina	October, 2027	September, 2023*	April, 2023	April, 2023	October, 2027	-	December, 2029

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Municipality and region of Pelotas, in the State of Rio Grande do Sul	-	April, 2024*	-	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 the 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, and therefore TIM is not entitled to a further renewal period.

\*\* Only complementary areas in some specific States.

## 20 Borrowing and financing

These are recorded as financial liabilities measured at amortized cost, being represented by non-derivative financial liabilities that are not usually traded before maturity.

They are initially recognized at fair value, and subsequently measured based on the effective interest rate method. The appropriation of financial expenses based on the effective interest rate method is recorded in income, under financial expenses.

Description	Currency	Charges	Maturity	Dec/2019	Dec/2018
BNDES (1)	URTJLP	TJLP to TJLP + 2,52 % p.a.	Jul/22	240,008	578,312
BNDES (1)	UM143	SELIC + 2.52% p.a.	Jul/22	374,461	489,421
BNDES (PSI) (1)	R\$	3.50% p.a.	Jan/21	18,071	56,804
KFW (2)	USD	Libor 6M+ 1.35% p.a.	Apr/19	-	43,420
KFW Finnvera (2)	USD	Libor 6M+ 0.75% p.a.	Jan/24 to Dec/25	330,217	378,595
Debentures (2)	R\$	104.1% of the CDI	Jul/20	1,025,965	-
Cisco Capital (3)	USD	2.50% p.a.	Dec/20	40,366	116,465
<b>Total</b>				<b>2,029,088</b>	<b>1,663,017</b>
<b>Current</b>				<b>(1,384,180)</b>	<b>(698,728)</b>
<b>Non-current</b>				<b>644,908</b>	<b>964,289</b>

### Guarantees:

- (1) Guaranteed by the holding company TIM Participações and collateral of some receivables of the subsidiary.
- (2) Guaranteed by the holding company TIM Participações.
- (3) No guarantee.

The Parent Company TIM Participações did not have borrowing and financing as at December 31, 2019.

The financing arranged by the subsidiary with BNDES was raised for the purpose of expanding the mobile phone network. The agreements include covenants that require certain financial and non-financial indexes calculated every six months. The Parent Company, TIM Participações, has complied

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with these financial ratios. The financial indexes are: (1) Shareholders' equity over total assets; (2) EBITDA over net financial expenses; (3) Total financial debt over EBITDA and (4) Short-term net financial debt over EBITDA.

In May 2018, the Company obtained a new line of credit in the amount of R\$ 1,500 million from BNDES to finance investments in fixed assets (Capex) for the three-year period 2017-2019 with a term of use up to December 2019. As of March 2019, with the contracting of Finame Direto, the Company replaced the sub-credit "B" of this contract (equivalent to R\$ 390 million). This new credit line in the amount of R\$ 390 million with Finame, a company of the BNDES system, aimed at improving the conditions of one of the sub-credits, of equal value, contracted with BNDES in May 2018, both in terms of term and cost. The cost of this line is TLP (Long Term Interest Rate) plus interest of up to 1.44% per year and its availability extends until December 2020, without any reimbursement obligations.

The table below sets forth the status of the financing and credit facilities available:

Type	Currency	Date of opening	Term	Total amount	Undrawn balance	Amount used as at December 31, 2019	Amount expired until December 31, 2019
BNDES (1)	TJLP	May/18	Dec/19	1,090,000	-	-	1,090,000
BNDES (2)	TJLP	May/18	Dec/19	20,000	-	-	20,000
FINAME	TLP	Mar/19	Dec/20	390,000	390,000	-	-
<b>Total R\$</b>				<b>1,500,000</b>	<b>390,000</b>	<b>-</b>	<b>1,110,000</b>

Purpose:

- (i) Support for the TIM investment plan for the years 2017 to 2019 including, but not limited to, the acquisition of Brazilian equipment.
- (ii) Investment in social projects involving the community.
- (iii) Investment solely toward the purchase of machinery and equipment, industrial systems and/or other components manufactured in the country.

The Investment Sustainment Program ("PSI") 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, 2019, corresponding to the adjustment of the subsidy granted by the BNDES for all the PSI lines, was approximately R\$42 million. This amount was recorded in "Deferred revenue" under the "Government subsidies" (Note 23) line and deferred for the useful life of the asset being financed and appropriated to income in "Subsidy income" (Note 29).

In January 2019, the Company, through its subsidiary, issued the first simple non-convertible debentures, unsecured, in the amount of R\$ 1,000 million. The issue aimed at reinforcing the Company's working capital and will mature in July 2020, being remunerated at 104.10% CDI.

The subsidiary has swap transactions to protect itself fully against any devaluation of the Brazilian currency against the US Dollar in its borrowing and financing transactions. Nevertheless, this is not classified as hedge accounting (see note 37).

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The long-term portions of borrowing and financing as at December 31, 2019 mature as follows:

	<b>Consolidated</b>
2021	305,171
2022	206,324
2023	33,434
2024	78,694
2025	21,285
	<b>644,908</b>

The nominal value of loans is consistent with their respective payment schedule.

**Borrowing 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 purposes of the fair value analysis, based on management's analyses any difference between nominal and fair value is immaterial in the context of the financial statements and debt of the company.

The amount of PSI credit lines is recorded at fair value as at the withdrawal date, and the fair value is calculated considering the CDI rate as at the withdrawal date.

Another transaction contracted with extremely specific features is the financing obtained from KFW Finnvera. This transaction is secured by Finnvera, a Finnish development agency. Given the features of this transaction, the Company believes that its fair value is equal to that shown in the balance sheet.

Regarding the funds raised with Cisco Capital, 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.

**21. Indirect taxes, charges and contributions payable**

	<b>Parent Company</b>		<b>Consolidated</b>	
	<b>12/2019</b>	<b>12/2018</b>	<b>12/2019</b>	<b>12/2018</b>
<b>Indirect taxes, charges and contributions payable</b>	530	447	466,603	453,941
Value added tax on goods and services - ICMS	-	-	377,105	361,558
ANATEL taxes and charges	-	-	22,009	21,320
ISS	525	441	61,673	59,764
Others	5	6	5,816	11,299
Current portion	(530)	(447)	(463,606)	(451,169)
Non-current portion	-	-	2,997	2,772

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**22. 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.

	Parent Company		Consolidated	
	12/2019	12/2018	12/2019	12/2018
<b>Direct taxes, charges and contributions payable</b>	25,816	47,285	508,615	542,213
Income tax and social contribution	-	-	346,097	372,467
PIS/COFINS	25,813	19,340	130,327	76,072
Other (*)	3	27,945	32,191	93,674
Current portion	(25,816)	(47,285)	(296,305)	(332,333)
Non-current portion	-	-	212,310	209,880

(\*) The composition of this account refers mainly to the subsidiary's adherence to the Tax Recovery Program – REFIS, as of 2009. For installment payment of debts due on federal taxes (PIS, COFINS, IR and CSLL) whose final maturity will be on October 31, 2024.

**23. Deferred revenue**

	Consolidated	
	12/2019	12/2018
<b>Deferred revenues</b>	1,109,112	1,313,467
Prepaid services to be provided (1)	186,310	301,621
Government grants (2)	42,159	63,731
Network swap (3)	2,713	11,449
Anticipated receipts	11,651	18,626
Deferred revenue for sale of towers (4)	843,017	897,112
Contractual liability (5)	23,262	20,928
Current portion	(281,930)	(406,867)
Non-current portion	827,182	906,600

(1) This refers to the reloading of voice and data credits not yet used by customers involving prepaid system services, which are appropriated to income when customers actually avail themselves of these services.

(2) Refers to the release of funds under the credit facility from the BNDES Investment Sustainment Program. The total sum of the subsidies granted by the BNDES through December 31, 2019, was R\$203 million and the amount outstanding at December 31, 2019 and R\$42,159 (63,731 at December 31, 2018). This amount is being amortized according to the useful life of the asset being financed and

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appropriated to the “Other income (expenses), net” (Note 29).

(3) Refers mainly to the transfer of onerous contracts and reciprocal fiber optic infrastructure (Note 11).

(4) Refers to amounts to be appropriated from sales of towers (Note 16).

(5) Contracts with customers.

As at December 31, 2019, the balance of contractual assets and liabilities was as follows:

	12/2019	12/2018
Accounts receivable included in trade accounts receivable	2,413,865	2,189,931
Contractual asset (note 6)	15,142	130
Contractual liabilities	(23,262)	(20,928)

Contracts with customers gave rise to the allocation of discounts under combined loyalty offers, where discounts may be given on equipment and/or services, generating a contractual asset or liability, respectively, depending on the nature of the offer in question.

Summary of the main changes during the fiscal year:

	Contractual asset (liability)	
	2019	2018
Balances as at January 1, 2019	(20,798)	(12,305)
Additions	1,845	(23,545)
Write-offs	10,833	15,052
Balances as at December 31, 2019	(8,120)	(20,798)

The estimated realization of the balances of contractual assets and liabilities is described below:

	2020	2021
Contractual asset (liability)	(5,953)	(2,167)

In accordance with paragraph 121 of IFRS 15 / CPC 47, the Company is not presenting the effects of the information on contracts with customers that are effective for less than one year.

#### **24. Provision for legal and administrative proceedings**

The Company and its subsidiary 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 or possible are subject to registration and disclosure, respectively, 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:

	Parent Company		Consolidated	
	12/2019	12/2018	12/2019	12/2018
<b>Provision for legal and administrative proceedings</b>	47,423	9,837	840,637	849,408
Civil (a)	-	-	212,702	111,301
Labor (b)	44,745	2,646	261,837	435,438
Tax (c)	2,678	7,191	333,717	271,214
Regulatory (d)	-	-	32,381	31,455

The changes in the provision for legal and administrative proceedings can be summarized as follows:

	Dec/2018	Additions, net of reversals	Payments	Monetary adjustment	Dec/2019
	849,408	547,691	(715,203)	158,741	840,637
Civil (a)	111,301	348,012	(335,640)	89,028	212,701
Labor (b)	435,438	96,235	(301,971)	32,136	261,838
Tax (c)	271,214	103,354	(77,341)	36,490	333,717
Regulatory (d)	31,455	90	(251)	1,087	32,381

	Dec/2017	Additions, net of reversals	Payments	Monetary adjustment	Dec/2018
	528,320	551,191	(536,647)	306,544	849,408
Civil (a)	132,422	239,705	(324,803)	63,977	111,301
Labor (b)	184,311	225,864	(114,450)	139,713	435,438
Tax (c)	180,643	84,990	(96,346)	101,927	271,214
Regulatory (d)	30,944	632	(1,048)	927	31,455

The Company and its subsidiary are subject to various legal and administrative proceedings filed against them by consumers, suppliers, service providers, consumer protection agencies and public finance agencies, in connection with a number of issues that arise in the regular course of business of the entities. The main cases are summarized below:

**a. Civil proceedings**

**a.1. Consumer lawsuits**

The Company is party 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\$135,290 (R\$86,039 as at December 31, 2018) basically refer to alleged incorrect collections, contract cancellation, service quality, deficiencies and failures in equipment delivery, and unjustified inclusion in credit protection services.

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*a.2. Consumer protection agencies*

TIM is a party to court and administrative lawsuits filed by the Public Prosecutor's Office, Procon and other consumer protection agencies arising from consumer complaints that include: (i) alleged failure to provide network services; (ii) challenges related to the quality of client assistance; (iii) alleged violation of SAC Decree; (iv) alleged violation of agreements; (v) alleged false advertising; and (vi) discussion of the amounts charged by the Company to its customers related to loyalty fines in the case of handset theft. The amounts involved total R\$31,221 (R\$5,814 as at December 31, 2018).

*a.3. Former trade partners*

TIM is a defendant in lawsuits filed by former trade partners claiming, among others, amounts on the basis of alleged non-compliance with agreements. The amounts involved total R\$12,812 (R\$10,378 as at December 31, 2018).

*a.4. Others*

TIM is a defendant in other non-consumer lawsuits filed by different agents to challenge, among others: (i) the renewal of lease agreements; (ii) share subscription; (iii) indemnities; (iv) alleged non-compliance with agreements; and (v) collection suits. The amounts involved total R\$27,039 (R\$3,060 as at December 31, 2018).

*a.5. Social, environmental and infrastructure*

The Company is party to lawsuits involving various agents challenging several licensing aspects, such as environmental licensing and structure licensing (installation/operation). The amounts involved total R\$498 (R\$239 as at December 31, 2018).

*a.6. ANATEL*

The subsidiaries are parties to lawsuits filed against ANATEL, challenging: (i) a debit related to the collection of 2% on revenue 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. The amounts involved are equivalent to R\$1,340 (R\$1,270 as at December 31, 2018).

**b. Labor proceedings**

Below is a summary of the key labor proceedings claims with a likelihood of loss considered probable:

Refer to various labor claims filed by former employees in relation to issues such as salary differences, parity, payment of variable compensation/commission, legal additions, overtime and other provision set forth in the period preceding the privatization process, and also claims filed by former employees of service providers who, taking advantage of the labor legislation currently in force, require the Company and/or its subsidiary to be held liable for labor obligations not complied with by the service providers contracted.

Of the total number of 2,408 labor claims as at December 31, 2019 (3,948 as at December 31, 2018) filed against the Company and its subsidiary, most of them relate to claims involving former employees of service providers, followed by claims filed by the Company's own employees. The provision for these proceedings amounts to R\$252,968, monetarily restated (R\$426,570 as at

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December 31, 2018).

A significant portion of this provision refers to organizational restructuring procedures, of which the Company highlights the closing of the activities of the call centers, as well as proceedings related to TIM's internal sites, which led to the termination of employee contracts. As at December 31, 2019, the provision for these proceedings totaled R\$57,859, monetarily restated (R\$27,981 as at December 31, 2018).

c. Tax processes

	12/2019	12/2018
Federal taxes	155,495	82,033
State taxes	93,790	103,546
Municipal taxes	8,227	1,713
TIM S.A. proceedings (purchase price allocation)	76,205	83,922
	333,717	271,214

The total provision recorded is substantially composed of the following proceedings, and the amounts indicated are estimated using the indices established by the federal government for taxes in arrears, being linked to the variations in the SELIC rate:

Federal taxes

The provision is substantially composed of the following proceedings:

- a. The provision for TIM S.A. has been made for 37 cases challenging the taxes levied on CIDE, CPMF, CSLL and IRRF transactions, the voluntary reporting of the penalty regarding FUST payments and ancillary obligations. From these cases, the main amounts relate to court actions in which TIM intends to have the right not to pay the CPMF (a Federal contribution on financial movements) allegedly due to simultaneous purchase and sale transactions in foreign currency and changes to accountholders as a result of mergers, with updated provision amounts totaling R\$9,560 (R\$ R\$9,335 as at December 31, 2018), as well as the amount corresponding to the fine and interest on FUST contribution for the year 2009, which does not include the benefits of voluntary reporting, for which the amount provided and updated is R\$14,564 (R\$14,060 as at December 31, 2018).
- b. The Company set up a provision for a lawsuit seeking to collect social security contribution withheld at a rate of 11%, to which payments made by the Company to other legal entities as compensation for sundry activities should have supposedly been subject. The amount provisioned and updated is R\$37,977 (R\$36,685 as at December 2018).
- c. Additionally, in the second quarter of 2019, the Company set up a provision for the FUST process alleging the unconstitutionality and illegality of FUST charges. Action for recognition of the right of not paying FUST and not including the revenues transferred as interconnection and EILD (Industrial Exploration of Dedicated Line) in the Company's calculation base, as well as the right of not being charged retroactively for the differences due to non-compliance with ANATEL Precedent 7/2005, in the amount of R\$58,116 (no corresponding amount on December 31, 2018).

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State taxes

The provision is substantially composed of the following proceedings:

The provision for TIM S.A. supports forty-one lawsuits, among which are (i) the amounts involved in the assessments that question the reversal of ICMS debts, as well as the documentary support for proving credits appropriated by the Company, whose amounts provisioned, updated, are equivalent to R\$ 23,558 (R\$ 42,628 as of December 31, 2018), (ii) amounts supposedly not offered for taxation by the rendering of telecommunications services, which, updated, amount to R\$ 5,037 (R\$ 4,829 as of December 31, 2018), as well as (iii) collections due to alleged differences both of goods entries and exits, in a quantitative stock survey procedure, whose updated amounts amount to R\$ 15,460 (provisioned process on 03/2019, with no correspondent as of December 31, 2018).

Municipal taxes

These include the amounts involved in assessments questioning the withholding and payment of the ISS-source 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, totaling R\$76,205 (R\$83,922 as at December 31, 2018).

d. Regulatory processes

ANATEL has brought administrative proceedings against the Group 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, 2019, the amount classified as a probable risk related to Procedures to Verify Breaches of Obligations ("PADOs"), after monetary adjustments, amounted to R\$32,381 (R\$31,455 as at December 31, 2018).

e. Legal and administrative processes involving possible losses

Civil, labor, tax and regulatory actions have been filed against the Company and its subsidiary involving a risk of loss classified as possible by the Company's legal advisors and the Management. No provision has been set up for these legal and administrative proceedings, and no materially adverse effects are expected on the financial statements, as shown below:

	<b>Consolidated</b>	
	<b>12/2019</b>	<b>12/2018</b>
	18,395,727	18,734,644
Civil (e.1)	1,032,637	1,046,521
Labor and social security (e.2)	459,020	523,236
Tax (e.3)	16,196,077	16,530,061
Regulatory (e.4)	707,993	634,826

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The administrative and legal proceedings assessed as 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>12/2019</b>	<b>Consolidated 12/2018</b>
Actions filed by consumers (e.1.1)	374,860	405,635
ANATEL (e.1.2)	220,526	207,657
Consumer Protection Agencies (e.1.3)	32,847	84,231
Former trade partners (e.1.4)	180,226	173,213
Social and environmental, and infrastructure (e.1.5)	125,201	71,574
Other (e.1.6)	98,977	104,211
	<u>1,032,637</u>	<u>1,046,521</u>

e.1.1. Actions filed by consumers

These actions refer particularly to alleged incorrect billing, contract cancellation, service quality, deficiencies and failures in equipment delivery, and unjustified inclusion in bad debtors' lists.

e.1.2. ANATEL

The Company is party to lawsuits filed against ANATEL, for the following reasons: (i) debit regarding the collection of 2% on revenue obtained from VAS and interconnection; (ii) *pro rata* monetary restatement applied to the price proposal established in the call notice for the use of 4G frequencies; and (iii) alleged non-compliance with service quality targets.

e.1.3. Consumer Protection Agencies

TIM is a party to court and administrative lawsuits filed by the Public Prosecutor's Office, Procon and other consumer protection agencies arising from consumer-related complaints that include: (i) alleged failure to provide network services; (ii) alleged failure to deliver devices; (iii) alleged non-compliance with state legislation; (iv) contract model and alleged incorrect charging for 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 actions filed by several former trade partners who are claiming, among other items, amounts arising from alleged non-compliance with agreements.

e.1.5. Social, environmental and infrastructure

The Company is party to lawsuits involving different parties that challenge aspects related to: (1) environmental licensing and structure licensing (installation/operations), 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.

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e.1.6 Others

TIM is a party to other lawsuits of an essentially non-consumer-related nature filed by various agents other than those described above, in which the discussions involve: (i) renewals of lease agreements, (ii) share subscription lawsuits, (iii) compensation lawsuits, (iv) alleged breach of contract, and (v) lawsuits involving charges.

e.2. Labor claims

*e.2.1. Social security*

TIM Celular received a Debit Assessment Notice, related to the alleged irregularity in the payment of social security contributions related to the payment of Profit Sharing, in the amount of R\$ 538, adjusted (R\$ 538 on December 31, 2018) and also suffered a tax assessment related to alleged social security contributions levied on hiring bonus; unadjusted bonus; consideration for self-employed activities and sales incentives in the updated amount of R\$ 9.693 at December 31, 2019.

TIM S.A. received Tax Underpayment Assessments regarding alleged irregularity related to the payment of social security contributions levied on profit sharing; failure to pay Management's fees and failure properly to fill out the FGTS – GFIP tax form, and an erroneous GFIP declaration in the updated amount of R\$1,559 (R\$1,430 as at December 31, 2018).

*e.2.2. Labor*

There are 3,976 labor claims at December 31, 2019 (4,654 at December 31, 2018) filed against the Company and its subsidiary, related to claims involving former employees and service providers in the amount of R\$459,020 updated (R\$ 523,236 at December 31, 2018).

A significant portion of the existing contingency relates to organizational restructuring processes, of which the closure of the activities of the Customer Relationship Centers (call center) stands out, as well as processes related to TIM's internal sites, which resulted in the dismissal of employees. In addition to these processes, there are those carried out by third party service providers with requests for employment with TIM, whose amounts total R\$ 14,349 updated (R\$ 16,709 as of December 31, 2018).

It should also be pointed out that there is a group of labor claims, particularly in São Paulo and Rio de Janeiro, from former employees of Gazeta Mercantil, Jornal do Brasil and JB Editora requesting in court the inclusion in the liability center of Holdco, which before the merger with TIM Participações, belonged to the Grupo Econômico Docas, of which Gazeta Mercantil and Jornal do Brasil are part.

The other amounts are related to labor lawsuits filed by former employees and third companies.

e.3. Tax

	<b>Consolidated</b>	
	<b>12/2019</b>	<b>12/2018</b>
Federal taxes (e.3.1)	4,279,570	3,952,125
State taxes (e.3.2)	8,221,808	8,904,916
Municipal taxes (e.3.3)	703,132	693,616
FUST, FUNTTEL and EBC (e.3.4)	2,991,567	2,979,404
	<u>16,196,077</u>	<u>16,530,061</u>

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The amounts are adjusted based on an estimate of the SELIC rate. The historical amount involved is equivalent to R\$11,549,274 (R\$ 11,662,216 as of December 31, 2018).

*e.3.1. Federal taxes*

Assessment against the TIM Group for federal taxes amounted to R\$4,279,570 as at December 31, 2019, (R\$3,952,125 as at December 31, 2018). Of this total, the following issues stand out:

- (i) Alleged errors in the use of tax credits due to a reverse merger, the 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 of these benefits in the Federal Revenue Department (“RFB”) and failure to pay the estimated IRPJ and CSLL amounts. The amount involved is R\$2,672,754 (R\$2,543,851 as at December 31, 2018).
- (ii) Method of offsetting tax losses and negative bases. The amount involved is R\$203,302 (R\$198,175 as at December 31, 2018).
- (iii) Collection of CSLL on monetary variations for swap transactions, recorded on a cash basis. The amount involved is R\$66,164 (R\$64,537 as at December 31, 2018).
- (iv) Payment of IRRF on revenue from overseas residents, including those remitted for international roaming and payments to unidentified beneficiaries, as well as the collection of CIDE on royalties remitted overseas, including remittances for international roaming. The amount involved for the subsidiary is R\$256,833 (R\$296,589 as at December 31, 2018).
- (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\$427,233 (R\$412,715 as at December 31, 2018).

*e.3.2. State taxes*

Assessment against the TIM Group for state taxes amounting as at December 31, 2019 to R\$8,221,808 (R\$8,904,916 as at December 31, 2018). 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\$1,053,411 (R\$1,344,288 as at December 31, 2018).
- (ii) Use of tax benefits under the Program for Promoting the Integrated and Sustainable Economic Development of the Federal District granted by the tax authority itself, but subsequently declared unconstitutional and alleged incorrect crediting of ICMS on interstate purchases of goods with tax benefits granted in the state of origin. The amount involved is R\$887,67 (R\$1,110,827 as at December 31, 2018).
- (iii) Credit reversal and late use of credits for purchases of fixed assets. The amount involved for TIM S.A. is R\$731,864 (R\$767,142 as at December 31, 2018).

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- (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 prepayment of future recharges (special credit), as well as credits related to transactions involving tax substitution, exempt and non-taxable transactions. As at December 31, 2019, the amount involved for the subsidiary was R\$3,284,473 (R\$3,340,448 as at December 31, 2018).
- (v) The use of credit to purchase electricity for the companies' production processes. The amount involved is R\$131,057 (R\$140,368 as at December 31, 2017).
- (vi) Alleged conflict between ancillary obligation data and the payment of the tax, and specific questioning regarding the fine charged due to non-compliance with ancillary obligations. The amount involved is R\$138,684 (R\$116,880 as at December 31, 2018).
- (vii) Alleged failure to pay ICMS arising from debts reversed regarding prepaid services, incorrect ICMS credits regarding outgoing goods allegedly benefiting from a reduction in the calculation base, as well as an alleged failure to include VAS of the ICMS calculation base. The amount involved is R\$198,505 (R\$192,074 as at December 31, 2018).
- (viii) Credits booked for the return of cell phones on free lease. The amount involved is R\$180,920 (R\$177,128 as at December 31, 2018).
- (ix) Collection of ICMS tax on subscription services and the alleged failure to include this in the ICMS calculation base due to its nature. The amount involved is R\$249,659 (R\$139,758 as at December 31, 2018).

*e.3.3. Municipal taxes*

The total assessment against the TIM Group for municipal taxes was R\$703,132 as at December 31, 2019, (R\$693,616 as at December 31, 2018). Of this amount, the following issues stand out:

- a. 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\$147,572 (R\$142,355 as at December 31, 2018).
- b. Collection of ISS on import of services. The amount involved is R\$300,669 (R\$283,620 as at December 31, 2018).
- c. Constitutionality of the collection of the TFF by municipal authorities in several locations. The amount involved is R\$120,503 (R\$118,114 as at December 31, 2018).

*e.3.4. FUST and FUNTTEL*

The amount assessed against the TIM Group for contributions to FUST and FUNTTEL is R\$2,991,567 (R\$2,979,404 as at December 31, 2018). The principal discussion involves the payment of the contributions to FUST and FUNTTEL (the Telecommunications Technical Development Fund) starting 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 mobile telecommunications service providers, from the effective date of Law N°. 9.998/2000.

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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 other items.

As at December 31, 2019, the amount stated for Breach of Obligation procedures (locally PADOs), considering the monetary restatement that was considered possible loss was R\$707,993 (R\$634,826 as at December 31, 2018). The variations mainly resulted from the handling of the PADOs included in the Consent Decree - "TAC" negotiated with ANATEL and new revenue recorded in the year 2019.

As at August 22, 2019, at the 874<sup>th</sup> Meeting of the ANATEL Board of Directors, the proposed Conduct Adjustment Commitment ("TAC") was approved, and the Proceedings were sent back to the Federal Court of Auditors (TCU) for review.

On obtaining an extension of the authorization to use radio frequencies associated with SMP, the subsidiary TIM S.A. 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 VAS since 2012. In the Company's opinion, this revenue should not be included because it is not expressly stipulated in the original Instruments of Authorization. Therefore, the charges received are being discussed at the administrative and/or legal levels.

**25. Shareholders' equity**

a. Capital stock

The 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 the Company's shares, intending to hold 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. As at December 31, 2019, the Company held 210,527 treasury shares (784,317 for 2018) with a view to fulfilling the stock option plan (Note 26).

The Company is authorized to increase its capital upon 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>Consolidated</b>	
	<b>12/2019</b>	<b>12/2018</b>
<b>Net value paid up</b>	9,866,298	9,866,298
Value paid up	9,913,415	9,913,415
(-) Funding costs	(47,117)	(47,117)
<b>Number of common shares</b>	<b>2,421,032,479</b>	<b>2,421,032,479</b>

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b. Capital reserves

The use of capital reserves is in accordance with the provisions of Article 200 of Law No. 6.404/76, which refers to corporate entities. These reserves consist of:

	12/2019	12/2018
	410,650	412,091
Special goodwill reserve	380,560	380,560
Stock options	30,090	31,531

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 took place by issuing new shares of TIM Participações S.A., converting those companies into full subsidiaries. At that time, this transaction was recorded at the book value of the shares, no goodwill being recorded arising from the difference between the market value and the shares negotiated.

When first adopting IFRS, the Company availed itself of 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 of 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 (Intelig)*

As at December 30, 2009, the Special General Meeting of TIM Participações approved the takeover of Holdco, a company that held 100% of the equity of TIM S.A, 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 on the base date of November 30, 2009.

When IFRS was first adopted, the acquisition was recorded on 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 on capital reserves of R\$223,004.

b.2 Stock options

The balances recorded in these items represent the expenses of the Company and its subsidiary for the share options granted to their employees (Note 26).

In the year ended December 31, 2019 and the year ended 2018, the Company sold 668,367 and 1,194,576 common shares, respectively, to the beneficiaries of the Stock Option Plan (Note 26). These

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shares were in the Company's treasury when the options were exercised at the average book value of R\$10.86 and R\$10.34, respectively. Additionally, through the Share Buyback Program launched in October 2017, the Company acquired 115,949 shares in 2019 (377,052 in 2018) at the price of R\$15.22 and R\$11.64, respectively, equivalent to R\$ 3,204 in 2019 (R\$ 4,389 in 2018). As a result, the net effect on the repurchase transaction of treasury shares was R\$5,319 (R\$7,964 in 2018).

c. Profit reserves

c.1 Legal reserve

This refers to 5% of the income for every year ended December 31, until the legal reserve equals 20% of the capital stock, excluding, as from 2018, the balance set aside for the tax incentive reserve. Also, the Company is authorized to cease 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 capital increases or 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 corporate business.

The balance of income that is not compulsorily allocated to other reserves and that is not allocated for the payment of dividends, is allocated to this reserve, which may not exceed 80% of the capital. Once this limit is reached, it is incumbent upon the shareholders' meeting to decide on the balance, either distributing this to shareholders or increasing the capital.

In December 2019, the Reserve for Expansion reached the limit defined in the Company's bylaws. Therefore, the next meeting will propose a capital increase via capitalization of the expansion reserve in the amount of R\$ 1,644,013. This increase may be made without the issuance of new shares in proportion to the rights of shareholders.

c.3 Tax benefit reserve

The subsidiary enjoys tax benefits that provide for restrictions on the distribution of profits by this subsidiary. According to the legislation establishing these 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 for the legal entity. This reserve should only be used for offsetting the losses or capital increases. At December 31, 2019, the accumulated amount of benefits enjoyed by the subsidiary was R\$ 1,612,019 (R\$1,417,858 at December 31, 2018).

This tax benefit basically corresponds to a reduction in the IRPJ on income from exploration, recorded by the units entitled to this benefit. The subsidiary operates in the area of the former Superintendence for 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.

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d. Dividends

Dividends are calculated in accordance with the bylaws and Brazilian Corporate Legislation.

As stated in the most recent bylaws approved on April 14, 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 revised 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, 2019, dividends and interest on equity were calculated as shown below:

	2019	2018
Net income for the year	3,622,127	2,545,101
(-) Tax incentives not to be distributed	(194,161)	(146,455)
(-) Legal reserve constitution	(171,398)	(119,932)
Revised profit	3,256,568	2,278,714
Minimum dividends calculated considering 25% of the revised profit	814,142	569,679
Breakdown of dividends payable and interest on equity:		
Interest on shareholders' equity	995,438	849,994
Total dividends and interest on shareholders' equity distributed and proposed	995,438	849,994
IRRF on interest on shareholders' equity	(149,316)	(125,757)
Total dividends and interest on shareholders' equity, net	846,122	724,237
Dividends per share (amount in reais), net of IRRF	0.35	0.30

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 in the allocation of net income for the year/period, in changes in shareholders' equity. Interest on shareholders' equity received and/or receivable is recorded against financial revenue, with an impact on the equity accounting income. For disclosure purposes, the impacts on income are eliminated, and a reduction is recorded in the investment balance. As of December 31, 2019, the amount provisioned was R\$995,438, of which R\$ 313,600 was paid over the year and the remaining balance is recorded in the Company's current liabilities and paid in January 2020.

Dividends not claimed – As provided for in the Brazilian Corporate Law, dividends and interest on shareholders' equity that are declared but not claimed by shareholders for a period of three years are reversed to the shareholders' equity according to the statute of limitations.

Regarding the statement of cash flow, interest on shareholders' equity and dividends paid to shareholders were classified as "financing activities".

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**26. Long-term incentive plan**

**2011-2013 Plan, 2014-2016 Plan and 2018-2020 Plan**

At the annual meeting on August 5, 2011, April 10, 2014 and April 19, 2018, the shareholders of TIM Participações S.A. approved the long-term incentive plans, respectively the “2011-2013 Plan”, the “2014-2016 Plan” and the “2018-2020 Plan” for the senior Management and key executives of the Company and its subsidiary.

The 2011-2013 and 2014-2016 Plans involve granting options, while the 2018-2020 Plan provides for the granting of shares.

The exercise of options under the 2011-2013 Plan depends on the achievement of specific performance targets, while the exercise of options of 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.

The 2018-2020 Plan, in turn, proposes granting to the participants shares issued by the Company, subject to certain time and/or performance conditions (attainment of specific targets). The number of shares may vary up or down depending on performance and possible declarations of dividends, considering the criteria specified for each Grant.

Share options of the 2011-2013 and the 2014-2016 Plans are effective for six years, and TIM Participações has no legal or informal obligation to repurchase or settle the options in cash. In the case of the 2018-2020 Plan, the effectiveness period is the same as the vesting period of three years. The 2018-2020 Plan, in turn, besides allowing for the transfer of shares, also provides for the possibility of making payments to the participants of the equivalent cash value.

The total amount of the expense is recognized during the vesting period: that is, the period during which specific vesting conditions must be met. On the date of each balance sheet, the Group reviews its estimates for the number of options that will vest, considering vesting conditions not related to the market and time with the company.

It should also be taken into account that in 2017 there were no new grants, only the calculations of the vesting period from past grants.

The variations in the quantity of shares/options are presented below:

Date of grant	Share options granted	Maturity Date	Exercise price	Balance at beginning of 2019 financial year	Granted in the period	Exercised in the period	Forfeited in the period	Failing due in the period	Balance at beginning of 2019 financial year
2018-2020 Plan - 2 <sup>a</sup> Grant	930,662	Jul/22	R\$ 11.28	-	930,662	-	(33,418)	-	897,244
2018-2020 Plan - 1 <sup>st</sup> Grant	849,932	Apr/21	R\$ 14.41	466,514	-	(115,949)	(97,228)	-	253,337
2014-2016 Plan - 3 <sup>rd</sup> Grant	3,922,204	Nov/22	R\$ 8.10	895,522	-	(476,182)	-	-	419,340

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2014-2016 Plan – 2 <sup>nd</sup> Grant	3,355,229	Oct/21	R\$ 8.45	292,523	-	(159,675)	-	-	132,848
2014-2016 Plan – 1 <sup>st</sup> Grant	1,687,686	Sep/20	R\$ 13.42	531,972	-	(32,511)	(121,175)	-	378,286
2011-2013 Plan – 3 <sup>rd</sup> Grant	3,072,418	Jul/19	R\$ 8.13	543,583	-	-	-	(543,583)	-
2011-2013 Plan – 2 <sup>nd</sup> Grant	2,661,752	Sep/18	R\$ 8.96	-	-	-	-	-	-
2011-2013 Plan – 1 <sup>st</sup> Grant	2,833,595	Aug/17	R\$ 8.84	-	-	-	-	-	-
<b>Total</b>	<b>19,313,478</b>			<b>2,730,114</b>	<b>930,662</b>	<b>(784,317)</b>	<b>(251,821)</b>	<b>(543,583)</b>	<b>2,081,055</b>
Average weighted price for the period			<b>R\$ 11.23</b>						

Date of grant	Share options granted	Maturity Date	Exercise price	Balance at beginning of 2018 financial year	Granted in the period	Exercised in the period	Forfeited in the period	Failing due in the period	Balance at beginning of 2018 financial year
2018-2020 Plan – 1 <sup>st</sup> Grant	849,932	May/20	14.41	-	849,932	-	(383,418)	-	466,514
2014-2016 Plan – 3 <sup>rd</sup> Grant	3,922,204	Nov/22	8.10	2,684,284	-	(510,884)	(1,277,878)	-	895,522
2014-2016 Plan – 2 <sup>nd</sup> Grant	3,355,229	Oct/21	8.45	1,240,740	-	(656,268)	(291,949)	-	292,523
2014-2016 Plan – 1 <sup>st</sup> Grant	1,687,686	Sep/20	13.42	658,720	-	(27,424)	(99,324)	-	531,972
2011-2013 Plan – 3 <sup>rd</sup> Grant	3,072,418	Jul/19	8.13	694,936	-	-	(151,353)	-	543,583
2014-2016 Plan – 2 <sup>nd</sup> Grant	2,661,752	Sep/18	8.96	194,756	-	-	-	(194,756)	-
2014-2016 Plan – 1 <sup>st</sup> Grant	2,833,595	Aug/17	8.84	-	-	-	-	-	-
<b>Total</b>	<b>18,382,816</b>			<b>5,473,436</b>	<b>849,932</b>	<b>(1,194,576)</b>	<b>(2,203,922)</b>	<b>(194,756)</b>	<b>2,730,114</b>
Average weighted price for the period			<b>10.26</b>						

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Below are the significant data included in the model:

Date of grant	Weighted average base price of shares during the vesting period of the grant	Volatility	Expected useful life of the option	Annual interest rate without risk
2011 Grant	R\$ 8.84	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
2018 Grant	R\$ 14.41	NA	3 years	NA
2019 Grant	R\$ 11.28	NA	3 years	NA

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** - Volume traded and the trading price of the shares in TIM Participações in the 30 day period 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** - Volume traded and the trading price of TIM Participações shares during the period July 1, 2012 to August 31, 2012.
- **2011-2013 Plan– 3<sup>rd</sup> Grant** - Volume traded and the trading price of TIM Participações shares during the 30 day period preceding July 20, 2013.
- **2014-2016 Plan– 1<sup>st</sup> Grant** - Volume traded and the trading price of TIM Participações shares during the 30 day period preceding the date determined by the Board of Directors of TIM Participações (September 29, 2014).
- **2014-2016 Plan– 2<sup>nd</sup> Grant** - Volume traded and the trading price of TIM Participações shares during the 30 day period preceding the date determined by the Board of Directors of TIM Participações (September 29, 2015).
- **2014-2016 Plan– 3<sup>rd</sup> Grant** - Volume traded and the trading price of TIM Participações shares during the 30 day period preceding the date determined by the Board of Directors (September 29, 2016).
- **2018-2020 Plan – 1<sup>st</sup> Grant** - Volume traded and the trading price of TIM Participações shares during the period from March 1, 2018 to March 31, 2018.
- **2018-2020 Plan – 2<sup>nd</sup> Grant** - Volume traded and the trading price of Tim Participações shares during the period from June 1, 2019 to June 30, 2019.

The Group recognizes the impact of review of its initial estimates, if any, in the statement of income, with a contra-entry in shareholders' equity. As at December 31, 2019 the expenses related to said long-term benefit plans totaled R\$2,359 (R\$ 4,291 as at December 31, 2018).

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**27. Net 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.

Revenues are recognized monthly, through billing, and revenues to be billed between the billing date and the end of the month (unbilled) are identified, processed, and recognized in the month in which the service was provided. These non-billed revenues are recorded on an estimated basis, which takes into account consumption data, number of days elapsed since the last billing date.

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 reload 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

Revenues from product sales (telephones, mini-modems, tablets and other equipment) are recognized when the performance obligations associated with the contract are transferred to the buyer. Revenues from sales of devices to trading partners are accounted for at the time of their physical delivery to the partner, net of discounts, and not at the time of sale to the end customer, since the Company has no control over the product sold.

Contract Identification

The Company reviews all current commercial contracts in order to identify the main contractual clauses and other elements present in the contracts that could be relevant in the application of the new accounting pronouncement.

Identification of performance obligation

Based on the review of its contracts, the Company verified the existence of two performance obligations:

- (i) sale of equipment; and
- (ii) provision of mobile, fixed and internet telephony services.

Therefore, the Company began to recognize revenues when, or as, the performance obligation is met when transferring the good or service promised to the customer; the asset is considered transferred when or as the customer obtains control of this asset.

Determining and Allocating the Transaction Price to the Performance Obligation

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The Company understands that its commercial packages that combine services and sale of cellular handsets with discounts. In accordance with IFRS 15 (CPC 47), the Company is required to perform the discount allocation and recognize revenues related to each performance obligation based on their standalone selling prices.

Prior to the adoption of the standard, the Company recognized revenue from each element identified based on its contractual price, with the discount on the sale of handsets being allocated completely to the price of the handset.

As a consequence of the adoption of the new standard, an additional portion of the revenue was allocated to revenues from sale of handsets at the beginning of the contract, representing an increase in revenues from the sale of equipment in relation to previously adopted accounting practice. The difference between the amount of revenue and the amount of equipment sales revenue at the beginning of the contract was recognized at the time each as a contractual asset, allocated to service revenue along the contract period.

Cost to obtain contract

All incremental costs related to obtaining a contract (sales commissions and other costs of acquisition from third parties) are recorded as prepaid expenses and amortized over the same period as the revenue associated with this asset. Similarly, certain contract compliance costs are also deferred to the extent that they relate to performance obligations under the customer agreement, i.e. when the customer obtains control over the asset.

	<b>12/2019</b>	<b>Consolidated 12/2018</b>
<b>Net operational revenue</b>	17,377,194	16,981,329
Gross operating revenue	25,182,831	24,232,404
Service revenue	23,820,343	23,065,648
Service revenue – Mobile	22,145,033	21,531,779
Service revenue – Landline	1,675,310	1,533,869
Goods sold	1,362,488	1,166,756
Deductions from gross revenue	(7,805,637)	(7,251,075)
Taxes	(4,939,980)	(5,163,797)
Discounts given	(2,843,670)	(2,073,892)
Returns and other	(21,987)	(13,386)

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**28. Operating costs and expenses**

	Consolidated							
	12/2019				12/2018			
	Cost of services provided and goods sold	Selling expenses	General and administrative expenses	Total	Cost of services provided and goods sold (*)	Selling expenses	General and administrative expenses	Total
	(7,433,731)	(4,986,289)	(1,717,859)	(14,137,879)	(7,701,418)	(4,970,780)	(1,608,319)	(14,280,517)
Personnel	(53,392)	(624,353)	(392,984)	(1,070,729)	(36,514)	(637,177)	(357,878)	(1,031,569)
Third-party services	(569,242)	(2,041,646)	(512,643)	(3,123,531)	(518,762)	(2,169,624)	(451,990)	(3,140,376)
Interconnection and means of connection	(1,419,464)	-	-	(1,419,464)	(2,513,176)	-	-	(2,513,176)
Depreciation and amortization	(4,132,223)	(256,898)	(739,860)	(5,128,981)	(3,119,954)	(162,804)	(671,562)	(3,954,320)
Taxes, fees and contributions	(32,120)	(817,369)	(18,846)	(868,335)	(31,754)	(866,197)	(18,333)	(916,284)
Rent and insurance	(291,302)	(121,795)	(20,590)	(433,687)	(591,226)	(146,877)	(67,387)	(805,490)
Cost of goods sold	(931,818)	-	-	(931,818)	(883,912)	-	-	(883,912)
Publicity and advertising	-	(355,234)	-	(355,234)	-	(421,588)	-	(421,588)
Losses on doubtful accounts	-	(748,291)	-	(748,291)	-	(544,881)	-	(544,881)
Other	(4,170)	(20,703)	(32,936)	(57,809)	(6,120)	(21,632)	(41,169)	(68,921)

	Parent Company							
	12/2019				12/2018			
	Cost of services provided and goods sold (*)	Selling expenses	General and administrative expenses	Total	Cost of services provided and goods sold (*)	Selling expenses	General and administrative expenses	Total
	-	-	(24,755)	(24,755)	-	-	(29,745)	(29,745)
Personnel	-	-	(19,713)	(19,713)	-	-	(25,641)	(25,641)
Third-party services	-	-	(4,321)	(4,321)	-	-	(3,392)	(3,392)
Taxes, fees and contributions	-	-	(386)	(386)	-	-	(249)	(249)
Rent and insurance	-	-	(8)	(8)	-	-	(15)	(15)
Other	-	-	(327)	(327)	-	-	(448)	(448)

The Company and its subsidiary contribute to public and private pension insurance plans in a mandatory, contractual or voluntary manner during the time when employees are working at the Company and its subsidiary. These plans do not originate any additional obligation for the Company. When an employee leaves the Company or its subsidiary 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 future contributions of the Company and its subsidiary to active employees, or a refund in cash of these amounts, are recorded in assets.

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**29. Other income (expenses), net**

	Parent Company		Consolidated	
	12/2019	12/2018	12/2019	12/2018
<b>Income</b>				
Subsidy income, net	-	-	21,572	25,305
Fines on telecommunications services	-	-	50,499	44,411
Revenue from disposal of assets	-	-	2,214	1,708
Other income (a)	901	-	1,878,558	282,041
	901	-	1,952,843	353,465
<b>Expenses</b>				
FUST/FUNTEL (b)		-	(137,169)	(143,167)
Taxes, fees and contributions		-	(4,024)	(4,092)
Provision for legal and administrative proceedings, net of reversal	(55,717)	(825)	(466,460)	(452,463)
Expenses from disposal of assets	-	-	(7,055)	(4,424)
Other expenses	(49)	(12)	(62,594)	(32,608)
	(55,766)	(837)	(677,302)	(636,754)
Other revenues (expenses), net	(54,865)	(837)	1,275,541	(283,289)

(a) The variation in the period refers to: (i) credits from legal proceedings held by TIM Celular S.A. (incorporated by TIM S.A.) with a final decision in favor of the Company in higher courts in 2019, which discussed the exclusion of ICMS from the calculation base of PIS and COFINS contributions. The amount of R\$ 1,795 million was recorded under other revenues in June 2019 (Note 9) and (ii) amortization of deferred revenue from the sale of the towers (Note 16).

(b) Expenses incurred with contributions on several telecommunications revenue amounts due to ANATEL, according to the legislation in force.

**30. Financial income**

	Parent Company		Consolidated	
	12/2019	12/2018	12/2019	12/2018
<b>Financial income</b>	2,671	1,978	1,430,171	412,733
Interest on financial investments	1,650	1,358	88,224	119,548
Interest received from clients	-	-	37,233	36,793
Swap interest	-	-	15,536	17,001
Interest on leasing	-	-	20,528	25,664
Monetary adjustments (i)	1,021	620	1,263,793	207,191
Foreign exchange variation	-	-	4,857	6,536

(i) Includes the amount of R\$1,228 million regarding the adjustment of credits from a legal proceeding of TIM Celular S.A. (absorbed by TIM S.A.) on the exclusion of ICMS from PIS and COFINS tax bases (Note 9).

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**31. Financial expenses**

	Parent Company		Consolidated	
	12/2019	12/2018	12/2019	12/2018
<b>Financial expenses</b>	(169,399)	(95,687)	(1,408,053)	(951,439)
Interest on borrowing and financing	-	-	(116,735)	(96,682)
Interest on taxes and fees	(51)	(50)	(28,396)	(15,409)
Swap interest	-	-	(24,604)	(32,424)
Interest on leasing	-	-	(821,463)	(266,328)
Monetary adjustment <sup>(2)</sup>	(56,826)	(4,676)	(191,309)	(340,175)
Discounted granted	-	-	(36,047)	(38,858)
Other expenses <sup>(1)</sup>	(112,522)	(90,961)	(189,499)	(161,563)

<sup>(1)</sup> Includes PIS/COFINS amounts on financial events, mainly related to Interest on Shareholders Equity (JSCP).

<sup>(2)</sup> Monetary adjustment relates mainly to provision for legal and administrative proceedings.

**32. Foreign exchange variations, net**

	Parent Company		Consolidated	
	12/2019	12/2018	12/2019	12/2018
<b>Revenue</b>				
Borrowing and financing		-	22,494	1,409
Suppliers	32	12	9,004	6,844
Swap		-	40,742	75,340
Others	2	-	15,952	13,937
	34	12	88,192	97,530
<b>Expenses</b>				
Borrowing and financing	-	-	(40,715)	(75,298)
Suppliers	(60)	(21)	(13,201)	(11,925)
Swap		-	(22,493)	(1,409)
Others		-	(12,691)	(7,525)
	(60)	(21)	(89,100)	(96,157)
<b>Exchange variations, net</b>	(26)	(9)	(908)	1,373

Exchange variation in the year is related to loans and financing and suppliers in foreign currency. The effect was reduced by operations with derivatives (note 37).

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**33. Income tax and social contribution**

	Consolidated	
	12/2019	12/2018
Current income and social contribution taxes		
Income tax for the year	(155,521)	(253,120)
Social contribution for the year	(58,905)	(92,502)
Tax incentive – SUDENE/SUDAM (I)	156,594	146,454
	(57,832)	(199,168)
Deferred income tax and social contribution		
Deferred income tax	(625,516)	651,632
Deferred social contribution	(225,186)	217,501
	(850,702)	869,133
Provision for income tax and social contribution contingencies		
	(5,406)	(5,054)
	(856,108)	864,079
	(913,940)	664,911

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 forth below:

	Parent Company		Consolidated	
	12/2019	12/2018	12/2019	12/2018
Income before income tax and social contribution	3,497,838	2,548,347	4,536,066	1,880,190
Combined tax rate	34%	34%	34%	34%
Combined tax rate on income tax and social contribution	(1,189,265)	(866,438)	(1,542,262)	(639,265)
(Additions)/exclusions:				
Unrecognized/recognized tax losses and temporary differences	(18,783)	(4,232)	(18,783)	920,745
Equity accounting income	1,273,032	908,700	-	-
<i>Permanent additions and exclusions:</i>				
Non-deductible expenses for tax purposes	(109)	-	(10,958)	(12,040)
Financial lease impact	-	-	-	(36,046)
Tax benefit related to interest on shareholders' equity	(63,771)	(35,357)	338,449	288,998
Tax incentive (i)	-	-	194,161	146,454
Other amounts	2,142	(5,919)	125,453	(3,935)
	1,192,511	863,192	628,322	1,304,176
Income tax and social contribution recorded in income for the period	3,246	(3,246)	(913,940)	664,911
Actual rate	-	-	20.15%	(35.36%)

(I) As mentioned in Note 25 c.3, for investment subsidies not to be considered within the taxable income, they must be recorded as tax incentive reserves, to be used only to offset losses or increase capital. The subsidiary TIM Celular has tax benefits (SUDENE/SUDAM) which comply with these rules.

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**34. Earnings per share**

**(a) Basic**

Basic earnings per share are calculated by dividing income attributable to shareholders of the Company by the weighted average number of shares issued during the tax year.

	12/2019	12/2018
Income attributable to shareholders of the Company	3,622,127	2,545,101
Weighted average number of common shares issued (thousands)	2,420,481	2,420,172
Basic earnings per share (expressed in R\$)	1.50	1.05

**(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.

	12/2019	12/2018
Income attributable to shareholders of the Company	3,622,127	2,545,101
Weighted average number of common shares issued (thousands)	2,421,018	2,421,075
Diluted earnings per share (expressed in R\$)	1.50	1.05

The calculation of the diluted earnings per share considered 537 thousand shares (903 thousand shares in 2018) related to the granting of Plan 2011-2013, and granting of the 2014-2016 Plan, as mentioned in Note 26.

**35. Balances and transactions with related parties**

The consolidated balances of transactions with companies of the Telecom Italia Group are as follows:

	Assets	
	12/2019	12/2018
Telecom Italia Sparkle (1)	1,949	2,877
TI Sparkle (3)	2,007	804
TIM Brasil (4)	5,429	13,993
Gruppo Havas (6)	-	75,600
Other	1,035	1,092
Total	10,420	94,366

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	<b>Liabilities</b>	
	<b>12/2019</b>	<b>12/2018</b>
Telecom Italia S.p.A. (2)	80,825	89,433
Telecom Italia Sparkle (1)	6,531	11,895
TI Sparkle (3)	3,731	4,174
TIM Brasil (4)	6,056	6,044
Vivendi Group (5)	1,164	4,745
Gruppo Havas (6)	11,049	62,686
Other	2,467	107
<b>Total</b>	<b>111,823</b>	<b>179,084</b>

	<b>Revenue</b>	
	<b>12/2019</b>	<b>12/2018</b>
Telecom Italia S.p.A. (2)	775	858
Telecom Italia Sparkle (1)	5,371	5,809
TI Sparkle (3)	2,052	904
<b>Total</b>	<b>8,198</b>	<b>7,571</b>

	<b>Costs/Expenses</b>	
	<b>12/2019</b>	<b>12/2018</b>
Telecom Italia S.p.A. (2)	93,188	62,976
Telecom Italia Sparkle (1)	24,914	30,123
TI Sparkle (3)	18,700	18,035
Vivendi Group (5)	1,386	9,439
Gruppo Havas (6)	264,318	301,752
Others	18,713	-
<b>Total</b>	<b>421,219</b>	<b>422,325</b>

(1) Indirect parent company. These amounts refer to roaming, VAS, assignment of means and international voice data – *wholesale, according to the contractual conditions between the parties.*

(2) These amounts refer to international roaming, technical post-sales assistance and VAS.

On May 17, 2018, TIM Participações and Telecom Itália signed a licensing agreement on the use of a registered trademark and formally granted to TIM Participações and its subsidiary the right to use the “TIM” trademark against the payment of royalties of 0.5% of the company’s net revenues. The payment is made on a quarterly basis.

(3) The amounts refer to the leasing of links and EILD, lease of means (submarine cables) and signaling services according to the contractual conditions between the parties.

(4) Direct controller of the Company. Amounts refer mainly to judicial deposits made due to labor claims.

(5) Shareholder of TIM S.p.A. The figures refer to value added services - VAS.

(6) The amounts described above, in the income, refer to advertising services, of which R\$ 172,956 (R\$ 232,492 in 2018) are related to media transfers

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The balance sheet account balances are recorded in the following groups: trade accounts receivable, prepaid expenses, suppliers and other current assets and liabilities.

The Company engages in social investment actions that include donations, projects developed by the TIM Institute and sponsorships. In 2019, the Company invested R\$4,207 (R\$ 4,637 in 2018) with its own resources in social benefit.

### 36. Management remuneration

Key Management personnel includes the statutory officers and the Board of Directors. The compensation of key Management personnel for services rendered is shown below:

	12/2019	12/2018
Short-term benefits	22,524	23,556
Long-term benefits	900	3,351
Share-based payments remuneration	5,379	10,230
	<u>28,803</u>	<u>37,137</u>

### 37. Financial instruments and risk management

The financial instruments registered by the Company and its subsidiary 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 as they are incurred, under financial income 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 to recognize any gain or loss depends on whether or not the derivative is assigned as a hedge instrument in cases where hedge accounting is adopted.

Through its subsidiary, 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 swap contracts.

The Company's financial instruments are presented, through its subsidiary, in compliance with IFRS 9 / CPC 48.

The major risk factors to which the Company and its subsidiary are exposed are as follows:

(i) Exchange variation risks

Exchange variation risks refer to the possibility of the subsidiary incurring: i) losses on unfavorable exchange rate fluctuations, which would increase the outstanding balances of borrowing and financing taken in the market along with the related cost expenses, or ii) an increase in the cost of commercial agreements affected by exchange variations. In order to reduce this kind of risk, the

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subsidiary enters into swap contracts with financial institutions for the purpose of avoiding the impact of foreign exchange fluctuations on the financial results, and trade agreements containing sections that provide for foreign exchange bands with the purpose of partially reducing exchange rate risks, or US Dollar stock options intended to reduce foreign exchange exposure risks in business contracts.

As at December 31, 2019, the borrowing and financing of the subsidiary indexed to foreign currency were fully hedged by swap contracts in terms of time and amount. Any gains or losses arising from these swap contracts are recorded in the results of the subsidiary.

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 value of TJLP and/or TLP-indexed financing taken by the subsidiary, when these rates are not proportional to the CDI rate. As at December 31, 2019, the subsidiary had no swap transactions linked to the TJLP and/or TLP.

- The possibility of unfavorable changes in interest rates would result in higher finance costs for the subsidiary due to the indebtedness and the obligations assumed by the subsidiary under the swap contracts indexed to floating interest rates (CDI percentage). However, as at December 31, 2019, the subsidiary's financial funds were invested in CDIs and this considerably reduces this risk.

(iii) Credit risk inherent to providing services

The risk involves the possibility of the subsidiary factoring in losses arising from the inability of subscribers to pay the invoiced amounts. To keep this risk to a minimum, the subsidiary undertakes preventive credit analyses of all orders placed by the sales areas while monitoring the accounts receivable from subscribers, blocking their ability to use the services, among other actions, in the event that the customers do not pay their debts. There were no customers contributing more than 10% of the net accounts receivable as at December 31, 2019 and 2018 or revenue from services rendered.

(iv) Credit risk inherent to sales of handsets and prepaid phone cards

The policy of the Group regarding the sale of handsets and the distribution of prepaid phone cards is directly related to the levels of credit risk accepted during the normal course of business. The selection of partners, the diversification of the accounts receivable portfolio, monitoring loan conditions, positions and order limits established for the traders and the constitution of real guarantees are among the procedures adopted by the subsidiaries to reduce possible problems in collecting from their commercial partners. There are no customers that have accounted for more than 10% of the receivables from the sale of goods during the period ending in December 2019 and 2018. The Company had one customer that accounted for more than 10,6 % of the net trade accounts receivable from the sale of goods as at December 31, 2019.

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(v) Liquidity risk

- Liquidity risk arises from the need for cash to meet the Company's obligations. The Company structures the maturity dates of its non-derivative financial instruments and of its respective derivative financial instruments so as not to affect liquidity.

- The Company's liquidity and cash flow management is performed on a daily basis in order to ensure that the operating cash generation and prior funding, whenever necessary, are sufficient to maintain its schedule of operational and financial commitments.

- All financial investments of the Company have daily liquidity, and Management may, in specific cases: i) review the dividend payment policy, ii) issue new shares, and/or iii) sell assets in order to improve liquidity.

(vi) Financial credit risk

The cash flow estimate is made and aggregated by the Finance and Treasury department of the Company. This department monitors the continuous liquidity requirements estimate 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 subsidiary incurring losses due to difficulties in realizing their short-term investments and swap contracts due to bankruptcy of the counterparties. The subsidiary minimizes the risk associated with these financial instruments by operating only with sound financial institutions and adopting policies that establish maximum risk concentration levels per institution.

Fair value of derivative financial instruments

The consolidated derivative financial instruments are shown as follows:

	12/2019			12/2018		
	Assets	Liabilities	Net	Assets	Liabilities	Net
Transactions involving derivatives	46,511	(4,405)	42,106	81,408	(11,618)	69,790
Current portion	16,602	(858)	15,744	50,769	(2,373)	48,396
Non-current portion	29,909	(3,547)	26,362	30,639	(9,245)	21,394

The consolidated financial derivative instruments with long-term maturities as at December 31, 2019 were as follows:

	Assets	Liabilities
2021	8,096	(709)
2022	8,096	(709)
2023 onwards	13,717	(2,129)
	29,909	(3,547)

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Non-derivative financial liabilities mainly represent suppliers, dividends payable and other obligations maturing in the next 12 months, except for borrowing and financing and financial leases, whose nominal payment flows are disclosed in Notes 20 and 16.

**Consolidated financial assets and liabilities valued at fair value:**

	12/2019		
	Level 1	Level 2	Total
Total assets	658,328	46,511	704,839
Financial assets valued at fair value	658,328	46,511	704,839
Derivatives used for hedging purposes	-	46,511	46,511
Securities	658,328	-	658,328
Total liabilities	-	4,405	4,405
Financial liabilities valued at fair value through profit or loss	-	4,405	4,405
Derivatives used for hedging purposes	-	4,405	4,405
	<b>12/2018</b>		
	Level 1	Level 2	Total
Total assets	790,070	81,408	871,478
Financial assets valued at fair value	790,070	81,408	871,478
Derivatives used for hedging purposes	-	81,408	81,408
Securities	790,070	-	790,070
Total liabilities	-	11,618	11,618
Financial liabilities valued at fair value through profit or loss	-	11,618	11,618
Derivatives used for hedging purposes	-	11,618	11,618

The fair value of financial instruments traded on active markets is based on quoted market prices as 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 comprise investments in CDBs and repurchases classified as trading securities.

The fair value of financial instruments that are not traded on an active market (for example, over-the-counter derivatives) is determined using valuation techniques. These valuation techniques maximize the use of observable market data when available and rely to the minimum extent possible on entity specific estimates. If all significant inputs required to fair value 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

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included in Level 3.

Specific valuation techniques used to value financial instruments include:

- Quoted market prices or financial institutions 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 fair value for 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 this flow to its present value by means of the discounted future interest rates disclosed in the market. The fair values were estimated at a specific time, based on the 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 follows:

December 31, 2019

	Measured at amortized cost	Fair value through profit or loss	Total
Assets, per balance sheet	6,769,033	704,839	7,473,872
Derivative financial instruments	-	46,511	46,511
Trade accounts receivable and other accounts receivable, excluding prepayments	3,287,855	-	3,287,855
Marketable securities	-	658,328	658,328
Cash and cash equivalents	2,284,810	-	2,284,810
Leasing	156,379	-	156,379
Judicial deposits	1,006,899	-	1,006,899
Other assets to offset	33,090	-	33,090
	14,310,830	4,405	14,315,235
Liabilities per balance sheet			
Borrowing and financing	2,029,088	-	2,029,088
Derivative financial instruments	-	4,405	4,405
Suppliers and other obligations, excluding legal obligations	3,923,035	-	3,923,035
Leasing	7,780,870	-	7,780,870
Dividends payable	577,837	-	577,837

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December 31, 2018

	Measured at amortized cost	Fair value through profit or loss	Total
Assets per balance sheet	5,639,420	871,478	6,510,898
Derivative financial instruments	-	81,408	81,408
Trade accounts receivable and other accounts receivable, excluding prepayments	2,969,116	-	2,969,116
Marketable securities	-	790,070	790,070
Cash and cash equivalents	1,075,530	-	1,075,530
Leasing	208,049	-	208,049
Judicial deposits	1,345,113	-	1,345,113
Other assets to offset	41,612	-	41,612

	Measured at amortized cost	Fair value through profit or loss	Total
Liabilities per balance sheet	8,296,570	11,618	8,308,188
Borrowing and financings	1,663,017	-	1,663,017
Derivative financial instruments	-	11,618	11,618
Suppliers and other obligations, excluding legal obligations	4,323,374	-	4,323,374
Leasing	1,940,074	-	1,940,074
Dividends payable	370,105	-	370,105

The 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**

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 hedging against exchange variations must be acquired simultaneously with the closing of the debt that gave rise to that exposure. The coverage level for this exchange exposure is 100% of the risk, both in terms of maturity date and amount.

As at December 31, 2019, no types of margins or collateral applied to the Company's or the subsidiary's transactions involving derivative financial instruments.

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The criteria for choosing the financial institutions abide by parameters that take into account the rating provided by reliable risk analysis agencies, shareholders' equity and concentration levels of transactions and funding.

The transactions involving derivative financial instruments entered into by the subsidiaries and outstanding as at December 31, 2019 and 2018 are shown in the table below:

December 31, 2019

		<u>COUNTERPARTY</u>			<u>% Coverage</u>	<u>AVERAGE SWAP RATE</u>		
<u>Currency</u>	<u>SWAP Type</u>	<u>DEBT</u>	<u>SWAP</u>	<u>Total Debt</u>	<u>Total Swap (Asset Side)</u>	<u>Asset Side</u>	<u>Liability Side</u>	
<b>USD</b>	LIBOR X DI	KFW/ Finnvera	JP Morgan e BOFA	330,217	330,217	100%	LIBOR 6M + 0,75% p.a.	85,50% do CDI
<b>USD</b>	PRE X DI	CISCO	Santander e JP Morgan	40,366	40,366	100%	2,50% p.a.	84,50% do CDI

December 31, 2018

		<u>COUNTERPARTY</u>			<u>% Coverage</u>	<u>AVERAGE SWAP RATE</u>		
<u>Currency</u>	<u>Swap type</u>	<u>Debt</u>	<u>SWAP</u>	<u>Total Debt</u>	<u>Total Swap (Asset Side)</u>	<u>Asset Side</u>	<u>Liability Side</u>	
<b>USD</b>	LIBOR X DI	KFW	JP Morgan	43,420	43,420	100%	LIBOR 6M + 1.35% p.a.	102.50% of CDI
<b>USD</b>	LIBOR X DI	KFW/ Finnvera	JP Morgan and BOFA	378,595	393,387	100%	100% LIBOR 6M + 0.75% p.a.	85,50% of CDI
<b>USD</b>	PRE X DI	CISCO	Santander and JP Morgan	116,466	116,466	100%	2.18% p.a.	88,20% of CDI

In August 2018, the Company purchased US Dollar call options in the amount of US\$100 million, with a strike price of R\$4.00, in order to reduce the effects of foreign exchange variations on business contracts. The options were divided into nine maturity brackets worth US\$11.1 million each (October 2018 to June 2019), and they were purchased for the initial amount of R\$11.7 million, taking into account a reference spot price of R\$3.7655 upon purchase. Due to the increase in US Dollar rates and a reduction in the risk exposure of business contracts, the Company settled the installments maturing in October 2018 and November 2018 in advance, for the price of R\$5.6 million, considering a reference spot price of 4.157 at the time of the sale. In November 2018, considering the close maturity dates and the reduced risk exposure in commercial agreements, the Company settled in advance those maturing in December 2018 and in January and February 2019 in the amount of R\$1.0 million. The options remaining matured on June 15, 2019. The Company did not have options transactions on December 31.

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Position showing the sensitivity analysis – effect of variations in the fair value of the swaps

In order to identify possible distortions arising from consolidated derivative financial instrument transactions 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 follows:

Description	2019	Probable Scenario	Possible Scenario	Remote Scenario
Debt in USD (Cisco and KFW)	381,178	381,178	474,450	567,104
A) Δ Aggregate debt variation			93,272	185,926
Fair value of the asset side of the swap	381,178	381,178	474,450	567,104
Fair value of the liability side of the swap	(398,971)	(338,971)	(337,647)	(336,387)
Swap result	42,207	42,207	136,803	230,717
B) Δ Aggregate swap variation			94,596	188,510
C) Final result (B-A)			(1,324)	(2,584)

Given the characteristics of the derivative financial instruments of the subsidiaries, the Company's assumptions basically took into account the effects of: i) the variation in the CDI, ii) the variation of the LIBOR rate, and iii) the variation in the US Dollar rate used in the transactions, achieving, respectively, the percentages and quotations indicated below:

Risk variable	Probable scenario (current)	Possible scenario	Remote scenario
CDI	4.40%	5.50%	6.60%
LIBOR	1.91%	2.39%	2.87%
USD	4.0307	5.0384	6.0461

As the subsidiaries hold derivative financial instruments to hedge their respective financial debt, the variations in the scenarios are monitored from the respective subject of the 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 in 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.

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 subject matter of the subsidiaries' derivative financial instruments.

Sensitivity analyses referring to the derivative financial instruments outstanding as at December 31, 2019 were conducted basically taking into account the assumptions surrounding the variations in market interest rates and the variation of the US Dollar used in the swap agreements. The use of those assumptions in the analyses was exclusively due to the characteristics of the derivative financial instruments, which represent exposure to interest rate and exchange variations only.

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Position showing gains and losses with derivatives in the period

	12/2019
Net income from USD vs. CDI transactions	5,077

**Capital management**

The Group's objectives when managing capital are to safeguard the Group's ability to continue as a going concern in order to provide returns to shareholders and benefits to other stakeholders, in addition to maintaining 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, returning capital to the shareholders or issuing new shares or selling assets to reduce its level of indebtedness, for example.

The Financial Leverage Index as at December 31, 2019 and December 31, 2018 can be summarized as below:

	2019			2018
	Balances with IFRS 16	Adjustments	Balances without IFRS 16	
Total borrowings and financings and derivatives (Note 20 and 37)	1,986,982	-	1,986,982	1,593,227
Lease - Liabilities (Note 16)	7,780,870	(6,196,068)	1,584,802	1,940,074
Lease - Assets (Note 16)	(156,379)	-	(156,379)	(208,049)
Less: Cash and cash equivalents (Note 4)	(2,284,810)	-	(2,284,810)	(1,075,530)
FIC (Note 5)	(654,479)	-	(654,479)	(784,841)
Net Debt	6,672,184	(6,196,068)	476,116	1,464,881
LAJIDA (EBITDA) (1) (last 12 months) - Standardized	9,643,838	(1,315,684)	8,328,153	6,371,844
Financial Leverage Index - Unaudited	0.69	4.71	0.06	0.23
<b>(1) Reconciliation to Net Income for the year:</b>				
Adjusted Net Income	3,622,127	143,076	3,765,203	2,545,101
Depreciation and amortization	5,128,981	(940,144)	4,188,837	3,954,321
Net financial income	(21,210)	(592,323)	(613,533)	537,333
Income tax and social contribution	913,940	73,706	987,646	(664,911)
LAJIDA (EBITDA) (1)	9,643,838	(1,315,685)	8,328,153	6,371,844

(1) Lajida: profit before interest, taxes, depreciation and amortization.

EBITDA: Earnings before interest, tax, depreciation and amortization (not an accounting metric)

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**Changes in financial liabilities**

Changes in liabilities due to financing activities, such as borrowing and financing, financial leasing and financial instruments are presented below:

	Borrowing and financing	Financial leasing	Derivative financial instruments (assets) liabilities
December 31, 2018	1,663,017	1,940,074	(69,790)
Adoption of IFRS 16/CPC 06 (R2)	-	5,256,114	-
Inflows	1,000,000	1,834,914	-
Financial expenses	167,998	821,463	9,068
Foreign exchange variations, net	18,222	-	(14,145)
Payments	(820,149)	(1,585,712)	32,761
Remeasurement IAS 17 (i) / IFRS16	-	(485,983)	-
December 31, 2019	2,029,088	7,780,870	(42,106)

(i) As mentioned in Note 2.f, the Company decided to adopt the pronouncement IFRS 16/CPC 06(R2) – Lease, retroactively with the effect of the application as at January 1, 2019. Therefore, the lease previously classified as a financial lease, using CPC 06 (IAS 17), the book value of the right-of-use asset and of the lease liability on the date of initial application of the standard, comprised the book value of the lease asset and of the lease liability immediately prior to the application of this new standard, in accordance with CPC 06 (IAS 17). However, for such leases, as determined by the new standard, the Company is required to become to measure the right-of-use asset and the lease liability as from the initial application based on the new standard. Thus, the lease previously measured in accordance with IAS 17/CPC 06 was remeasured as at March 31, 2019, specifically with respect to the exclusion of variable lease payments that depend on an index or a rate, given that the projected inflation took into account for the period of the agreements previously measured in accordance with IAS 17/CPC 06.

**38. Defined benefit pension plans and other post-employment benefits**

	12/2019	12/2018
PAMEC/ asset policy and medical plan	5,782	2,850

**ICATU, SISTEL and FUNCESP**

The Company has been sponsoring a private pension plan with defined benefits for a group of employees from the former TELEBRÁS system under the administration of the Fundação Sistel de Seguridade Social – SISTEL and of ICATU Multi-sponsored fund. In addition to the plans coming from the Telebrás System, there is also a plan managed by Fundação CESP resulting from the merger of AES Atimus.

The pension plans mentioned, as well as the medical plans, are briefly explained below:

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**PBS Assisted (PBS-A Tele Celular Sul and PBS-A Tele Nordeste Celular):** SISTEL's benefit plan, which has defined benefit characteristics and includes inactive employees who were part of the plans sponsored by the companies of the former TELEBRÁS System;

**PBS (PBS Tele Celular Sul and PBS Tele Nordeste Celular):** pension plan for inactive employees, such plan being multi-sponsored, under administration of ICATU Multi-sponsored fund;

**Management Agreement:** management agreement for the payment of pensions to retirees and pensioners, for the retirees of the Company's predecessors, under administration of ICATU Multi-sponsored fund;

**PAMEC/Asset Policy:** health care plan to the supplemented, for the retirees of the Company's predecessors;

**AES Telecom:** Part of the supplementary pension and pension plan PSAP, managed by the CESP Foundation, which is the Company's responsibility, in view of the acquisition of Eletropaulo Telecomunicações Ltda (AES Atimus), succeeded by TIM Fiber SP LTDA, later incorporated to TIM Celular which was incorporated by the Company.

**Medical Plan Fiber:** Provision for the maintenance of a health plan as a post-employment benefit to former employees of AES Atimus (as established in law 9656/98, articles 30 and 31), which was acquired and incorporated by TIM Celular and later incorporated by the Company.

We present below the actuarial position of liabilities and assets related to the retirement and health care plans, as of December 31, 2019, according to the rules established by CPC 33/IAS 19:

**(a) Effects as of December 31:**

	Plans						Totals	
	PBS (*)	PBS Assisted (*)	Management agreement (*)	PAME C/Asse t Policy	AES Telecom	Medical Plan	2019	2018
Reconciliation of assets and liabilities as of 12/31/19								
Present value of actuarial liabilities	40,427	10,107	151	1,080	11,099	2,585	65,449	52,206
Fair value of plan assets	(43,991)	(13,527)	(425)	-	(8,982)	-	(66,925)	(68,768)
Present value of obligations in excess of fair value of assets	(3,564)	(3,420)	(274)	1,080	2,117	2,585	(1,476)	(16,562)
Net actuarial liabilities / (assets)	(3,564)	(3,420)	(274)	1,080	2,117	2,585	(1,476)	(16,562)

(\*) No assets were recognized by the sponsors, due to the impossibility of reimbursement of this surplus, and the sponsor's contributions will not be reduced in the future.

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**(b) Movement in net actuarial liabilities (assets)**

	Plans					
	PBS	PBS Assisted	Management agreement	PAMEC /Asset Policy	AES Telecom	Medical Plan
Actuarial Liabilities (Assets) at 12/31/18	(14,964)	(4,209)	(239)	884	102	1.864
Expenditure (revenue) recognized in income	(1,394)	(391)	(22)	81	100	283
Sponsor Contributions	-	-	-	(47)	-	(26)
Recognized actuarial (gains) or losses	12,794	1,180	(13)	162	1,915	464
Unrecognized actuarial gains or losses	-	-	-	-	-	-
Net actuarial liabilities (assets) as of 12/31/19	(3,564)	(3,420)	(274)	1,080	2,117	2,585

**(c) Reconciliation of the present value of the obligations**

	Plans					
	PBS	PBS Assisted	Management agreement	PAMEC /Asset Policy	AES Telecom	Medical Plan
Value of liabilities at 12/31/18	32,767	8,285	156	884	8,250	1,864
Cost of current service	5	-	-	-	93	108
Interest on actuarial liability	2,932	738	14	81	770	175
Benefits paid in the year	(2,629)	(719)	(9)	(47)	(348)	(27)
Contributions paid by participants					57	
(Gains)/losses on liabilities	7,352	1,803	(10)	162	2,277	465
Value of liabilities at 12/31/19	40,427	10,107	151	1,080	11,099	2,585

**(d) Reconciliation of fair value of assets**

	Plans					
	PBS	PBS Assisted	Management agreement	PAMEC/Asset Policy	AES Telecom	Medical Plan
Fair value of assets at 12/31/18	47,731	12,494	395	-	8,148	-
Benefits paid in the year	(2,629)	(719)	(9)	-	(348)	-
Effective return on assets in the year	4,326	1.128	36	-	763	-
Actuarial gain (loss) on plan assets	(5,437)	624	3	-	361	-
Contributions paid by participants	-	-	-	-	58	-
Sponsor contributions poured into the plan	-	-	-	-	-	-
Fair value of assets at 12/31/19	43,991	13,527	425	-	8,982	-

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**(e) Expenditure planned for 2020**

	Plans					
	PBS	PBS Assisted	Management agreement	PAMEC/Asset Policy	AES Telecom	Medical Plan
Current service cost (with interest)	15	-	-	-	125	150
Interest on actuarial liabilities	2.650	658	10	72	774	179
Expected return on assets	(2,893)	(888)	(29)	-	(627)	-
Interest on the effect of the (asset)/ liability limit	243	230	19	-	-	-
Total net expense (income) to be recognized	15	0	0	72	272	329

**Actuarial assumptions adopted in the calculations**

The main actuarial assumptions adopted in the calculations were the following:

Nominal discount rate of the actuarial liability:	PBS South: 6.81% / 3.20%; PBS Northeast: 6.83% / 3.22%; MA: 6.85% / 3.24%; PBS-A: 6.75% / 3.14%; AES: 7.09% / 3.47%; PAMEC: 6.77% / 3.16%; FIBER: 6.96% / 3.34%
Nominal wage growth rate:	PBS e MA: Not Applicable MA and PBS-A: Not Applicable; AES: 5.57% / 2.00%; PAMEC and FIBER: Not Applicable
Biometric general mortality table:	PBS, MA and PBS-A: AT-2000 segregated by sex, softened by 10%;
Biometric disability entry table:	PBS: Álvaro Vindas; MA, PBS-A and PAMEC: Not Applicable; AES and FIBER: Mercer Disability;
Expected rate of turnover:	PBS, MA, PBS-A and PAMEC: Nula AES and FIBER: 0.15/(time of service + 1), being null and void as from 50 years
Probability of entry into retirement:	PBS and FIBER: 100% in 1st eligibility; MA: Not Applicable; AES: 3% per year between the first age of eligibility for early retirement and eligibility for normal retirement;
Estimated long-term inflation rate	MA, PBS-A and PAMEC: Not Applicable PAMEC and FIBER: 7.64% / 3.25%
Calculation method	Projected Unit Credit Method

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### 39. Insurance

The Company and its subsidiary have a policy for monitoring the risks inherent in their operations. Accordingly, as at December 31, 2019, the Company and its subsidiary had insurance coverage against operating risks, third-party liability and health, among others. The Management of the Company and of its subsidiary consider that the insurance coverage 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>Amount Insured</b>
Operating risk	R\$ 32,274,029
General Liability - RCG	R\$ 80,000
Cybernetic risks (cyber)	R\$ 28,520
<b>Vehicles (executive and operational fleets)</b>	<b>R\$1,000 for civil liability optional (property damages and personal injury) and R\$100 for moral damages.</b>

### 40. Subsequent Events

On January 31, 2020, the Company's wholly-owned subsidiary signed a financing agreement with Banco do Nordeste do Brasil, in the total amount of R\$752,479: (i) R\$325,071 at IPCA cost + 1.4386% and subject to a 15% default bond; and, (ii) R\$427,408 at IPCA cost + 1.7582% and subject to a 15% default bond. The purpose of the facility is to finance Capex in the Northeast and North of the states of Minas Gerais and Espírito Santo from 2019 to 2022 with a total payment term of 8 years, being 3 grace years and 5 years of amortization. The operation will be guaranteed by (i) a bank guarantee proportional to 100% of the amount of each disbursement; and (ii) a bond of receivables proportional to 5% of the amount of each disbursement. To date, there were no disbursements.

## **FISCAL COUNCIL'S OPINION**

The Fiscal Council, in compliance with legal and statutory provisions, examined the Management's Report and the individual and consolidated Financial Statements of TIM Participações S.A. ("Company"), dated as of December 31<sup>st</sup>, 2019.

Our examinations were conducted in accordance with the legal provisions and included the: (i) analysis of the financial statements prepared periodically by the Company; (ii) the Management's Proposal for the allocation of results related to the year of 2019 and the distribution of dividends by the Company; (iii) monitoring of the work done by independent and internal auditors; and (iv) questions about relevant actions and transactions made by the Management.

Based on our examinations, the information provided and the clarifications received and, also, considering the Company's Independent Auditors' Report, Ernst & Young Auditores Independentes S/S ("EY"), unqualified, issued on February 11<sup>th</sup>, 2020, the Fiscal Council is of the opinion that: (i) the Management's Report and the Financial Statements above mentioned, adequately reflect the information contained in them; and (ii) the Management's Proposal for the allocation of results related to the year of 2019 and the distribution of dividends by the Company, are all in conditions to be submitted to the Annual General Shareholders Meeting.

Rio de Janeiro, February 11<sup>th</sup>, 2020.

**WALMIR KESSELI**

Chairman of the Fiscal Council

**JARBAS T. BARSANTI RIBEIRO**

Member of the Fiscal Council

**ELIAS DE MATOS BRITO**

Member of the Fiscal Council

## STATUTORY AUDIT COMMITTEE ANNUAL REPORT

### 1. About the Committee

The Statutory Audit Committee (“CAE”) of TIM Participações S.A. (“Company”) is a permanent statutory body created by the Extraordinary Shareholders’ Meeting held on December 12, 2013, in order to adopt the best Corporate Governance practices, as recommended, and in accordance with the *Comissão de Valores Mobiliários* (“CVM”) Instruction Nr. 308, of May 14, 1999, as amended by CVM Instruction Nr. 509, of November 16, 2011, and other applicable regulations.

The CAE is composed of at least three (3) and no more than 5 (five) members, elected by the Board of Directors, for a 2-year term of office, which shall coincide with the term of office of the members of the Board of Directors, re-election being limited to a maximum period of 10 (ten) years. The CAE member’s assignment may not be delegated and must be exclusively carried out by the elected members.

On the occasion of the election of the new Board Members at the Annual and Extraordinary Shareholders’ Meeting held on March 28<sup>th</sup>, 2019, for the 2019/2021 mandate, the Board of Directors elected the following members to compose the CAE: Messrs. Alberto Emmanuel Carvalho Whitaker (Coordinator), Gesner José de Oliveira Filho and Herculano Aníbal Alves. Due to the resignation presented by Mr. Alberto Emmanuel Carvalho Whitaker, on July 30<sup>th</sup>, 2019, and the election of Mrs. Flavia Maria Bittencourt, on the same date, the composition of the CAE is the following: Messrs. Gesner José de Oliveira Filho (Coordinator) and Herculano Aníbal Alves, and Mrs. Flavia Maria Bittencourt. All of them are Board members of the Company and are characterized as independent, according to CVM criteria.

The CAE is responsible for the supervision of the quality and integrity of the financial statements, and their compliance with legal, regulatory and statutory terms, the adequacy of proceedings related to risk management and for the activities of the independent and internal auditors, as well as the supervision and assessment of contracts of any kind, to be executed between the Company or its subsidiary, on one side, 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 side.

In addition to its ordinary duties, the CAE also performs as the Audit Committee of the Company, in accordance with the provisions of the Sarbanes Oxley Act (“SOx”), to which the Company is subject to, as it is registered at the US Securities and Exchange Commission

("SEC"), as holder of American Depositary Receipts (ADRs) on The New York Stock Exchange ("NYSE") since November 16, 1998.

The CAE has an annual budget, within the limits approved by the Company's Board of Directors, to conduct or determine consultations, evaluations and investigations within the scope of its activities, including the arrangement and use of independent external experts.

This Report is issued in compliance with Section 13, VIII, of the Internal Rules of the CAE, and according to the rule established by the CVM.

## **2. Activities of the Statutory Audit Committee of TIM Participações in 2019**

The CAE will meet whenever necessary, but at least bi-monthly, so that financial information is always assessed before becoming public.

Upon establishment of an annual plan to fulfill its duties, during the period from January 1<sup>st</sup> to December 31<sup>st</sup>, 2019, twenty-two (22) ordinary meetings of the CAE were held, which included 123 (one hundred and twenty-three) items of Agenda (topics). The meetings lasted an average of 2 (two) hours and 30 (thirty) minutes each and, during the discussions, the Chairman of the Board of Directors, the Chief Executive Officer, the *Diretor Financeiro* (Chief Financial Officer) and the *Diretor de Relações com Investidores* (Investor Relations Officer), besides other members of the Executive Board, the Directors of the Internal Audit and the Compliance areas, and the Independent Auditors, were directly involved. At each meeting of the Board of Directors the CAE reports the activities carried out in the respective month.

Among the activities carried out during the financial year, the following should be highlighted:

I. Analyzed the annual work plan of the Independent Auditors and discussed the results of their activities in seventeen (17) topics during the year of 2019. Ernst & Young Auditores Independentes S/S ("EY") was the firm responsible for auditing the financial statements for the fiscal year ended on December 31, 2019, for the planning and execution of the audits up to the quarterly reports ("ITRs") regarding the 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> quarters, according to the recognized standards, as well as responsible for the special revision of the ITRs (quarterly reports), submitted to the CVM. Their opinion should ensure that these Financial Statements represent adequately the Company's equity and financial position, in accordance with accounting practices adopted in Brazil, the Brazilian Corporate Law, the CVM Rules and the International Financial Reporting Standards (IFRS) issued by the International Accounting

Standard Board (IASB). EY was also the auditor firm of the subsidiary of the Company, TIM S.A., as well as responsible for reviewing Form 20-F (SEC) of the Company.

PricewaterhouseCoopers (“PwC”) was the firm responsible for auditing the quarterly report (“ITRs”) regarding the 1<sup>st</sup> quarter.

II. Supervised the Company's Internal Audit activities, in nine (9) topics during the year of 2019, analyzing the annual work plan and discussing the results of the activities performed and the reviews carried out, and evaluated through an evaluation questionnaire approved by the CAE, the performance of the internal auditors. On the 2019 Annual Audit Program, thirty-seven (37) audit projects were formalized, which action plans issued two-hundred and fifty-six (256) new actions, of which one-hundred and forty-one (141) were completed. Additionally, other one-hundred and forty-two (142) actions resulting from audit project referring to 2016 - 2018 fiscal years were concluded.

III. Supervised and analyzed the effectiveness, quality and integrity of internal control mechanisms in five (5) topics during the year of 2019, in order to, in addition to other purposes, monitor compliance with the provisions relating to: (a) the presentation of the Financial Statements, including quarterly reports and other interim statements; and (b) the information and valuation released based on adjusted accounting data and non-accounting data that add elements that were not on the structure of the usual reports of the Financial Statements, especially regarding the internal controls which support the Sarbanes-Oxley (“SOx”) certification.

With regards to internal controls, the following main issues were the subject of monitoring and recommendations by the CAE: (i) monitoring of the internal control system as to its effectiveness and improvement processes; (ii) analysis of the process of certification of internal controls - SOx with the Management and Independent Auditors; (iii) Company procedures for full compliance with SOx requirements and intensive monitoring of remediation plans related to the deficiencies pointed out by the Independent Audit in relation to the process of SOx Certification in the Company.

The CAE found that the internal controls are implemented in accordance with the nature, complexity and necessity of the operations and, in view of the information provided by the Executive Board, the Internal Audit and the independent auditors, and verified that there are no relevant facts or of a serious nature that could put at risk the compliance with the applicable legal and regulatory rules.

IV. The CAE was informed of the main processes within the Company, evaluating its quality and the commitment of the members of the top management with its continuous improvement. As a result of the meetings with the Company's internal areas, the CAE was able to offer suggestions to the Board of Directors to improve processes, as well as to monitor their implementation, and the execution of recommendations for improvement which were identified during the audit activities and in discussions with the business and control areas. Based on the information to which the CAE had access to, the CAE believes that the internal controls system of the Company, and of its subsidiary, is adequate to the size and complexity of its business, as well as structured to ensure the efficiency of its operations, of the systems that issue the financial reports and is in accordance with the internal and external rules to which the transactions are subject to. The CAE has noted the importance of continuous improvement in the internal control system.

V. Followed-up and supervised the work carried out by the Company's Compliance area in ten (10) topics, with emphasis on issues related to: (i) SOx Compliance through monitoring the deficiencies pointed out by the Independent Auditor and the Management of the Company; (ii) Compliance with Information Technology and Corporate Security, highlighting the risks of Cyber Security and discussing the implementation in the Company of the adaptations required by the General Law of Personal Data Protection ("LGPD"); (iii) Compliance of general and Commercial Processes of the Company; fraud and corruption, ensuring adherence to laws, rules, standards and internal and external regulations. In this sense, the CAE had the opportunity for field visits and direct contact with those responsible for these areas.

VI. The CAE was informed of the main amendment proposals related to the regulatory framework and to expected institutional changes, as well as of the main aspects of the political and economic scenarios, with emphasis on the risks and challenges of the current situation which may affect the Company. To this end, the CAE has monitored the main macro indicators that assist in an assessment of the risks of the external environment for the Company at the limit of what is predictable by the best quantitative and qualitative techniques.

VII. During the performance of its activities, the CAE regularly monitored issues related to: (i) Customer satisfaction and the quality of services and staff contact; (ii) Incentives for innovation applied to products and services; (iii) Transparency and accountability to stakeholders; (iv) Ethical conduct in business; (v) Digital inclusion; (vi) Dialogues and communication with stakeholder groups; (vii) Management of

electronic products; (viii) Investment in infrastructure; and (ix) Development of new technologies.

VIII. Throughout the year of 2019, the CAE analyzed the Company's Enterprise Risk Management ("ERM") reports, focusing on the monitoring of the work plan to review and update risk factors disclosed by the Company, management of financial risks, risk appetite of the Company and adequacy of risk factors contained in the Company's *Formulário de Referência*, on SOx/CVM risk inventory. This issue was brought in three (3) topics during the year 2019. The Company's risk management structure foresees the analysis, by the CAE, based on the examination performed by the Control and Risks Committee ("CCR"). Both are bodies of governance associated to the Board of Directors as defined by the Company's By-laws.

IX. Within its attributions, provided by the Company's By-laws and the CAE's Internal Rules, the CAE previously examined, evaluated and opined on fifteen (15) agreements of different types between the Company or its subsidiary, on one side, and related parties, on the other side. All the agreements entered into, strictly followed the governance process required to comply with both the internal rules of the Company's Compliance area and the standards of CVM and SEC regulations. The relevant information on the agreements are duly disclosed in the Company's *Formulário de Referência*.

X. As part of its duties, the CAE analyzed, in eight (8) topics during the year 2019, the reports regarding the complaints received by the Company's Whistleblowing Channel its respective envisaged actions for improvement. The reports, which are divided by typology, are filed at the Company's headquarters.

XI. In addition to the twenty-two (22) reported meetings for the proper performance of their duties, the CAE members participated in at least three (3) private meetings, of 1 hour each, with the Independent Auditors (PwC and, later, EY), as well as the Internal Audit area of the Company, without the participation of the top management or other managers of the organization, to assess possible retrenchment or risk of a breach of independence, of any kind of interference by management, and/or to open the Committee to any concerns that need to be assessed in the development of the respective audit work.

### **3. Items discussed with the Independent Auditors considering the Audit Report (ISA 701) presentation form**

As determined by the auditing standards (ISA 260), which provide for communication with those charged with the Company's governance, the auditor must communicate, among other matters, the following: (i) their responsibilities in relation to the audit of the financial statements; (ii) overview of its Audit Plan for the fiscal year; (iii) its view on the significant qualitative aspects of the Company's accounting practices, including accounting policies and estimates, and disclosures in the financial statements; (iv) significant difficulties encountered during the audit, if any; (v) aspects of independence, including formal confirmation of its independence from the Company and its subsidiary; (vi) written notice to the persons in charge of governance of the significant findings arising from the audit; and (vii) as determined by ISA 701, communicate which Key Audit Matters (“KAM”) to be considered in the Independent Auditor's Report.

In view of the foregoing, in order to comply with the protocol and/or request for communication between the auditors and those charge with the Company's governance, the CAE held periodic meetings with the Company's Independent Auditors, in order to monitor the progress of the auditors' work in relation to the Company's financial statements and internal financial reporting controls (SOx), so that all of the above, among others, were formally evaluated by the CAE with the independent auditors.

Specifically, in relation to the KAMs, the CAE interacted with the Independent Auditors in order to understand the judgment of the auditors to determine these matters as KAMs, as well as an understanding of the audit approach defined by the Independent Auditors as an audit response to these KAMs.

Finally, in addition to all interaction with the Independent Auditors, the CAE carried out the following activities throughout the year to evaluate the areas considered as KAMs by the Independent Auditors:

#### **3.1 Provision for tax contingencies (explanatory notes “Provision for tax judicial and administrative lawsuits”, and 24)**

The CAE reviewed quarterly the evolution of tax contingencies and followed up the forecasts provided by those responsible for the Tax, Civil, Labor and Regulatory areas of the Company.

### **3.2 Recognition of PIS/COFINS credits due to the impact of the exclusion of ICMS from the PIS/COFINS tax base (note 9)**

The CAE met with the Company's management to evaluate and monitor the amount of credits in favor of the Company, due to the impact of the exclusion of ICMS from the PIS/COFINS calculation base.

### **3.3 New accounting standards (explanatory note 2.f)**

The CAE maintained several interactions with the Company's management to understand the adoption of the developed plan, the main technical aspects to be considered, including critical estimates and judgments, internal controls and/or tools developed to capture, measure and disclose financial statements and, specially, the qualitative and quantitative impacts resulting from the new accounting standard IFRS 16 - Leases (adoption as of January 1<sup>st</sup>, 2019).

## **4. Other Activities**

### **4.1 Review of Form 20-F and the *Formulário de Referência***

With regards to the review work on Form 20-F (SEC) and the *Formulário de Referência* (CVM), the members of the CAE met, formally, in the total of four (4) times with Company's executives, over the months of March and May 2019.

### **4.2. Evaluation of the Report on the Brazilian Code of Corporate Governance – Publicly-held Companies**

The members of the CAE met in total two (2) times over the months of June and July 2019 with executives of the Company, to evaluate the Company's adherence to certain governance practices set forth in the Brazilian Code of Corporate Governance – Publicly-held Companies, in compliance with CVM Instruction Nr. 586, of June 8, 2017, which amended and added provisions to CVM Instruction Nr. 480, of December 7, 2009.

### **4.3 Self-assessment of the CAE**

The members of the CAE submitted themselves to a self-assessment questionnaire on the performance of their activities, in accordance with the best governance practices in the domestic and foreign markets. Based on the answers presented, the CAE members sought

to improve and make more efficient the activities developed during the year 2019, aiming at a process of constant and permanent evolution.

#### **4.4. Assessment of Independent Auditors and Internal Audit**

The members of the CAE evaluated the quality of the work of the Company's Independent Auditors and Internal Audit, by means of an evaluation questionnaire previously approved by the CAE.

#### **5. Conclusions and recommendations**

The Company's CAE members, in the exercise of their duties and legal responsibilities, analyzed the Financial Statements, together with the Independent Auditors' report and the annual management report for the fiscal year ended December 31<sup>st</sup>, 2019 ("Annual Financial Statements of 2019").

Considering the information provided by the Company's Management and EY, and the proposed allocation of the results for the year 2019, the CAE concluded that this information and documents adequately reflect, in all material respects, the Company's equity and financial positions and of its subsidiary.

For this reason, they unanimously recommended the approval of the aforementioned documents by the Company's Board of Directors for referral to the Annual Shareholders' Meeting, pursuant to the Brazilian Corporation Law.

Rio de Janeiro, February 11, 2020

**GESNER JOSÉ DE OLIVEIRA FILHO**

Coordinator of the Statutory Audit  
Committee

**HERCULANO ANÍBAL ALVES**

Member of the Statutory Audit Committee

**FLAVIA MARIA BITENCOURT**

Member of the Statutory Audit Committee

## STATUTORY OFFICERS' STATEMENT

**Pietro Labriola** (Chief Executive Officer), **Adrian Calaza** (Chief Financial Officer and Investor Relations Officer), **Bruno Mutzenbecher Gentil** (Business Support Officer), **Mario Girasole** (Regulatory and Institutional Affairs Officer), **Leonardo de Carvalho Capdeville** (Chief Technology Information Officer), **Jaques Horn** (Legal Officer) and **Alberto Mario Griselli** (*Chief Revenue Officer*), as Statutory Officers of TIM Participações S.A., declare, in accordance with article 25, paragraph 1, item VI of CVM Instruction Nr. 480 of December 7<sup>th</sup>, 2009, that they have: reviewed, discussed and agreed with the Company's Financial Statements for the year ended December 31<sup>th</sup>, 2019.

Rio de Janeiro, February 11<sup>th</sup>, 2020.

**PIETRO LABRIOLA**  
Chief Executive Officer

**ADRIAN CALAZA**  
Chief Financial Officer and Investor  
Relations Officer

**MARIO GIRASOLE**  
Regulatory and Institutional Affairs  
Officer

**LEONARDO DE CARVALHO CAPDEVILLE**  
Chief Technology Information Officer

**BRUNO MUTZENBECHER GENTIL**  
Business Support Officer

**ALBERTO GRISELLI**  
Chief Revenue Officer

**JAQUES HORN**  
Legal Officer

## STATUTORY OFFICERS' STATEMENT

**Pietro Labriola** (Chief Executive Officer), **Adrian Calaza** (Chief Financial Officer and Investor Relations Officer), **Bruno Mutzenbecher Gentil** (Business Support Officer), **Mario Girasole** (Regulatory and Institutional Affairs Officer), **Leonardo de Carvalho Capdeville** (Chief Technology Information Officer), **Jaques Horn** (Legal Officer) and **Alberto Mario Griselli** (*Chief Revenue Officer*), as Statutory Officers of TIM Participações S.A., declare, in accordance with Section 25, paragraph 1, item V of CVM Instruction Nr. 480 of December 7<sup>th</sup>, 2009, that they have: reviewed, discussed and agreed with the opinion expressed on the Company's Independent Auditors' Report regarding the Company's Financial Statements for the year ended December 31<sup>th</sup>, 2019.

Rio de Janeiro, February 11<sup>th</sup>, 2020.

**PIETRO LABRIOLA**

Chief Executive Officer

**ADRIAN CALAZA**

Chief Financial Officer and Investor  
Relations Officer

**MARIO GIRASOLE**

Regulatory and Institutional Affairs Officer

**LEONARDO DE CARVALHO CAPDEVILLE**

Chief Technology Information Officer

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Business Support Officer

**ALBERTO GRISELLI**

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