

D. Risk Factors

This section is intended to be a summary of more detailed discussions contained elsewhere in this annual report. The risks described below are not the only ones we face. Additional risks that we do not presently consider material, or of which we are not currently aware, may also affect us. Our business, results of operations or financial condition could be impacted if any of these risks materialize and, as a result, the market price of our preferred shares and our ADSs could be affected.

Risks Relating to Brazil

The Brazilian government has exercised, and continues to exercise, significant influence over the Brazilian economy. This influence, as well as Brazilian political and economic conditions, could adversely affect us and the trading price of our preferred shares and ADSs.

The Brazilian federal government frequently exercises significant influence over the Brazilian economy and occasionally makes significant changes in policy and regulations. The Brazilian government's actions to control inflation and other policies and regulations have often involved, among other measures, changes in interest rates, changes in tax policies, wage and price controls, foreign exchange controls, currency devaluations, capital controls and limits on imports. Our business, financial condition, results of operations and the market price of our preferred shares and ADSs may be adversely affected by changes in government policies, especially those related to our sector, such as changes in telephone fees and competitive conditions, as well as general economic factors, including:

- exchange rates and currency fluctuations;
- exchange controls and restrictions on remittances abroad, (including with regards to the payment of dividends) such as those imposed in 1989 and early 1990;
- growth or downturn of the Brazilian economy;
- inflation;
- energy policy;
- interest rates and monetary policies;
- liquidity of domestic capital and lending markets;
- fiscal policies and changes in tax laws;
- economic, political or social instability;
- labor and social security policies, laws and regulations; and
- other political, diplomatic, social and economic developments in or affecting Brazil.

Uncertainty over whether the Brazilian federal government will implement changes to the policies, regulations or standards affecting these or other factors in the future may affect economic performance and contribute to economic uncertainty in Brazil, which may have an adverse effect on us and the trading price of our preferred shares and ADSs. Recent economic and political instability has led to a negative perception of the Brazilian economy and higher volatility in the Brazilian securities markets, which also may adversely affect us and the trading price of our preferred shares and ADSs.

The ongoing economic uncertainty and political instability in Brazil may adversely affect the Brazilian economy, our business, and the market price of our preferred shares and ADSs.

Brazil's political environment has historically influenced, and continues to influence, the performance of the country's economy. Political crises have affected and continue to affect the confidence of investors and the general public, which have historically resulted in economic deceleration and heightened volatility in the securities issued by Brazilian companies.

The recent economic instability in Brazil has contributed to a decline in market confidence in the Brazilian economy as well as to a deteriorating political environment. Despite the ongoing recovery of the Brazilian economy, weak macroeconomic conditions in Brazil are expected to continue throughout 2018 and in early 2019. In addition, various ongoing investigations into allegations of money laundering and corruption being conducted by the Office of the Brazilian Federal Prosecutor, including the largest such investigation known as “Lava Jato,” have negatively impacted the Brazilian economy and political environment.

In recent years, there has been significant political turmoil in connection with the impeachment of the former president (who was removed from office in August 2016) and ongoing investigations of her successor (who left office in January 2019) as part of the ongoing “Lava Jato” investigations. Presidential elections were held in Brazil in October 2018. We cannot predict which policies the new President of Brazil, who assumed office on January 1, 2019, may adopt or change during his mandate or the effect that any such policies might have on our business and on the Brazilian economy. Any such new policies or changes to current policies may have a material adverse effect on us. The political uncertainty resulting from the presidential elections and the transition to a new government may have an adverse effect on our business, results of operations and financial condition and the price of our preferred shares and ADSs.

Furthermore, Brazil’s federal budget has been in deficit since 2014. Similarly, the governments of Brazil’s constituent states are also facing fiscal concerns due to their high debt burdens, declining revenues and inflexible expenditures. While the Brazilian Congress has approved a ceiling on government spending that will limit primary public expenditure growth to the prior year’s inflation for a period of at least 10 years, local and foreign investors believe that fiscal reforms, and in particular a reform of Brazil’s pension system, will be critical for Brazil to comply with the spending limit. As of the date of this annual report, discussions in the Brazilian Congress relating to such reforms remain ongoing. Diminished confidence in the Brazilian government’s budgetary condition and fiscal stance could result in downgrades of Brazil’s sovereign debt by credit rating agencies, negatively impact Brazil’s economy, lead to further depreciation of the real and an increase in inflation and interest rates, thus adversely affecting our business, results of operations and financial condition.

Uncertainty about the Brazilian government’s implementation of changes in policies or regulations that affect such implementation may contribute to economic instability in Brazil and increase the volatility of securities issued abroad by Brazilian companies, including our securities. Any of the above factors may create additional political uncertainty, adversely affect the Brazilian economy, our business, financial condition, results of operations and the market price of our preferred shares and ADSs.

Inflation and government efforts to curb inflation may contribute to economic uncertainty in Brazil, adversely affecting our business and results of operations.

In the past, Brazil has experienced extremely high rates of inflation. Inflation and some of the measures taken by the Brazilian government in an attempt to curb inflation have had significant negative effects on the Brazilian economy generally. Inflation, policies adopted to curb inflationary pressures and uncertainties regarding possible future governmental intervention have contributed to economic uncertainty and heightened volatility in the Brazilian capital markets.

According to the National Consumer Price Index (*Índice Nacional de Preços ao Consumidor Amplo*), or IPCA, Brazilian inflation rates were 2.9%, 6.3% and 10.7% in 2017, 2016 and 2015, respectively. In 2018, inflation as measured by the IPCA registered 3.7%. Brazil may experience high levels of inflation in the future and inflationary pressures may lead to the Brazilian government’s intervening in the economy and introducing policies that could harm our business and the price of our preferred shares and ADSs. In the past, the Brazilian government’s interventions included the maintenance of a restrictive monetary policy with high interest rates that restricted credit availability and reduced economic growth, causing volatility in interest rates. For example, the SELIC (*Sistema Especial de Liquidação e de Custódia*), the Central Bank’s overnight rate, as established by the Monetary Policy Committee of the Central Bank (*Comitê de Política Monetária do Banco Central do Brasil-COPOM*), increased from 10.00% at the beginning of 2014 to a high point of 14.25% in 2016 before a series of reductions that started in 2017 until March 2018, bringing the SELIC rate down to 6.50% and remaining at this level at present. Conversely, more lenient government and Central Bank policies and interest rate decreases have triggered and may continue to trigger increases in inflation, and, consequently, growth volatility and the need for sudden and significant interest rate increases, which could negatively affect us and increase our indebtedness.

Currently, fixed broadband and mobile service providers use the internal general price index (*Índice Geral de Preços - Disponibilidade Interna*), or IGP-DI, to adjust their prices and television and cable service providers use the market general price index (*Índice Geral de Preços ao Mercado*), or IGP-M. The IGP-DI and IGP-M are inflation indexes developed by the Fundação Getúlio Vargas, a private organization. Since 2006, telephone fees for fixed line services have been indexed to the telecommunication services index (*Índice de Serviços de Telecomunicações*), or IST, adjusted by a productivity factor, which is defined by ANATEL Resolution 507/2008. The IST is an index composed of other domestic price indexes (including the IPCA, IGP-DI and IGP-M, among others) that is intended to reflect the telecommunications industry's operating costs. As a result, this index serves to reduce potential discrepancies between our industry's revenue and costs, and thus reduce the apparent adverse effects of inflation on our operations. The productivity factor, pursuant to which ANATEL is authorized to adjust fee rates, is calculated based on a compensation index established by ANATEL to incentivize operational efficiency and to share related gains in earnings from fixed line services with customers through fee rate adjustments. The IST is calculated based on a 12-month period average. This may cause increases in our revenues above or below our costs (including salaries), with potentially adverse impacts on our profitability.

Inflation and government measures to combat inflation, along with speculation about possible future governmental measures, have had and are expected to continue to have significant negative effects on the Brazilian economy, including heightened volatility in the Brazilian securities market. On the other hand, these policies may be incapable of preventing increases in the inflation rate. In the event of an increase in inflation, we may not be able to adjust the prices we charge our customers to offset the effects of inflation on our cost structure, which may adversely affect us.

Fluctuations in exchange rates may adversely affect our ability to meet liabilities denominated or linked to foreign currencies or reduce our income in foreign currency, and may have a material adverse effect on the market value of our preferred shares and ADSs.

The Brazilian currency has been historically volatile and has been devalued frequently over the past three decades. Throughout this period, the Brazilian government has implemented various economic plans and used various exchange rate policies, including sudden devaluations, periodic mini-devaluations (during which the frequency of adjustments has ranged from daily to monthly), exchange controls, dual exchange rate markets and a floating exchange rate system. Although long-term depreciation of the real is generally linked to the rate of inflation in Brazil, depreciation of the real occurring over shorter periods of time has resulted in significant variations in the exchange rate between the real, the U.S. dollar and other currencies. The exchange rate between the U.S. dollar and the Brazilian *real* has experienced significant fluctuations in recent years. The *real* depreciated 14.6% against the U.S. dollar in 2013, 13.4% in 2014 and 47.0% in 2015. In 2016, the *real* appreciated 16.5% against the U.S. dollar and in 2017, the *real* depreciated 1.5%, followed by another depreciation of 17.1% in 2018, ending the year at an exchange rate of R\$3.8748 per US\$1.00. On February 20, 2019 the exchange rate was R\$3.7100 per U.S.\$1.00. There can be no assurance that the *real* will not again depreciate against the U.S. dollar or other currencies in the future.

As of December 31, 2018, 1.6% of our total indebtedness of R\$6.1 billion was denominated in foreign currency. As of December 31, 2018, we had currency hedges in place to cover all of our financial foreign currency-denominated indebtedness. Approximately 7.8% of our operating costs and expenses are payable or linked to payment by us in U.S. dollars or Euros. By contrast, 99.8% of our revenue is generated in *reais*, except income derived from hedging transactions, international long-distance interconnection fees and services to customers outside of Brazil.

To the extent that the value of the *real* decreases relative to the U.S. dollar or the Euro, our commitments payable or linked to payment by us in foreign currencies become more expensive. Although our accounts receivable denominated in foreign currencies would also appreciate, the net effect could adversely affect our revenue and expenses. In addition, the IST inflation index does not adequately reflect the true effect of exchange rate fluctuations. Thus, our revenue, when translated to U.S. dollars, does not adequately reflect the true effect of exchange rate fluctuations, which may affect our results of operations.

We use derivative instruments to limit our exposure to exchange rate risk. Since September 1999, we have hedged all of our foreign currency-denominated bank debt using swaps and other derivative instruments. Since May 2010, the company began using net balance coverage, which is the hedging of net positions in foreign exchange exposures, or assets (issued invoices) minus liabilities (received invoices) for foreign exchange exposures, substantially reducing our risk to fluctuations in exchange rates. We could still continue to face exchange rate exposure with respect to our planned capital expenditures however, as a small part of our planned capital expenditures are denominated or indexed in foreign currencies (mostly U.S. dollars). We systematically monitor the amounts and time of exposure to exchange rate fluctuations and may hedge positions when deemed appropriate.

Political, economic and social developments and the perception of risk in other developed and emerging countries may adversely affect the Brazilian economy, our business, and the market price of Brazilian securities, including our preferred shares and ADSs.

The market for securities issued by Brazilian companies may be influenced, to varying degrees, by economic conditions in both developing and developed economies. The reaction of investors to developments in other countries may have an adverse impact on the market value of securities of Brazilian companies. The prices of shares traded on the B3, for example, have historically been sensitive to fluctuations in interest rates in the United States, as well as variations of the main U.S. stock exchanges. Additionally, crises in other emerging countries or the economic policies of other countries may reduce investor demand for securities of Brazilian companies, including our preferred shares and ADSs. Any of the foregoing developments may adversely affect the market value of our preferred shares and ADSs and hinder our ability to access the capital markets and finance our operations in the future on acceptable terms and costs, or at all.

To the extent that economic problems in emerging market countries or elsewhere adversely affect Brazil, our business and the market value of our preferred shares and ADSs could be adversely affected. Furthermore, we cannot assure you that, in the event of adverse developments in emerging market economies, the international capital markets will remain open to Brazilian companies or that the resulting interest rates in such markets will be advantageous to us. Decreased foreign investment in Brazil may negatively affect growth and liquidity in the Brazilian economy, which in turn may have a negative impact on our business. Disruption or volatility in the global financial markets could further increase negative effects on the financial and economic environment in Brazil, which could have a material adverse effect on us.

Any further downgrading of Brazil's credit rating could reduce the trading price of our preferred shares and ADSs.

We may be harmed by investors' perceptions of risks related to Brazil's sovereign debt credit rating. Rating agencies regularly evaluate Brazil and its sovereign ratings, which are based on a number of factors including macroeconomic trends, fiscal and budgetary conditions, indebtedness metrics and the perspective of changes in any of these factors.

As a result of the allegations under the "Lava Jato" investigations and the economic downturn, Brazil was downgraded to non-investment grade status by S&P in September 2015, by Fitch Ratings in December 2015, by Moody's in February 2016 and downgraded again by Fitch in May 2016. In addition, Brazil was further downgraded by S&P to BB- with a stable outlook in January 2018 as a result of the failure of the current Brazilian government to approve certain pension reforms. Brazil's sovereign rating is currently rated by the three major risk rating agencies as follows: BB- by S&P and Fitch Ratings and Ba2 by Moody's.

Brazil's sovereign credit rating is currently rated below investment grade by the three main credit rating agencies. Consequently, the prices of securities issued by Brazilian companies have been negatively affected. A reversal of the current recovery of the Brazilian economic activity and instability in the political environment, among other factors, could lead to revision of the agencies' outlooks, which could be followed by further ratings downgrades. Any further downgrade of Brazil's sovereign credit ratings could heighten investors' perception of risk and, as a result, cause the market price of our preferred shares and ADSs to decline.

Risks Relating to the Brazilian Telecommunications Industry and Us

Extensive government regulation of the telecommunications industry and our concession agreements may limit, in some cases, our flexibility in responding to market conditions, competition and changes in our cost structure or impact our fees.

Our business is subject to extensive regulation, including any regulatory changes that may occur during the terms of our concession agreements and our authorizations to provide telecommunication services in Brazil. ANATEL, the main telecommunications industry regulator in the country, regulates, among other things:

- industry policies and regulations;
- licensing;
- fees and tariffs;
- competition, including our ability to grow by acquiring other telecommunications businesses;
- service, technical and quality standards;
- interconnection and settlement arrangements; and
- universal service obligations.

The Brazilian telecommunications regulatory framework is continuously evolving. The interpretation and enforcement of regulations, the assessment of compliance with regulations and the flexibility of regulatory authorities are all marked by uncertainty. We operate under authorizations and a concession from the Brazilian government, and our ability to maintain these authorizations and concession is a precondition to our success. However, because of the changing nature of our regulatory framework, we cannot provide assurances that ANATEL will not adversely modify the terms of our authorizations and/or licenses. According to our operating authorizations and licenses, we must meet specific requirements and maintain minimum quality, coverage and service standards. Our failure to comply with such requirements may result in the imposition of fines, penalties and/or other regulatory responses, including the termination of our operating authorizations and concession. Any partial or total termination of any of our operating authorizations and licenses or our concession would have a material adverse effect on our business, financial condition, revenues, results of operations and prospects.

In recent years, ANATEL has been reviewing and introducing regulatory changes, especially regarding asymmetric competition measures and interconnection fees charged among local providers of telecommunications services. Asymmetric competition measures can include regulations intended to rebalance markets in which a market participant has distinct market power over other competitors. The adoption of disproportionately asymmetric measures could have a material adverse effect on our business, financial condition, revenues, results of operations and prospects.

With respect to interconnection fees, these are an important part of our revenue and cost bases. Such fees are charged by telecommunications service providers to each other in order to allow interconnected use of each other's networks. To the extent that changes to the rules governing interconnection fees reduce the amount of fees we can receive, or our ability to collect such fees, our businesses, financial conditions, revenues, results of operations and prospects could be materially adversely affected.

Therefore, our business, results of operations, revenues and financial conditions could be negatively affected by the actions of the Brazilian authorities, including, in particular, the following:

- the introduction of new or stricter operational and/or service requirements;
- the granting of operating licenses in our areas;
- limitations on interconnection fees we may charge to other telecommunications service providers;
- delays in the granting of, or the failure to grant, approvals for rate increases; and
- antitrust limitations imposed by ANATEL and CADE.

Our concession may be terminated by the Brazilian government under certain circumstances.

We operate our fixed line business in the state of São Paulo under a concession granted by the Brazilian government. According to the terms of the concession, we are obligated to meet certain universal service requirements and to maintain minimum quality and service standards. For example, ANATEL requires that we satisfy certain conditions with respect to, among other things, the expansion of our network to provide (i) public pay-phone services for all locations with a population over 100 inhabitants and (ii) private individual telephone service for all locations with a population over 300 inhabitants, as well as several quality of service targets. Our ability to satisfy the terms and conditions may be affected by factors beyond our control, and our failure to comply with the requirements of our concession may result in the imposition of fines up to R\$50 million per incident and/or other government actions, including the termination of our concession. Any partial or total termination of our concession or authorizations would have a material adverse effect on our financial condition and results of operations.

Furthermore, the concession agreements establish that all assets owned by us, and which are indispensable to the provision of the services described in such agreements, are considered “reversible assets” (*bens reversíveis*) and are deemed to be part of the concession assets. According to ANATEL’s interpretations of current regulations, reversible assets will be automatically returned to ANATEL’s possession upon expiration of the concession agreements in accordance with regulations in force at the time of such expiration, and would not be available to creditors in the event of insolvency, bankruptcy or similar events.

As of December 31, 2018, the net book value of our reversible assets, calculated in accordance with ANATEL’s interpretation of current regulations, is estimated at R\$8.6 billion. These assets are comprised of switching and transmission equipment, public use terminals, external network equipment, energy equipment and systems and operations support equipment.

Review of our concession agreements and/or the implementation of a new regulatory framework in Brazil could have a materially adverse effect on our operations.

The expiration date of our fixed line concession agreements is December 31, 2025. These agreements contain a provision allowing ANATEL to review the concession agreements every five years, and include revisions to terms and conditions that relate to network expansion, modernization and quality of service targets in response to changes in technology, competition in the marketplace and domestic and international economic conditions.

On June 24, 2014, ANATEL opened a public review and comment period for the revisions of the terms of fixed line concession agreements with respect to the 2016-2020 period. However, when the agency released the new version of the agreements in June 2017, operators disagreed with the inclusion by ANATEL of certain provisions, and decided against executing new agreements with the agency. As a result, the agreements with respect to the 2011-2015 period remain in force. In December 2018, although the new concession contracts have not yet been signed, the Brazilian government published Decree No. 9,619/2018 which approves the revision of the General Universal Service Targets Plan (PGMU – *Plano Geral de Metas de Universalização*) valid until 2020 (PGMU IV). The new plan replaces some obligations, mainly related to public telephony, for obligations related to broadband infrastructure (including mobile network). These targets are being criticized by some local operators.

Changes to our concession agreements or to the current regulatory framework may entail the imposition of new requirements, including obligations to make specific investments and/or capital expenditures. ANATEL may also impose new service targets on us with values that we are not able to predict. The conditions, terms and criteria being considered with respect to any such changes in the regulatory framework are still uncertain, and will only be defined by ANATEL after the approval of a law amending the General Telecommunications Act (*Lei Geral de Telecomunicações*). Any such changes to laws, rules or regulations could have a material adverse effect on our operations and financial condition.

Telefônica Brasil is exposed to risks in relation to compliance with anti-corruption laws and regulations.

Telefônica Brasil is required to comply with Brazilian anti-corruption laws and regulations, as well as laws and regulations on the same subject in jurisdictions where it has its securities traded. In particular, the Company is subject, in Brazil, to Law nº 12,846/2013 and, in the United States, to the U.S. Foreign Corrupt Practices Act of 1977.

Although we have internal policies and procedures designed to ensure compliance with the aforementioned anti-corruption laws and regulations, there can be no assurance that such policies and procedures will be sufficient or that our employees, directors, officers, partners, agents and service providers will not take actions in violation of our policies and procedures (or otherwise in violation of the relevant anti-corruption laws and regulations) for which we or they may be ultimately held responsible. Violations of anti-corruption laws and regulations could lead to financial penalties, damage to our reputation or other legal consequences that could have a material adverse effect on our business, results of operations and financial condition.

In connection with the above-mentioned policies, Telefônica Brasil is currently conducting an internal investigation - which is part of a broader investigation being conducted by the controlling shareholder of the Company (Telefônica, S.A.) - regarding possible violations of the abovementioned laws and regulations. Telefônica Brasil is in contact with governmental authorities about this matter and intends to cooperate with those authorities as the investigation continues. It is not possible at this time to predict the scope or duration of this matter or its likely outcome.

We are dependent on key personnel and the ability to hire and retain additional personnel.

We believe that our success will depend on the continued services of our senior management team and other key personnel. Our management team is comprised of highly qualified professionals, with extensive experience in the telecommunications industry. The loss of the services of any of our senior management team or other key employees could adversely affect our business, financial condition and results of operations. We also depend on the ability of our senior management and key personnel to work effectively as a team.

Our future success also depends on our ability to identify, attract, hire, train, retain and motivate highly skilled technical, managerial, sales and marketing personnel. Competition for such personnel is intense, and we cannot guarantee that we will successfully attract, assimilate or retain a sufficient number of qualified personnel. Failure to retain and attract the necessary technical, managerial, sales and marketing and administrative personnel could adversely affect our business, financial condition and results of operations.

We depend on key suppliers to obtain necessary equipment and services for our business.

We depend on certain key suppliers of equipment and services, especially telecommunications network equipment and handsets, for the execution and development of our business. These suppliers may delay delivery, alter prices and limit supply as a result of problems related to their own businesses, over which we have no control. If these suppliers are not able to deliver equipment and services regularly, we may face problems with the continuity of our business activities, which may have an adverse effect on our business and results of operations.

We are subject to liabilities relating to third party contractors, which may have a material adverse effect on our business and results of operations.

We are exposed to contingent liabilities resulting from our contracting structure, which includes third party service providers. Such potential liabilities may involve labor claims by third party providers that are treated as direct employees as well as joint liability claims relating to wage or overtime pay complaints and workplace injury claims. If a significant portion of these contingent liabilities is decided against us and for which we have not made adequate provisions, our financial condition and results of operation may be adversely affected.

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

Certain key inputs are subject to risks related to importation, and we acquire other key inputs from a limited number of domestic suppliers, which may further limit our ability to acquire such inputs in a timely and cost-effective manner.

The high growth in data markets in general and broadband in particular may result in a limited supply of equipment essential for the provision of such services, such as data transmission equipment and modems. The restrictions on the number of manufacturers imposed by the Brazilian government for certain inputs, mainly data transmission equipment and modems, and the geographical locations of non-Brazilian manufacturers of these inputs, pose certain risks, including:

- vulnerability to currency fluctuations in cases where inputs are imported and paid for with U.S. dollars, Euros or other non-Brazilian currency;

- difficulties in managing inventory due to an inability to accurately forecast the domestic availability of certain inputs; and
- the imposition of customs or other duties on key inputs that are imported.

If any of these risks materialize, they may result in our inability to provide services to our customers in a timely manner or may affect the prices of our services, which may have an adverse effect on our business, financial condition and results of operations.

We make investments based on demand forecasts that may become inaccurate due to economic volatility and may result in revenues that are lower than expected.

We make certain investments, such as the procurement of materials and the development of physical sites, based on our forecasts of the amount of demand that customers will have for our services at a later date (generally several months later). However, any major changes in the Brazilian economic scenario may affect this demand and therefore our forecasts may turn out to be inaccurate. For example, economic crises may restrict credit to the population, and uncertainties relating to employment may result in a delay in the decision to acquire new products or services (such as broadband or Pay TV). As a result, it is possible that we may make larger investments based on demand forecasts that were necessary given actual demand at the relevant time, which may directly affect our cash flow.

Furthermore, improvements in economic conditions may have the opposite effect. For example, an increase in demand not accompanied by our investment in improved infrastructure may result in a possible loss of opportunity to increase our revenue or result in the degradation of the quality of our services.

Consolidation in the telecommunications market may increase competition in the near future and may change Brazilian market dynamics.

Mergers and acquisitions may change market dynamics, create competitive pressures, force small competitors to find partners and impact our financial condition; and may require us to adjust our operations, marketing strategies (including promotions), and product portfolio.

The entry of a new market participant with significant financial resources or potential changes in strategy by existing telecommunications service providers can change the competitive environment in the Brazilian market. We may be unable to keep pace with these changes, which could affect our ability to compete effectively and have a material adverse effect on our business, financial condition and results of operations.

Additional joint ventures, mergers and acquisitions among telecommunications service providers are possible in the future. If such consolidation occurs, it may result in increased competition within our market. We may be unable to adequately respond to pricing pressures resulting from consolidation in our market, adversely affecting our business, financial condition and results of operations. We may also consider engaging in merger or acquisition activity in response to changes in the competitive environment, which could divert resources away from other aspects of our business.

We face significant competition in the Brazilian market.

In 2018, competition in the Brazilian telecommunications sector remained fierce, with telecommunications operators focusing on improving their base of accesses by attracting customers to higher-value products. We believe the main strategy pursued during the year by such market participants, including us, was to upsell prepaid customers to hybrid plans (“*planos controle*”) and pure postpaid plans, in order to increase overall ARPUS and profitability. Accordingly, this increase in competition in the postpaid plan segment led to changes in the customer mix of telecommunications operators and associated market shares in the year.

In addition, customers are demanding higher quality and more data availability, which require higher investments in development, modernization, expansion and continuous improvement in service quality and customers’ experience.

As a result, we have faced significant competition, mainly driven by the following factors: (1) commercial and pricing pressures from new mobile portfolios launched by competitors; (2) competitors increasing 4G and 4.5G coverage, improving the quality of service provided by them; and (3) low-cost alternative services, such as voice and text services provided over IP and Video on Demand, may affect our competitive position in the market.

We continuously monitor market progress in order to anticipate future challenges and opportunities and how to address them. Nevertheless, our operational results, market position, competitiveness in the market and margins may be negatively affected if we are unable to keep the same pace as our competitors.

Our results of operations may be negatively affected by the application of the Fixed Commuted Telephone Service (Serviço de Telefonia Fixa Comutada), or STFC, rules relating to fixed telephone service and the Personal Mobile Service (Serviço Móvel Pessoal), or SMP, rules relating to mobile services.

We receive payments for the termination of calls in our fixed network. On May 18, 2014, ANATEL established a gradual decrease in termination rates for the STFC concessionaries, including TU-RL (Urban Usage Rate), TU-RIU1 (Interurban Usage Rate Level 1) and TU-RU2 (Interurban Usage Rate Level 2). In the same year, ANATEL also established gradual decreases in mobile interconnection fees, also known as mobile termination rates, or MTR, based on a cost model. The related rates established by ANATEL are set forth in the following table:

	2017	2018	2019
Sector 31 (fixed)			
TU-RL	0.00574	0.00289	0.00146
TU-RIU1	0.02191	0.00899	0.00369
TU-RU2	0.02348	0.009	0.00345
Mobile			
Region I	0.04928	0.02606	0.01379
Region II	0.05387	0.02815	0.01471
Region III	0.06816	0.04141	0.02517

In December 2018, ANATEL established the reference values for MTR for the years from 2020 until 2023. The table below shows the reference values for each region (corresponding to different Brazilian states) in the General Authorization Plan (Plano Geral de Autorizações), or PGA:

Year	PGA Region I	PGA Region II	PGA Region III
2020	0.01863	0.02128	0.04342
2021	0.01937	0.02191	0.04595
2022	0.02014	0.02255	0.04864
2023	0.02096	0.02327	0.05140

We cannot assure you that new mobile service plans will not be suspended by ANATEL, that the mobile interconnection fees we negotiated will not be changed, nor that future negotiations regarding mobile termination rates will be as favorable as those that were previously set by the agency. If the readjustments to mobile interconnection fees that we negotiated are canceled or if negotiated mobile interconnection fees in the future are less favorable to us, our business, financial condition, revenues, results of operations and prospects may be adversely affected.

ANATEL has the authority to issue new regulations affecting many of our areas of operations.

ANATEL has the authority to issue new regulations affecting many of our areas of operations. Such new regulations could have an adverse effect on our operating results because: (1) ANATEL could significantly reduce the interconnection fees we are able to charge, thereby reducing our revenues (see “Our results of operations may be negatively affected by the application of the Personal Mobile Service (Serviço Móvel Pessoal – SMP) rules relating to mobile services”); (2) ANATEL may allow more favorable conditions for economic groups without significant market power; (3) the granting of new licenses may increase competition in our area from other operators, which could adversely affect our prices and/or market share, thereby reducing our revenues; (4) ANATEL may require that revenue received for the usage of the SMP network must be included in the calculation of operating revenue, which will increase the cost of renewing licenses; and (5) ANATEL’s general plan of updating the regulations targets several areas of vital importance for the mobile business, such as regulations (i) to improve the quality of services, which may cause an increase in operating costs, (ii) of virtual mobile operations, or MVNO, which may cause an increase in competitive pressure, (iii) against SMP providers exercising market power to negotiate lower mobile termination rate fees, which could cause a decrease in our revenues from the mobile termination rate fees we are able to charge to SMP providers, and (iv) relating to multimedia communication.

For a detailed description of the regulations issued by ANATEL and their impact on our business, see “–Item 4. Information on the Company–Business Overview–Regulation of the Brazilian Telecommunications Industry.”

The industry in which we conduct our business is continually changing and evolving technologically, which demands adequate changes in the regulatory environment.

The telecommunications industry is subject to rapid and significant technological changes. Our future success depends on our ability to anticipate and adapt in a timely manner to technological changes. We expect that new products and technologies will emerge and that existing products and technologies will be further developed.

The advent of new products and technologies could have a variety of consequences. These new products and technologies may reduce the price of our services by providing lower-cost alternatives and the creation of new digital services, such as the example of over-the-top (OTT) players that provide voice and messages over IP. Also, new product and technologies may become superior to, and render obsolete, the products and services we offer and the technologies we use, thus requiring our constant investment in new technology and innovation.

Such new technologies will demand changes in the regulatory environment, challenging both governmental agencies and telecommunication companies. Companies that provide OTT services, which have characteristics similar to telecommunications services, are currently not subject to the same rules as the telecommunications operators. This gap can bring additional challenges to the telecommunications industry, as current developments in the regulatory framework for OTTs are inconsistent and still unclear.

We are subject to certain risks related to conditions and obligations imposed by ANATEL for the use of the spectrum needed for the 4G services we offer.

In 2012, Telefonica acquired 40MHz on the 2.5GHz to 2.69GHz frequencies for the amount of R\$ 1.05 billion. In order to meet the coverage requirements, we had the obligation of implementing 4G coverage in 1,094 cities by December 31, 2017. By that date, we had made 4G services available in 2,600 municipalities. To achieve these targets, Telefonica has deployed and continues to deploy 4G coverage by serving its customers through the use of its own network or by established agreements of RAN-sharing approved by ANATEL. The remaining coverage commitments in cities with less than 30,000 inhabitants may be fulfilled with other frequency bands, and we are required to make 4G coverage available in 156 more cities by December 31, 2019.

Regarding the 700MHz spectrum, ANATEL has allocated the band for the provision of fixed, mobile and broadband services. On September 30, 2014, we acquired 20 MHz (10+10 MHz) with nationwide coverage, for R\$1.92 billion, at the minimum price, plus R\$904 million for the band cleaning (migration of broadcasters that currently occupy the band) and interference management. According to the auction rules, the winning bidders are responsible for financing and managing the band cleaning process (Analog TV switch off).

In January 2016, the Ministry of Communications (presently, the Ministry of Science, Technology, Innovation and Communications) published a new schedule for the analog TV Switch Off, postponing the usage of the 700 MHz frequency for telecommunications in some major Brazilian cities. According to the schedule and further revisions, 11 cities had its analog TV services turned off in 2016, including Rio Verde (GO) and Brasília (DF). In 2017 the switch off was completed in over 404 cities.

Between 2016 and 2018, of the 1,379 municipalities that were expected to have the analog TV signal off, 1,362 municipalities (including all state capitals and the Federal District) were confirmed. The remaining 17 municipalities had their analog TV switch off postponed to September 1, 2019.

By the end of 2018, 4,467 municipalities were approved for activation of LTE coverage in the 700 MHz band. By mid-2019, all Brazilian municipalities will be able to activate LTE in the 700MHz band.

The targets established by ANATEL for the fast-paced implementation of networks could be impacted by (1) our ability to obtain licenses for the construction of new sites at the speed necessary to achieve the coverage targets, (2) the capacity of our suppliers to deliver the equipment necessary for this expansion, which may increase the price of such equipment, and (3) lack of qualified resources to meet the expected implementation pace.

If we are not able to meet targets and obligations set forth in the bid documents, ANATEL may use our bank guarantees, we may be subject to fines and/or have our licenses to operate these frequencies revoked, negatively affecting our business and results of operations. Additionally, the inefficient use of any frequency may lead to the loss of the usage license. Furthermore, ANATEL may also impose new targets, conditions and/or obligations on us that we are not able to predict (see “– Review of our concession agreements and/or the implementation of a new regulatory framework in Brazil could have a materially adverse effect on our operations.”). Any of the above factors could have a material adverse effect on our operations and financial condition.

Our sales could be suspended as a result of issues with the quality of our services.

ANATEL and other judicial and administrative agencies have the authority to suspend our sales in an attempt to improve the overall quality of telecommunications services. Sales suspensions are generally applied to the services for which there have been complaints by consumers and the consumer protection agencies. When applied, the suspension is temporary and usually lifted once the company presents an action plan for improvement. In July 2012, ANATEL suspended mobile service sales from three of our main competitors, Oi, Claro and Tim, as a result of a considerable increase in consumer complaints. The suspensions lasted about 20 days and ANATEL requested that all telecommunications companies, including us, present an action and investment plan to improve the mobile network. Although our action plan was approved by ANATEL in September 2012, if a similar increase in customer complaints occurs in the future we may face suspension of one or more of our services until a new plan can be presented to and approved by ANATEL, which may materially affect our business and results of operations.

The Law of Protection of Personal Data is recent and its implementation may require adaptations in our processes and services

In August 2018, the Brazilian government passed the Law of Personal Data Protection (Law 13,709/2018). This law increases citizens’ control over their personal information, requiring explicit consent for the collection and use data. It also obligates the creation of options for viewing, correcting and deleting such data. The law will take effect in 2020 in order to allow public and private entities to adapt to the new rules. On December 27, 2018, the Brazilian government created the National Data Protection Authority by means of an executive order (*Medida Provisória* 869/2018), which will be responsible for supervising matters of private data usage and imposing eventual penalties foreseen in the Law of Personal Data Protection.

In general, our services and processes depend on personal data. The way in which we collect, store and manage this data shall be in accordance with the provisions of the new law.

Due to its recent approval, different judges or courts may decide very similar claims in different ways and establish conflicting jurisprudence. This legal uncertainty allows for rulings against us and may establish adverse precedents, which individually or collectively may have a material adverse effect on our business, results of operations and financial condition. In addition, such legal uncertainty may adversely affect the perception and use of our services by our customers.

Internet regulation in Brazil is still limited and several legal issues related to the Internet are uncertain.

In 2014, Brazil enacted a law, which we refer to as the Civil Rights Framework for the Internet, setting forth principles, guarantees, rights and duties for the use of the internet in Brazil, including provisions about internet service provider liability, internet user privacy and network neutrality. In May 2016, further regulations were passed relating to the privacy and network provisions set forth in the Civil Rights Framework for the Internet. However, unlike in the United States, few legal precedents relating to the Internet Act exist and existing jurisprudence has not been consistent, especially with respect to the application of the network neutrality principle. Legal uncertainty arising from the limited guidance provided by current laws in force allows for different judges or courts to decide very similar claims in different ways and establish contradictory jurisprudence. This legal uncertainty allows for rulings against us and could set adverse precedents, which individually or in the aggregate could seriously harm our business, results of operations and financial condition. In addition, legal uncertainty may harm our customers’ perception and use of our service.

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

Certain of our existing debt agreements contain restrictions and covenants and require the maintenance or satisfaction of specified financial ratios and tests. Failure to meet or satisfy any of these covenants, financial ratios or financial tests could result in an event of default under these agreements, which would have a material adverse effect on our financial condition.

We are subject to environmental laws and regulations. Failure to comply with governmental laws and regulations could subject us to penalties that could have an adverse effect on our business and reputation.

Our operations and properties are subject to a variety of environmental laws and regulations governing, among other things, environmental licensing and registries, protection of flora and fauna, air emissions, waste management and remediation of contaminated areas, among others. Our failure to comply with present and future requirements, or the management of existing and identification of new contamination, could cause us to incur substantial costs, including cleanup costs, indemnification, compensation, fines, suspension of activities and other penalties, investments to upgrade our facilities or change our processes, costs to redress any loss of reputation or the curtailment of our operations. The identification of presently unidentified environmental conditions, more vigorous enforcement by regulatory agencies, enactment of more stringent laws and regulations or other unanticipated events may arise in the future and give rise to material environmental liabilities and related costs. The occurrence of any of the foregoing could have a material adverse effect on our business, results of operations and financial condition.

Companies in the telecommunication industry, including us, may be harmed by restrictions regarding the installation of new antennas for mobile services.

Currently, there are approximately 250 municipal laws in Brazil that limit the installation of new antennas for mobile service. This scenario has been a barrier to the expansion of mobile networks. Those laws are meant to regulate issues related to zoning and the alleged effects of the radiation and radio frequencies of the antennas. Despite the existence of a federal law approved in 2015, that addresses this issue by establishing new guidelines to create a consolidated plan for the installation of antennas, as long as the municipal laws remain unchanged, the risk of noncompliance with regulations and of having services of limited quality in certain areas continues to exist.

Additional antenna installation is also limited as a result of concerns that radio frequency emissions from base stations may cause health problems and other environmental impacts. These concerns could have an adverse effect on the wireless communications industry and, possibly, expose wireless providers, including us, to litigation. Based on information from the World Health Organization (WHO) we are not aware of any evidence in the latest medical research that conclusively establishes any relationship between radio frequency emissions of base stations and health concerns. Perceived risks may, however, delay expansion of our network if we experience problems in finding new sites, which in turn may delay expansion and affect the quality of our services.

For instance, in May 2009, the Brazilian government published Law No. 11934/2009 that limits the exposure for fields with frequencies up to 300 GHz. The new law uses the exposure limits determined by the International Commission on Non-Ionizing Radiation Protection and recommended by the WHO and restricts the installation of new antennas.

New laws may create additional transmission regulations, which in turn, could have an adverse effect on our business. Health concerns regarding the effects of radio frequency emissions may also discourage the use of mobile telephones and may result in the adoption of new measures by governments or any other regulatory interventions, any of which could materially and adversely affect our business, results of operations and financial condition.

We face risks associated with litigation.

We are party to a number of lawsuits and other proceedings. An adverse outcome in, or any settlement of, these or other lawsuits could result in significant costs to us. In addition, our senior management may be required to devote substantial time to these lawsuits, which they could otherwise devote to our business. See "Item 8. Financial Information—A. Consolidated Statements and Other Financial Information—Legal Proceedings."

Risks Relating to the Preferred Shares and the ADSs

Holders of our ADSs may face difficulties in serving process on or enforcing judgments against us and other persons.

We are organized under the laws of Brazil, and all of our executive officers and our independent public accountants reside or are based in Brazil. Also, six of our twelve directors reside or are based in Brazil. Substantially all of our assets and those of these other persons are located in Brazil. As a result, it may not be possible for holders of the ADSs to effect service of process upon us or these other persons within the United States or other jurisdictions outside Brazil or to enforce any judgments obtained in the United States or other jurisdictions outside Brazil against us or such other persons. Because judgments of U.S. courts for civil liabilities based upon the U.S. federal securities laws may only be enforced in Brazil if certain conditions are met, holders may face greater difficulties in protecting their interests due to actions by us, our directors or executive officers than would shareholders of a U.S. corporation.

Holders of our preferred shares and ADSs generally do not have voting rights.

In accordance with Brazilian Corporate Law and our bylaws, holders of our preferred shares, and therefore of our ADSs, are not entitled to vote at meetings of our shareholders, except in limited circumstances set forth in “Item 10. Additional Information–B. Memorandum and Articles of Association.”

Holders of our preferred shares might be unable to exercise preemptive rights with respect to the preferred shares unless there is a current registration statement in effect which covers those rights or unless an exemption from registration applies.

Holders of our preferred shares will not be able to exercise the preemptive rights relating to the preferred shares underlying their ADSs unless a registration statement under the U.S. Securities Act of 1933, as amended, or the Securities Act, is effective with respect to the shares underlying those rights, or an exemption from the registration requirements of the Securities Act is available. We are not obligated to file a registration statement. Unless we file a registration statement or an exemption from registration applies, holders of our preferred shares may receive only the net proceeds from the sale of their preemptive rights by the depositary, or if the preemptive rights cannot be sold, they will lapse and they will not receive any value for them. For more information on the exercise of these rights, see “Item 10. Additional Information–B. Memorandum and Articles of Association–Description of our Bylaws–Preemptive Rights.”

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

Beginning on March 30, 2015, the different forms of foreign portfolio investments in Brazil, including investments via Depositary Receipts, have been regulated by CMN Resolution 4,373, of September 29, 2014 (or “Resolution No. 4,373”), which revoked the former rule (CMN Resolution 2,689, of January 26, 2000) that had been in effect for the previous 15 years. Resolution No. 4,373 provides for the issuance of Depositary Receipts in foreign markets in respect of shares of Brazilian issuers, and, pursuant to this regulation, the ADSs benefit from the certificate of foreign capital registration, which permits Citibank N.A., as depositary, to convert dividends and other distributions with respect to preferred shares into foreign currency, and to remit the proceeds abroad. Holders of ADSs who exchange their ADSs for preferred shares will then be entitled to rely on the depositary’s certificate of foreign capital registration for five business days from the date of exchange. Thereafter, they will not be able to remit non-Brazilian currency abroad unless they obtain their own certificate of foreign capital registration, or unless they qualify under CMN Resolution No. 4,373, which entitles certain investors to buy and sell shares on Brazilian stock exchanges without obtaining separate certificates of registration. CMN Resolution No. 4,373 replaced both CMN Resolution No. 1,927 and CMN Resolution No. 2,689 as of March 30, 2015. Further rules will be issued by CVM and by the Central Bank to regulate foreign investments in ADSs, including with regard to the exchange of ADSs for preferred shares and the remittance of funds arising from the sale of these preferred shares.

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