

Foreign Exchange Controls

Indonesia has limited foreign exchange controls. The Indonesian Rupiah has been, and in general is, freely convertible. A number of regulations, however, have an impact on the exchange system. For example, only banks are authorized to deal in foreign exchange and execute exchange transactions related to the import and export of goods. In addition, Indonesian banks (including branches of foreign banks in Indonesia) are required to report to Bank Indonesia any fund transfers exceeding US\$10,000. Based on the decree of the Head of the PKLN, we are required to obtain an approval from the PKLN prior to acquiring foreign commercial loans. We are also required to submit periodical reports to PKLN during the term of the loans.

B. CAPITALIZATION AND INDEBTEDNESS

Not applicable.

C. REASON FOR THE OFFER AND USE OF PROCEEDS

Not applicable.

D. RISK FACTORS

Risks Related to Our Business

Operational Risks

A material failure in the continuing operations of our network, certain key systems, gateways to our network or the networks of other network operators could adversely affect our business, financial condition, results of operations and prospects

We depend to a significant degree on the uninterrupted operation of our network to provide our services. For example, we depend on access to our fixed wireline network for the operation of our fixed line network and the termination and origination of cellular telephone calls to and from fixed line telephones, and a significant portion of our cellular and international long distance call traffic is routed through the PSTN. We also depend on access to an internet and broadband network and a cellular network. Our integrated network includes a copper access network, fiber optic access network, BTSs, switching equipment, optical and radio transmission equipment, an IP Core network, satellites and application servers.

In addition, we also rely on interconnection to the networks of other telecommunications operators to carry calls and data from our subscribers to the subscribers of operators both within Indonesia and overseas. We also depend on certain technologically sophisticated management information systems and other systems, such as our customer billing system, to enable us to conduct our operations. Our network, including our information systems, IT and infrastructure and the networks of other operators with whom our subscribers are interconnected, are vulnerable to damage or interruptions in operation from a variety of sources including earthquake, fire, flood, power loss, equipment failure, network software flaws, transmission cable disruption or similar events. For example, during 2018 and 2019, a number of submarine cables that we rely on to provide services across the Indonesian archipelago were damaged mostly as a result of earthquakes. As a result, services in east Indonesia faced slowdowns and disruptions as we had to redirect affected traffic through satellites until the submarine cables could be restored.

Although we have implemented a business continuity plan and a disaster recovery plan, which we test regularly, we cannot guarantee that the implementation of such plans will be completely or partially successful should any portion of our network be severely damaged or interrupted. Any failure that results in an interruption of our operations or of the provision of any service, whether from operational disruption, natural disaster or otherwise, could adversely affect our business, financial condition, results of operations and prospects.

We may, in the future, be required to share our network infrastructure and capacity with our competitors

In November 2016, the Government announced its intention to amend certain regulations, as a result of which we may, in the future, be required to share our network infrastructure and capacity with our competitors. In particular, the draft revision to Government Regulation No.52/2000 on Telecommunications ("Draft Revision to GR No.52/2000") contemplates providing the Government with the authority to require telecommunication operators such as our Company to share network capacity with other telecommunication operators in Indonesia. Draft Revision to GR No.52/2000 may also require telecommunication operators such as our Company to share proprietary network transmission equipment when the Government deems this to be necessary in order to maintain market competition and network efficiency and sustainability.

In addition, the Government also announced its intention to amend Government Regulation No.53/2000 on the Utilization of Radio Frequency Spectrum and Satellite Orbit ("Draft Revision to GR No.53/2000"). Draft Revision to GR No.53/2000 may require telecommunication operators such as our Company to share network with other telecommunication operators and service providers.

If these draft regulations are enacted by the Government in their current form, we would be required to share our network infrastructure and capacity with our competitors. This may allow our competitors to expand without significant capital expenditure outlay in areas where we operate. In addition, we cannot assure you that we will have sufficient network capacity to maintain our current business, product offerings and quality of service due to the additional traffic that we would need to service as a result of our competitors' access to our network. Our ability to service any increase in traffic within our network may consequently be limited, which may adversely affect our ability to increase our revenues through the expansion of our services.

Neither the Draft Revision to GR No.52/2000 nor the Draft Revision to GR No.53/2000 provide the details of the terms under which we may be required to share our network infrastructure and capacity with our competitors. We cannot assure you that the Government will adopt terms which we consider to be commercially reasonable. For example, we cannot assure you that any subsequent regulations will allow us to charge competitors who lease our network capacity with fees at rates which we consider to be commercially acceptable.

If the Draft Revision to GR No.52/2000 and the Draft Revision to GR No.53/2000 are adopted, and the terms under which such proposed regulations are implemented are not commercially reasonable, it could have a material adverse effect on our business, financial condition, results of operations and prospects.

Our operations may be adversely affected by an outbreak of an infectious disease, such as the novel coronavirus (COVID-19) or other epidemics

An outbreak of any severe infectious disease such as diseases caused by the novel coronavirus (COVID-19), Severe Acute Respiratory Syndrome (SARS), Middle East Respiratory Syndrome (MERS), the H5N1 avian flu or the human swine flu (H1N1) or a similar communicable diseases, if uncontrolled, or restrictions or containment measures taken by the governments of affected countries, including Indonesia, could have a material adverse effect on the overall business sentiment in Indonesia and in economies where we carry out our business, on Indonesian and international consumers' confidence and purchasing behavior, and in turn, on demand for our products and services. Most recently, in January 2020, an outbreak of COVID-19 believed to have started in Wuhan, Hubei, China, spread aggressively in multiple countries, including Indonesia, other countries in Southeast Asia, Europe and North America. The World Health Organization (the "WHO") declared the outbreak to be a pandemic on March 11, 2020.

Various measures have been implemented to contain the outbreak resulting, in certain regions and countries, in extensive government-imposed restrictions and containment measures, including restrictions on domestic and international travel, restrictions on public gatherings, and local or general "stay at home" or quarantine orders. As at the date hereof, there are early indications that the COVID-19 outbreak and such measures have had a significant impact on national economies, including Indonesia, and may cause a global downturn. In response to the COVID-19 outbreak or other epidemics or outbreak of infectious diseases, similar or more stringent measures could be taken that may further worsen the Indonesian economy and the global economy.

If the current COVID-19 outbreak or other epidemics or outbreak of infectious diseases were to develop and persist, customers may delay, suspend or decrease orders for our products and services, and demand for certain of our products and services may decrease. Our distribution network and retail outlets may also experience significant disruption due to physical distancing measures and other containment measures. Regardless of enhanced hygiene and precautionary measures to safeguard the safety and health of our employees and customers, we could be subject to labour shortage or suspension of work if certain of our personnel, in Indonesia or elsewhere, were to become infected with the disease or restrictions and containment measures described above were to affect their ability to reach our offices and outlets. Our operations may also be significantly and adversely affected if government-imposed restrictions or other containment measures require us to suspend our operations, partially or entirely. Finally, the negative impact of the outbreak on the global economy may increase counterparty risks, increased difficulties in collecting fees, which may negatively impact our cash flows, delay certain of our projects, and reduce our ability to access capital or increase financing costs.

As at the date hereof, the potential economic impact on Indonesia and the global economy brought by, and the duration of, the COVID-19 pandemic is highly uncertain, subject to change and difficult to estimate or predict. There is no assurance that the outbreak of COVID-19 in Indonesia or elsewhere can be effectively controlled, or that another disease outbreak will not happen in the future. Whereas we are closely monitoring the current situation and potential developments, there is still uncertainty as to the full extent of the potential delays and disruptions above described on our business, operations, prospects and results of operations.

Our networks face both potential physical and cyber security threats, such as theft, vandalism and acts intended to disrupt our operations, which could adversely affect our operating results

Our networks and equipment, particularly our wireline access network, face both potential physical and cyber security threats. Physical threats include theft and vandalism of our equipment and organized attacks against key infrastructure intended to disrupt operations. In addition, telecommunications companies worldwide face increasing cyber security threats as businesses become increasingly dependent on telecommunication and computer networks, and adopt cloud technologies. Cyber security threats include gaining unauthorized access to our systems or inserting computer viruses or malicious software in our systems to misappropriate consumer data and other sensitive information, corrupt our data or disrupt our operations. Unauthorized access may also be gained through traditional means such as the theft of computers, portable data devices or mobile phones and intelligence gathering on employees with access to our systems.

Although we have not experienced any material successful cyberattacks to date that have affected our operations, our network and website are frequently targeted by cyberattacks. For example, in October 2018, PT Telkom Satelit Indonesia's ("Telkomsat") corporate website was defaced. The content on the homepage was altered, which left customers unable to access the site for part of one day, before the site was restored. In 2019, we detected no defacement attack but we detected 351.3 million cyber threats to the server which is a significant increase from 29.9 million cyber threats in 2018. However, out of the 351.3 million non-disruptive cyber threats, only 18 raised to the level of issues we needed to specifically address, which we did successfully and quickly. While none of these cyberattacks have caused significant losses to date, a successful cyberattack may lead us to incur substantial costs to repair damage or restore data, implement substantial organizational changes and training to prevent future similar attacks and lost revenues and litigation costs due to misused sensitive information, liabilities for information loss, breach of confidentiality of private information, and cause substantial reputational damage. Cyberattacks may also cause equipment failures, loss of information, including sensitive information or information stored in our customers' computer systems and mobile phone systems, failure or perceived failure to comply with applicable privacy, security or data protection laws, as well as disruption to our operations or our customers' operations. Furthermore, it might be difficult to calculate the economic costs caused by potential cyber security incidents and maintain sufficient insurance coverage relating to them at commercially reasonable rates and terms. Eliminating computer viruses and other security problems may also require interruptions, delays or suspension of our services, reduce our customer satisfaction and cause us to incur additional costs. Due to the evolving nature of cyber security threats, the scope and impact of any future incident cannot be precisely predicted. We take preventive and remedial measures with respect to our systems, including enhanced cooperation with the police, particularly in areas prone to criminal activity and regular updates of our information system security measures. While we believe that we have taken appropriate measures to protect our network, there is no assurance that these physical and cyber security measures will be successful. Damage to our network, equipment or data and the need to repair such damage resulting from a physical or cyberattack may materially and adversely affect our business, financial condition and operating results.

We face a number of risks relating to our internet-related services

In addition to cyber security threats, since we provide connections to the internet and host websites for customers and develop internet content and applications, we may be perceived as being associated with the content carried over our network or displayed on websites that we host. For example, in the past, due to an escalation in spam messages generated from email addresses on the Telkom network, Telkom was placed on certain DNS blacklists which blocked all email generated from Telkom addresses for almost a week until remedial measures could be put into place. This did not occur in 2019 as we deployed anti-spam tools into our systems which have significantly mitigated the effect of cyberattacks on our systems in 2019. While we have made certain administrative and technical adjustments to identify and combat spam, we cannot assure you that such measures will always be effective and that we would not be placed on certain DNS blacklists again in the future. In addition, the content carried over our network or the websites that we host may contain materials or information which may be illegal, defamatory, impermissible or infringe on third party copyrights. We cannot and do not screen all of this content and may face litigation claims due to a perceived association with such content. These types of claims can be costly to defend, divert management resources and attention, and may damage our reputation.

A revenue leakage might occur due to internal weaknesses or external factors and if this risk were to materialize, it could have an adverse effect on our operating results

We may face revenue leakage or problems with collecting all the revenues to which we may be entitled, due to the possibility of inaccurate billing, delays in transaction processing, dishonest customers or other factors. Further, our services might be susceptible to piracy and unauthorized usage. Such piracy and unauthorized usage may lead to a loss of revenue for our Group which may affect our financial conditions and results of operations. For example, in recent years the use of simboxes, which are electronic boxes that use cell phone antennae or a BTS on which local operator SIM cards are installed so that international calls can be fraudulently terminated through local numbers so that the fraudster can bypass interconnection rates in the destination country, have led to a loss of revenue for our Group.

We have taken certain preventive measures to mitigate the possibility of revenue leakage by increasing control functions in all of our existing business processes, implementing revenue assurance methods, employing adequate policies and procedures as well as implementing information systems applications to minimize revenue leakages. Nonetheless, there is no assurance that in the future there will be no significant revenue leakages or that any such leakages will not have a material adverse effect on our operating results.

New technologies may adversely affect our ability to remain competitive

The telecommunications industry is characterized by rapid and significant changes in technology. We may face increasing competition due to technologies under development or which may be developed in the future. Future development or application of new or alternative technologies, services or standards could require significant changes to our business model, the development of new products, the provision of additional services and substantial new investments by us. New products and services may be expensive to develop and may result in the introduction of additional competitors into the marketplace. We cannot accurately predict how emerging and future technological changes will affect our operations or the competitiveness of our services. Furthermore, we cannot guarantee that we will be able to effectively integrate new technologies into our existing business model.

One of the main challenges faced by the telecommunications industry in Indonesia is the increasing use of Over The Top services that has become a substitute for voice and SMS services, in line with the growing number of smartphone users. In particular, the percentage contribution from cellular phone services to our consolidated revenues has declined from 29.0% for 2017 to 20.6% for 2019. This has happened not only in Indonesia, but also in developed countries where smartphone penetration is high. In addition, we face a continuing risk of market entry by new operators and service providers (including non-telecommunication players and Over The Top players) who, by using newer or lower cost technologies, may succeed in rapidly attracting customers away from established market participants such as ourselves. This may result in a loss of market share and could have a material adverse effect on our business, financial condition and results of operations. In particular, the rapid development of new technologies, new services and products, and new business models has resulted in distinctions between local, long distance, wireless, cable and internet communication services entry barriers being lessened and has brought new competitors into the telecommunications market. For example, the increased availability of high-throughput satellite capacity in Indonesia has had increased competition, and adversely affected pricing, for our satellite business.

We cannot assure you that our technologies will not become obsolete, or be subjected to competition from new technologies in the future, or that we will be able to acquire new technologies necessary to compete in changed circumstances on commercially acceptable terms. Our failure to react to rapid technological changes could adversely affect our business, financial condition, results of operations and prospects.

Expected benefits from investment in new networks and technologies may not be realized

We may pursue new growth opportunities in the communications industry in the future, including introducing services and products employing new technologies, such as next generation mobile technologies, virtualization, software-defined networking, cloud based technologies, new video and content delivery platforms and digital marketing. The implementation of these new technologies depends on a number of factors, including developing our network and the launch of new and commercially viable products and services involving these technologies. We may have to incur substantial expenditure to develop our network, services and products and to gain access to related or enabling technologies in order to successfully implement these new technologies. We may not be successful in modifying our network infrastructure in a timely and cost-effective manner to facilitate such implementation, which could adversely affect our quality of service, financial condition and results of operations.

Further, we may face the risk of unforeseen complications in the deployment of new technologies. Any newly adopted technology may not perform as expected, and we may not be able to successfully or on a timely basis to develop the new technology to effectively and economically deliver services based on such technology.

Our satellites have limited operational life and they may be damaged or destroyed during in-orbit operation or suffer launch delays or failures. The loss or reduced performance of a satellite, whether caused by equipment failure or its license being revoked, may adversely affect our financial condition, results of operations and ability to provide certain services

We operate three satellites, namely Telkom-2, Telkom-3S and the Merah Putih Satellite. These satellites have limited operational lives, with their design lives will end approximately in 2020, 2032 and 2033, respectively. A number of factors affect the operational lives of satellites, including the quality of their construction, the durability of their systems, subsystems and component parts, on-board fuel reserves, accuracy of their launch into orbit, exposure to micrometeorite storms, or other natural events in space, collision with orbital debris, or the manner in which the satellite is monitored and operated. We use satellite transponder capacity on our satellites in connection with many aspects of our business, including direct leasing of such capacity and routing for our international long distance and cellular services.

International Telecommunication Union regulations specify that a designated satellite orbital slot has been allocated for Indonesia and the Government has the right to determine which party is licensed to use such slot. While we hold a license to use the designated satellite orbital slot, in the event any of our satellites experience technical problems or failure, the Government may determine that we have failed to optimize the existing slot under our license, which may result in the Government withdrawing our license. We cannot assure you that we will be able to maintain use of the designated satellite orbital slot in a manner deemed satisfactory by the Government.

Our acquisition activities expose us to various risks

We have in the past pursued, and may continue to pursue, acquisitions of complementary assets and businesses. For instance, in 2019, our wholly-owned subsidiary PT Dayamitra Telekomunikasi ("Dayamitra" or "Mitratel") purchased 2,100 telecommunications towers from PT Indosat Tbk, a telecommunications operator company in Indonesia. The success of these acquisitions will depend, in part, on our ability to realize the anticipated growth opportunities and synergies from combining the acquired businesses with our existing businesses. Based on the size and complexity of certain businesses, integrating them into our existing business could require substantial time, expense and effort from our management. The process of integrating an acquired business may also involve unforeseen costs and delays or other operational, technical and financial difficulties that may require a disproportionate amount of management attention as well as financial and other resources. If our management's attention is diverted or there are any difficulties associated with integrating these businesses, our results of operations could be adversely affected.

Even if we are able to successfully integrate these businesses, it may not be possible to realize the full benefits we expect to result from such acquisitions and strategic transactions or realize these benefits within the time frame that we expect. Moreover, such businesses generally remain subject to unforeseeable factors outside of our control. Our acquisitions and strategic transactions, including those entered into in recent periods, may turn out to be unprofitable. Any failure to successfully incorporate the acquired businesses and assets into our existing operations, to enhance operating efficiencies from consolidation savings, minimize any unforeseen operational difficulties and realize the anticipated benefits on time, or at all, could materially and adversely affect our business, financial condition, results of operations, prospects and cash flows.

Risks Related to our Fixed and Cellular Telecommunication Business***Competition from existing cellular service providers may adversely affect our cellular services business***

The Indonesian cellular services business is highly competitive. Competition among cellular services providers in Indonesia is based on various factors, including pricing, network quality and coverage, the range of services, features offered and customer service. With the increasing popularity of smart phones in Indonesia, we believe that data network quality and coverage, including 4G/LTE coverage, will increasingly become an intense area of competition. In recent years, competitors have offered promotions such as bonus data packages in order to attract customers, which has generally made the pricing environment in Indonesia less profitable. Although, in 2019, the intensity of downward pressure on selling prices has decreased. This competition is likely to continue, particularly as telecommunications companies are affected by increased competition from Over The Top providers. In 2019, a number of our competitors also increased their coverage by expanding outside Java, in particular, in Sumatra.

Our cellular services business, operated through our majority-owned subsidiary, PT Telekomunikasi Selular ("Telkomsel"), competes primarily with Indosat and XL Axiata. However, we are also facing increased competition from smaller operators that provide cellular services in Indonesia, including PT Hutchison 3 Indonesia ("Hutchison"), which is part of the Hutchison Asia Telecom Group and operates under the "3" or "Tri" brand and PT Smartfren Telecom Tbk ("Smartfren Telecom"), which is part of the Sinar Mas Group.

XL Axiata completed the acquisition of a majority interest in and merged with PT Axis Telekom in 2014, which resulted in XL Axiata acquiring additional frequency allocations to provide 4G/LTE services as well as acquiring the customers of PT Axis Telekom.

Additional consolidation among cellular services providers may occur which may be driven by competitive factors as well as efforts to reduce operating costs and obtain wider spectrum allocation. In addition, the Government tends to encourage consolidation, and we believe that it is the policy of the MoCI to support industry consolidation by not issuing additional or new licenses for cellular services providers.

Consolidation of competitors for cellular services may allow them to expand the geographic coverage of their integrated network infrastructure. In recent years, both Telkomsel and its competitors have acquired wider spectrum allocation as part of the Government's spectrum refarming initiative. In 2019, we entered into a refarming arrangement with Indosat which was approved by the Government. This has allowed them to improve the quality of their cellular services as well as to expand the amount of traffic that they can service through their network, which may allow them to expand their services and increase revenues. Furthermore, the Government has proposed a draft regulation which would require telecommunication companies to share network infrastructure and capacity. See "— We may, in the future, be required to share our network infrastructure and capacity with our competitors." As the telecommunications operator with the most extensive network infrastructure in Indonesia, this regulation, if it were to become effective, would allow our competitors to take advantage of our existing infrastructure without significant capital expenditure, which would have a significant impact on competition.

As a result, any of these developments may present challenges for Telkomsel in maintaining its market position and could adversely affect our results of operations, financial condition and prospects.

We may further lose wireline telephone subscribers and revenues derived from our wireline voice services may continue to decline, which may materially adversely affect our results of operations, financial condition and prospects

Revenues derived from our wireline voice services have declined during the past several years mainly due to the increasing popularity of mobile voice services and other alternative means of communication. Tariffs for mobile services have declined in recent years which has further accelerated substitution of mobile for wireline voice services. The number of our fixed wireline subscribers decreased by 15.7% in 2019 and revenues from our wireline voice services decreased by 9.2% in 2019. The percentage of revenues derived from our wireline voice services out of our total revenues was 2.2% in 2019.

Since the beginning of 2015, we have taken various steps to stabilize our revenues from wireline voice services by seeking to migrate subscribers to IndiHome, a service which bundles fixed broadband internet, fixed wireline phone and interactive TV services. However, we cannot assure you that we will be successful in mitigating the adverse impact of the substitution of mobile voice services and other alternative means of communication for wireline voice services or in reducing the rate of decline in our revenues generated from wireline voice services. Migration from wireline voice services to mobile services and other alternative means of communication may further intensify in the future, which may affect the financial performance of our wireline voice services and thus materially and adversely affect our results of operations, financial condition and prospects as a whole.

Our data and internet services are facing increasing competition, and we may experience declining margins and/or market share from such services as such competition intensifies

Our data and internet services are facing increased competition from other data and internet operators, including mobile operators. The number of mobile broadband subscribers have increased with the increasing popularity of smart phones in Indonesia, which adversely affects our market share and revenues from our fixed line data and internet services.

In addition, with the increasing popularity of smart phones in Indonesia, data and internet services have become an intense area of competition in our industry. We have been taking various measures in order to mitigate the impact of intense competition in our data and internet businesses. However, we cannot assure you that we will be successful in mitigating such adverse impact. Competition may further intensify in the future, which may affect the financial performance of our data and internet services and thus materially and adversely affect our results of operations, financial condition and prospects as a whole.

Cellular network congestion and limited spectrum availability could limit our cellular subscriber growth and cause reductions in our cellular service quality

We expect to continue to offer promotional plans to attract subscribers and increase usage of our network by our cellular subscribers. We also expect to continue to promote our data services and fixed broadband services. While we believe that we have sufficient spectrum allocation to support our current business, we may in the future need to acquire additional spectrum allocation to accommodate future growth in subscribers and traffic. As a result, we may experience increased network congestion, which may affect our network performance and damage our reputation with our subscribers. The Government occasionally conducts auctions for unused spectrum allocation. We cannot assure you that we will be successful in acquiring any additional spectrum allocation in future auctions.

Moreover, the increase in smartphone applications that rely on data services has resulted in the significant amount of data traffic and cellular network congestion. To support such additional demands on our network, we may be required to make significant capital expenditures to improve our network coverage. Such additional capital expenditures, together with the possible degradation of our cellular services, could materially and adversely affect our competitive position, results of operations, financial condition and prospects.

Continuing growth in and the converging nature of wireless and broadband services will require us to deploy increasing amounts of capital and require ongoing access to spectrum in order to provide attractive services to customers

Telecommunications services are undergoing rapid and significant technological changes and a dramatic increase in usage, in particular, the demand for faster and seamless usage of video and data across mobile and fixed devices. We continually invest in our networks in order to improve our wireless and broadband services to meet this increasing demand and remain competitive. Improvements in these services depend on many factors, including continued access to and deployment of adequate spectrum and the capital needed to expand our network to support transport of these services. We must maintain and expand our network capacity and coverage for transport of video, data and voice between cell and fixed landline sites. To this end, we have participated in spectrum auctions, at increasing financial cost, and continue to deploy technology advancements in order to further improve our network. Further, we must pay an annual right of usage fee for the license in case of our winning additional spectrum, such as the additional 30 MHz spectrum at 2.3 GHz frequency we won at an auction in October 2017.

Network service enhancements and product launches may not occur as scheduled or at the cost expected due to many factors, including delays in determining equipment and wireless handset operating standards, supplier delays, increases in network equipment and handset component costs, regulatory permitting delays for tower sites or enhancements, or labor-related delays. Deployment of new technology also may adversely affect the performance of the network for existing services. If we cannot acquire the required spectrum or deploy the services customers desire on a timely basis and at a reasonable price, then our ability to attract and retain customers, and therefore maintain and improve our operating margins, could be materially adversely affected.

Our continued investments in the construction of our infrastructure network may not adequately address the issues resulting from the substantial increases in data traffic or otherwise achieve the desired economic returns

Our wireless data traffic business has experienced significant growth in recent years, which contributed to the growth of our operating revenue and provides our business with further opportunities for development. In addition, we expect our 4G/LTE services, launched in 2014, will drive further growth in data traffic. The continued substantial increase in data traffic resulting from the growth of our wireless data traffic business, our 4G/LTE business and the proliferation of smartphones significantly strains the existing capacity of our telecommunications network infrastructure. As a result, we have made and will continue to make substantial investments in the construction of our infrastructure network, including our 4G/LTE infrastructure, to carry the increasing data traffic. We cannot assure you that these investments would successfully address the issues resulting from the substantial increases in data traffic or otherwise achieve the desired economic returns.

We are subject to the control of the Government

The Government, through the MSOE, owns 52.09% of our issued share capital. Consequently, the Government effectively controls the outcome of matters requiring the vote of our shareholders, including the composition of our boards of Directors and Commissioners, and determining the timing and amount of dividend payments. The Government has historically influenced, and is likely to continue to influence, our strategy and operations. In addition, the Government owns a Dwiwarna Share in our Company which gives the Government, represented by the MSOE, certain rights such as the right to veto with regards to the nomination, appointment and removal of our Directors and Commissioners, the issuance of new shares and any amendments to our Articles of Association. The rights of the Government attached to this Dwiwarna Share limit the ability of public shareholders to influence certain matters relating to our Company. Under our Articles of Association, the Government cannot transfer the Dwiwarna Share. The Government's rights with respect to the Dwiwarna Share will not terminate unless our articles of association are amended, which would require the approval of the Government as holder of the Dwiwarna Share. See "Relationship with the Government and Government Agencies – The Government as Shareholder."

There can be no assurance that the Government will exercise its control and influence to our benefit. For example, the Government may request us to enter into transactions which are not in our best interests. In addition, there can also be no assurance that we will ever become independent of our Government shareholder or even if we do become independent, that we will be able to exercise any such independence effectively in making decisions concerning our business and prospects, including decisions concerning compensation from the Government when we act in the public interest. If we agree to act in the public interest and are not adequately compensated by the Government, our business, prospects, financial condition, liquidity and result of operations may be materially and adversely affected, which would limit our ability to compete effectively and expand our business.

Financial Risks

We are exposed to interest rate risk and risks inherent to potential changes in relevant benchmarks and indices

Our debt includes bank borrowings used to finance our operations. In order to reduce our exposure to interest rate fluctuations, we aim to balance the share of our fixed rate loans and floating rate loans in our bank borrowings. We try to achieve this where there are opportunities to increase the share of fixed-rate loans in our overall loan portfolio in light of prevailing interest rates available in the market at any given time and based on market and our expectations as to future floating and fixed interest rates. As of December 31, 2019, a majority (based on aggregate outstanding principal) of our total bank borrowings were floating rate loans.

Changes in the economic situation in the United States may also have an impact on Southeast Asia and Indonesia. In part, in an effort to support the Indonesian Rupiah, Bank Indonesia decreased its benchmark interest rate four times in 2019 to 5.00%.

Moreover, reference rates and indices, including interest rate benchmarks (such as the London Interbank Offered Rate ("LIBOR"), the Euro Interbank Offered Rate ("EURIBOR"), or JIBOR), which are used to determine the amounts payable under financial instruments or the value of such financial instruments ("Benchmarks"), have, in recent years, been the subject of political and regulatory scrutiny as to how they are created and operated. This has resulted, particularly in the United Kingdom, in regulatory reform and changes to existing Benchmarks, with further changes anticipated. This could increase the costs and risks of complying with any such regulations or requirements.

For example, LIBOR has been questioned as a result of the absence of relevant active underlying markets and possible disincentives for market participants to continue contributing to such benchmarks. On July 27, 2017, the United Kingdom Financial Conduct Authority, which regulates LIBOR, announced that it does not intend to continue to persuade, or use its powers to compel, panel banks to submit rates for the calculation of the LIBOR benchmark to the administrator of LIBOR after 2021 (the "FCA Announcement"). The FCA Announcement indicated that the continuation of LIBOR on the current basis cannot and will not be guaranteed after 2021. Subsequent speeches by FCA officials have emphasized that market participants should not rely on the continued publication of LIBOR after 2021. In addition, on November 29, 2017, the Bank of England and the FCA announced that, from January 2018, its Working Group on Sterling Risk-Free Rates has been mandated with implementing a broad-based transition to the Sterling Overnight Index Average ("SONIA") over the next four years across sterling bond, loan and derivative markets, so that SONIA is established as the primary sterling interest rate benchmark by the end of 2021.

Following the implementation of any such changes, reforms or potential reforms, the manner of administration of LIBOR, EURIBOR or other benchmark indices such as JIBOR may change, with the result that it may perform differently than in the past or benchmarks could be eliminated entirely. Any of the above changes or any other consequential changes as a result of international or national reforms or other initiatives or investigations could have a material adverse effect on the interest paid on our floating-rate loans that are linked to, reference or otherwise are dependent (in whole or in part) upon a benchmark. As of December 31, 2019, we had loans whose outstanding principal amount, in aggregate represented approximately US\$93.2 million in aggregate that were denominated in U.S. Dollar and had LIBOR as a reference rate.

We may not be able to successfully manage our foreign currency exchange risk

Changes in exchange rates have affected and may continue to affect our financial condition and results of operations. Most of our debt obligations are denominated in Indonesian Rupiah and a majority of our capital expenditures are denominated in U.S. Dollar. Most of our revenues are denominated in Indonesian Rupiah, although a portion is denominated in U.S. Dollar (for example, from international services). We may also incur additional long-term indebtedness in currencies other than the Indonesian Rupiah, including the U.S. Dollar, to finance further capital expenditures. Depreciation of the Indonesian Rupiah against the U.S. Dollar may materially affect our results of operation because, among other things, it would cause an increase in the amount of Indonesian Rupiah required by us to make interest and principal payments on U.S. Dollar debt, and increase, in Indonesian Rupiah terms, the cost of equipment that we purchase from overseas and pay for in U.S. Dollar.

From 2015 to 2019, the Indonesian Rupiah per U.S. Dollar exchange rate ranged from a high of Rp12,444 per U.S. Dollar to a low of Rp15,253 per U.S. Dollar. As a result, we recorded foreign exchange gains of Rp51 billion in 2017 and Rp71 billion in 2018, and foreign exchange loss of Rp89 billion in 2019. As of December 31, 2019, the Indonesian Rupiah per U.S. Dollar exchange rate stood at Rp13,901 per U.S. Dollar, compared to Rp14,481 per U.S. Dollar as of December 31, 2018. To the extent that the Indonesian Rupiah depreciates further from the exchange rate as of December 31, 2019, our U.S. Dollar-denominated obligations under our accounts payable and procurements payable, as well as payments for foreign currency-denominated loans payable and bonds payable, would increase in Indonesian Rupiah terms. A depreciation of the Indonesian Rupiah would also increase the Indonesian Rupiah cost of our capital expenditures as most of our capital expenditures are priced in or with reference to foreign currencies, mainly U.S. Dollar and Euro, while a substantial majority of our revenues are in Indonesian Rupiah. Such depreciation of the Indonesian Rupiah would result in losses on foreign exchange translation and significantly affect our total expenses and net income, and may consequently have a material adverse effect on our business, financial condition and results of operations. We can give no assurance that we will be able to control or manage our exchange rate risk successfully in the future or that we will not be adversely affected by our exposure to exchange rate risk.

Although we have a financial risk management program and a written policy for foreign currency risk management which mainly uses time deposits placements and hedging to cover foreign currency risk exposure for periods ranging from three to 12 months, we can give no assurance that we will be able to manage our exchange rate risk successfully or that our business, financial condition or results of operations will not be adversely affected by our exposure to exchange rate risk.

We may be unable to fund the capital expenditures needed for us to remain competitive in the telecommunications industry in Indonesia

The delivery of telecommunications services is capital intensive. In order to be competitive, we must continually expand, modernize and update our telecommunication infrastructure technology, which involves substantial capital investment. For the years ended December 31, 2017, 2018 and 2019, our consolidated capital expenditures totaled Rp33,154 billion, Rp33,620 billion and Rp36,485 billion (US\$2,628 million), respectively. Our ability to fund capital expenditures in the future will depend on our future operating performance, which is subject to prevailing economic conditions, levels of interest rates and financial, business and other factors, many of which are beyond our control, and upon our ability to obtain additional external financing. We cannot assure you that additional financing will be available to us on commercially acceptable terms, or at all. In addition, we can only incur additional financing in compliance with the terms of our debt agreements. Accordingly, we cannot assure you that we will have sufficient capital resources to improve or expand our telecommunication infrastructure technology or update our other technologies to the extent necessary to remain competitive in the Indonesian telecommunications market. Our failure to do so could have a material adverse effect on our business, financial condition, results of operations and prospects.

Legal and Compliance Risks

If we are found liable for anti-competitive practices, we may be subjected to substantial liability which could have an adverse effect on our reputation, business, financial condition, results of operations and prospects

We are subject to laws and regulations relating to anti-competitive practices and anti-monopoly. Law No.5 of 1999 on Prohibition of Monopolistic Practice and Unfair Business Competition (the "Business Competition Law") prohibits agreements and activities which amount to unfair business competition and an abuse of a dominant market position. Pursuant to the Business Competition Law, the KPPU was established as Indonesia's antitrust regulator with the authority to enforce the provisions of the Business Competition Law.

In 2016, our Company, Telkomsel, and five other local operators were found to have violated the Business Competition Law for price-fixing practices related to SMS services. We and Telkomsel have paid penalties to the treasury fund in the amount of Rp18 billion and Rp25 billion, respectively.

In 2017, it was alleged that we had violated the Business Competition Law by selling our bundling program which is marketed under the retail brand "IndiHome." This product allows customers to choose one or more of our services, which consist primarily of broadband Internet, fixed wireline phone and interactive TV services, at a competitive price. Although KPPU held that we did not violate the provisions in the Business Competition Law, the case highlights the risk that our business strategy could be challenged by our customers or regulators.

In November 2018, we received a summons from the KPPU regarding unspecified allegations of violations of Business Competition Law. We are in the process of gathering information for further discussion with KPPU, but we have not received any information on the exact subject matter of or reason for such investigation. Our policy is to collaborate fully with KPPU and their investigation. Based on communication with KPPU, we do not expect KPPU to further investigate such allegations and, as at the date hereof, we are expecting a formal written confirmation from them that such process has been terminated.

In November 2019, we received a summons from the KPPU regarding alleged violations of the Business Competition Law relating to Telkom and Telkomsel's policy on blocking access to Netflix. Telkom has provided information in response to the investigation conducted by the KPPU and conveyed that Telkom found itself obliged to take such temporary measures to protect consumers from potential losses (e.g. despite the subscription payment, consumers are exposed to potential risk of not being able to enjoy Netflix's services if Netflix, and/or access from Indonesia to all or part of the contents they provide is banned by the Government, and also, the content Netflix provides may not be suitable for Indonesian viewers) as Telkom considers that as at the date hereof, Netflix has not yet fully complied with Indonesian regulations regarding media content, especially in relation to censorship laws. We have not received any further response from KPPU and, as at the date hereof, we are still waiting for the official statement from the KPPU regarding any further developments relating to the investigation process.

In November 2019, we also received a summons from the KPPU regarding alleged violations of the Business Competition Law relating to Telkom's Internet Protocol Transit Business in Papua. In December 2019, we provided clarifications regarding this matter as requested by the KPPU. The KPPU has not yet initiated any investigation process. As at the date hereof, we have not received any further response from KPPU on this matter and there has been no further official confirmation regarding this matter.

We cannot assure you that any new or existing governmental regulators will not, in the future, find our business practices to have an anti-competitive effect, nor can we assure you that we will not be found to have violated the relevant laws and regulations relating to anti-competition and anti-monopoly in the future. If we are found to have violated any laws and regulations relating to anti-competition and anti-monopoly, we may be subjected to substantial liability such as payments of fines, the amount of which will be subject to the discretion of the courts, which could have a material adverse effect on our reputation, business, financial condition, results of operations, and prospects.

Regulation Risks

We operate in a legal and regulatory environment that is undergoing significant change. These changes may result in increased competition, which may result in reduced margins and operating revenue, among other things. These changes may also directly reduce our margins or reduce the costs of our competitors. These adverse changes resulting from regulation may have a material adverse effect on us

Reform of Indonesian telecommunications regulations initiated by the Government in 1999 have, to a certain extent, resulted in the industry's liberalization, including removal of barriers to entry and the promotion of competition. However, in recent years, the volume and complexity of regulatory changes has created an environment of considerable regulatory uncertainty. In addition, as the legal and regulatory environment of the Indonesian telecommunications sector continue to change, competitors, potentially with greater resources than us, may enter the Indonesian telecommunications sector and compete with us in providing telecommunications services. Furthermore, it is impossible to anticipate the regulatory policies that will be applied to new technologies.

We derive substantial revenue from interconnection services because we have the largest network in Indonesia and our competitors must pay tariffs to connect to our network. As regulated by the MoCI, although SMS interconnection rates increased from Rp23 to Rp24, as a result of ITRB No.60/BRTI/III/2014 and No.125/BRTI/IV/2014 effective April 2014, through December 31, 2015, SMS interconnection rates have been decreasing in recent years and may decrease again in the future. As a result, our revenue from interconnection services may decrease in the future if SMS interconnection rates, as regulated by the MoCI, continue to decrease.

The Government has socialized its plan (and has already circulated a white paper) to gradually shift the existing interconnection services regime to be an internet protocol-based. It is expected that, in 2025, all interconnection services will be IP-based and existing interconnection services (e.g. SMS) would only be part of the value added service. If this government initiative is realized, we may need to significantly change our existing infrastructure (which our competitors rely on in carrying out conventional interconnection services and pay tariffs to us) with the new technologies. Consequently, our revenue from interconnection services may decrease, and we may need to reserve costs to procure new infrastructures.

In the future, the Government may announce or implement other regulatory changes which may adversely affect our business or our existing licenses. We cannot assure you that we will be able to compete successfully with other domestic or foreign telecommunications operators, that regulatory changes will not disproportionately reduce our competitors' costs or disproportionately reduce our revenues, or that regulatory changes, amendments or interpretations of current or future laws and regulations will not have a material adverse effect on our business and operating results.

In addition to Indonesian laws and regulations, due to the nature of our business and the services we provide, we may be subject to the laws and regulations of other jurisdictions where we operate or have customers. In particular, regulators in various jurisdictions are increasingly scrutinizing how companies collect, process, use and analyze, store, share and transmit personal data. This increased scrutiny may result in new interpretations of existing laws, thereby further impacting our business. Recent regulations, such as the General Data Protection Regulation ("GDPR"), which went into effect in the European Union ("EU") on May 25, 2018, apply to the collection, use, retention, security, processing, and transfer of personally identifiable information of residents of certain countries, such as EU member states in the case of the GDPR. The GDPR created a range of new compliance obligations, and imposes significant fines and sanctions for violations. In Indonesia, the draft data protection bill, which has adopted the contents of the GDPR, has been submitted to the House of Representatives of Indonesia (*Dewan Perwakilan Rakyat* or "DPR"). As our subsidiary Telin has expanded its international infrastructure into Europe and its overseas operations and cooperation with foreign parties have developed and may further develop, certain of our operations may fall within the scope of the GDPR. Although we have not been subject to any GDPR sanctions, it is possible that the GDPR or other emerging regulations may be interpreted or applied in a manner that is adverse to us. Any failure, or perceived failure, by us to comply with any applicable regulatory requirements or orders, including but not limited to privacy, data protection, information security, or consumer protection related privacy laws and regulations, could result in proceedings or actions against us by governmental entities or individuals, subject us to fines, penalties, and/or judgments, or otherwise adversely affect our business, as our reputation could be negatively impacted.

Regulatory changes may adversely affect our business and results of operations

We operate in a regulated environment, and our telecommunication operations are mainly regulated by the MoCI. We are also required to comply with applicable information and technology, and consumer data protection laws and regulations in carrying out our activities. Future regulatory changes, particularly with respect to telecommunication network, telecommunication service provisions, and data protection may generate incremental costs and delays, thereby adversely affecting our business, prospects, financial condition and results of operations.

In December 2018, the OJK issued two draft regulations to replace BAPEPAM-LK Regulation No. IX.E.1 on Affiliated Party Transactions and Conflicts of Interest in Certain Transactions, as attached to Decision of the Chairman of Bapepam-LK No. Kep-412/BL/2009 ("Draft OJK Regulation on Affiliated Party Transaction") and Bapepam-LK Regulation No. IX.E.2 on Material Transactions and Change of Main Business Activities, as attached to Decision of the Chairman of Bapepam-LK No. Kep-614/BL/2011 ("Draft OJK Regulation on Material Transaction"). On April 21, 2020, OJK issued the new material transaction rule derived from the Draft OJK Regulation on Material Transaction, as provided under OJK Regulation No. 17/POJK.04/2020 on Material Transactions and Change of Business Activity ("New Material Transaction Rule"). The New Material Transaction Rule differs substantially from the previous regulation in a few instances, among other things, it expands the scope of what is considered a "material transaction." The New Material Transaction Rule also provides a new method for calculating whether a transaction falls under the definition of material transaction (previously it was only defined as a transaction of which value equals or is in excess of 20% of the equity value of the public company). The New Material Transaction Rule itself will be effective six months from its issuance date. As provided under the New Material Transaction Rule and the Draft OJK Regulation on Affiliated Party Transaction, the new rule and the draft rule introduce a wider coverage of transactions that are subject to stricter requirements than the previous regulation. If the New Material Transaction Rule is illustrative of a trend and if the Draft OJK Regulation on Affiliated Party Transaction is enacted by the Government in its current form, certain actions that used to be exempted will now be subject to public disclosure requirements, and we would be subject to a more stringent and stricter supervision from the Government, especially the OJK.

In addition, licenses obtained by us under applicable Indonesian laws and regulations may be subject to conditions, compliance with which may be expensive, difficult or impossible. It is possible that Governmental authorities could take enforcement actions against us for our failure to comply with such regulations, including the aforementioned conditions. These enforcement actions could result, among other things, in the imposition of fines or the revocation of our licenses. Compliance with such regulations could require us to make substantial capital expenditures and consequently divert funds from our planned construction projects. We could also experience delays in our business schedules as a result of such compliance efforts. Each of the above could adversely affect our business, prospects, financial condition and results of operations.

Applicable regulations on tariffs and their implementation as supervised by the Indonesian Telecommunication Regulatory Authority ("ITRA") may affect our revenues and earnings

The Government does not set a fixed amount or specified range of tariff that must be charged by telecommunication operators to their customers. However, the Government does set out formulas that telecommunication operators like us must refer to in determining the tariff for our services. MoCI Regulation No.15/PER/M.KOMINFO/4/2008 on Guidelines for Tariff Determination on Basic Telephony Service Distributed through Fixed Line ("MoCI Regulation No.15/2008") and MoCI Regulation No.09/PER/M.KOMINFO/04/2008 on Guidelines for Tariff Determination on Telecommunication Service Distributed through Mobile Cellular Network ("MoCI Regulation No.09/2008") are the applicable regulations for tariff calculation and determination relating to basic telephony and cellular services. Tariff formulation for our internet telephony services for retail customers is subject to MoCI Regulation No.8 of 2017 on Provision of Internet Telephony Service for Public ("MoCI Regulation No.8/2017"). In October 2019, MoCI issued new regulation MoCI Regulation No.13 of 2019 on Provision of Telecommunication Services ("MoCI Regulation No.13/2019") that will revoke and replace MoCI Regulation No.8/2017 from April 25, 2020. Further, MoCI Regulation No. 13/2019 ("MoCI Regulation No.2/2020") amended MoCI Regulation No.13/2019 which postponed the effectiveness of MoCI Regulation No.13 of 2019 until January 31, 2021.

Neither MoCI Regulation No.8/2017 nor MoCI Regulation No.13/2019 discuss at length the formula that we must apply in determining the tariff for internet telephony services as the operator. While MoCI Regulation 13/2019 requires operators to follow the relevant MoCI guidelines, as of the date hereof, MoCI has not yet published such guidelines. MoCI Regulation No. 8/2017 requires operators to determine the internet telephony services tariff following a cost-based calculation in a manner that (i) accounts for investments in the telecommunications network, (ii) accounts for investments in infrastructure relating to internet telephony services, and (iii) ensures the tariff for internet telephony services corresponds to the applicable tariff for basic telephony services. We understand that, pending publication of the expected MoCI guidelines on the tariff for internet telephony services for retail customers in accordance with MoCI Regulation No.13/2019, operators are expected to follow the existing tariff determination process based on MoCI Regulation No.8/2017.

The formulas set out in MoCI Regulation No.15/2008 and MoCI Regulation No.09/2008 comprise numerous variables, such as cost of capital, cost of equity, cost of debt, annuity factor, traffic data and fee cost. These variables are accounted for based on, among other things, our annual financial reports and statements. Although this may seem to give us flexibility in tariff formulation, the Government is still authorized to supervise the implementation of tariff formulation through (i) ITRA, for basic telephony and cellular services, and (ii) Directorate General on Post and Informatics ("DGPI"), for internet telephony services for the public. Based on its supervision, ITRA may take further action as it sees fit if any of our actions is deemed to potentially disrupt fair competition in the telecommunication market. Our promotional tariff must be carefully planned and calculated to avoid any possible "predatory pricing" claim, as the Government does not fix an amount for the lowest tariff that we may charge to our customers.

If we violate the tariff formulation as governed under these tariff regulations, we will be subject to fines (relating to MoCI Regulation No.15/2008) and examination by ITRA (relating to MoCI Regulation No.09/2008). Both regulations allow the public to participate in the supervision process by submitting complaints, e.g. regarding unfavorable fees charged by us. Meanwhile, the lack of clarity and MoCI Regulation 09/2008 with respect to non-compliance with the applicable internet telephony services tariff could lead to unpredictable action that may be taken by DGPI. We cannot assure you that there will be no actions taken by either ITRA or DGPI against us or complaints alleged by our customers against us. If these risks were to materialize, it could have an adverse effect on our business, financial condition, results of operations and prospects.

Regulations for the configuration of BTS towers may delay the set up of new BTS towers or changes in the placement of existing towers, and may erode our leadership position by requiring us to share our towers with our competitors

In 2008, MoCI issued MoCI Regulation No. 02/PER/M.KOMINFO/3/2008 relating to the construction, utilization and sharing of BTS towers ("MoCI Regulation No.02/2008"). In 2009, MoCI (jointly with the Minister of Home Affairs, Minister of Public Works and Head of Capital Investment Coordinating Board) issued a joint regulation ("Joint Ministries Regulation") that supplemented MoCI Regulation No.02/2008. The purpose of this new regulation was essentially to harmonize central, local and sectoral administrative procedures and functions for granting BTS tower construction permits. MoCI Regulation No.02/2008 was revoked in 2018. Consequently, as at the date hereof, the only relevant regulation governing the construction of BTS towers is the Joint Ministries Regulation.

Based on the Joint Ministries Regulation, the construction of BTS towers requires permits from the local government. This may adversely affect us in the allocation, development or expansion plan of our new BTS towers as setting up of our new towers will become more complicated. We may be prohibited from setting up new BTS towers in certain local areas thereby restricting our expansion as well. It may also adversely affect our existing BTS towers if local governments require any changes in the placement of the existing towers. For instance, in the Jakarta area, the Governor of Jakarta, by virtue of Governor Regulation No.106 of 2019 on Guideline on the Provision of Utility Network Infrastructures, requires established utility networks (such as telecommunications cable networks) to be relocated underground where Government-owned facilities that are in compliance with the Jakarta's planning masterplan can be used and leased by operators who have obtained the relevant governmental permit. Such relocation must be completed within 12 months from the date such governmental facilities are made available to operators, subject to exemptions that may be granted by the Government. As of the date hereof, the Government's underground facilities have been made available to operators in certain areas following the Government's gradual implementation of its relocation plan for utility networks in the Jakarta area. Operators who do not comply with this new requirement could be subject to sanctions (such as written warnings, forced cable cutting or pole/infrastructure retraction). A governmental initiative is only being implemented in Jakarta and Surabaya but it could be expanded to other cities by local governments, which could adversely impact our tower business. Most operators object to the high lease tariffs that are being introduced by the local governments in both Jakarta and Surabaya. As a result, the local governments are still discussing this issue with all stakeholders and evaluating the tariffs taking into account the potential impact they may have on end-consumers. Although we have been communicating with the local governments, the extent of financial exposure and the concrete implementation of this initiative remain unclear. However, we believe that the Government will likely proceed with the 12-month transition period in accordance with the regulation.

In addition, this regulation requires us to allow other telecommunication operators to lease space on and utilize our telecommunications towers in a manner that provides equal opportunity to and without any discrimination among such other telecommunication operators. This allows our competitors to expand their networks by leasing space on and utilizing our telecommunications towers without having to expend capital expenditures to build their own telecommunications towers. As a result, our competitors may be able to expand their network quickly and grow their business quickly, particularly in urban areas where new space for additional towers may be difficult to obtain.

In order to operate our telecommunications towers, Indonesian regulations allow local governments to impose fees which are determined on a cost basis subject to a formula provided by the Ministry of Finance and the location of the telecommunications towers. While the local governments that have yet begun to impose such fees have not charged material amounts, we cannot assure you that such fees will not be material in the future. In addition, we cannot assure you that there will be no material difference in the amount of fees that we would be liable to pay to the relevant local governments. If these risks were to materialize, it could have an adverse effect on our operating results.

We may experience local community opposition to some of our tower sites

We have experienced, and may in the future experience, local community opposition to our existing sites or the construction of new tower sites for various reasons, including aesthetic and alleged health concerns. As a result of such opposition, we could be required by the local authorities to dismantle and relocate certain towers. If we are required to relocate a material number of our towers and cannot locate replacement sites that are acceptable to our customers, it could materially and adversely affect our business, prospects, results of operations and financial condition.

We are subject to numerous non-tax state revenue payments and a Universal Service Obligation Contribution ("USO Contribution")

We are subject to multiple rules and regulations authorizing the Government to collect non-tax state revenue from us. Pursuant to Government Regulation No.80 of 2015 on Applicable Types and Tariff on Non-Tax State Revenue for MoCI ("GR No.80/2015"), the Government's non-tax revenue may be derived from, among other things, tests for telecommunication devices, telecommunications operations and use of radio frequency spectrum. MoCI Regulation No.17 of 2016 on Tariff Implementation Guidelines on Non-Tax State Revenue Collected from Telecommunication Operation Rights Fee (*Biaya Hak Penyelenggaraan*, or "BHP") and USO Contribution, as amended by MoCI Regulation No.19 of 2016 ("MoCI Regulation No.19/2016") specifies that every licensed telecommunication operator must pay the Telecommunication BHP and USO Contribution. Government Regulation No.53 of 2000 on Use of Radio Frequency Spectrum and Satellite Orbit ("GR No.53/2000") and MoCI Regulation No.21 of 2014 also specifies the obligation for telecommunication operators that use a slot in the orbit for their satellite to pay a satellite orbit operation right fee.

Under the Telecommunications Law, telecommunication operators must participate in USO Contribution. Further, according to MoCI Regulation No.10 of 2018 on Implementation of Telecommunication and Informatics USO ("MoCI Regulation No.10/2018"), the USO Contribution will be one of the sources of funding for provision of information and communication technology infrastructure. This infrastructure provision is targeted to (i) remote areas needing access to information and telecommunication technology, (ii) groups of citizens with disabilities or economic limitations and/or (iii) other areas that still require access to information and telecommunication technology.

According to the Telecommunications Law, failure to make the non-tax state revenue payment and participate in USO Contribution will be subject to administrative sanctions; the most adverse one of which is revocation of license (which should be preceded by written warnings). While we have not previously failed to make the requisite payments, any failure by us to pay these obligations may cause our licenses to be revoked. Any revocation of licenses could have a material adverse effect on our financial condition, results of operations and liquidity.

The interpretation and application of the anticipated enactment of a new consumer data protection regulation are uncertain and may adversely affect our business, financial condition, results of operations and prospects

Law No.11 of 2008 on Electronic Information and Transactions Law as amended by Law No.19 of 2016 ("EIT Law") first came into effect on April 21, 2008. The EIT Law sets forth general principles to be further implemented through a series of Government regulations, presidential decrees and ministerial decrees, some of which have not yet been promulgated. In general, the provisions of the law are broad, and few sources of interpretive guidance are available. A number of implementing regulations to the EIT Law have been enacted, among others, Government Regulation No. 71 of 2019 on Implementation of Electronic System and Transaction ("GR No.71/2019") and MoCI Regulation No.20 of 2016 on Protection of Personal Data in an Electronic System ("MoCI Regulation No.20/2016"). These regulations are new and subject to interpretation by the regulatory authorities. Pending clear instances of the application of such regulations, it is uncertain how these regulations will affect us.

GR No.71/2019 has implemented a number of significant changes, including (i) a new definition of public and private electronic system operators, (ii) new data localization requirements for public electronic system operators, (iii) further elaboration on the deletion of electronic data, (iv) the provision of electronic certificates and electronic reliability certificates, and (v) a new scope of electronic certification services. The new rule also defines "public electronic system operators" as governmental institutions that organize, manage or operate an electronic system or any person, state apparatus or business entities appointed by any such governmental institution to organize, manage or operate an electronic system. The other electronic system operators that do fall within the foregoing category will be considered "private electronic system operators." Under GR No.71/2019, private electronic system operators can place their electronic systems and data in or outside Indonesia, unless otherwise regulated. However, private electronic system operators must allow "supervision" by government agencies, including granting access to the electronic systems and data for monitoring and law enforcement purposes. Under this regulation, there is a one-year transitional period for electronic system operators to comply with their obligation to register with MOCI and a two-year transitional period for public electronic system operators to comply with the data localization requirements, which is the obligation to manage, process and store the electronic systems and data within Indonesia. As a positive development from the previous rule, GR No.71/2019 has clarified the data localization requirements (which now comprise "managing," "processing," and "storing" electronic systems and data) and removed the uncertainty about the "public services" definition under the prior applicable rule. The previous rule only stipulated that electronic system operators for "public services" were obliged to, among others, maintain data centers within Indonesia. GR No. 71/2019 removed all references to "public services" and instead uses the concept of "public electronic system operators", which clarifies which parties are required to comply with the additional requirements under GR No. 71/2019.

Not all of the implementing regulations to the EIT Law, however, have been issued and some have only been recently enacted. Accordingly, the full impact of the EIT Law, the related implementing regulations and any change in Indonesian consumer data protection regulations on our financial and operational status cannot be determined at this time. There is no assurance that we would be able to comply with the EIT Law, or that the compliance would not require us to make substantial capital expenditure or delays in our business schedules.

Our electronic money business activity is highly regulated

We are subject to multiple rules and regulations in respect of our electronic money (e-money) business activities. The practice of e-money in Indonesia is mainly governed by Bank Indonesia ("BI") Regulation No.20/6/PBI/2018 on Electronic Money ("BI Regulation No.20/2018"). Any party which wishes to carry out e-money activities in Indonesia must first obtain an e-money license granted by BI. Although we, through our subsidiary Telkomsel, have obtained an e-money license from BI, we are still subject to evaluation conducted by BI. Under BI Regulation No.20/2018, BI is authorized to take further action based on the evaluation as it sees fit, among others, to revoke a license, to accelerate the license period or to limit the license holder's activity. Subject to evaluation, if BI takes the view that there are reasons to impose any of those further actions on Telkomsel, our ability to conduct business in the usual course would be limited, which may adversely affect our business, financial condition and results of operations.

BI Circular Letter No.16/11/DKSP dated July 22, 2014 on Electronic Money Operations which was most recently amended by BI Circular Letter No.18/21/DKSP dated September 27, 2016, further implements the obligation for e-money license holders to report any change in the type or name, developments or addition of facilities to the e-money product. See Item 4 "Information on the Company – Licensing – Payment Method Using e-Money." The amendment of this circular specifies that an e-money product with a different type and/or name, developments and/or additional facilities can only be issued after obtaining approval from BI. Further, BI Regulation No.20/2018 is also implemented by BI's Board of Governor Members Regulation No.20/21/PADG/2018 dated August 20, 2018 on the Report on the Implementation of Payment Using Card and Electronic Money Activities by Smallholder Credit Banks and Non-Bank Institutions ("BI BOG Regulation No.20/2018"). BI BOG Regulation No.20/2018 regulates the reporting obligation that must be satisfied by any party practicing e-money activity.

We must comply with these regulations as we are carrying out a business which is highly regulated. If we, through Telkomsel, fail to comply with any of these obligations, we will be subject to administrative sanctions. Any sanction imposed on Telkomsel could materially and adversely affect our business, financial condition, results of operations and prospects.

Risks Related to Development of New Businesses

We may not succeed in our efforts to develop new businesses

We believe that efforts to develop new businesses other than the telecommunication business such as digital life and smart platform and enterprise digital businesses, as well as international expansion are necessary to ensure continuing business growth. Risks related to new business development include competition from established players, suitability of business model, competition from disruptive new technologies or business models, the need to acquire new expertise in the new areas of operation, and risks related to online media which include intellectual property, consumer protection and confidentiality of customer data. Further, we have to focus on securing new enterprise customers. If we are unable to secure new contracts, or we are unable to renew our existing contracts with similar contract value, size or margins to existing ones, this may adversely affect our business, results of operations and financial condition.

Focusing on international expansion is one of our strategic business initiatives. In particular, we have expanded into a number of jurisdictions in telecommunications or data related areas, namely Singapore, Hong Kong, Timor Leste, Australia, Myanmar, Malaysia, Taiwan, the United States, Saudi Arabia and New Zealand. Expanding our operations internationally exposes us to a number of risks associated with operating in new jurisdictions. For example, our international operations could be adversely affected by political or social instability and unrest, regulatory changes (such as an increase in taxes applicable to our operations), macroeconomic instability, limitations on or controls on the foreign exchange trade, competition from local operators, difference in consumer preference and a lack of expertise in the local markets in which we will operate. Any of these factors could limit our expected returns from our expansion and materially and adversely affect our business, results of operations and financial condition.

Other Risks

We are dependent on our subsidiary, Telkomsel

We derived 70.2%, 65.3% and 65.1% of our revenue in 2017, 2018 and 2019, respectively, from our mobile business through our 65.0% majority-owned subsidiary, Telkomsel. The remaining 35.0% interest in Telkomsel is held by Singapore Telecom Mobile Pte Ltd ("Singtel"). Singtel may seek to influence the management, operation and performance of Telkomsel. In the event that there are differences between us and Singtel regarding the business, strategy and operations of Telkomsel, these issues may take time to resolve, or may not result in a positive outcome for our Group. These factors could adversely affect our business, financial condition and operating results.

Our financial results are reported to the OJK in conformity with IFAS, which differs in certain significant respects from IFRS, and we distribute dividends based on profit for the year attributable to owners of the parent company and net income per share determined in reliance on IFAS

In accordance with the regulations of the OJK and the Indonesia Stock Exchange ("IDX"), we are required to report our financial results to the OJK in conformity with IFAS. We have provided the OJK with our financial results for the year ended December 31, 2019 on May 26, 2020, which we furnished to the SEC on a Form 6-K dated May 27, 2020, which contains our Consolidated Financial Statements as of and for the year ended December 31, 2019, and prepared in conformity with IFAS. IFAS differs in certain significant respects from IFRS and, as a result, there are differences between our financial results as reported under IFAS and IFRS, including profit for the year attributable to owners of the parent company and net income per share. We distribute dividends based on profit for the year attributable to owners of the parent company and net income per share determined in reliance on IFAS.

Based on IFAS financial statements, our profit for the year attributable to owners of the parent company would be Rp18,032 billion in 2018 and Rp18,663 billion in 2019 and our net income per share would be Rp182.03 in 2018 and Rp188.40 in 2019. Dividends declared per share were Rp163.82 for 2018. The dividend for 2019 will be decided at the 2020 AGMS, scheduled for June 19, 2020.

We are established in Indonesia and it may not be possible for investors to effect service of process or enforce judgments, on us within the United States or to enforce judgments of a foreign court against us in Indonesia

We are a state-owned limited liability company established in Indonesia, operating within the framework of Indonesian laws governing companies with limited liability, and all of our significant assets are located in Indonesia. In addition, all of our Commissioners and Directors reside in Indonesia and a substantial portion of the assets of such persons are located outside the United States. As a result, it may be difficult for investors to effect service of process, or enforce judgments on us or such persons within the United States, or to enforce against us or such persons in the United States, judgments obtained in United States courts.

We have been advised by Hadiputranto, Hadinoto & Partners, our Indonesian legal advisor, that judgments of United States courts, including judgments predicated upon the civil liability provisions of the United States federal securities laws or the securities laws of any state within the United States, are not enforceable in Indonesian courts, although such judgments could be admissible as non-conclusive evidence in a proceeding on the underlying claim in an Indonesian court. They have also advised that there is doubt as to whether Indonesian courts will enter judgments in original actions brought in Indonesian courts predicated solely upon the civil liability provisions of the United States federal securities laws or the securities laws of any state within the United States. As a result, the claimant would be required to pursue claims against us or such persons in Indonesian courts.

Our controlling shareholder's interest may differ from those of our other shareholders

The Government has a controlling equity interest of 52.09% of our issued and outstanding shares of common stock and the ability to determine the outcome of all actions requiring the approval of our shareholders. The Government also holds our one Dwiwarna Share, which has special voting rights and veto rights over certain matters, including the election and removal of our Directors and Commissioners. The Government may also use its powers as a majority shareholder or under the Dwiwarna Share to cause us to issue new shares, amend our Articles of Association or bring about actions to merge or dissolve us, increase or decrease our authorized capital or reduce our issued capital, or veto any of these actions. One or more of these may result in the delisting of our securities from certain exchanges. In addition, the Government regulates the Indonesian telecommunications industry through the MoCI.

As of December 31, 2019, the Government had a 14.29% equity interest in PT Indosat Tbk ("Indosat"), which competes with us in cellular services, data center services, IT solutions, system integration services and fixed IDD telecommunications services. The Government's equity interest in Indosat also includes a Dwiwarna Share which has special voting rights and veto rights over certain strategic matters under Indosat's articles of association, including decisions on dissolution, liquidation and bankruptcy, and also permits the Government to nominate one director to its board of directors and one commissioner to its board of commissioners. As a result, there may be instances where the Government's interests will conflict with ours. There is no assurance that the Government will not direct opportunities to Indosat or favor Indosat or any other telecommunication operator when exercising regulatory powers over the Indonesian telecommunications industry. If the Government were to give priority to the business of Indosat or any other telecommunication operator over ours, or to expand its equity interest in Indosat or acquire an equity interest in any other telecommunication operator, our business, financial condition, and results of operations and prospects could be materially and adversely affected.

Forward-looking statements may not be accurate

This Annual Report incorporates forward-looking statements that include announcements regarding our current goals and projections of our operational performance and future business prospects. The words "believe," "expect," "anticipate," "estimate," "project" and similar words identify forward-looking statements. In addition, all statements, other than statements that contain historical facts, are forward-looking statements. While we believe that the expectations contained in these statements are reasonable, we cannot give an assurance that they will be realized. These forward-looking statements are subjected to a number of risks and uncertainties, including changes in the economic, social and political situation in Indonesia and other risks described in this section "Risk Factors." All forward-looking statements, written or verbal, made by us or by persons on behalf of us are deemed to be subject to those risks.

Risks Related to Indonesia

Political and Social Risks

Current political and social events in Indonesia may adversely affect our business

Since 1998, Indonesia has experienced a process of democratic change, resulting in political and social events that have highlighted the unpredictable nature of Indonesia's changing political landscape. In 1999, Indonesia conducted its first free elections for representatives in parliament. In 2004, 2009, 2014 and most recently, in 2019, elections were held in Indonesia to elect the President, Vice-President and representatives in parliament. Indonesia also has many political parties, without any one party holding a clear majority. Due to these factors, Indonesia has, from time to time, experienced political instability, as well as general social and civil unrest. For example, since 2000, thousands of Indonesians have participated in demonstrations in Jakarta and other Indonesian cities both for and against former presidents Abdurrahman Wahid, Megawati Soekarnoputri and Susilo Bambang Yudhoyono and current President Joko Widodo as well as in response to specific issues, including fuel subsidy reductions, privatization of state assets, anti-corruption measures, decentralization and provincial autonomy, and the American-led military campaigns in Afghanistan and Iraq. Although these demonstrations were generally peaceful, some turned violent. Indonesia announced in November 2014, and implemented with effect from January 1, 2015, a fixed diesel subsidy of Rp1,000 per liter and scrapped the gasoline subsidy. Although the implementation did not result in any significant violence or political instability, the announcement and implementation also coincided with a period where crude oil prices had dropped very significantly from 2014. Currently, the Government reviews and adjusts the price for fuel on monthly basis and implements the adjusted fuel price in the following month. There can be no assurance that future increases in crude oil and fuel prices will not result in political and social instability.

President Joko Widodo won the Indonesian presidential elections which took place in 2014, and was sworn in as President on October 20, 2014. Although the 2014 elections were conducted in a peaceful manner, President Joko Widodo's governing coalition did not hold a majority of seats in parliament. Between November 2016 and February 2017, significant demonstrations took place in central Jakarta against the governor of Jakarta. These demonstrations occurred during the closely fought Jakarta gubernatorial elections which took place in February 2017 and continued through the subsequent run-off election in April 2017. Each of the foregoing events, as well as political campaigns in Indonesia generally, may be indicative of the degree of political and social division in Indonesia. The latest presidential election took place on April 17, 2019, and incumbent President Joko Widodo won the presidential polls with 55.5% of the total votes. The result triggered allegations of electoral fraud. Thousands of supporters of the opposing party Prabowo Subianto held a rally in front of the Elections Supervisory Agency's (Bawaslu) headquarters on Jl. Thamrin in Central Jakarta on May 21, 2019, calling for the disqualification of Joko Widodo from the presidential election. The rally ended with a riot on May 22, 2019, in Central Jakarta. The opposing party also filed a lawsuit to the Constitutional Court to challenge the election result, alleging fraud. The Constitutional Court on July 27, 2019, rejected the lawsuit challenging the presidential election result. There can be no assurance that this situation or future sources of discontent will not lead to further political and social instability.

Separatist movements and clashes between religious and ethnic groups have also resulted in social and civil unrest in parts of Indonesia, such as Aceh in the past and in Papua. There have been clashes between supporters of those separatist movements and the Indonesian military, including continued activity in Papua by separatist rebels that has led to violent incidents. There have also been inter-ethnic conflicts, for example in Kalimantan, as well as inter-religious conflict such as in Maluku and Poso.

In August 2019, after the arrest of Papuan students for allegedly vandalizing the Indonesian flag, riots broke out in Papua. The riots caused a Telkom customer service building to be damaged in 2019, but this did not result in significant issues, service interruption or damages,

Labor issues have also come to the fore in Indonesia. In 2003, the Government enacted a new labor law that gave employees greater protections. Occasional efforts to reduce these protections have prompted an upsurge in public protests as workers responded to policies that they deemed unfavorable.

There can be no assurance that social and civil disturbances will not occur in the future and on a wider scale, or that any such disturbances will not, directly or indirectly, materially and adversely affect our business, financial condition, results of operations and prospects.

Terrorist activities in Indonesia could destabilize Indonesia, which would adversely affect our business, financial condition and results of operations, and the market price of our securities

There have been a number of terrorist incidents in Indonesia in the past two decades, including the May 2005 bombing in Central Sulawesi, the Bali bombings in October 2002 and October 2005 and the bombings at the JW Marriot and Ritz Carlton hotels in Jakarta in July 2009, which resulted in deaths and injuries. On January 14, 2016, several coordinated bombings and gun shootings occurred in Jalan Thamrin, a main thoroughfare in Jakarta, resulting in a number of deaths and injuries. On May 24, 2017, a bombing at a bus station in Jakarta resulted in multiple deaths and injuries. In May 2018, three churches were bombed in Surabaya, killing at least 28 people and injuring at least 50 others. On October 10, 2019, Wiranto, Indonesia's Coordinating Minister for Political, Legal and Security Affairs at that time was stabbed several times by a member of Jamaah Ansharut Daulah, an extremist group, during his visit in Java.

Although the Government has successfully countered some terrorist activities in recent years and arrested several of those suspected of being involved in these incidents, terrorist incidents may continue and, if serious or widespread, might have a material adverse effect on investment and confidence in, and the performance of, the Indonesian economy and may also have a material adverse effect on our business, financial condition, results of operations and prospects and the market price of our securities.

Macro-Economic Risks

Negative changes in global, regional or Indonesian economic activity could adversely affect our business

Changes in the Indonesian, regional and global economies can affect our performance. Two significant events in the past that impacted Indonesia's economy were the Asian economic crisis of 1997 and the global economic crisis which started in 2008. The 1997 crisis was characterized in Indonesia by, among others, currency depreciation, a significant decline in real gross domestic product, high interest rates, social unrest and extraordinary political developments. Indonesia entered a recessionary phase with relatively low levels of growth between 1999 and 2002. The rate of growth has stabilized at relatively higher levels in subsequent years, though there has been a moderate slowdown in growth from 2012 to 2016 with slight development over the past three years. In addition, the Government continues to have a modest fiscal deficit and a high level of sovereign debt, its foreign currency reserves are modest, the Indonesian Rupiah continues to be volatile and has poor liquidity, and the banking sector is weak and suffers from high levels of non-performing loans. Accordingly, there is no assurance that the current Indonesian economic situation would not deteriorate, which could have an adverse effect on our business, financial condition, results of operations and prospects.

While the global economic crisis that arose from the subprime mortgage crisis in the United States did not affect Indonesia's economy as severely as in 1997, it still put Indonesia's economy under pressure. The global financial markets have also experienced volatility as a result of expectations relating to monetary and interest rate policies of the United States, concerns over the debt crisis in the Eurozone, Brexit, the United States and China trade disputes, concerns over China's economic health and economic protectionism, and most recently, the ongoing outbreak of the novel coronavirus (COVID-19). Uncertainty over the outcome of the Eurozone governments' financial support programs and worries about sovereign finances generally are ongoing. The economic and social impact of the COVID-19 spread, further escalation of trade and geopolitical tensions, uncertainties around the conditions of the future trade relationship between the United Kingdom and the European Union at the end of the transition period following the Brexit withdrawal, and persistently weak economic data pointing to a protracted slowdown in global growth are among the possible triggers that could result in a major deterioration in financial market sentiment.

Trade tensions between the U.S. and major trading partners, most notably China, continue to escalate following the introduction of a series of tariff measures in both countries. Although China is the primary target of U.S. trade measures, value chain linkages mean that other emerging markets, primarily in Asia, may also be impacted. China's policy response to these trade measures also presents a degree of uncertainty. There is some evidence of China's monetary policy easing and the potential for greater fiscal spending, which could result in imbalances in the Chinese economy. This could undermine efforts to address already high debt levels and increase medium-term risks.

In Europe, (i) uncertainties around the conditions of the future trade relationship between the United Kingdom and the European Union at the end of the transition period following the Brexit withdrawal, (ii) the possible exit of Scotland, Wales or Northern Ireland from the United Kingdom, (iii) the possibility that other European Union countries could hold similar referendums to the one held in the United Kingdom and/or call into question their membership of the European Union, (iv) the possibility that one or more countries that adopted the Euro as their national currency might decide, in the long term, to adopt an alternative currency, or (v) prolonged periods of uncertainty connected to these eventualities could have significant negative impacts on international markets. These could include greater volatility of foreign exchange and financial markets in general due to the increased uncertainty. Market and economic disruptions have affected, and may continue to affect, consumer confidence levels and spending, personal bankruptcy rates, levels of incurrence and default on consumer debt, among other factors. There can be no assurance that the market disruptions in Europe, including the increased cost of funding for certain governments and financial institutions, will not spread, nor can there be any assurance that future financial support packages will be made available or, even if provided, will be sufficient to stabilise the affected countries and markets in Europe or elsewhere.

If the current global uncertainties become protracted, we can provide no assurance that they will not have a material and adverse effect on Indonesia's economic growth and consequently on our business.

Adverse economic conditions could result in less business activity, less disposable income available for consumers to spend and reduced consumer purchasing power, which may reduce demand for communication services, including our services, which in turn would have an adverse effect on our business, financial condition, results of operations and prospects. There is no assurance that there will not be a recurrence of economic instability in future, or that, should it occur, it will not have an impact on the performance of our business.

Fluctuations in the value of the Indonesian Rupiah may materially and adversely affect us

Our functional currency is the Indonesian Rupiah. One of the most important impacts the Asian economic crisis had on Indonesia was the depreciation and volatility in the value of the Indonesian Rupiah as measured against other currencies, such as the U.S. Dollar. The Indonesian Rupiah continues to experience significant volatility.

In addition, while the Indonesian Rupiah has generally been freely convertible and transferable, from time to time, Bank Indonesia has intervened in the currency exchange markets in furtherance of its policies, either by selling Indonesian Rupiah or by using its foreign currency reserves to purchase Indonesian Rupiah. We can give no assurance that the current floating exchange rate policy of Bank Indonesia will not be modified or that the Government will take additional action to stabilize, maintain or increase the Indonesian Rupiah's value, or that any of these actions, if taken, will be successful. Modification of the current floating exchange rate policy could result in significantly higher domestic interest rates, liquidity shortages, capital or exchange controls, or the withholding of additional financial assistance by multinational lenders. This could result in a reduction of economic activity, an economic recession, loan defaults or declining subscriber usage of our services, and as a result, we may also face difficulties in funding our capital expenditures and in implementing our business strategy. Any of the foregoing consequences could materially and adversely affect our business, financial condition, results of operations and prospects.

Downgrades of credit ratings of the Government or Indonesian companies could adversely affect our business

As of the date of this Annual Report, Indonesia's sovereign foreign currency long-term debt was rated "Baa2" by Moody's, "BBB" by Standard & Poor's and "BBB" by Fitch Ratings. Indonesia's short-term foreign currency debt is rated "A-2" by Standard & Poor's and "F2" by Fitch Ratings.

We can give no assurance that Moody's, Standard & Poor's or Fitch Ratings will not change or downgrade the credit ratings of Indonesia. Any such downgrade could have an adverse impact on liquidity in the Indonesian financial markets, the ability of the Government and Indonesian companies, including us, to raise additional financing, and the interest rates and other commercial terms at which such additional financing is available. Interest rates on our floating rate Rupiah-denominated debt would also likely increase. Such events could materially and adversely affect our business, financial condition, results of operations, prospects and/or the market price of our securities.

Disaster Risks

Indonesia is vulnerable to natural disasters and events beyond our control, which could adversely affect our business and operating results

Many parts of Indonesia, including areas where we operate, are prone to natural disasters such as floods, lightning strikes, typhoons, earthquakes, tsunamis, volcanic eruptions, fires, droughts, power outages and other events beyond our control. The Indonesian archipelago is one of the most volcanically active regions in the world as it is located in the convergence zone of three major lithospheric plates. It is subject to significant seismic activity that can lead to destructive earthquakes, tsunamis or tidal waves. Flash floods and more widespread flooding also occur regularly during the rainy season from November to April. Cities, especially Jakarta, are frequently subject to severe localized flooding which can result in major disruption and, occasionally, fatalities. Landslides regularly occur in rural areas during the wet season. From time to time, natural disasters have killed, affected or displaced large numbers of people and damaged our equipment. These events in the past have disrupted, and may in the future, disrupt our business activities, cause damage to equipment, and adversely affect our financial performance and profit.

For example, on September 2, 2009, an earthquake in West Java caused damage to our assets. On September 30, 2009, an earthquake in West Sumatra disrupted the provision of telecommunications services in several locations and caused severe damage to our assets. In June 2016, underwater volcanic activity caused disturbances to submarine fiber optic cable, causing disruption in services and loss of revenue. On August 5, 2018 a large earthquake hit Lombok and on September 28, 2018, a large earthquake triggered a tsunami which impacted Central Sulawesi, both of which caused operational disruptions and damage to our assets. In January 2020, landslides and floods triggered by torrential downpours in and around Jakarta, Bekasi and Bogor resulted in approximately 50 deaths and 400,000 displaced. Floodwater reached up to six meters in certain areas, making it the worst rainfall in over a decade. The extreme weather also submerged at least 169 neighborhoods. The landslides and floods caused damage to our civil mechanical, and electrical equipment, production equipment and buildings. This resulted in the congestion of data traffic when transferring data to our backup network and therefore, several hours of service disruption at various automatic telephone center (*Sentral Telepon Otomat* or "**STO**"). The estimated loss from the damages caused by the landslides and floods is Rp4.7 billion and we have submitted a claim to our insurance provider for reimbursement of such loss.

Given the geography of Indonesia, we are highly reliant on the use of submarine cables to provide services across the Indonesian archipelago. These submarine cables may be damaged by volcanic activity or friction with the ocean floor caused by earthquake tremors or otherwise, which may disrupt our ability to provide services to customers.

Although we have implemented a business continuity plan and a disaster recovery plan, which we test regularly, and we have insured certain of our assets to protect from any losses attributable to natural disasters or other phenomena beyond our control, there is no assurance that the insurance coverage will be sufficient to cover the potential losses, that the premium payable for these insurance policies upon renewal will not increase substantially in the future, or that natural disasters would not significantly disrupt our operations.

We cannot assure you that future natural disasters will not have a significant impact on us, or Indonesia or its economy. A significant earthquake, other geological disturbance or weather-related natural disaster in any of Indonesia's more populated cities and financial centers could severely disrupt the Indonesian economy and undermine investor confidence, thereby materially and adversely affecting our business, financial condition, results of operations and prospects.