## TYPES OF RISK AND MANAGEMENT METHOD

The Risk Management Department at Telkom has a function to assist the Company's management in identifying strategic risks related to business processes. The following table presents some of the main risks that affect Telkom's business activities.

## TABLE OF RISK AND MANAGEMENT METHOD

Type of Risk	Risks that is Faced	The Impact to Telkom	Mitigation/Risk Management
1. Sistemic Risks			
Political and Social	stability, social, and security turmoil both domestically and internationally caused by specific issues such as	business growth, operations, financial condition, results of operations, supply chain of	<ul> <li>a. Monitoring the influence of socio political turmoil on operational service disruptions.</li> <li>b. The maintenance of awareness through the improvement of safety &amp; security functions.</li> <li>c. Monitoring supply chain issues related to raw materials and looking for alternatives to materials/device designs.</li> </ul>
Macro Economy	Changes in the rate of inflation.  The fluctuation of Rupiah Exchange rate.  Increase in energy and fuel prices.  Increase in loan interest rates.  The decrease of Government or Company's credit rating.	<ol> <li>Affects the purchasing power and ability to pay customers.</li> <li>Have the impact on the business, financial condition, business result or business prospect.</li> <li>Have a material adverse effect to the business, financial, condition, business proceeds or business prospect.</li> </ol>	a. Monitoring the influence of macroeconomy to the change to increase the expense through Cost Leadership program.  b. To look for the opportunity to increase the spending of APBN pursuant to the government focus (health, energy, education, etc).
Risk of Disaster	as floods, lightning, hurricanes, earthquakes,	and give negative impact to the financial performance and profit, business prospect as well as	a. Monitoring indicators that have the potential to cause disturbances to equipment such as device humidity and temperature, ship traffic on the SKKL route through the system.  b. Transfer of risk by using the insurance of assets to anticipate the natural disaster and fire.  c. Coordination with ASKALS (Indonesian Sea Cable Association and BAKAMLA (Indonesian Marine Safety Agency) to secure SKKL.  d. Preventive & corrective action by preparing the disaster recovery plan and crisis management team

Type of Risk	Risks that is Faced	The Impact to Telkom	Mitigation/Risk Management			
2. Business Related Risks						
Operational Risk	The failure in the sustainability of network operation, main system, gateway on Telkom's network, or other operator's network.	business, financial condition,	<ul> <li>a. Implementation of BCM, BCP, and DRP.</li> <li>b. Certification of Integrated Management System (IMS) for infrastructure management.</li> </ul>			
	Threat of physical and cyber security, such as brute force attack, DDoS attack, and threats do Data Center.	business, financial condition,	<ul> <li>a. The upgrade of preventive action in the form of vulnerability assessment and penetration test periodically.</li> <li>b. Monitor and identify all types of attack in the real-time as well as to choose and conduct a necessary action immediately.</li> <li>c. Preparing the recommendation to handle cyber attack based on the historical incident analysis.</li> <li>d. Intensive coordination with relevant parties to handle the cyber attack.</li> </ul>			
	Risks related to sub-optimal internet services.	May face a lawsuit and damage the reputation.	To be more prudent in the preparation of contract with content provider partner.			
	New technology.	Has an impact on the competitive power.	a. The preparation of Technology Roadmap by taking into account future technologies and the possible implementation of competitor's technologies. b. Acceleration of IDN (Indonesia Digital Network) program to support future services.			
		condition, operation result, and	<ul> <li>a. The planning to change the satellite of which operation period will be immediately expired.</li> <li>b. The insurance of satellite operation during the active period.</li> <li>c. Insurance for manufacturing and launching of new satellite.</li> <li>d. Developing the understanding with regulator in relation to the satellite operation by Telkom.</li> </ul>			
Financial Risk	Interest rate risk.	Has an impact on increasing interest expenses, especially for floating interest loans.	Interest rate swap contract from the float interest rate to become the fix interest rate upon certain loan term.			
	Market price risk.	Has an impact of changes in fair value on the performance of financial assets measured through profit or loss.	Perform hedging activities of financial assets.			

Type of Risk	Risks that is Faced	The Impact to Telkom	Mitigation/Risk Management
	Foreign exchange rate risk.	Has negative impact on the financial condition or result from the operation.	Placement of time deposit and hedging to cover the fluctuation risk of foreign exchange.
	Credit risk mainly from trade receivables and other receivables.	Adverse impact on financial condition, operational performance, and business prospects.	
	Liquidity risk.	Adverse impact on financial condition, operational performance, and business prospects.	a. Maintaining adequate cash balances in an effort to fulfill financial liabilities.     b. Perform analysis to monitor statement of financial position liquidity ratios such as current ratio and debt to equity ratio against debt agreement requirements.
	The limitation of financing capital expenditures.	Has a material adverse effect to the business, financial condition, operational performance, and business prospect.	Company's performance to gain the
Legal and Compliance Risk	Penalty/fine by KPPU in relation to the price-fixing and the occurrence of class action.	and has negative impact to the	Strengthening legal review towards corporate action plan or certain contract.
Regulation Risk	The change of Indonesian or International Regulation.	Has the impact to the business, financial condition, operational performance, and business prospect.	a. Analysis on the impact of the regulation plan towards the industry in general and Telkom in particular.      b. Giving inputs so that the regulation that will be stipulated will give positive impact to the Company and industry.
Transformation Risk	_	Has an impact on business growth and the company's financial performance in the short and long-term.	<ul> <li>a. Market Assessment and strategic situation analysis on transformation initiatives.</li> <li>b. Preparation of strategic fit and roadmap for transformation initiatives.</li> <li>c. Conducting risk assessment of transformation initiatives both at the pre and post-transformation stages.</li> <li>d. Implementation of change management by maximizing the Project Management Office (PMO) function.</li> </ul>

## RISK MANAGEMENT SYSTEM'S REVIEW ON THE EFFECTIVENESS

During 2022, Telkom's risk management system has been running effectively. The implemented system can manage Telkom's various business risks to support every policy and process in the TelkomGroup. The effectiveness of the risk management system at Telkom is supported by several tools or risk management information systems, namely:

- Generic Tools Enterprise Risk Management Online (ERM Online), which is used by all units to manage risk register.
- 2. Specific Tools for certain risk management which are:
  - a. Fraud Management System (FRAMES) application is used as an early detection system for the possibility of Customer and Third Party Fraud.
  - b. i-Library application managed by Service Operation Division and to be used to manage the documentation system of the Integrated Management System.
  - SMK 3 Online application managed by Security & Safety unit for Health and Safety Documentation Management.

The evaluation process for assessing the effectiveness of Risk Management implementation will be carried out in 2022, namely:

- 1. Measurement of Risk Maturity Index (RMI).
- 2. Monitoring and evaluation of the effectiveness of risk mitigation through the ERM Online application.
- 3. One-on-one evaluation/discussion and advisory with business units as needed.
- 4. Joint reporting and evaluation with BOD and Committee for Planning and Risk Evaluation and Monitoring (KEMPR).

## STATEMENT OF BOARD OF DIRECTORS AND BOARD OF COMMISSIONERS ON ADEQUACY OF RISK MANAGEMENT SYSTEM

In an effort to ensure the implementation of risk management, the Board of Directors and Board of Commissioners through the Planning and Risk Evaluation and Monitoring Committee conduct meetings with the Risk Management Department on a regular basis. The meeting discussed risk monitoring in the corporate environment and follow-ups that have been carried out by the risk owner to minimize the risks that occur. The Risk Management Department will report to the Board of Directors and Board of Commissioners the results of risk monitoring on a quarterly basis.

In 2022, the Board of Directors and Board of Commissioners assess that the risk management system at Telkom has been running well according to and fulfilling the adequacy of the policies and standards referred to. The adequacy includes among others:

- 1. Adequacy of Risk Management Information System
  The risk management system implemented in the
  Company refers to the ISO 31000:2018 framework
  and adopts various international standards to ensure
  the best implementation of risk management. The
  preparation of the company's risk register and risk
  profile has utilized the ERM Online application, as well
  as the monitoring and evaluation process as well as
  the dashboard.
- 2. Adequacy of Risk Identification, Measurement, Monitoring, and Control Processes.

The Board of Directors through the Internal Audit function has carry out inspections, evaluations, reports, and/or recommendations for improvement of adequacy and the effectiveness of the risk management process then followed up through evaluation by the Evaluation Committee and Planning and Risk Monitoring.