# RISK MANAGEMENT FUNCTION

The Company continuously strives to improve the quality of Risk Management and conducts periodic reviews to ensure the effectiveness and adequacy of the Risk Management Function to comply with all applicable regulations and create a healthy Culture of Compliance in the Company. The Risk Management function also has a large role and responsibility related to the Company's Internal Control System, especially related to the Risk Assessment component in the COSO Internal Control Framework. In addition, the application of the Risk Management Function is based on the Financial Services Authority Regulation (POJK) No. 18/POJK.03/2016 concerning the Implementation of Risk Management for Commercial Banks and the Financial Services Authority Circular Letter (SEOJK) No. 34/POJK.03/2016 concerning the Application of Risk Management for Commercial Banks, which is also a reference for the Company's Risk Management.

## RISK MANAGEMENT POLICIES AND PROCEDURES

The Company has developed policies in the field of Risk Management, i.e. the Risk Management Policy Manual (PKMR), which covers the minimum provisions required by Bank Indonesia and the Financial Services Authority regulations. The PKMR is reviewed regularly at the frequency of at least once a year by the Board of Directors and Board of Commissioners by refining the Risk Management Policy Manual. An additional review of internal policies is also implemented to be in line with the regulator's latest provisions by conducting a gap analysis and accommodating the common best practices used in the banking industry to increase the quality of Risk Management.

## COMPANY'S RISK MANAGEMENT SYSTEM

The Risk Management System is designed to support the Company in realizing sound business management and achieving sustainable growth, thus optimizing shareholder value. The Company adopts a comprehensive approach to managing risks comprehensively, by improving the performance in managing uncertainty, minimizing threats, and maximizing opportunities without neglecting the principles of Risk Management that at least include the following:

1. Active supervision by the Board of Commissioners and the Board of Directors;
2. Adequacy of policies, procedures, and limits set;
3. Adequacy of Risk Identification, Measurement, Monitoring, and Control Process, as well as the Risk Management Information System;
4. A comprehensive Internal Control System.

In addition, the Company's Risk Management strategy is adjusted to the Company's Business strategy. The Risk Management Strategies are applied in order to support the Company's business development in the future through:

1. The application of Risk Management, in addition to being focused on further developing and simulating Risk and Capital measurements, is also focused on developing a Culture of Risk Awareness across all levels of the Company as well as the Ex-Ante Function to minimize Risk Exposure. This is so that the established Risk Management policies will be applied in the business process and daily operations at all levels.
2. Preparation of Risk Management policies and procedures.
3. Develop an Internal Credit Rating (ICR) for commercial credit and Enhancement Risk and Control Self-Assessment (RCSA) for operational risk control as part of the risk management information system.
4. The implementation of Stress Testing for Credit Risk is performed twice a year, Market Risk Stress Testing also twice a year and Stress Testing of Liquidity Risk is conducted 4 times a year in order to assess the Company's resilience to stress/crisis scenarios.

## THE ROLE OF THE BOARD OF COMMISSIONERS AND DIRECTORS IN THE COMPANY'S RISK MANAGEMENT SYSTEM

The Board of Commissioners has clear duties and responsibilities, including:

a. To endorse the Risk Management policy, including the Risk Management strategies and framework set forth in accordance with the Risk Appetite and Risk Tolerance; The Board of Directors Regulation No. 14/PD/DIR/PPD/2018 dated December 28, 2018 concerning the Risk Management Policy Guidelines (PKMR) in PT Bank Tabungan Negara (Persero) Tbk.
b. The Board of Commissioners and / or through the Risk Monitoring Committee has conducted regular discussions and evaluations on the risk profile report (quarterly).
c. To evaluate the accountability of the Board of Directors and periodically provide direction regarding improvements in the implementation of Risk Management policies. Evaluation is conducted in order to ensure that the Board of Directors has managed the Company's risks and activities effectively. The Risk Profile is submitted to the Board of Commissioners and Risk Monitoring Committee on a quarterly basis as part of the evaluation materials concerning the implementation of Risk Management policies and Risk Management strategies.

The Board of Directors has clear duties and responsibilities, including:

1. To compile the Risk Management policy, including the strategy and framework of Risk Management comprehensively and in writing. The policy shall include the Risk Limits and type of risks, considering the risk level faced and Risk Tolerance level regarding Capital Adequacy. After obtaining approval from the Board of Commissioners, the Board of Directors stipulates the policy, strategy, and framework of the stated Risk Management;
   a. The Board of Directors' Circular Letter No. 33/DIR/RMD/2012 dated July 31, 2012, regarding the Guidelines for Formulating the Bank's Risk Profile.
   b. The Board of Directors compiles, sets, and updates the procedures, and measures the Company's soundness included in the risk profile, i.e. in the Board of Directors' Regulation No. 06/PD/RMD/2015 dated June 1, 2015, regarding the Self-Assessment of the Company's Soundness.
   c. The Board of Directors' Regulation No. 04/PD/RMD/2016 dated April 27, 2016, regarding the Amendment to the Board of Directors Regulation No. 08/PD/RMD/2015 regarding the Risk Management Committee.
   d. The Board of Directors' Circular Letter No. 48/DIR/RMD/2016 dated November 4, 2016, regarding the Amendment to the Board of Directors' Circular Letter No. 30/DIR/RMD/2015 dated August 25, 2015, regarding the Guidelines for Risk Data Collection for the Bank BTN-Loss Event Database Application (BTN-LED Tool).
   e. The Board of Directors' Circular Letter No. 41/DIR/RMD/2015 dated October 5, 2015, regarding the Guidelines for Implementing the Liquidity Risk Measurement Process.
   f. The Board of Directors' Circular Letter No. 60/DIR/RMD/2015 dated December 28, 2015, regarding the Market Risk Measurement Guidelines.
   g. The Board of Directors' Circular Letter No. 63/DIR/RMD/2015 dated December 30, 2015, regarding the Interest Rate Risk Management in the Banking Book.
   h. Circular Board of Directors No. 67/DIR/RMD/2017 dated December 8, 2017 concerning Amendments to the Board of Directors' Circular No. 03/DIR/RMD/2016 dated January 6, 2016 concerning Implementation Guidelines for Stress Testing.
   i. The Board of Directors' Circular Letter No. 10/DIR/RMD/2017 March 27, 2017 concerning the Policies and Procedures for Implementing a Risk Culture.
   j. The Board of Directors' Circular Letter No. 11/DIR/RMD/2017 dated March 30, 2017 regarding Risk and Control Self-Assessment (RCSA) Policies and Procedures.
   k. The Board of Directors' Circular Letter No. 18/DIR/RMD/2017 April 3, 2017 concerning Business Continuity Management (BCM) and the Business Continuity Plan (BCP) and Standard Operating Procedures.
   l. The Board of Directors' Decree No. 08/SK/DIR/RMD/2017 dated May 16, 2017 concerning Risk Appetite and Risk Tolerance for the Credit Concentration of 50 Core Debtors in 2017.
   m. The Board of Directors' Circular Letter No. 45/DIR/ MD/2017 dated August 14, 2017 Regarding the Guidelines and Assessment of Risk Profiles of the Branch Offices and Sharia Branch Offices
   n. The Board of Directors' Circular Letter No. 15/DIR/RMD/2018 dated March 22, 2018 concerning the Guidelines for the implementation of a Recovery Plan
   o. A Monthly Credit Risk Exposure Monitoring Report from the RMD is reported to the Board of Directors.
   p. RMD's Monitoring of the Liquidity Risk report on a regular basis is reported to the Board of Directors

q. The Operational Risk Report (LED/Loss Event Database) is reported by the RMD to the Board of Directors.
r. Branch Office Risk Profile Report for the Third Quarter of 2018.
s. RMD memo to Director of Strategic, Compliance and Risk No. 357/M/RMD/ERM/X/2018 dated November 28, 2018 concerning Application for approval of proposed changes in risk appetite and risk tolerance of BTN Bank in 2019.

2. Compile, stipulate, and update procedures and tools to Identify, Measure, Monitor, and Control Risks.
3. Regulation of the Board of Directors No. 14/PD/DIR/PPD/2018 dated December 28, 2018 concerning the Risk Management Policy Guidelines (PKMR) of PT Bank Tabungan Negara (Persero) Tbk.
4. Compile and determine the mechanism of transaction approvals, including those that exceed the limits and authority for each level of position;
   a. The Board of Directors has set out Risk and maximum Risk Limits through considering experience, ability to manage Risk Management, Human Resources, Bank Indonesia and the FSA regulations, and the implementation of prudential banking practices.
   b. The determination of Risk Limits are prepared by the Business Work Unit to be recommended to the Risk Management Work Unit and then request for a decision from the Board of Directors.
   c. Limit of authority Classification in deciding Loans at Branch Offices and Head Office per position level.
   d. Limit of authority classification in conducting treasury transactions per position level.
   e. Limit of authority classification in performing authorizations and fiat payments at Branch Offices and Headquarters per position level.
5. Evaluate and/or update the Risk Management policy, strategy and framework at least once a year or more often if there are changes in factors that have affected the Bank's Business Activities, Risk Exposure, and/or Risk Profiles significantly;
   a. Regulation of the Board of Directors No. 14/PD/DIR/PPD/2018 dated December 28, 2018 concerning the Risk Management Policy Guidelines (PKMR) of PT Bank Tabungan Negara (Persero) Tbk.
   b. The Board of Directors' Circular Letter No. 41/DIR/RMD/2015 dated October 5, 2015 concerning the Implementation Guidelines for the Measurement of Liquidity Risk.
   c. Regulation of the Board of Directors No. 10/PD/TRSD/2015 dated August 8, 2015 concerning the Guidelines for Liquidity Monitoring
   d. The Board of Directors' Circular Letter No. 48/DIR/TRSD/2015 dated November 5, 2015 concerning the Guidelines for Preparing the Contingency Funding Plan.
   e. The Board of Directors' Circular Letter No. 15/DIR/RMD/2018 March 22, 2018 concerning the Guidelines for Implementing the Recovery Plan.
   f. RMD memo to the Board of Directors' of SCR No. 357/M/RMD/ERM/X/2018 dated November 28, 2018 concerning the Application for Approval of the Proposed Changes in the Risk Appetite and Risk Tolerance of Bank BTN in 2019.

Establish the Organizational Structure including issuing clear authority and responsibility at every level of office related to the implementation of Risk Management:

- Regulation of the Board of Directors No. 14/PD/DIR/PPD/2018 dated December 28, 2018 concerning the Risk Management Policy Guidelines (PKMR) of PT Bank Tabungan Negara (Persero) Tbk.
- The Board of Directors has established through a Board of Directors Regulation concerning Risk Management organizations consisting of the Risk Management Committee and Divisions that support the implementation of Risk Management, which is the RMD as a Risk Management Work Unit, the IAD's Internal Control Function, Credit Risk Desk in an effort to improve the processes for the Commercial Credit Business through the implementation of the four eyes principle and the Compliance Function performed by the CMPD as a Compliance Unit including the authority and responsibility of each of the Work Units.

Responsible for the implementation of the Risk Management policies, strategies and framework, which was approved by the Board of Commissioners and evaluating and providing direction based on the reports submitted by the SKMR including reports regarding Risk Profiles;

As part of the responsibilities, the Board of Directors to provide direction regarding the report submitted by RMD, i. e.:

- The Bank's Risk Profiles submitted quarterly.
- The Risk Profile of the Third Quarter of 2018 of Branch Offices that are centralized and is delivered to all Work Units
- Monitoring the Report regarding the Position of Liquidity Risk, which is submitted in a standard manner.
- Credit Risk Exposure Monitoring Report submitted monthly.
- Liquidity Risk Stress Testing was implemented 4 times and delivered through the Risk Profile Report to the FSA in the

Fourth Quarter of 2017, First Quarter of 2018, Second Quarter of 2018 and Third Quarter of 2018.
- Credit Risk and Market Risk Stress Testing is conducted at least once a year and was implemented twice, in March 2018 and September 2018. For March 2018 the reporting was submitted to the FSA and for the September 2018 report an update was made to the reporting requirements of the Recovery Plan Document.
- Reports and evaluations regarding the implementation of Operational Risk Monitoring of Branch Offices (BTN-LED) submitted to the Board of Directors.

g. To ensure that all Material Risks and the impacts caused by the stated Risks have been followed up and accountability reports were submitted to the Board of Commissioners on a regular basis. The intended report includes, among other things, progress reports and material risk-related problems along with the corrective steps that have been, are being, and will be performed:
   - Based on the Bank's Risk Profile, the types of significant risks are Credit Risk, Liquidity Risk and Operational Risk. Through the Bank's Risk Profile report, Monitoring Position and Liquidity Risk reports and Monitoring Reports regarding the Credit Risk Exposure, the Board of Directors ensures that the related Work Units are to follow up on the recommendations in these reports so that Credit Risk, Operational Risk and Liquidity Risk will better managed.
   - The development of a significant Risk Profile has been submitted to the Board of Commissioners in the Bank's Quarterly Risk Profile Report.

   Ensure corrective measures for problems or irregularities in the Bank's business activities found by SKAI:
   - The Board of Directors has ensured corrective steps for problems or irregularities identified in the bank's Business Activities through:
     - Providing direction regarding the monitoring reports concerning the follow-up of External/Internal Audit Findings, which are submitted periodically by the IAD to the Board of Directors.
     - Evaluate the follow-up of the Audit results from the previous year at the Audit Exit meeting
     - Audit Committee Meeting
   - As part of the developer of a Culture of Risk Management, the Board of Directors ensures that:
     - Risk Management Certification and Certification refreshment programs for Bank BTN employees and officials.
     - Providing Risk Management training for new employees.

Developing a Culture of Risk Management, which includes Risk Awareness across all organizational levels, including adequate communication to all levels of the organization concerning the importance of effective Internal Control:
- Making an effort to internalize the Culture of Risk Management with all employees in accordance with the Board of Directors' Circular Letter No. 10/DIR/RMD/2017 March 27, 2017 concerning the Policies and Procedures for Implementing a Risk Culture.
- Risk Culture Socialization through the body of the employee's salary slip email, which aims to foster further Risk Awareness for all Bank BTN employees.
- The Board of Directors' support for the development of a Risk Culture through Memo No, 01/M/DIR/RMD/IV/2018 April 20, 2018 concerning the Managements Support for the Role of a Risk Champion in the 2018 Risk Culture Program, in which all Division/Desk Management Regional Offices and Branch Offices are required to support the role of a Risk Champion and actively participate in fostering a Culture of Risk Awareness and applying the principle of prudence in achieving a superior performance.
- The Risk Management Work Unit initiates a strategy to increase the Risk Awareness of all Bank BTN employees using the gamification method. This gamification method is expected to facilitate all employees in better understanding the importance of Risk Awareness in every activity, especially at work. To implement a more fun and attractive Risk Awareness program by initiating the 2018 Risk Culture Festival event, which is the Movie Review, Risk Poster, Risk Jingle, Short Movie and Risk Ambassador with the theme of Risk Management, which was attended by all employees across all Work Units.
- Preparing the Risk Awareness materials, Anti-Fraud, Whistle-Blowing System and Culture of Compliance in coordination with the Internal Audit and Compliance, which

is socialized by the Risk Champion and accompanied through the implementation of quizzes in each Work Unit for 1 month.

Develop a Risk Awareness program that includes 6 of the following themes:

a. Dissemination by the Head of the Work Unit regarding the Board of Directors' Circular Letter No. 10/DIR/RMD/2017 dated March 27, 2017 concerning the Policies and Procedures for Implementing a Risk Culture.
b. Incorporate Risk Management material as mandatory material in each employee training.
c. Deliver messages concerning Risk Awareness through the Corporate SMS and E-mail.
d. Socialize Risk Management through the BITNIZ bulletin/Paras magazine.
e. Develop Risk Management tools as a Risk Management practice through the Work Units.

Ensure the adequacy of financial and infrastructure support in order to manage and Control Risk;

The Board of Directors has ensured financial/budget sufficiency through approval in the 2018 Corporate Budget Work Plan and Infrastructure Support.

- Provided recommendations for the 2018 Corporate Budget Work Plan and the Bank's Business Plan for 2018-2020, which was submitted by the Board of Directors at the Joint Board of Commissioners and Board of Directors meeting on November 21, 2017 and provided approval for the 2017 Corporate Budget Work Plan, which was submitted through the Board of Commissioners' Circular Letter No. 168/KOM/BTN/XI/2017 dated November 22, 2017 concerning the Approval of the 2018 Corporate Work Plan and Budget (RKAP) and Bank Business Plan (RBB) for 2018-2020 of PT Bank Tabungan Negara (Persero) Tbk.
- Provided direction regarding the Revision of the Bank's Business Plan and Corporate Budget Work Plan through the Board of Commissioners Circular Letter No. 110/KOM/BTN/VI/2018 dated June 26, 2018 concerning the Approval of the Revision of the Corporate Work Plan and Budget (RKAP) for 2018 and the Bank Business Plan (RBB) for 2018-2020 of PT Bank Tabungan Negara (Persero) Tbk.
- Prepared the Bank's Strategic Plan, provided direction and approval for the Bank Business Plan (RBB) for 2018-2020 and submitted it to the Board of Commissioners, Bank Indonesia and the Financial Services Authority (OJK).
- The Board of Directors provided guidance regarding supervision and guidance through memos to all Work Units in line with the direction of the Transformation of Bank BTN towards "The Leading Housing Bank in Indonesia with World Class Service" by 2022, with the key to success directed by the following:
    1. Make the work culture a driver of target achievement
    2. The successful implementation of the Transformation of Bank BTN
    3. Monitor performance regularly
    4. Work according to the SOP
    5. Improve the Sales Culture and Risk Culture

h Ensure that the Risk Management Function was implemented independently, which is reflected in, among other things, the separation of functions between SKMR, which Identifies, Measures, Monitors and Controls Risks with the Work Unit that conducts and completes transactions

- Regulation of the Board of Directors No. 14/PD/DIR/PPD/2018 dated December 28, 2018 concerning the Risk Management Policy Guidelines (PKMR) of PT Bank Tabungan Negara (Persero) Tbk.
- The Board of Directors has ensured that the Risk Management Function was applied independently with each business unit and the IAD. The RMD as a Risk Management Work Unit (SKMR) has performed its function as a Risk Manager who continues to identify, measure, monitor and control risk and Business Work Units or Operational Work Units as Risk Owners must submit reports or information regarding the Risk Exposures managed by the Work Unit to the RMD.
- The Board of Directors' Decree No. 6/KD/DIR/TMO/2018 dated July 4, 2018 Regarding the Amendments to the Board of Directors' Decree Number 04/DIR/KD/TMO/2018 concerning the Organizational Structure of the Headquarters and Regional Offices of PT Bank Tabungan Negara (Persero) Tbk.

## RISK MONITORING COMMITTEE

The Risk Monitoring Committee possesses the duty and responsibility of providing recommendations to the Board of Commissioners by evaluating the Bank's Risk Management policy guidelines (Credit Risk, Market Risk, Liquidity Risk, Operational Risk, Legal Risk, Strategic Risk, Compliance Risk and Reputation Risk), evaluating the conformity between the Bank's Risk Management policy guidelines and their implementation and monitoring and evaluating regarding the implementation of the duties of the Risk Management Committee. In performing its duties and responsibilities, the Risk Monitoring Committee holds regular meetings with the Enterprise Risk Management Division to periodically discuss Current Issues, Bank BTN's Quarterly Risk Profile, Bank Soundness and matters related to Bank BTN's Risk Management including reviewing the Policy Guidelines related to Risk Management, which includes Risk Appetite and the Bank's Risk Tolerance.

## RISK MANAGEMENT COMMITTEE

The Risk Management Committee (KMR) plays an active role in delivering recommendations to the President Director regarding the Inherent Risks in the policies determined by the Board of Directors as well as evaluating the provisions that are deemed not in accordance with the latest developments and are required to be adjusted. The KMR is actively involved in conducting Risk Assessments inherent in each new product and/or service/activity so that the Bank can perform the necessary mitigation measures and conduct an evaluation of the Risk Management Policy Guidelines (PKMR).

## RISK MANAGEMENT UNIT

The Enterprise Risk Management Division (RMD) is a Risk Management Unit (SKMR) of the Bank, which is led by a Division Head who is directly responsible to the Director of Strategy, Compliance & Risk. The Enterprise Risk Management Division Organizational Structure consists of the Market Risk Management Department, the Credit Risk Management Department, the Operational Risk Management Department and the Enterprise Risk Management Department.

Beginning on February 4, 2016, the Enterprise Risk Management Division (RMD) implemented and obtained the ISO 9001:2015 Certification and is highly committed to continuing to work in accordance with the applied quality standards by making continuous improvements to foster a Culture of Risk and encourage the implementation of effective Risk Management throughout all levels of organization and the Bank's Business Operation in accordance with all applicable regulations.

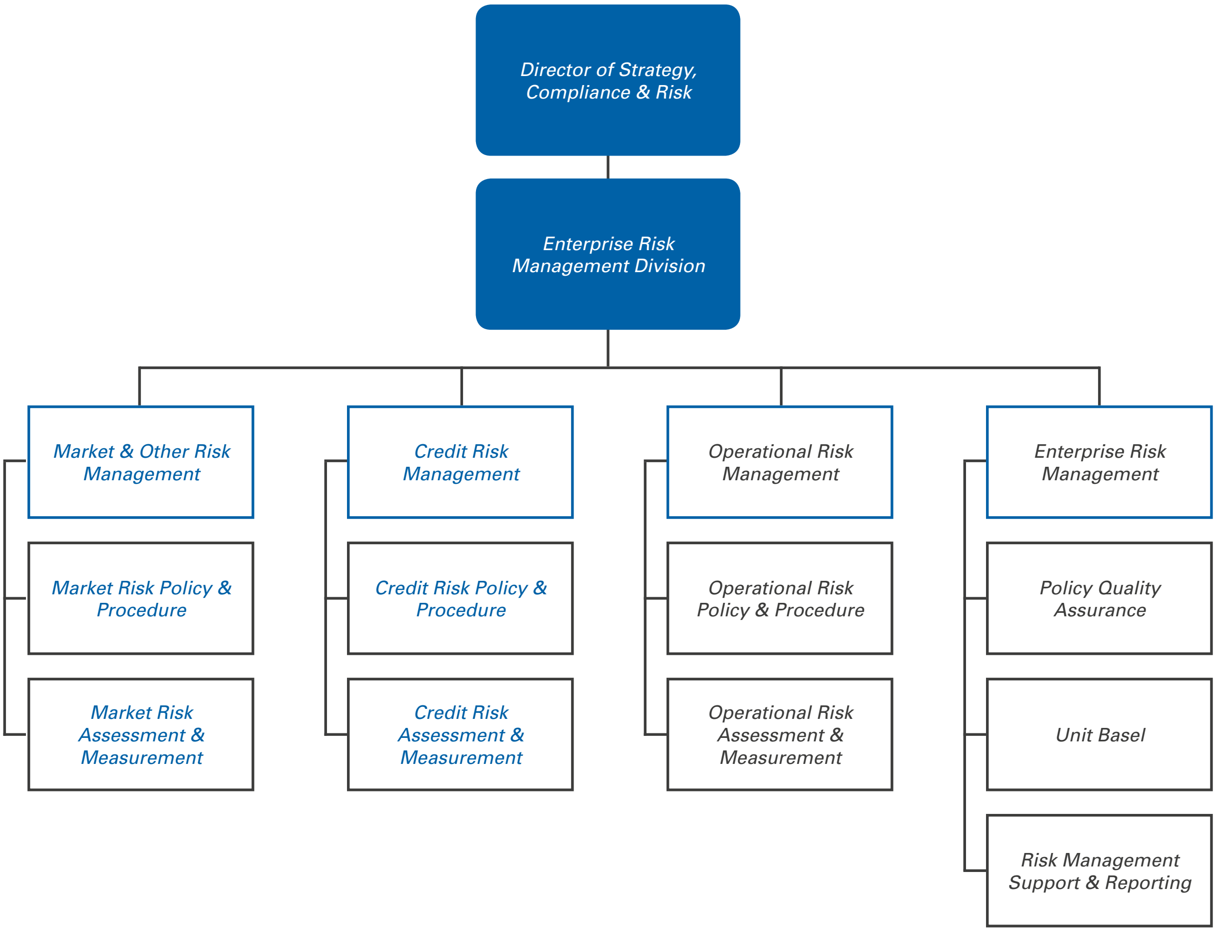
The ISO 9001:2015 Certification itself is currently being used by millions of organizations around the world, which can help them perform more efficient and profitable operations. The ISO 9001:2015 Certification provides a framework for a more consistent business performance, excellent service and continuous improvement for an extended period of time. The ISO 9001:2015 Certification provides many advantages and capabilities in terms of business scale over the recent years. This standard is a tool that is very helpful in developing a company and makes Bank BTN's organization a more resilient one.

The Credit Risk Management Department functions to ensure the effectiveness of Credit Risk management, the Market Risk Management Department functions to ensure the effectiveness of managing Market Risk and Liquidity Risk, the Operational Risk Management Department serves to ensure the effectiveness of managing Operational Risk, Legal Risk, Strategic Risk, Compliance Risk and Reputation Risk. The Department Head is assisted by a Work Unit for Policy & Procedure and Assessment & Measurement Work Units.

The Enterprise Risk Management Department functions in order to coordinate and ensure the effective integration of Risk Management with strategic planning, performance measurement and incentives in order to increase shareholder value, increase investor confidence, support the decision-making process and improve the efficiency of capital utilization.

## RISK MANAGEMENT DIVISION ORGANIZATIONAL STRUCTURE

The Risk Management Division Organizational Structure refers to the Board of Directors' Decree No. 03/KD/DIR/SIPD/2017 dated April 20, 2017 concerning the Organizational Structure of the Head Office of PT Bank Tabungan Negara (Persero) Tbk are as follows:




Within the Risk Management Division Organizational Structure, there is a Market Risk Management Department function to ensure the effectiveness of managing Market Risk and Liquidity Risk, the Credit Risk Management Department serves to ensure the effectiveness of Credit Risk management, the Operational Risk Management Department serves to ensure the effectiveness of managing Operational Risk, Legal Risk, Strategic Risk, Compliance Risk and Reputation Risk. Each Department Head is assisted by a Policy & Procedure Work Unit and an Assessment & Measurement Work Unit.

The Strategic Risk Management Department functions to coordinate and ensure the integration of Risk Management with the strategic planning, performance measurement and incentives related to increasing shareholder value, increasing investor confidence, supporting decision-making processes and increasing the efficiency of Capital utilization.

## ENTERPRISE RISK MANAGEMENT DIVISION HEAD PROFILE

The Head of the Enterprise Risk Management Division also serves as the secretary of the Risk Management Committee held by Mr. Sahat Sihombing based on the Board of Directors' Decree No.: 353/DIR/2017 dated August 1, 2017.

### Sahat Sihombing

Head of Enterprise Risk Management Division

Is an Indonesian citizen, he is 53 years old, and was born in Medan on October 23, 1966. He holds a bachelor's degree in Planology Engineering from the University of Bandung Institute of Technology in 1990 and Master of Management, from the University of IPPM Jakarta in 1992.

**Work Experience**

Started his career at PT Bank Tabungan Negara (Persero) Tbk in 1991 and has held various key positions in the Company, such as BTN Branch Heads Class 1 Branch Office Jakarta Cawang (2013-2014) and Tangerang Main Branch Offices (2014-2016) and Head Wealth Management Division (2016–2017) and Corporate Strategic & Performance Division (2017).

**Trainings**

He has attended education and training including ODP VII (1994) education with the title best graduate in the class, best graduate in line manager education (1996), Education Middle Manager 16 with the title of Best Graduate by LPPI (2002), IT Service Management as key by LAPI-ITB ( 2010) Level 3 Risk Management Certification by BSMR (2011), Level 3 Risk Management Refreshment by LSPP (2015) by Sespibank 66 by LPPI (2017) Certification of General Banking Level 3 by LSPP (2017), level 4 risk management certification (2018), Executive Development Program (2018) and others. The Enterprise Risk Management Division HR Certification Program fulfilling Enterprise Risk Management Division HR competencies through training or certification programs in risk management as an effort to enhance risk management quality, Risk Management Certification by LSPP (2018), ISO 9001: 2015 by Robbere & Ass (2018), Executive Risk Management Refreshment Program by LPPI (2018), Enterprise Risk Management Create & Protect Value Workshop by CRMS Indonesia (2018), DR candidates/University of Brawijaya (2016).

## RISK MANAGEMENT HUMAN RESOURCE DEVELOPMENT

In Human Resources development, the Bank has in place HR development programs in education and training for Risk Management officials. The bank includes all employees (according with job specifications) including the RMD regarding the Risk Management Certification.

The Bank periodically conducts education and training and actively engages its staff and officials in accordance with Bank Indonesia's Regulation (PBI) No. 11/19/PBI/2009 dated June 4, 2009 concerning the Certification for Management and Officials of Commercial Banks as amended by PBI No. 12/7/PBI/2010 dated April 19, 2010, and the basis for determining the minimum level of UKMR certification based on job title is the several levels of job titles resting below the Board of Directors in accordance with the prevailing Organizational Structure. The minimum level of certification based on job title still refers to the RMD memo No. 42/M/RMD/ERM/I/2017 dated January 15, 2017 regarding the Assessments of Employees' based on job titles entitled to the UKMR Certification. The Bank also includes several employees and officials in the Risk Management Work Unit to attend Master's programs in Risk Management, Banking and Finance.

The Bank also provides in-house training and pre-tests as a preliminary filter for officials and employees to be eligible for the Risk Management Certification exam organized by LSPP (Banking Professional Certification Institute).

## ENTERPRISE RISK MANAGEMENT DIVISION HR CERTIFICATION PROGRAM

The Company fulfills the competencies of the Enterprise Risk Management Division HR through training programs or Risk Management Certification as an effort to improve the quality of Risk Management. The following is the training program or the Enterprise Risk Management Division HR Certification issued throughout 2018:

**Table of the Enterprise Risk Management Division HR Certification Program for 2018**

| Certification Program | Organizer | Participants |
|---|---|---|
| Risk Management Competency Test (UKMR) Certification | LSPP | 24 |

## TYPES OF RISKS FACED BY THE COMPANY

There are 8 categories of risks loomed the Company that include assessment of inherent Risk and an assessment of the implementation quality of Risk Management that reflects the risk control system, both for the Bank as an individual and on a consolidated basis. The assessment was conducted on 8 (eight) Risks such as Credit Risk, Market Risk, Liquidity Risk, Operational Risk, Legal Risk, Strategic Risk, Compliance Risk and Reputation Risk.

### Credit Risk

Credit Risk is the Risk of Loss due to the counter parties' failure to fulfill their obligations. Included in Credit Risk is Credit Risk due to the failure of the debtor, Credit Risk due to the concentration of funds (Credit Concentration Risk), Credit Risk due to the Failure of Counter-party Credit, Credit Risk due to Settlement Failure, and Credit Risk due to Country Risk.

Credit risk can be found across many of the Bank's businesses. For most banks, Credit is the biggest source of Credit Risk. In addition to Credit, the Bank confronts Credit Risk from various Financial Instruments, which includes Securities, Acceptances, Interbank Transactions, Trade Finance Transactions, Exchange and Derivative Transactions and Commitment and Contingency Obligations.

### Market Risk

Market Risk is the Risk in balance sheet and administrative account positions including Derivative Transactions, due to overall changes in market conditions, including the risk of changes in option prices.

Market Risk includes, among others, Interest Rate Risk, Exchange Rate Risk, Equity Risk, and Commodity Risk, which may cause harm to the Bank. Market Risk can come from both the Trading Book position and the Banking Book position.

### Liquidity Risk

Liquidity Risk is a Risk due to the Bank's inability to fulfill maturing obligations from its Cash Flows and/or from high-quality Liquid Assets that can be pledged, without disrupting the Bank's Business Operations and its Financial situation.

Inability to obtain sources of funding from Cash Flows, which can cause Liquidity Risk due to the following points:

- Inability to generate Cash Flows from productive Assets as well as those originating from the sale of Assets including Liquid Assets; and/or
- Inability to generate Cash Flows from Sourcing Funds, Interbank Transactions, and Loans Received.

### Operational Risk

Operational Risk is a Risk due to insufficiency and/or the non-functioning of Internal Processes, Human Errors, System Failures, and/or the presence of External events that affect the Bank's operations.

Operational Risk can be caused by, among others, HR, Internal Processes, Systems and Infrastructure, and External Events.

These Risks can cause events that have a detrimental impact to the Bank's operations. The capability to circumvent these undesirable Operational Risks is the key factor to measure the success or failure of Risk Management. The types of Operational Risks can be classified into several types of events, which includes Internal Fraud, External Fraud, Employment Practices and Safety of the Work Environment, Customers, Products and Business Practices, Physical Asset Damage, Disruption of Business Activities and System Failures, and Process and Execution errors, including Fraud arising from Money Laundering and Terrorism Financing Activities.

## Legal Risk

Legal Risk is a risk due to lawsuits and/or weaknesses in juridical aspects. Legal Risk can be triggered by, among other things, the weaknesses of the juridical aspects caused by flaws in the agreements made by the Bank, the absence and/or changes in laws and regulations that cause a Bank transaction to be not in accordance with the provisions, and litigation from a Third-Party claim against the Bank or the Bank against a Third-Party.

## Strategic Risk

Strategic Risk is Risk due to inaccuracy in making and/or implementing a strategic decision and failure to anticipate business changes.

Strategic Risk can be triggered from weaknesses in weak strategy formulation and inaccuracies in strategy formulation, inadequate management information systems, inadequate analysis of internal and external circumstances, overly aggressive strategic objectives, inaccuracies in strategy implementation, and failure to anticipate changes in business situations.

## Compliance Risk

Compliance Risk is a risk due to the Bank not complying with and/or not implementing the laws and regulations. Compliance Risk can be sourced from, among other things, legal behavior, which is behavior or activities of the Bank that deviates or violates the provisions and/or legislation and organizational behavior, which is the Bank's behavior or the Bank's activities that deviate from generally accepted standards.

## Reputation Risk

Reputation Risk is a risk due to the stakeholders' diminishing level of trust due to negative perceptions of the Bank. Reputation Risk can be triggered through the Bank's various business activities as follows:

1. Events that could adversely affect the Bank's Reputation, including negative reporting in the Mass Media, violations of Business Ethics, and customer complaints; or
2. Weaknesses in Governance, Corporate Culture, and business practices of the Bank.

# RISK MANAGEMENT EFFORTS

The Company, as a Bank whose main focus is in Housing Loans or Financing, its Asset Portfolio is dominated by Home Ownership Loans (KPR), which are pre-disposed by the changes in business climate, which includes inflation and the BI Rate. Endeavors to minimize the negative impacts are the responsibility of the Risk Management Division in its day-to-day Risk Management activities, based on the principles of Good Corporate Governance (GCG) to ensure all procedures and mechanisms are at hand in achieving the Company's objectives, preventing the Company from deviations and risks that can lead to a failure in the pursuit of Company's objectives, and based on the principle of prudence to ensure the Bank's Healthy and Sustainable growth.

PT Bank Tabungan Negara (Persero) Tbk is classified as a Systemic Bank. As an effort to prevent and deal with potential a Financial System crisis, particularly with regard to the Systemically Important Bank problem, the Bank must be able to establish a plan to be implemented in the event of Financial Stress situations that could endanger the sustainability of the business. The plan is outlined in the form of a Recovery Plan in accordance with the FSA Regulation No. 14/POJK.03/2017 April 4, 2017 and the Bank's SE internal regulations No. 15/DIR/RMD/2018 March 22, 2018 concerning the Guidelines for implementing the Recovery Plan. Bank BTN has compiled a Recovery Plan Document, which includes Trigger Levels (for the purpose of prevention, recovery and repair). For each of Recovery Options indicators in the Recovery Plan, it includes: Capital Indicators, Liquidity, Rentability and Asset Quality.

## Credit Risk Management

In managing Credit Risk, the Bank regularly reviews and updates the Risk Management Policy Guidelines, Credit Policy Guidelines, Financing for Bank Loans, and Financing as part of the Risk Assessment process. Credit Risk exposures are monitored from the start of the Credit granting process to Credit Maturity.

Monitoring and controlling Credit Risk is performed by evaluating Credit Risk exposure to Credit Risk Limits (Risk Appetite & Risk Tolerance). The Bank reviews the Internal Credit Rating policy between business units and the Credit Risk Division (CRD) for Commercial Credit in analyzing Credit Risk. The CRD consists of the Head Office CRD, RCRH (Regional Credit Risk Head) Regional Office and BCRH (Branch Credit Risk Head) Branch Office BCRA (Branch Credit Risk Analyst) Branch Office, and currently the Bank has implemented the Four Eyes principle. In addition, a Monitoring Department in the Commercial Lending Division (CMLD) has been formed, which specifically monitors the Credit Exposure of large debtors (50 core debtors). In contrast to Commercial Credit, the Credit Risk Control process for consumer credit is performed through the Consumer Loans system, which complements the application with the Credit Scoring Model (CSM). Management of Kol-2 Consumer Credit Debtors and Non-Performing Loans is the responsibility of the Consumer Collection and Remedial Division (CCD), which is equipped with a Desk Call unit and a Consumer Collection and Remedial Unit (CCRU) at the Branch Office. Collection of Debtors in arrears of more than 360 days (Consumer & Commercial credit), Transfer of Debtors (Novation, Receipt) and Auctions managed through the Asset Management Division (AMD).

As a follow up to the implementation of Pillar 1 Basel II, the Bank has implemented the measurement of Credit Risk by using the Standardized Approach in accordance with the FSA Circular Letter No. 42/SEOJK.03/2016 dated September 28, 2016 concerning the Guidelines for the Calculation of Risk Weighted Assets (RWA) for Credit Risk using the Standard Approach.

## Market Risk Management

The Bank's Market Risk management is generally aimed at minimizing negative impacts due to changes in market conditions towards the Bank's Assets and Capital. In accordance with regulations and considering that the Bank has no consolidation with its subsidiaries, the management of Market Risk only covers managing Interest Rate Risk and Exchange Rate Risk. Most Interest Rate and Exchange Rate Risks managed by the Bank come from the Banking Book position and a small portion comes from the Trading Book position.

Regarding Market Risk Management, the Bank has an Assets and Liabilities Committee (ALCO) Committee. In this case, ALCO periodically discusses, among others, Interest Rates and Market Risk Management at the Bank, especially those originating from the Banking Book position.

As part of Managing Market Risk, the Bank identifies, measures, monitors and controls Market Risk through its Business Units and/or the Enterprise Risk Management Division. Identification of Market Risk is performed on every new product or activity.

In measuring Interest Rate Risk in Trading Book and Banking Book positions, the Bank analyzes the sensitivity aimed at measuring the impact of changes in Market Interest Rates regarding Profit (loss) and the Bank's Equity. Whereas in measuring Exchange Rate Risk, the Bank analyzes the sensitivity aimed at measuring the impact of changes in Exchange Rates concerning the Bank's Profit (loss).

Explicitly, for the Banking Book position, the Bank measures Interest Rate Risk in the Banking Book with the repricing gap method as stated in the Board of Directors' Circular Letter No. 63/DIR/RMD/2015 dated December 30, 2015 concerning Interest Rate Risk Management in the Banking Book. In accordance with the Financial Services Authority Circular Letter No. 12 /SEOJK.03/2018 dated August 21, 2018 concerning the Implementation of Risk Management and Standard Measurement of Risk Measurement for Interest Rate Risk in the Banking Book (Interest Rate Risk in The Banking Book) for Commercial Banks, Banks must submit policy adjustments related to IRRB in accordance with the FSA Circular Letter no later than June 2019 and IRRBB calculation report no later than July 2019. In calculating Interest Rate Risk in the Banking Book, the Bank is developing an IRRBB measurement system/application and preparing IRRBB policies.

To complement the measurement of Market Risk with standard methods and sensitivity analysis, the Bank conducts Stress Testing to assess the resilience of the Bank in the face of extreme changes in Interest Rates and Exchange Rates, with scenarios referring to regulatory provisions and the Bank's internal scenarios. For the Bank's internal scenario, at the beginning of each year the Enterprise Risk Management Division coordinates with the Working Group Stress Test (related division) to formulate scenarios and assumptions that will be used in the implementation of the Market Risk Stress Test for the next 1 (one) year.

In controlling or limiting Market Risk exposure, the Bank has set out limits that include limits on Treasury Transactions, Dealer Limits, Budget Loss Limits and Stop Loss/Stop Gain Limits. In controlling or limiting the exposure to Exchange Rate Risk, the Bank has set a Net Open Position (NOP) limit that is in accordance with the maximum limit specified in the Bank Indonesia Regulation 17/5/PBI/2015 dated 29 May, 2015 the Bank Indonesia Regulation No. 17/5/PBI/2015 dated May 29, 2015 concerning the Fourth Amendment to the Bank Indonesia Regulation Number 5/13/PBI/2003 concerning the Net Open Position for Commercial Banks.

In calculating the minimum Capital Risk (KPMM) requirements for Market Risk, the Bank measures Market Risk using standard methods as regulated by the regulators. Portfolios considered in determining Market Risk KPMM consists of Trading Book portfolios for Interest Rate Risk, Trading Book portfolio, and Banking Book for Exchange Rate Risk.

## Management of Liquidity Risk

As part of the management of Liquidity Risk, the Bank established an ALCO (Assets and Liabilities Committee) Management Committee, which functions to manage Liquidity and periodically discuss the management of the Bank's Liquidity Risk.

As a guideline in managing Liquidity Risk, the Bank has a Liquidity Risk Management Policy Manual, which is part of the Bank's Risk Management Policy Manual (PKMR). The Liquidity Risk Management Policy Guidelines regulate the active supervision of the Board of Commissioners and the Board of Directors in implementing Liquidity Risk Management, Liquidity Risk Management Processes, as well as policies, procedures and Liquidity Risk Limits.

Referring to the Liquidity Risk Management Policy Guidelines, the Bank identifies, measures, monitors and controls Liquidity Risk. Liquidity Risk identification is basically intended to determine the number and trend of Liquidity requirements and funding sources available to meet the demands.

The measurement of Liquidity Risk at the Bank is performed by the Treasury Division (TRSD) and Enterprise Risk Management Division (RMD). Liquidity Risk measurement uses 4 (four) methods, which includes Stock-Based, analysis of Maturity Profiles, Cash Flow projections and Stress Testing. The Stock-Based method is used to measure the Bank's Liquidity Risk by using Liquidity Ratios, the method of analysis of Maturity Profiles is used to measure Liquidity Gaps and Cash Flow projections are used to measure the amount and trend of Liquidity Requirements.

The Bank conducts Stress Testing using the Bank Specific Crisis (BSC) and General Market Crisis (GMC) scenarios, the purpose of which is to measure the adequacy of available Liquid Assets and the ability of the Bank to meet Liquidity demands in crisis conditions. At the beginning of each year the Enterprise Risk Management Division coordinates with the Working Group Stress Test (related division) to formulate scenarios and assumptions that will be used in the implementation of the Liquidity Risk Test for the next 1 (one) year.

In managing Liquidity Risk, the Bank regularly monitors Liquidity Risk, which is performed through the TRSD and RMD. Monitoring of Liquidity Risk by RMD is submitted to the Board of Directors on a weekly basis.

In maintaining the availability and adequacy of Liquid Assets as well as controlling or limiting Liquidity Risk exposure, the Bank has set limits that covers the limits of minimum Secondary Reserves (SR) and the limit on Maturity Gaps. In measuring Liquidity Risk, the Bank has provisions regarding the method of measuring Liquidity Risk, which is part of an effort to establish a Liquidity Risk Management Information System.

In accordance with FSA Regulation No. 14/POJK.03/2017 dated April 4, 2017 concerning Recovery Plans For Systemic Banks, Bank BTN has monitored Liquidity indicators, one of which is witnessed from the LCR and NSFR Ratio according to FSA Regulation No. 42/POJK.03/2015 dated December 23, 2015 concerning the Obligation to Fulfill the Liquidity Coverage Ratio (LCR) and Liquidity Adequacy Ratio for Commercial Banks and FSA Regulation No. 50/POJK.03/2017 dated July 13, 2017 concerning the Obligation to Fulfill the Net Stable Funding Ratio.

## Management of Operational Risk

In implementing the process of Risk Management, in particular Operational Risk, the Bank has in place an application for the BTN Loss Event Database (BTN-LED) that functions as an Operational Risk Data Collection point for Operational Risk events in Branch Offices using the criteria for risk events based on Basel II (7 risk event types). This Bank BTN LED application is connected to the Branch Office so that in its reporting, the Branch Office can send Loss Event Data online through web-based media every month. The output from Bank BTN's LED is data regarding accumulated Bank losses over one month in the form of actual loss, near miss and potential loss from each risk event, then the data is converted into the Top 10 Risks. The results of the collected data will be processed and analyzed so that Operational Risk exposure maps can be identified from each of the Branch Offices and Regional Offices. This exposure map functions as a reference in preventing similar incidents by taking measures to designed improve current business processes or by adding other forms of Risk Mitigation.

The Bank has developed a Risk and Control Self-Assessment (RCSA) policy and procedure based on Basel II, whose approach uses the reference to the Risk Management Process ISO 31000: 2009. RCSA policies and procedures are supported by the web-based RCSA applications and must be implemented across all Work Units, which includes the Head Office, Regional Offices and Branch Offices as a means of identifying, measuring, monitoring and controlling the Operational Risk of Work Units.

Operational Risk Mitigation is performed by all the Bank's Work Units. Compliance with policies and procedures is one method of Operational Risk Mitigation. The Enterprise Risk Management Division ensures that the Bank has adequate Risk Management policies and procedures in performing transactions and activities accurately, efficiently and on-time. The Bank has placed a Branch Compliance Supervisory Officer (BCSO) at each Branch Office, which has the following duties and responsibilities:

1. To evaluate the level of Compliance of the Work Unit with the rules and regulations and applicable SOPs in implementing operational activities (transactions and non-transactions) at Branch Offices (Conventional and Sharia).
2. To analyze and evaluate Compliance violations in order to propose further guidance to the Division concerned as well as the filing of a review concerning the provisions in force.
3. To coordinate with the relevant Work Units and the Internal/External Auditors in the context of evaluating Compliance and conducting Audits.
4. To monitor the follow-up regarding the improvements based on the evaluation results of Compliance levels and Audit findings.
5. To deliver a Compliance opinion concerning the Branch Office's operational activities that require a Compliance opinion based on the request of the Branch Office.
6. To promote a Culture of Compliance and Risk Awareness

To warrant the continuity of the Bank's operations and to be able to remain serving customers in the event of a disruption or disaster, whether caused by natural events, social conflict or IT system failure, the Bank has in place Business Continuity Management (BCM) policies and procedures. BCM policies and procedures aim to ensure that the Bank can continue its business activities and serve customers should a disaster occur, including a disruption to its Information Technology System. BCM policies and procedures contain integrated steps that are exercised as guidelines by employees starting from pre-disaster preparedness procedures, response to disasters, operational continuity plans to return to normal conditions.

Internalization of BCM policies with all employees is conducted by compiling socialization material in the form of videos and conducting periodic trials or simulations. The results of the trial or simulation report will be used as material for continuous improvement so that the BCM policies remain in line with the development of existing business processes.

## Management of Legal Risk

Legal Risk Identification is performed on factors that trigger risks including lawsuits and juridical aspects weaknesses that are inherent in Credit (functional provision), Treasury and Investment Activities, Operations and Services, Information Technology System and MIS, and Human Resource Management.

The Bank identifies Legal Risk based on Risk factors, which include lawsuits and the existence of juridical weaknesses.

Legal Risk Measurement is performed by the Enterprise Risk Management Division (RMD) together with the Legal Division (LGD) and Credit Operation Division (COD). From the LGD an evaluation report regarding the analysis of individual legal cases is obtained from contingent liabilities arising from lawsuits that occur, while the quality level of Credit Document Engagement (LAT) is obtained from the COD.

Legal Risk Measurements are implemented by the RMD together with LGD and COD based on reports concerning the results of analysis and evaluation of individual legal cases regarding contingent liabilities arising from lawsuits as well as quality reports regarding the binding of Credit Document Agreements. The indicators/parameters employed in measuring Legal Risk includes potential losses due to lawsuits, the weaknesses of the engagement due to the failure to fulfill the legal requirements, and changes in legislation that cause the Bank's products to fall out of line with the existing provisions.

Legal Risk Monitoring is performed by the RMD through the evaluation of the effectiveness regarding the implementation of policies, procedures and compliance with policies, legal regulations and the Bank's limit provisions. Monitoring is performed regularly on all Legal Risk positions. In implementing Legal Risk Control, the LGD provides legal advice and recommendations to each Division and Work Unit and periodically reviews agreements and contracts with counterparties. In addition, the Bank has a Legal Report Information System (LRIS) application that is designed in the form of a website and is used as a register and for monitoring legal cases being handled by the Bank, both Criminal and Non-Criminal so that the development of each case, both in the Branches and the Headquarter, can be effectively monitored.

The Bank has assigned employees in the Regional Office as a Regional Legal Representative (RLR) with duties and responsibilities including the following:

1. To monitor and manage potential legal issues in operational activities that may harm the Bank in accordance with its authority by providing legal opinion, legal consultation and performing the legal observation function.
2. To deal with legal issues arising in Regional Offices and Branch Offices as a result of or related to the Bank's operational activities in all judicial bodies in Indonesia.
3. To perform the monitoring function of management and settlement of principal Credit Documents at the Branch Office in order to agree with the stipulated policies.
4. To communicate policies and important issues related to the LGD task area in managing risks arising from legal aspects in the Bank's operations.

## Strategic Risk Management

Strategic Risk Identification is performed based on Strategic Risk factors regarding certain functional activities, including Credit, Treasury and Investment activities as well as Operations and Services through a Business Plan prepared by the Corporate Strategy & Performance Management Division (SPD) as a description of the Board of Directors General Policy (KUD).

Strategic Risk Measurement is performed based on the achievement of the Bank's performance by comparing actual results with pre-determined targets. Strategic Risk Monitoring is implemented by the Corporate Strategy & Performance Management Division (SPD) periodically through monitoring the achievement of the Key Performance Indicators (KPI) and Enterprise Risk Management Division (RMD) that monitors Risk Exposure as compared to the Bank's Risk Appetite and monitoring Risk Appetite and Risk Tolerance Strategies on a monthly basis. Furthermore, the Board of Commissioners, the Board of Directors and the Division review the basic strategies with a focus on business transformation, infrastructure and HR.

Moreover, the Enterprise Risk Management Division monitors Strategic Risk by comparing the anticipated results with actual results, evaluating each Work Unit, and ensuring achievement of the targets (target objectives).

In managing Strategic Risk, the Corporate Strategy & Performance Management Division (SPD) functions to analyze the gap between the actual report and the targets of the Business Plan and to convey the steps that must be taken with the Board of Directors periodically.

## Management of Compliance Risk

The Bank through its Legal Division (LGD) has created a special portal called Access Internal Management Standards (AIMS) to facilitate all Work Units in accessing the Bank's internal provisions. The Bank has in place a Branch Compliance Supervisory Officer (BCSO) at each Branch Office to evaluate the level of Compliance with the Bank's operational and non-transaction flows, whether they are in accordance with applicable rules, regulations or SOPs.

In identifying and monitoring Compliance Risk, the Compliance Division (CMPD) lists the Bank's obligations to external parties and reviews internal provisions on an ongoing basis to remain relevant with the applicable external provisions. In addition, the CMPD monitors events that may cause Compliance Risk to arise and inform them to the Enterprise Risk Management Division (RMD). CMPD monitors and reports Compliance Risks to the Bank's Directors at any time or periodically in the event of a Compliance Risk.

Compliance Risk Measurement is performed on potential losses caused by non-compliance and inability of the Bank to comply with the applicable external provisions. Indicators/parameters used in measuring Compliance Risk include the type, significance, and frequency of violations of applicable regulations or the Bank's Compliance track record, the behavior underlying the violation, and violations of generally accepted standards.

In controlling Compliance Risk, the RMD and CMPD are tasked with evaluating the effectiveness of the implementation of Compliance Risk by regularly monitoring all types of activities that have the potential to cause Compliance Risk.

## Management of Reputation Risk

All employees including Business Unit Management and the Bank's support activities form a part of the implementation structure of Risk Management for Reputation Risk, providing that Reputation is the result of a combination of the Bank's business activities. The role of the Business Unit Management is to identify Reputation Risk in the business or activity of the unit and as a front liner taking the responsibility in developing and preventing Reputation Risk, particularly related to customer relationships. Reputation Risk Identification is performed on Risk factors inherent in certain functional activities including Credit (provision of funds), Fund Collection, Treasury and Investment, Operations and Services, Information Technology System and MIS, as well as HR. Bank BTN has created an SPN application (Customer Complaint System) and actively monitors all mass media (local and national, print and electronic). The Bank records all news concerning the Bank whether directly (direct news) or indirectly (mentioned). The SPN application is integrated with Branch Offices and Contact Centers. Service Quality & Network Division (SQND) as an SPN manager will follow up regarding customer complaints and resolve them in accordance with the established SLA.

Reputation Risk Measurement is performed based on the assessment results of the factors that affect the Bank's Reputation, including customer complaints and negative reporting concerning the Bank. The Bank's Reputation Risk is managed by the Corporate Secretary Division (CSD) Work Unit that manages news regarding the Bank published in mass media both print and electronic and the Service Quality & Network Division (SQND) that manages customer complaints.

In monitoring Reputation Risk and ensuring customer satisfaction, the Bank's SPN (Customer Complaint System) serves to sustain the management of services and handling of customer complaints online between parties related to problems at Branch Offices and Headquarters. In addition, Reputation Risk monitoring is also performed by the Enterprise Risk Management Division (RMD) Work Unit through regular reminders and the recommendation of improvements to the Reputation Risk Management Division of CSD and SQND based on an assessment of the Reputation Risk Profile parameters.

In managing Reputation Risk, the Corporate Secretary Division is responsible for implementing policies to deal with and resolve negative news or avoid counter-productive information and implement the functions of the Public Service Obligation (PSO) in implementing Corporate Social Responsibility (CSR). Corporate Social Responsibility activities are not only focused on charity, but also on other social programs. To control the Reputational Risk of customer complaints, SQND follows up concerning the customer complaints and resolves them in accordance with the established SLA.

## Risk Management Improvement and Refinement

As a Bank whose main focus is in the area of providing Loans and Housing Finance, the Bank's Asset Portfolio is dominated by Home Ownership Loans (KPR), which are influenced by changes in the external business climate including Inflation and the BI Rate. Risk Management efforts to minimize the negative impacts are required to be performed on an ongoing basis with the principles of Good Corporate Governance (GCG). To ensure that the business process achieves the Company's goals and prevents irregularities and risks that can lead to failure, it is necessary to use the precautionary principle to ensure healthy and sustainable growth in the Bank's performance. In improving the Culture of Risk Management, the Risk Management Work Unit has initiated a strategy to increase the Risk Awareness of all Bank BTN employees through using the gamification method. This gamification method makes it more convenient for all employees to understand the importance of Risk Awareness in every activity, especially at work. This Risk Awareness Program becomes even more entertaining and attractive by initiating the 2018 Risk Culture Festival event such as Movie Reviews, Risk Poster, Risk Jingle, Short Movie and the Risk Ambassador with the theme of Risk Management, which was attended by employees from all Work Units.

## TARGET AND STRATEGIC INITIATIVE FOR RISK MANAGEMENT IMPLEMENTATION IN 2018

The target and strategic initiatives for implementing Risk Management in 2018 were as follows:

- The application of Risk Management in addition to being focused on the development and simulation of Risk and Capital Measurement, was also focused on the development of a Culture of Risk Awareness across all levels of Bank BTN as well as on the Ex-Ante function in minimizing the potential of Risk Exposure. The established Risk Management policies must be implemented in all business activities and daily operations.
- The preparation of the Risk Management policies and procedures for 2018 were as follows:
    1. Regulation of the Board of Directors No. 14 / PD/DIR/PPD/2018 dated December 28, 2018 concerning the Risk Management Policy Guidelines (PKMR) PT Bank Tabungan Negara (Persero) Tbk.
    2. The Board of Directors' Circular Letter No. 15/ DIR/RMD/2018 March 22, 2018 concerning the Guidelines for implementing the Recovery Plan
    3. Regarding Progress Review the Board of Directors' Circular Letter No. 18/DIR/RMD/2017 April 3, 2017 regarding Business Continuity Management (BCM) and the Business Continuity Plan (BCP) and Standard Operating Procedures (in 2019).
    4. Implementation of Stress Testing to assess the Bank's resilience to stress/crisis scenarios:
        a. Liquidity Risk Stress Testing has been performed 4 times and delivered through the Risk Profile Report for Fourth Quarter 2017, First Quarter 2018, Second Quarter 2017 and Third Quarter 2018.
        b. Market Risk and Credit Risk Stress Testing is conducted at least once a year and was performed twice in 2018, in March 2018 and September 2018. Reporting in March 2018 has been submitted to the FSA, and updates were made in September 2018 for reporting on the Recovery Plan Document.

## BASEL IMPLEMENTATION

In implementing Risk Management and anticipating the implementation of Basel II, especially pillar 1, the Bank has implemented the following:

a. Measurement of Credit Risk using the Standardized Approach in accordance with the FSA Circular Letter No. 42/SEOJK.03/2016 dated September 28, 2016 concerning Guidelines for Calculating Risk-Weighted Assets for Credit Risk by Using a Standard Approach.
b. Use of the Standardized Model for Market Risk in accordance with the FSA Circular Letter No. 38/ SEOJK.03/2016 dated September 8, 2016 concerning the Guidelines for Using Standard Methods in Calculating Minimum Capital Requirements for Commercial Banks by Considering Market Risk.
c. Calculation of minimum Capital requirements by using the Basic Indicator Approach for Operational Risk in accordance with the FSA Circular Letter No. 24/SEOJK.03/2016 dated 14, July 2016 concerning the Calculation of Risk Weighted Assets for Operational Risk using the Basic Indicator Approach.

For the implementation of Basel III Bank, which includes the following:

a. Calculating and reporting the Liquidity Coverage Ratio (LCR) to the regulator on a monthly and quarterly basis according to FSA Regulation No. 42/POJK.03/2015 dated December 23, 2015 concerning the Obligation to Fulfill the Liquidity Coverage Ratio for Commercial Banks.
b. Calculate and report on a quarterly basis of the Net Stable Funding Ratio (NSFR) to regulators in accordance with the FSA Regulation No. 50/ POJK.03/2017 dated 13, July 2017 concerning the Obligation to Fulfill the Net Stable Funding Ratio for Commercial Banks.

c. Calculate and report a trial calculation of the Leverage Ratio (LR) to the regulator quarterly according to the LR Consultative Paper.
d. Considering the buffer in the calculation of minimum Capital Adequacy by referring to the following:
   - Conservation Buffer in accordance with article 6 of the FSA Regulation No. 11/POJK.03/2016 dated January 29, 2016 concerning the Minimum Capital Requirements for Commercial Banks.
   - Counter-cyclical Buffer according to the Bank Indonesia Regulation No. 17/22/PBI/2015 dated December 23, 2015 concerning the Obligation of the Counter-cyclical Buffer Formation
   - Capital Surcharge for Systemic Banks in accordance with the FSA Regulation No. 46/POJK.03/2015 dated December 23, 2015 concerning the Determination of Systemically Important Bank and Capital Surcharges and Systemic Bucket Bank determination letters from regulators.

## RISK PROFILE ASSESSMENT

The Company always assesses the Company's Risk Profile through inherent Risk Rating surveys, and the quality rating regarding the implementation of Risk Management to determine the Company's overall Risk Rating. Inherent Risk Assessment is an assessment of the Risks inherent in the Company's business activities, whether they can be quantified or not, which have the potential to negatively affect the Company's financial position. The Quality Assessment regarding the Implementation of Risk Management is an evaluation of 4 (four) interrelated aspects including Risk Governance, Risk Management Framework, Risk Management Process, Adequacy of Human Resources, and Adequacy of Management Information Systems, and the Adequacy of Risk Control Systems.

In 2018, based on the results of the Company's independent assessment of the health level of the Company, the Company's Risk Profile is as follows:

| No | Risk Profile | Quarter IV / 2018 | | | Quarter IV / 2017 | | |
|---|---|---|---|---|---|---|---|
| | | Inherent Risk Ratings | Rating Of Risk Management Application Quality | Risk Rating | Inherent Risk Ratings | Rating Of Risk Management Application Quality | Risk Rating |
| 1 | Credit Risk | Low To Moderate (2) | Satisfactory (2) | Low To Moderate (2) | Low To Moderate (2) | Satisfactory (2) | Low To Moderate (2) |
| 2 | Market Risk | Low (1) | Satisfactory (2) | Low (1) | Low (1) | Satisfactory (2) | Low (1) |
| 3 | Liquidity Risk | Low To Moderate (2) | Satisfactory (2) | Low To Moderate (2) | Low To Moderate (2) | Satisfactory (2) | Low To Moderate (2) |
| 4 | Operational Risk | Low To Moderate (2) | Satisfactory (2) | Low To Moderate (2) | Low To Moderate (2) | Satisfactory (2) | Low To Moderate (2) |
| 5 | Legal Risk | Low To Moderate (2) | Strong (1) | Low (1) | Low To Moderate (2) | Strong (1) | Low (1) |
| 6 | Strategic Risk | Low (1) | Satisfactory (2) | Low (1) | Low (1) | Satisfactory (2) | Low (1) |
| 7 | Compliance Risk | Low To Moderate (2) | Satisfactory (2) | Low To Moderate (2) | Low To Moderate (2) | Satisfactory (2) | Low To Moderate (2) |
| 8 | Reputation Risk | Low To Moderate (2) | Satisfactory (2) | Low To Moderate (2) | Low To Moderate (2) | Satisfactory (2) | Low To Moderate (2) |
| Composite Ratings | | Low To Moderate (2) | Satisfactory (2) | Low To Moderate (2) | Low To Moderate (2) | Satisfactory (2) | Low To Moderate (2) |

| Analysis |
|---|
| Considering the Bank's business activities, the possibility of a Bank loss resulting from the Composite Inherent Risk score was classified as low over a period of time into the future. The quality of Composite Risk Management is adequate. Although there are minor weaknesses, these weaknesses require the attention of management. |

## EVALUATION REGARDING THE EFFECTIVENESS OF THE RISK MANAGEMENT SYSTEM

The Enterprise Risk Management Division as a Risk Management Unit periodically evaluates the implementation of the Risk Management System is on a quarterly basis by using Risk Profile tools, which include Risk Management for Credit Risk, Market Risk, Liquidity Risk, Operational Risk, Compliance Risk, Legal Risk, Strategic Legal Risk and Reputation Risk. As stipulated in the FSA Regulation No. 18/POJK.03/2016 concerning the Application of Risk Management for Commercial Banks and the FSA Circular Letter No. 34/SEOJK.03/2016 concerning the Application of Risk Management for Commercial Banks, the Risk Profile report includes an assessment of the Inherent Risk and an assessment of the Quality of the Application of the Bank's Risk Management.

The Inherent Risk Assessment is an evaluation of the Inherent Risks in the Bank's business activities, whether they can be quantified or not, which have the potential to negatively affect the Bank's financial position. The Quality Assessment concerning the Implementation of Risk Management is an assessment of 4 (four) interrelated aspects including Risk Governance, Risk Management Framework, Risk Management Process, Adequacy of Human Resources, and Adequacy of Management Information Systems, and the Adequacy of Risk Control Systems.

### Adequacy of Risk Management Information Systems

The Risk Management Information System from the initial stage was focused on gathering and improving the quality of the Risk Databases, which are expected to be developed and applied to the Risk Management Information System in stages so that the Risk Measurement and Risk Monitoring Processes will be implemented in an integrated manner and will also be presented in a timely manner. At present, Bank BTN is developing an Internal Credit Rating (ICR) for Commercial Credit and an Enhancement Loss Event Database (LED) that helps collect Loss Event Data that occurs at the Branch Office so that Risks will be identified at the KC and will be followed up with effective mitigation.

### Adequacy of Risk Identification, Measurement, Monitoring and Control Processes

The process of Identifying, Measuring, Monitoring and Controlling Risks is performed by the Risk Management Unit, in this case the RMD has a Work Unit of assessment and measurement in order to identify and measure each risk. Risk monitoring and control is conducted regularly so as to mitigate significant risks to the Bank.

### Strategy/Direction of Risk Management Policy for the next 1 (one) year period

Objectives of Enterprise Risk Management:

a. To create a system or mechanism for the Company to anticipate and manage Risks in order to increase and maintain the Company's value.
b. To encourage management and employees to act proactively to reduce the Risk of Loss, making Risk Management a competitive advantage and corporate performance advantage.
c. To Develop the ability to socialize Risk Understanding and maintaining the Company's Risk Management.
d. To improving the Company's performance by providing Risk level information as outlined in the Risk Map that is useful for management in the development of strategies and the improvement of the Risk Management Process continuously and sustainably.

The Bank's Risk Management Target:

a. Human Resources with Insight and a Risk Culture, a Sustainable and Planned Development Pattern.
b. To support the achievement of the CBP for 2019
c. To improve and maintain the Risk Profile and the Company's soundness at the desired level.
d. To optimize the Company's KPMM and maintain it at the desired level.

To achieve this goal, each Work Unit must implement Risk Management as stipulated in this provision. In realizing the objectives of implementing Risk Management, by referring to the blueprint for the Bank's Transformation Strategic Plan for 2016-2020, specifically strengthening comprehensive GRC implementation, the Bank has prepared Strategic Work Plans related to the implementation of Risk Management with a 1 (one) year Strategy and Work Plan target as follows:

a. In accordance with the transformation of Bank BTN's Blueprint and with reference to 11 Integrated GRC initiatives, which are the responsibility of the RMD (RM 7 to RM 16 and RM 20) to support the direction of optimizing the implementation of RMD Risk Management and the Bank's Risk Management Transformation Roadmap Bank BTN for the period 2019-2025 with an emphasis on the objectives to be achieved in the implementation as follows:
    - 2019: Effective Capital;
    - 2020: Optimal Earnings;
    - 2021: Controlled Risk;
    - 2021 – 2025: Good Corporate Governance.

b. Strengthening Risk Capability (RM.7), among others by restoring the Risk Management HR workforce and through increasing the Competence of HR in RMD and Bank BTN as a whole related to Risk Management.

c. Establish the Risk Appetite and Tolerance (RM.8) and clear strategies with the Compilation of Risk Management Policies (including RA / RT per type of risk for 2020).

d. Improving the Credit Decision process (RM.9) and Building an effective Risk Scoring model (RM.11), this is performed by enriching/expanding the capabilities of the Internal Credit Rating (ICR), Credit Scoring model (CSM), Model development Probability of Default (PD), Loss Given Default (LGD) and EAD as part of the implementation of PSAK 71, as well as developing a Risk Model Validation Framework, including Credit Risk and establishing the Limits of the Credit Termination Authority (BWMK).

e. Establish a strong Structure of Governance in order to increase the Risk Culture (RM.10) by increasing the Risk Awareness of all Bank BTN employees through using the gamification method. It is expected that the gamification method will make it more convenient for all employees to understand the importance of Risk Awareness in every activity, especially at work. By performing a Risk Awareness program that is more entertaining and attractive with the Implementation of the 2019 Risk Culture Program.

f. Improve the capability of Operational Risk Management (RM.12) and implement the Integrated GRC and monitor KPI, KRI, and KCI (RM. 20) by strengthening internal provisions governing the Loss Event Database (LED), Risk & Control Self-Assessment (RCSA) and Business Continuity Management (BCM), in addition to increasing the capability of Operational Risk Management to be expanded by developing the provisions of Key Risk Indicators (KRI) and IT Risk Management and implementing IT applications/systems designed to support the implementation of RCSA and Integration of the Operational risk Tools ( LED, KRI and RCSA)

g. Improve the capability of Liquidity Management and Market Risk (RM.14), which is through developing a framework for validating the Market Risk & Liquidity Model and intensifying the monitoring of the concentration of Core Customers, Liquidity Coverage Ratio (LCR) & Net Stable Funding Ratio (NSFR).

h. Develop a Risk Information System (RM.15) by developing and/or strengthening the IT system applications that includes the Risk Management Integration Application and the Credit Risk Datamart Application.

i. Implementation of a rule-based early warning system (RM 16) by developing a Recovery Plan application,

In refining the implementation of the above strategies, the RMD has obtained and implemented ISO 9001: 2015 Certification and committed to continue to perform its duty in accord with the applied quality standards and to continuously advancing in order to foster a Culture of Risk and encourage the application of effective Risk Management across all organizational levels and the Bank's business activities.