

## PROGRAM MONITORING AND EVALUATION SYSTEM ASSESSMENT

### A. Description of the Monitoring and Evaluation System

1. The State Electricity Corporation (PLN) is committed to continuous and comprehensive monitoring and evaluation (M&E). A thorough review of the existing M&E systems, processes, and procedures, and an assessment of the monitoring of program performance within PLN indicate extensive data generation, the ability to monitor transmission and distribution in real time, and a regular reporting system. The Management Reporting Information System (SILM) contains data on critical dimensions, such as performance, electricity generation, energy sales, transmission and distribution, and projects and construction. This information will facilitate the monitoring of disbursement-linked indicators (DLIs) for the Electricity Grid Strengthening—Sumatra Program, which is an Asian Development Bank (ADB) results-based lending program (RBL). Information about the M&E systems was obtained in conjunction with PLN's Corporate Performance Control Unit (SPKK), and the generation, transmission, and distribution divisions.

2. **M&E information systems.** SPKK is responsible for PLN corporate M&E through the SILM which provides accurate, real-time, online data. To implement the M&E requirements, each department has, and operates, information technology (IT) applications that are developed together with the Information Technology Division. The IT applications generate data and provide information on current activities, which provide information for the M&E process.<sup>1</sup> A monthly summary report is generated based on information provided by the SILM, addressed to the PLN's Board of Directors (BOD) and to all heads of divisions. Based on this report, each division provides feedback on conditions in the field, addresses problems, or develops strategies to make progress. In addition, the BOD and SPKK use the BOD dashboard information system, which contains comprehensive data in real-time for customer service, projects, corporate performance, and electricity supply condition.

3. **Beneficiary group feedback.** PLN stakeholders include bondholders, employees, the government or regulator (through the Financial Services Authority), Parliament, work partners, customers, creditors, the general public, and the media. Shareholders evaluate the performance of the Board of Commissioners (BOC) and the BOD using the achievement of key performance indicators (KPIs) determined by PLN and top management. Performance reports are presented to shareholders at the general meeting of shareholders. The BOC is tasked with monitoring and providing counsel to ensure that the company goals are achieved, and decisions made during the general meeting of shareholders are carried out.<sup>2</sup> Engagement and feedback are delivered through the general meeting of shareholders and additionally by intensive communication periodically through a variety of media to obtain feedback in the form of suggestions and desired expectations of stakeholders. This is done in accordance with specific expectations inherent in each stakeholder group. At BOD meetings, including the general meeting of shareholders, PLN's corporate secretary follows up on complaints and suggestions. This is a systematic, ongoing process, and important issues are placed on the BOD dashboard. Customer complaints are followed up with the regional representative offices. All complaint records are summarized within the call center reports. Reporting and communication arrangements with each stakeholder group are provided in the Monitoring and Evaluation Framework.<sup>3</sup>

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<sup>1</sup> State Electricity Corporation (PLN). 2013. *Annual Report*. Jakarta.

<sup>2</sup> State Electricity Corporation (PLN). 2013. *Sustainability Report*. Jakarta. p.46.

<sup>3</sup> Monitoring and Evaluation Framework (accessible from the list of linked documents in Appendix 2 of the report and recommendation of the President).

4. **Institutional arrangements for M&E.** PLN specifically created SPKK to monitor, evaluate, and remove obstacles that arise during the implementation of tasks and business processes in the corporation. SPKK coordinates with all PLN divisions and units to obtain current and accurate data. It processes and evaluates data into clear information to facilitate BOD decision-making. In addition, each division has duties and responsibilities to perform monitoring duties in accordance with its field. Each division reports through IT systems appropriate to their respective areas. A table of program-relevant IT applications is provided with the M&E framework (footnote 3). In each regional division, including SPKK, specific staff is responsible for M&E processes. SPKK has 11 staff with M&E responsibilities. Each division has an operator to monitor and evaluate division activities. In addition, the division supervisor (senior manager) and the head of division oversee M&E processes. SPKK organizes monthly meetings with each division and its units to monitor current actual conditions and action plans to solve the problems. All data required for M&E is available and ready to retrieve in real time online at corporate premises. PLN has extensive experience in M&E of both large and smaller projects and programs. PLN has been successfully monitoring programs and projects, including projects to strengthen the power grid in West Kalimantan (ADB), construct the Sumatra–Java hydropower plant (World Bank), and construct a submarine cable (PLN self-funded). However, PLN M&E experience is in input-based projects. This results-based lending modality (RBL) is the first program under PLN control. Management staff in each division and in SPKK monitors and evaluate PLN programs, projects, processes, and procedures internally. However, little benchmarking, or comparison with other companies with world-class experience and achievement has been accomplished. Capacity development within PLN needs to be expanded to include professional development in comparative M&E practices to allow PLN to benchmark itself against the standards of other power companies that use international best practices for M&E.

5. **M&E dimensions for operations.** The overall PLN program and the RBL are concerned with generation, transmission, distribution, and performance management. The Operations Division is responsible for the M&E of generation, transmission, and distribution areas. The Projects Division, the Primary Energy Division, and In-Bound Logistics Division provide data to and support the Operations Division. SPKK is responsible for performance management. KPIs clearly set out the company's performance targets for economic, social, environment, and occupational safety and health, including other parameters such as customer service, perception toward PLN, and compliance with laws and regulations. The KPIs are monitored monthly.

6. **M&E plans.** The Construction Division, with contract administration staff within the Project Management Office, developed the M&E plans for use during construction. Internal planning procedures are in place for M&E during operations, with divisions monitoring the progress of projects or loans after construction completion. Division supervisors implement the M&E. Plans include corporate performance indicators, person in charge, timetable for M&E activities, and intended recipient of the reporting. Separate M&E plans are not needed for the program.

7. **Availability and quality of data.** Data indicators and targets have been established for most of the data collection applications. The units responsible provide the necessary data as designated as a KPI indicator for the related unit. Units that do not fill in complete and accurate data will receive a low achievement on the KPI score. This mechanism ensures data availability and quality. Quantitative data regarding PLN performance includes data from PLN and data

managed by subsidiaries. PLN also maintains historical data for analysis, annual reports, and 5-year development plans (footnote 3).<sup>4</sup>

8. Technical power subsector definitions and calculations used by PLN are standard definitions in international use and are consistent with those adopted by others including ADB.

9. **Information sharing and reporting.** All PLN divisions and units have access to data collected with IT applications. This ensures proper information sharing. The Operations Division works closely with the Strategic Programs Division (supply chain, strategies program, planning procurement) and reports to SPKK. All units also report directly to their division. The units provide monthly, quarterly, semiannual, and annual reports on operations to SPKK. Progress reports on achievement of KPIs, progress reports for construction projects, and information about any problems are routinely reported every month through the SILM. Written summary progress reports are submitted to the BOD and heads of divisions. These contain information based on detailed data for each indicator for the regional distribution and construction units, and detailed progress of project implementation (percentage) for each project on generation, transmission, and substation, complete with the status of current problems.

## **B. Assessment of the Monitoring and Evaluation System**

10. With the RBL modality, DLIs include indicators for outcome, output, and system performance indicators. A total of 11 DLIs were identified, of which 6 are directly linked to disbursements. The disbursement-linked DLIs contain three outcome indicators and three output indicators. They are based on PLN's SILM and do not require separate measurement efforts. PLN's M&E system is sufficient and able to generate reliable, timely, and adequate information on results, including DLIs. The units responsible provide the necessary data updates. Data specific to DLIs and other indicators are collected, analyzed, and monitored throughout the specific system (footnote 3). The design and monitoring framework records the baselines of all DLIs for the program's outcome and outputs. To communicate the status of specific DLIs to all PLN-related parties (such as divisions and PLN units) and for M&E purposes, reporting should be provided through the SILM. The program's progress data would therefore be easily accessed by and reported to all related parties. The reporting application should also be able to offer ways to provide feedback on the program progress reports. Other indicators solely for performance monitoring and not linked to loan disbursements were also identified. Risks and mitigating actions are discussed in para 17.

11. **Disclosure arrangements.** The SILM captures information on critical dimensions such as the number and type of customers, transmission interruptions, and distribution losses. Data indicators and targets have been established. The division reports accurate real-time online data to SPKK via IT systems. SPKK then processes and evaluates it into clear information to facilitate internal and BOD decisions. In addition, to ensure proper information sharing, the data collected within IT applications is accessible by all PLN divisions and units.

12. **Reporting.** Progress reports on achievement of key performance indicators, progress reports for construction projects, and information about any problems are available online in real time, and are examined monthly by SPKK and heads of divisions. A monthly summary progress report is generated based on information provided by SILM, addressed to the BOD and to all heads of divisions. Based on this report, each division provides feedback on the condition in the field, addresses problems, or develops strategies to make progress. Arrangements to disclose

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<sup>4</sup> Government of Indonesia. State Electricity Corporation (PLN). Statistics, 2013.

the status of program DLIs in a timely and accessible manner to stakeholders to allow them to monitor and provide feedback can be incorporated into PLN's current reporting systems. In addition, PLN will collect all reports and information necessary to verify accomplishment of the DLIs, and prepare an annual draft DLI achievement report. The PLN director of Corporate Planning or designee will assess achievement of the DLIs and authorize the DLI achievement report to be shared with the Ministry of Finance and ADB.

13. **Transparent and reliable monitoring of RBL performance.** The current M&E systems within PLN enable transparent and reliable monitoring of PLN projects. The M&E of the program DLIs can be incorporated directly into existing systems. In addressing the relationship between sustainable electricity, economic activity, and quality of life (design and monitoring framework impact statement), the systems in place capture useful information that can be measured, analyzed, and extrapolated to provide a larger picture of the program impact on Indonesia.

14. **Addressing problems.** SPKK and heads of the generation, transmission, distribution, and performance divisions will routinely carry out M&E of program performance. The M&E results will be reported to the BOD through the online dashboard and in written reports. The reporting mechanisms will facilitate decision-making for the BOD, and enable the BOD to make necessary decisions to resolve any issues that arise. The M&E system will also provide an early warning of conditions that require immediate attention and resolution to the heads of divisions and general managers of the PLN units. This will facilitate the timely remedy of any problems that arise.

15. **Long-term evaluation.** PLN routinely conducts long-term and/or final evaluations for its projects and programs. The Construction Administration Division typically conducts these. As the program is new and an RBL, SPKK may utilize the assistance of other divisions, particularly the Corporate Planning Division, to conduct the ADB completion report and any other necessary evaluation. SPKK and the Corporate Planning Division will release any evaluation reports to the Indonesian government.

### **C. Managing Risks and Improving Capacity**

16. PLN's Risk Management Office within the Commerce, Risk Management, and Compliance Division conducts risk analysis. Initial risks regarding M&E became evident during the loan reconnaissance mission for the program. They include

- (i) PLN does not meet funding targets for required investments in power generation, transmission, and distribution;
- (ii) the use of medium-voltage feeder permanent interruptions per 100 kilometers to monitor frequency of outages;
- (iii) annual frequency of reporting; and
- (iv) reduction of customer complaints as an indicator of improvement.

## D. Summary of Risk Mitigation Mechanisms

17. The key monitoring risks and corresponding mitigation measures are summarized below.

Monitoring Risks	Rating	Mitigation Measures
PLN funding targets to meet required investments in power generation, transmission, and distribution are not met	Substantial	Finance and Budgeting Division and Treasury Division track data for funding targets and investments and can report to the BOD and ADB early on in the process.
Medium voltage feeder technical interruptions are used to monitor reduction of time and frequency of outages <sup>a</sup>	Medium	Use additional specific data available through APD, P3BS, and SCADA including type and location of customer, method of reporting, employee reports, and branch office locations.
Annual DLI progress reporting to ADB may reduce full-time focus on the program by PLN during the other months	Low	SPKK generates monthly summary progress reports, which will include program progress. They can be made available to ADB.
Reduction of customer complaints is used as an indicator of improvement	Medium	PLN has standard, globally recognized metrics for reliability and monitors them. AP2T data including type of customer and complaint, location, wait time for connections, and employee reports can be included SCADA data to monitor sections of distribution and transmission line faults and relate them to customer complaints can be tracked. <sup>b</sup>

ADB = Asian Development Bank, AP2T = centralized customer services application, APD = regional distribution control unit, APKT = integrated complaints application, BOD = Board of Directors, DLI = disbursement-linked indicator, P3BS = Sumatra Load Dispatch Center, PLN = State Electricity Corporation, SCADA = supervisory control and data acquisition, SPKK = Corporate Performance Control Unit.

<sup>a</sup> PLN generally defines medium voltage as 20 kV.

<sup>b</sup> This application unites the business processes related to PLN customers. It was launched on 14 December 2012 in Banda Aceh, Nanggroe Aceh Darussalam (Indonesia).

Source: Asian Development Bank.