REPUBLIC OF INDONESIA
MINISTRY OF NATIONAL DEVELOPMENT PLANNING/
NATIONAL DEVELOPMENT PLANNING AGENCY

PUBLIC PRIVATE PARTNERSHIP

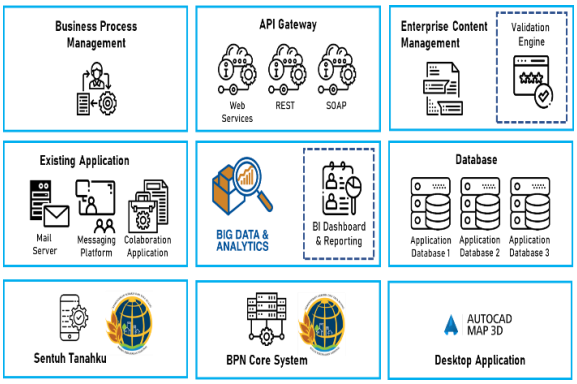
INFRASTRUCTURE PROJECTS PLAN IN INDONESIA

2022

Development of Modern Land Information System

Location: National

Sector : Telecommunications and Informatics



Government Contracting Agency:
Minister of Agrarian Affairs and Spatial Planning / Head of National Land Agency

Type of PPP:
Solicited

Return of Investment:
Availability Payment

Sub-Sector : E-Government

Description:
The objective of the project is to improve public services in land affairs through the development of the Modern Land Information System (MLIS). The development focuses on transforming conventional process to electronic/digital services with the intervention of advanced technologies to support the complete and systemic land registration (PTSL) project target and 100 percent land certificates in Indonesia by 2025.

Estimated Project Cost: USD 320.04 Million

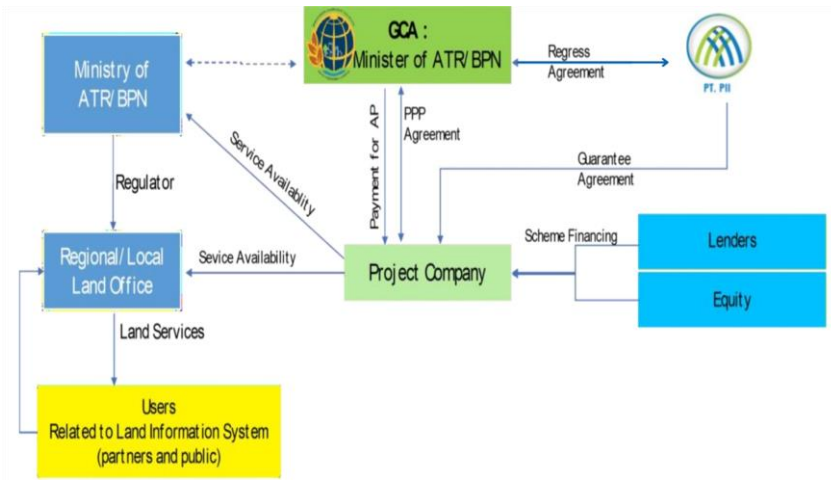
Financial Feasibility:
IRR : 11.02%
NPV : USD 84.56 Million

Estimated Concession Period: 15 years

Indicative Project Schedule

Project Status : Final Business Case (FBC)

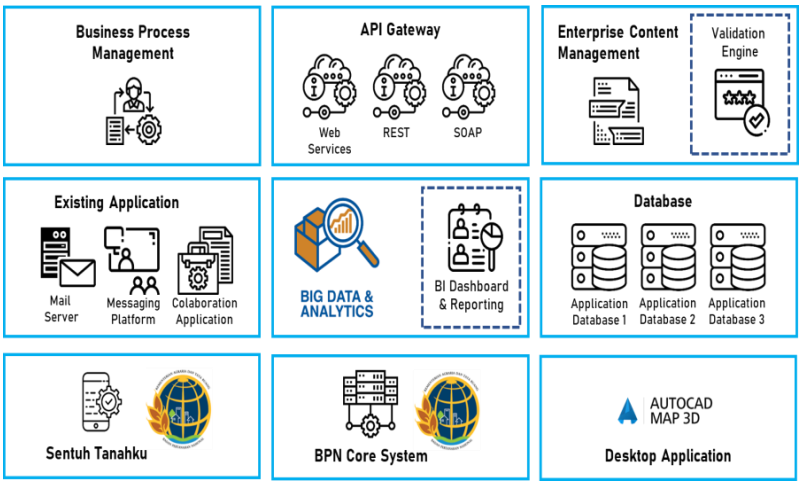
Indicative Project Structure



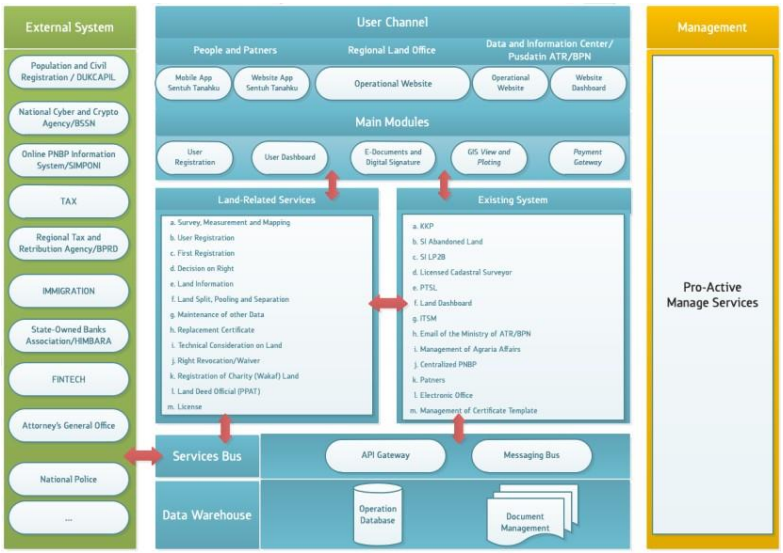
Project Digest

Project Title	Modern Land Information System
Government Contracting Agency	Minister of Agrarian Affairs and Spatial Planning/Head of National Land Agency
Implementing Agency	Data and Information Center of the Ministry of ATR/BPN
Preparation Agency	Data and Information Center of the Ministry of ATR/BPN (National Development Planning Agency Facilitate the OBC)
Project Cost	USD 320.04 Million
Estimated Concession Period	15 years
Location	National

1. Project Picture (Map and/or Illustration of Project)



Picture 1 – Infrastructure Capacity Development of Modern Based on Electronic-Based Government System (Sistem Pemerintahan Berbasis Elektronik/SPBE) Standard



Picture 2 – Architecture of Modern LIS

2. The Opportunity

2.1. Project Background

The business process, system adjustment, and technology application are mandatory in facing the digital disruption era. The transformation in those elements will increase efficiency and effectiveness in carrying out the daily routine of an institution. Without adjustment, obsolete elements will become a critical obstacle of an institution to pace with new demands and compete with its counterparts.

To respond to the challenges, the Ministry of ATR/BPN plans to develop a Modern Land Information System (MLIS). The Ministry perceives the importance of digital penetration to its land core systems to transform the conventional system into a digital one, thus expecting more efficient digital services to the public. The project will also allow strengthening the Ministry's capacity in spatial planning and land administration.

2.2. Project Description

The Ministry of ATR/BPN plans to develop a Modern Land Information System (MLIS) to improve its business process, data, system, and services through a Public-Private Partnership (PPP) scheme. The MLIS is expected to propel the realization of the land-related national priority programs. The project is also targeted to improve the Ease of Doing Business (EoDB) rating and simultaneously increase state revenue from land sectors. After the project's completion, system integration with other ministries and institutions will be enabled to collaboratively enhance public services in Indonesia.

2.3. Project Objectives

The project aims to transform its conventional land system and services to digital ones by developing modern land information systems.

3. Business Entity's Scope of Work

Private partners shall be responsible for developing land information systems, DC and DRC infrastructure improvement and maintenance, hardware procurement, helpdesk and support center, digitalization, and validation of land documents (data cleansing). Within this scope of responsibility, private investment will be returned in the form of an Availability Payment (AP) scheme for 15 years-with 14 percent of Return on Investment (ROI).

The business entity's scope of work are as follows:

1. Development of the modern land information system
2. Maintenance of MLIS
3. Help Desk and Support Centre
4. Enhancement of Data Centre (DC) and Data Recovery Centre Infrastructure (DRC)
5. Maintenance of Data Centre (DC) and Data Recovery Centre Infrastructure (DRC)
6. Digitalization and Data Cleansing
7. Command Centre

4. Technical Specification

The Modern Land Information System project is expected to function as an integrated internal application in the Ministry system. The technical project specification consists of:

1. Development of the Modern Land Information System
   - Developing Modern LIS Core Module
   - Developing Modern LIS Services Module
   - Geospatial System and Software License
   - CAD Software License
2. Maintenance of MLIS
   - Maintaining Modern LIS Core and Service Module
   - Maintaining Geospatial System and Technical Support
   - Maintaining Existing ATR/BPN Application
3. Help Desk and Support Centre
   - Developing Modern Helpdesk and Technical System
   - Training and Socialization Activities
   - Helpdesk and Technical Operation
   - Helpdesk System Leasing
   - Office Activities Monitoring
4. Enhancement of Data Centre (DC) and Data Recovery Centre Infrastructure (DRC)
   - Deploying Private Cloud Infrastructure
   - Deploying Document Management System (Knowledge Management System)
   - Deploying SDWAN for DC/DRC and Office Land
   - Deploying Active-Active Data Center (Private & Public Cloud)
   - Deploying Next Generation Firewall and End Security System
   - Improving Land Office Infrastructure Capacity
   - Improving DC/DRC Infrastructure and Devices
   - Maintaining DC/DRC Infrastructure and Devices
5. Maintenance of Data Centre (DC) and Data Recovery Centre Infrastructure (DRC)
   - Data Center Integration (DCI)
   - DC and DRC Infrastructure Maintenance
6. Digitalization and Data Cleansing
   - Development of Application for Document Validation and Spatial Data
   - Adjustment and Topology Spatial Data (KW 1 - KW 2 - KW 3) – Nationwide
   - Spatial Data Backlog Validation (KW 4 - KW 5 - KW 6) – 12 Cities
   - Land Ledger/Book and Drawing Notes digitalization - Nationwide
7. Command Centre
   - Developing and Building Command Center (Operation and Security)
   - Command Center Operation

5. Environmental Impact Assessment (EIA/AMDAL) Findings

The project does not require EIA/AMDAL

6. Land Acquisition and Resettlement Action Plan

The project does not require a land acquisition or resettlement plan

7. Project Cost Structure

Estimated Project Cost	USD 320.04 Million
Indicative Debt to Equity Ratio	
- **Debt Level**	70%
- **Equity Level**	30%
IRR	11.02%
NPV	USD 86.03 Million

8. Government Support and Guarantee

The indicative government supports for Modern LIS Development Project are written below:

- License and Permit support: the need for adjustment of Government Regulations regarding types and tariffs for types of Non-Tax Revenues applicable to the Ministry of ATR / BPN
- The need to prepare a Memorandum of Understanding (MoU) with other ministries and state institutions related to the cooperation in data and information sharing.
- Support for the provision of internet bandwidth network

To mitigate the project's risks from changes in demand risk and shifts in the political scenario, government guarantee is required. In this regard, the level of risk perceived from investors will be determined at market sounding.

9. Contact Information

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