ADB

Board of Directors

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R111-16
20 October 2016

Proposed Technical Assistance Loan Accelerating Infrastructure Delivery through Better Engineering Services Project (Indonesia)

1. The Report and Recommendation of the President (RRP: INO 49141-001) on the proposed technical assistance loan to Indonesia for the Accelerating Infrastructure Delivery through Better Engineering Services Project is circulated herewith.

2. This Report and Recommendation should be read with *Country Partnership Strategy: Indonesia, 2016–2019: Towards a Higher, More Inclusive and Sustainable Growth Path*, which was circulated to the Board on 23 August 2016 (DOC.Sec.M23-16).

3. In the absence of any request for discussion and in the absence of a sufficient number of abstentions or oppositions (which should be communicated to The Secretary by the close of business on 10 November 2016), the recommendation in paragraph 36 of the paper will be deemed to have been approved, to be so recorded in the minutes of a subsequent Board meeting. Any notified abstentions or oppositions will also be recorded in the minutes.

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ADB

Report and Recommendation of the President to the Board of Directors

Project Number: 49141-001
October 2016

Proposed Technical Assistance Loan
Republic of Indonesia: Accelerating Infrastructure Delivery through Better Engineering Services Project

Asian Development Bank

CURRENCY EQUIVALENTS

(as of 16 September 2016)

Currency unit	–	rupiah (Rp)
Rp1.00	=	0.000076
$1.00	=	Rp13,132

ABBREVIATIONS

ADB	–	Asian Development Bank
BAPPENAS	–	Badan Perencanaan Pembangunan Nasional (National Development Planning Agency)
DGH	–	Directorate General of Highways
DGHS	–	Directorate General of Human Settlements
DGWR	–	Directorate General of Water Resources
ESP	–	Accelerating Infrastructure Delivery through Better Engineering Services Project
GDP	–	gross domestic product
MPWH	–	Ministry of Public Works and Housing
PPP	–	public–private partnership
RPJMN	–	Rencana Pembangunan Jangka Menengah Nasional (National Medium-Term Development Plan)
TA	–	technical assistance

NOTE

In this report, "$" refers to US dollars unless otherwise stated.

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PROJECT AT A GLANCE

1. Basic Data — **Project Number:** 49141-001

Project Name	Accelerating Infrastructure Delivery through Better Engineering Services Project	**Department /Division**	SERD/IRM
Country	Indonesia	**Executing Agency**	Secretariate General
Borrower	Republic of Indonesia		

2. Sector

	Sector	Subsector(s)	ADB Financing ($ million)
✓	**Water and other urban infrastructure and services**	Urban policy, institutional and capacity development	51.60
	Agriculture, natural resources and rural development	Rural water policy, institutional and capacity development	51.60
	Transport	Transport policies and institutional development	45.00
		Total	**148.20**

3. Strategic Agenda

Strategic Agenda	Subcomponents
Inclusive economic growth (IEG)	Pillar 2: Access to economic opportunities, including jobs, made more inclusive

Climate Change Information

Climate Change impact on the Project	Low

4. Drivers of Change

Drivers of Change	Components
Governance and capacity development (GCD)	Institutional development
Knowledge solutions (KNS)	Pilot-testing innovation and learning
Private sector development (PSD)	Public sector goods and services essential for private sector development

Gender Equity and Mainstreaming

No gender elements (NGE)	✓

5. Poverty and SDG Targeting

Project directly targets poverty and SDGs	No

Location Impact

Nation-wide	High

6. Risk Categorization: Low

7. Safeguard Categorization **Environment:** C **Involuntary Resettlement:** C **Indigenous Peoples:** C

8. Financing

Modality and Sources	Amount ($ million)
ADB	**148.20**
Sovereign TA loan: Ordinary capital resources	148.20
Cofinancing	**0.00**
None	0.00
Counterpart	**19.40**
Government	19.40
Total	**167.60**

9. Effective Development Cooperation

Use of country procurement systems	No
Use of country public financial management systems	Yes

Source: Asian Development Bank

I. THE PROPOSAL

1. I submit for your approval the following report and recommendation on a proposed technical assistance (TA) loan to the Republic of Indonesia for the Accelerating Infrastructure Delivery through Better Engineering Services Project (ESP).[1]

2. The ESP will help meet the infrastructure development objectives of the Strategic Plan, 2015–2019, of Indonesia's Ministry of Public Works and Housing (MPWH).[2] The ESP will strengthen the MPWH's capacity to efficiently design and implement its increased public investment program by (i) improving the quality and timely start-up of infrastructure projects, and (ii) strengthening the MPWH's public investment management systems.

II. THE PROJECT

A. Rationale

3. **Inadequate infrastructure provision.** Logistics costs in Indonesia are estimated at 24% of gross domestic product (GDP) as a result of underserved and congested transport networks.[3] In Jakarta alone, road congestion is estimated to result in Rp65 trillion (0.6% of GDP) in losses annually. Only 55% of Indonesia's irrigation system is functioning at full capacity reducing yields and cropping intensity.[4] Poor flood control infrastructure is a major factor, contributing to economic losses of $430 million annually. Access to basic urban water and sanitation services lags far behind other middle-income countries. In 2014, just 80.7% of the urban population had access to improved water sources, while 61.1% had access to improved sanitation facilities. Only 4% of septage and 1% of urban wastewater are treated. Overall, inadequate infrastructure has been one of the main impediments to doing business in Indonesia, and it has hampered inclusive growth and poverty reduction in Indonesia.[5]

4. **Underinvestment in infrastructure.** The gap in infrastructure provision is due to a long period of underinvestment: overall infrastructure spending in Indonesia dropped from 8% of GDP during 1995–1997 to about 4% of GDP during 2008–2014,[6] well below the estimated investment need of 6%–7% of GDP.[7] Particularly low was the government's infrastructure investment, which averaged 3% of GDP during 2008–2014.[8] The government's ability to spend what had been allocated for infrastructure was also a problem, as it actually utilized only around 85% of what had been budgeted for infrastructure spending each year. To help overcome underinvestment in infrastructure, the National Medium-Term Development Plan (RPJMN), 2015–2019 envisages total infrastructure investment to increase to Rp4,800 trillion from

[1] The design and monitoring framework is in Appendix 1.
[2] Government of Indonesia, MPWH. *Strategic Plan of MPWH for Years 2015 to 2019*. Jakarta. MPWH Regulation No. 13.1/PRT/M/2015.
[3] Road-based transportation accounts for more than 70% of overall logistics costs in Indonesia. Logistics costs are estimated at 16% of GDP in Thailand, and 13% of GDP in Malaysia.
[4] Government of Indonesia, MPWH. 2014. *Irrigation Systems Rapid Assessment*. Jakarta.
[5] The World Bank estimates that faster growth of infrastructure stock in 2001–2011 may have (i) raised average GDP growth from 5.3% (actual) to 5.8%–7.0% during this period, and (ii) reduced the poverty rate in 2011 from 11.4% (actual) to 6.9%–9.9%. World Bank. 2013. *Indonesia Economic Quarterly: Continuing Adjustment*. Jakarta.
[6] During 2011–2013, infrastructure investment averaged 7% of GDP in Thailand, 8% in Viet Nam, and 10% in the People's Republic of China.
[7] B. Bhattacharyay. 2010. Estimating Demand for Infrastructure in Energy, Transport, Telecommunications, Water and Sanitation in Asia and the Pacific: 2010–2020. *ADB Institute Working Paper*. No. 248. Tokyo: ADB Institute.
[8] Despite recent progress, private participation in infrastructure remains low at 0.5% of GDP compared with 2.3% of GDP during 1995–1997. This is mainly due to fragmented legal and institutional frameworks and lack of project preparation capacity of government contracting agencies.

Rp1,900 trillion under RPJMN, 2010–2014.[9] The government's infrastructure investment is expected to increase from 3.1% of GDP in 2014 to 6.2% in 2019.

5. **Momentum in acceleration of infrastructure delivery.** The reform of fuel subsidies in January 2015 has enabled the government's infrastructure budget to increase from Rp144.4 trillion in 2014 to Rp280.3 trillion in 2015 and to Rp302.6 trillion in 2016. The line ministries are responsible for the delivery of more than 50% of the government's infrastructure budget.[10] The increase in infrastructure spending has been accompanied by institutional reforms to enable the ministries to deliver their public investment programs in an accelerated manner. In 2014–2015, the government (i) established a dedicated office for land acquisition at the National Land Agency,[11] (ii) strengthened the procurement units of government agencies and rolled out a national e-procurement system, (iii) increased the use of advance procurement and multiyear contracts for infrastructure projects, and (iv) set up a budget realization evaluation and monitoring team to address implementation constraints at the central and subnational levels.[12]

6. **Role of the Ministry of Public Works and Housing in infrastructure delivery.** The MPWH leads the government's effort to meet RPJMN, 2015–2019 targets to build 3,650 kilometers of new highways, improve the irrigation network covering 1 million hectares, build 49 dams, attain 100% access to drinking water, reduce slum areas to 0%, and achieve 100% access to improved sanitation, all by 2019.[13] During 2015–2019, the MPWH's infrastructure program is estimated at Rp660 trillion or 47% of the government's infrastructure program. In 2015–2016, Rp207 trillion (about 37% of the government's infrastructure budget) was allocated to the MPWH. Within MPWH, 90% of its budget in 2015–2016 has been allocated to three directorates general: Directorate General of Highways (DGH), Directorate General of Water Resources (DGWR), and the Directorate General of Human Settlements (DGHS).

7. **Critical constraints.** Efficiency and effectiveness of the MPWH's infrastructure programs has been constrained by complex land acquisition processes, weak procurement capacity, inadequate preparation of infrastructure projects, and poor infrastructure planning and delivery systems. With the implementation of the new land acquisition law and continuous efforts to strengthen procurement capacity, it is now inadequate preparation of infrastructure projects and poor infrastructure planning and delivery systems that critically constrain the MPWH's ability to deliver infrastructure in a timely and good quality manner.

8. **Causes of critical constraints.** Inadequate project preparation is largely due to (i) lack of resources to complete the required assessments, surveys, designs, and environmental and land acquisition clearances; and (ii) the low quality of feasibility studies and detailed engineering designs, many of which often need to be redone during implementation.[14] Poor infrastructure

[9] Of this amount, Rp1,400 trillion (29%) is expected to come from the national government, Rp550 trillion (11%) from the local governments, Rp1,100 trillion (23%) from state-owned enterprises, and Rp1,750 trillion (37%) from the private sector. Government of Indonesia. 2015. *Indonesia National Medium-Term Development Plan, 2015–2019*. Jakarta.

[10] The line ministries include the ministries of public works and housing, transportation, agriculture, and energy and mineral resources.

[11] This office was one of the institutional reforms initiated to implement the new land acquisition law (Law No. 2 of 2012). This law sets clear steps and timelines for land acquisition, including dispute resolution through courts, after which land can be acquired for public purposes.

[12] Presidential Instruction No. 1/2015; MPWH Instruction No. 3/2015; Minister of Finance Circular No. S-577/2015; Minister of Finance Regulation No. 238/2015; and Presidential Decree No. 20/2015.

[13] Improved sanitation refers to flush toilets linked to a piped sewerage system or septic tanks.

[14] In externally financed projects, the cost of preparation of detailed engineering designs, environmental impact assessments, and land acquisition and resettlement plans in accordance with government requirements is

planning and delivery is mainly due to fragmented and short-term infrastructure development programs, inappropriate or outdated design standards, project fragmentation as reflected in prevalence of small and short contracts, poor construction quality, and ineffective maintenance.[15] Improving project preparation and infrastructure planning and delivery will therefore be critical to enable the MPWH to meet its ambitious infrastructure development targets and increase value for money given the significant increase in its infrastructure budget.

9. **Consulting industry context.** The capacity of domestic consulting firms working in public works areas is generally weak. Therefore, the significant increase in government infrastructure investments, the growing complexity of projects, and the government's intention to mainstream international best practices and technology in project design and implementation will pose a challenge to domestic consulting firms involved in public works areas. It is therefore important to the success of the MPWH's infrastructure program to attract more international and domestic consulting firms to work on infrastructure project preparation. To date, international consulting firms have been reluctant to engage with government agencies for project preparation mainly due to the following factors: restrictions on foreign firm participation in public bidding, small contract budgets, payment in local currency, and reputational risk. Strong domestic consulting firms also shy away from government assignments due to similar issues, as well as high transaction costs of dealing with the public sector compared with private sector contracts.

10. **Asian Development Bank support.** The Asian Development Bank (ADB) has a long history of supporting the MPWH's infrastructure development through investment and TA projects in the water resources, roads, and water supply and sanitation sectors. ADB has also supported the preparation of public–private partnership projects by setting up a project development facility at the National Development Planning Agency (BAPPENAS).[16] Most recently, ADB has been supporting BAPPENAS to reduce project start-up delays.[17]

11. **Lessons.** Major lessons learned in supporting project preparation in Indonesia are as follows: (i) it is more efficient to provide project preparation support directly to implementing agencies, (ii) support should cover preparation of due diligence and compliance documents that are in line with government requirements to ensure timely start-up of civil works, and (iii) the project preparation mechanism needs to be designed to be part of the overall strengthening of the implementing agency's public investment management systems.

12. **Distinct features.** The ESP targets the MPWH's critical constraints, and incorporates the consulting industry context (para. 9) and lessons learned (para. 11). The ESP is the first

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budgeted as part of the projects. This may result in a maximum 1.5-year delay in project start-up after loan effectiveness. In ADB-financed projects, this is a key factor behind the loan extensions that average 2.4 years.

[15] D. Ray and L.Y. Ing. 2016. Survey of Recent Developments: Addressing Indonesia's Infrastructure Deficit. *Bulletin of Indonesian Economic Studies*. 52 (1). pp. 1–25. In 2015, 93% of the construction contracts signed by the MPWH were single-year contracts, under which construction is often rushed, resulting in substandard quality and weak supervision. The use of multiyear contracts will help address this by better capturing economies of scale, allowing adequate time for effective implementation, and reducing the transaction cost to the government.

[16] Sector Assessment (Summary): Multisector (accessible from the list of linked documents in Appendix 2).

[17] ADB. 2013. *Technical Assistance to the Republic of Indonesia for Aligning Asian Development Bank and Country Systems for Improved Project Performance*. Manila. This technical assistance supports (i) development of action plans to apply country safeguard systems for environment and resettlement in ADB-financed projects, (ii) harmonization of ADB's and government's bidding documents for procurement of goods, works, and consultants, and (iii) review of planning, budgeting, and staffing processes of line ministries and local governments to improve the government's project readiness criteria and ensure these processes are adequately considered in ADB's business processes related to project preparation.

project that is fully dedicated to the preparation of a pipeline of infrastructure projects according to government requirements. The ESP will help the MPWH achieve better quality and timeliness of project preparation and construction supervision, and adequately mainstream international best practices and technology in project design and construction supervision. In parallel, the ESP will strengthen the MPWH's public investment management systems, including in master planning, project preparation and designs, procurement, environmental and social safeguards, and construction supervision. This two-pronged approach will help sustain the ESP's support to the MPWH beyond the project implementation period.

13. **New consultant selection approach.** Under the ESP, a large number of consulting firm contracts will need to be expeditiously procured. Given this, and based on ADB's unique experience in supporting the preparation of large pipelines of PPP projects in India and the Philippines,[18] the ESP will apply the following two-phase method for selecting consulting firms for project preparation purposes: (i) the consulting firms will be selected to be part of a panel, and the empanelled firms will be retained for up to 3 years on a noncommittal basis under indefinite delivery contracts (empanelment phase); and (ii) for preparation of individual projects, a selection will be made from the panel based on the evaluation of full technical proposals submitted by the consultants (call-down phase).[19] MPWH will apply this two-phase approach for the first time under the ESP. The National Public Procurement Agency has encouraged piloting testing this approach at MPWH for eventual replication in other sectors.

14. **Efficiency gains.** Application of the two-phase method and other special arrangements (para. 26) will result in significant reduction of time for selecting consulting firms. For example, it is estimated that 87 days will be required to recruit a project preparation consulting firm under the ESP, against ADB's standard of 120 days for consultant recruitment under loan projects.[20] The use of this method (along with the application of large multiyear contracts with direct payment procedure) will also help overcome the reluctance of international and domestic firms in participating in public works consulting assignments (para. 9).

15. **Comprehensive support to the acceleration of infrastructure delivery.** The ESP is an integral part of ADB's comprehensive support under the proposed country partnership strategy, 2016–2019 to the government's agenda on accelerating infrastructure delivery.[21] It complements public procurement reform under the Stepping Up Investment for Growth Acceleration Program.[22] The ESP will support the preparation of selected projects under the Integrated Participatory Development and Management of Irrigation Program planned for 2016, and the Food Security and Bulk Water Supply Program and the Citywide Sanitation Investment

[18] ADB. 2008. *Technical Assistance to India for Preparing the Public–Private Partnerships Pilot Projects Initiative (Mainstreaming Public–Private Partnerships)*. Manila; and ADB. 2011. *Technical Assistance to the Philippines for Strengthening Public–Private Partnerships in the Philippines*. Manila.

[19] When deliverables, timelines, and a payment schedule of the call-down assignment can be clearly defined, the consultants will be engaged under lump-sum contracts. Use of lump-sum contracts will allow a more flexible use of strong national experts, who can be members of several firms' teams at the same time. At the same time, lump-sum contracts will ensure that the firm is fully accountable for its deliverables. Lump-sum contracts will be considered for project preparation only. Consultants for construction supervision and technical and financial assessment during construction will be engaged through time-based contracts.

[20] The time savings are even larger if compared against the current practice of 348 days under loans. ADB. 2014. *Midterm Review of Strategy 2020: Action Plan*. Manila.

[21] ADB. 2016. *Country Partnership Strategy: Indonesia,* 2016–2019: *Towards a Higher, More Inclusive and Sustainable Growth Path*. Manila.

[22] ADB. 2014. *Report and Recommendation of the President to the Board of Directors: Proposed Programmatic Approach and Policy-Based Loan for Subprogram 1 to the Republic of Indonesia for the Stepping Up Investment for Growth Acceleration Program*. Manila.

Program planned for 2018.[23] The TA cluster for the Sustainable Infrastructure Assistance Program will support MPWH with coordination and oversight of the implementation of the ESP and related capacity building.[24] The ESP will also build on the support to BAPPENAS and the National Public Procurement Agency to align ADB and country systems for improved project readiness (footnote 17).

16. **Alignment with ADB's strategic agenda.** The ESP is closely aligned with the inclusive and environmentally sustainable growth agendas of the Midterm Review of Strategy 2020 via (i) improving project designs to promote creation and enhancement of access to economic opportunities; (ii) ensuring that reduction of vulnerability and improvement of resilience are adequately covered during preparation of infrastructure projects; (iii) improving public infrastructure management systems; and (iv) strengthening capacity development of implementing agencies in construction, operation, and maintenance of infrastructure assets.[25] The ESP has also followed the action plan for the Midterm Review of Strategy 2020 by (i) having ADB's Operations Services and Financial Management Department join the project team and provide support during loan processing, (ii) streamlining the process for the recruitment of consulting firms, (iii) using lump-sum contracts as default contract types, (iv) reducing the time taken by ADB to review consultant contracts, and (v) using a 90:10 (technical quality–price) ratio for the evaluation of proposals on infrastructure project preparation (footnote 20).[26]

17. **Development partner coordination.** Major development partners working with the MPWH have supported the rationale, design, and consultant selection approach of the ESP. Specifically, in the road sector, the ESP will implement the policies, tools, design standards, and quality assurance arrangements developed under the Government of Australia-funded Indonesia Infrastructure Initiative and East Indonesia National Roads Improvement Project.

B. Impact and Outcome

18. The impact will be the attainment of infrastructure objectives of the MPWH's Strategic Plan, 2015–2019 (footnote 2). The outcome will be strengthened capacity of MPWH's DGH, DGHS, and DGWR to efficiently design and implement MPWH's public investment program.

C. Outputs

19. **Output 1: Quality and timely start-up of infrastructure projects improved.** This output will support the preparation—based on new technology and improved design standards[27]—of (i) irrigation, flood management, bulk water, and dam projects of DGWR; (ii)

[23] ADB. 2016. *Country Operations Business Plan: Indonesia, 2017-2019*. Manila.

[24] ADB. 2013. *Technical Assistance to the Republic of Indonesia for the Sustainable Infrastructure Assistance Program. Manila*. This TA cluster amounting to A$20 million is financed by the Government of Australia, through the Department of Foreign Affairs and Trade, and administered by ADB.

[25] ADB. 2014. *Midterm Review of Strategy 2020: Meeting the Challenges of a Transforming Asia and Pacific*. Manila.

[26] Authority for procurement decisions on loan consulting packages below $5 million has been delegated to the Indonesia Resident Mission.

[27] In the road sector, these are improved design standards on pavement, drainage, geometric, grade-separated junction, and at-grade junction aspects. In the irrigation sector, the new technologies are related to the web-based integrated asset management information system with geospatial interface, high-resolution aerial surveys for survey of irrigation assets, and satellite-based water accounting. The detailed engineering design guidelines of the irrigation sector will be also updated to incorporate climate change and water efficiency, among other issues. In the wastewater sector, in 2016 MPWH is expected to adopt new technical guidance on feasibility studies and new design standards for wastewater treatment systems.

water supply and sanitation projects of DGHS; and (iii) national road projects of DGH.[28] This output will support the preparation of (i) master plans and feasibility studies; (ii) detailed engineering designs, including geotechnical, topographical, and other surveys; (iii) environmental impact assessments and land acquisition documents as per government requirements; and (iv) advance contracting for civil works. This output will also support construction supervision (for selected DGHS and DGH projects), and technical and financial assessment during construction (for selected DGH projects).

20. **Output 2: Capacity in public investment management strengthened.** This output will support DGWR, DGHS, and DGH in (i) improving master planning and public investment management systems; (ii) on-the-job capacity building of project staff, especially at the local level, in such areas as design-and-build contracts, design standards, construction supervision, enforcement of civil works contractor performance via technical and financial assessment consultants, multiyear contracting, and asset management; (iii) strengthening MPWH's safeguards[29] and procurement systems;[30] (iv) strengthening value engineering during the preparation of infrastructure projects; and (v) monitoring and evaluation of project preparation activities.

D. Investment and Financing Plans

21. The project is estimated to cost $167.6 million (Table 1).

Table 1: Project Investment Plan
($ million)

Item		Amount[a]
A.	**Base Cost**[b]	
	1. Output 1: Improved quality and timely start-up of infrastructure projects	137.40
	2. Output 2: Strengthened capacity in public investment management	10.50
	Subtotal (A)	**147.90**
B.	**Contingencies**[c]	**15.10**
C.	**Financing Charges During Implementation**[d]	**4.60**
	Total (A+B+C)	**167.60**

[a] Includes taxes and duties of $14.8 million to be financed from government resources.
[b] In March 2016 prices.
[c] Physical contingencies computed at 3%. Price contingencies computed at 1.5% on foreign exchange costs and 4.2% on local currency costs; includes provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.
[d] Includes interest during implementation. Interest during implementation for the ADB loan has been computed at the 5-year forward London interbank offered rate plus a spread of 0.5%.
Sources: Asian Development Bank and Ministry of Public Works and Housing.

22. The government has requested a TA loan of $148.2 million from ADB's ordinary capital resources to help finance the project. The TA loan will have a 15-year term, including a grace period of 3 years, straight-line repayment method, an annual interest rate determined in

[28] A list of projects that will be supported under the ESP is in Appendix 1 of the Project Administration Manual (accessible from the list of linked documents in Appendix 2). The total amount of public investment associated with these projects is estimated at $6 billion. All infrastructure projects are from MPWH's Strategic Plan, 2015–2019 and are to be mainly financed from the government budget. ADB may consider financing selected ESP-prepared projects. For these projects, ADB's safeguards and fiduciary requirements will be considered, as appropriate.
[29] Ministry of Public Works and Housing: Needs Assessment on Capacity Strengthening in Environment and Social Safeguards (accessible from the list of linked documents in Appendix 2).
[30] In 2015, the MPWH adopted regulations on procurement and standards of design-and-build contracts (Regulation no. 19/PRT/M/2015) and on sustainable construction of infrastructure (Regulation no. 05/PRT/M/2015).

accordance with ADB's London interbank offered rate (LIBOR)-based lending facility, and such other terms and conditions set forth in the draft loan agreement. Based on this, the average loan maturity is 9.25 years, and there is no maturity premium payable to ADB.

23. The financing plan is in Table 2.

Table 2: Financing Plan

Source	**Amount** ($ million)	**Share of Total** (%)
Asian Development Bank		
Ordinary capital resources (loan)	148.2	88.4
Government	19.4	11.6
Total	**167.6**	**100.0**

Source: Asian Development Bank.

E. Implementation Arrangements

24. The MPWH, through its secretariat general, will be the executing agency, with DGH, DGWR, and DGHS as implementing agencies.[31] MPWH will establish a steering committee to monitor the ESP's overall implementation and ensure ESP-supported projects are prioritized for implementation. A project coordination office will be established at the Bureau of Budget Planning and International Cooperation of the MPWH's secretariat general to support the steering committee.[32] DGH, DGHS, and DGWR will each establish (i) a project management office headed by a project director and supported by administrative staff; and (ii) project implementation units within their respective sector directorates to lead the selection of consultants for project preparation, with participation of concerned local offices of DGH, DGHS, and DGWR, as required. The project implementation units and local offices of DGH, DGHS, and DGWR will establish project teams to review and endorse the outputs of consulting firms for direct payment by ADB. All consultants will be recruited and managed in accordance with ADB's Guidelines on the Use of Consultants (2013, as amended from time to time).

25. The implementation arrangements are summarized in Table 3 and described in detail in the project administration manual.[33]

Table 3: Implementation Arrangements

Aspects	**Arrangements**
Implementation period	December 2016–December 2019
Estimated completion date	31 December 2019 (estimated loan closing date: 30 June 2020)
Project management	
(i) Oversight body	Steering committee Secretary general of the MPWH (chair) Directors general of MPWH's DGH, DGHS, and DGWR (members)

[31] Programming and budgeting of loan-funded infrastructure projects of the MPWH are carried out at directorate general level. In line with this, the government programmed separate engineering services projects for DGWR, DGHS, and DGH. Due to efficiency considerations, it was decided to integrate these separate projects in one operation. Given this, under the ESP, MPWH through its secretariat general, has been designated as the executing agency, with DGH, DGHS, and DGWR as implementing agencies.

[32] To support the project coordination office and facilitate advance action on consultant selection (Table 3), ADB engaged three individual consultants under the TA cluster (footnote 24). Details on these consultants are in Appendix 2 of the Project Administration Manual (accessible from the list of linked documents in Appendix 2).

[33] Project Administration Manual (accessible from the list of linked documents in Appendix 2).

Aspects	Arrangements		
(ii) Executing agency	MPWH, through its secretariat general		
(iii) Key implementing agencies	DGH, DGHS, and DGWR		
(iv) Implementation units	PCO at MPWH's secretariat general, 3 staff; PMOs at planning directorates of DGH, DGHS, and DGWR, 3–5 staff in each; PIUs at technical directorates of DGH, DGHS, and DGWR, 3–5 staff in each.		
Consulting services	Quality-based selection for establishing panels for DGH, DGHS, and DGWR	person-months: NA	amount: NA
	Quality-and cost-based selection (90:10) for the selection of firms for infrastructure project preparation, construction supervision, and technical and financial audit during construction	Number of person-months to be determined during implementation	Loan amounts per directorate general: DGH: $41,000,000 DGHS: $47,575,000 DGWR: $47,625,000
	Quality-and cost-based selection (80:20) for the selection of project management consulting firms to support DGH, DGHS, and DGWR with the implementation of the project	146 person-months of international and 1,317 person-months of national consultants	Total loan amount: $12,000,000
Advance contracting	(i) panels for DGH, DGHS, and DGWR; (ii) project management consulting firms for DGH, DGHS, and DGWR (each contract estimated at $4,000,000); and (iii) consulting firm for preparation of Jragung multipurpose dam project (contract estimated at $1,910,000). The contracts will be signed after the loan is declared effective.		
Disbursement	The loan proceeds will be disbursed in accordance with ADB's *Loan Disbursement Handbook* (2015, as amended from time to time) and detailed arrangements agreed between the government and ADB.		

ADB = Asian Development Bank, DGH = Directorate General of Highways, DGHS = Directorate General of Human Settlements, DGWR = Directorate General of Water Resources, MPWH = Ministry of Public Works and Housing, NA = not applicable, PCO = project coordination office, PIU = project implementation unit, PMO = project management office.
Source: ADB.

26. To ensure expeditious implementation, the government and ADB have agreed on (i) the use of the government's e-procurement platform for the selection of consultants under the ESP, (ii) benchmark timelines for each step during the consultant selection process, and (iii) post-review arrangement for the selection of consulting firms at the call-down phase (para. 13).[34]

III. DUE DILIGENCE

A. Technical

27. The ESP will help improve the technical quality of infrastructure projects through (i) the use of new technology and improved design standards that help prolong the life of infrastructure (footnote 27), (ii) new technical solutions by contractors through the increased use of design-and-build contracts, (iii) on-the-job knowledge transfer between project preparation consultants

[34] The government e-procurement system has been adjusted to meet the requirements of ADB's Guidelines on the Use of Consultants (2013, as amended from time to time). Selection of firms for the panels, first call-down selections from each panel, and issuance of requests for proposals to the panel members will be on a prior review basis.

and MPWH staff, (iv) use of technical and financial assessment consultants for more accountable performance of staff in charge of construction supervision and civil works contractors, and (v) reflection of operation and maintenance costs in the project documents to allow for adequate financing of infrastructure during operation.

B. Economic and Financial

28. The ESP will generate significant economic benefits. It will directly facilitate the preparation of $6 billion in infrastructure investments, which will potentially add up to $4 billion to GDP during 2019–2023.[35] Through strengthening the public investment management systems of MPWH—the ministry with the largest infrastructure budget—the ESP will contribute to the acceleration of infrastructure delivery, which can help increase the country's potential economic growth.[36] The ESP's contribution to road infrastructure improvement can significantly contribute to economic growth due to the increased competitiveness of domestic products and the increased production of goods that were previously not tradable due to expensive interisland transport and logistics costs, and by stimulating new private investment.[37]

C. Governance

29. The ESP's overall procurement risk classification is assessed *medium*.[38] A financial management assessment concluded that the financial management risk is *moderate*.[39] In fiduciary issues, DGH, DGHS, and DGWR will be comprehensively supported by the project management consulting firms engaged for the duration of the ESP. To support efficient and effective oversight and institutional coordination, the secretariat general of the MPWH will be supported through ADB TA (footnote 32). To enable adequate disclosure of information, the MPWH has committed to set up a dedicated web page for the ESP.

30. ADB's Anticorruption Policy (1998, as amended to date) was explained to and discussed with the government and MPWH. The specific policy requirements and supplementary measures are described in the project administration manual (footnote 33).

D. Poverty and Social

31. While the ESP is not expected to have direct poverty, gender, or social impacts, the infrastructure projects prepared under the ESP will generate such impacts. Assessment of such impacts will be done by the project preparation consulting firms selected at the call-down phase.

E. Safeguards

32. The ESP will focus on preparing infrastructure projects and strengthening the capacity of the MPWH.[40] Hence, it is not expected to have any direct adverse social and environmental impacts. The ESP is classified category C for environment, involuntary resettlement, and indigenous people.

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[35] Economic and Financial Analysis (accessible from the list of linked documents in Appendix 2).
[36] International Monetary Fund. 2011. *Indonesia: Selected Issues*. Washington, DC.
[37] A. Yusuf et al. 2012. Improving Indonesia's Domestic Connectivity: An Inter-regional CGE Analysis. Unpublished.
[38] Procurement Risk Assessment (accessible from the list of linked documents in Appendix 2).
[39] Financial Management Assessment (accessible from the list of linked documents in Appendix 2).
[40] For strengthening the MPWH's capacity in social safeguards, the ESP will also use the manual on social safeguards that combines government regulations on social safeguards and ADB's Safeguard Policy Statement (2009). This manual was prepared with ADB support and approved by BAPPENAS. ADB. 2010. *Technical Assistance for Strengthening and Use of Country Safeguard Systems*. Manila.

F. Risks and Mitigating Measures

33. The ESP's overall risks are assessed *medium*. The ESP's integrated benefits and impacts are expected to outweigh its costs. Major risks and mitigating measures are summarized in Table 4 and described in detail in the risk assessment and risk management plan.[41]

Table 4: Summary of Risks and Mitigating Measures

Risks	Mitigating Measures
Delayed consultant selection due to the novelty of the panel approach, and first-time use of SPSE for consultant selection under an ADB-funded project.	Provision of capacity building for MPWH staff on the two-phase consultant selection arrangement and the use of SPSE. Coordination with LKPP on SPSE upgrades.
Delayed implementation of viable ESP-prepared infrastructure projects due to delayed action by local governments (location determination, land acquisition, environmental clearance) and budgetary constraints.	Project preparation consultants will help PIUs comply with documentation requirements and closely monitor timelines of actions by local governments. PIUs will oversee alignment of the project preparation schedules with the budgeting process. Regular reporting to the ESP steering committee on the availability of the budget for implementation of ESP-prepared projects.

ADB = Asian Development Bank, ESP = Accelerating Infrastructure Delivery through Better Engineering Services Project, LKPP = Lembaga Kebijakan Pengadaan Barang/Jasa Pemerintah (National Public Procurement Agency), MPWH = Ministry of Public Works and Housing, PIU = project implementation unit, SPSE = Sistem Pengadaan Secara Elektronik (government e-procurement system).
Source: ADB.

IV. ASSURANCES

34. The government has assured ADB that implementation of the project shall conform to all applicable ADB policies, including those concerning anticorruption measures, safeguards, gender, procurement, consulting services, and disbursement as described in detail in the project administration manual and loan documents.

35. The government has agreed with ADB on certain covenants for the project, which are set forth in the loan agreement.

V. RECOMMENDATION

36. I am satisfied that the proposed technical assistance (TA) loan would comply with the Articles of Agreement of the Asian Development Bank (ADB) and recommend that the Board approve the TA loan of $148,200,000 to the Republic of Indonesia for the Accelerating Infrastructure Delivery through Better Engineering Services Project, from ADB's ordinary capital resources, with interest to be determined in accordance with ADB's London interbank offered rate (LIBOR)-based lending facility; for a term of 15 years, including a grace period of 3 years; and such other terms and conditions as are substantially in accordance with those set forth in the draft loan agreement presented to the Board.

Takehiko Nakao
President

19 October 2016

[41] Risk Assessment and Risk Management Plan (accessible from the list of linked documents in Appendix 2).

DESIGN AND MONITORING FRAMEWORK

Impact the Project is aligned with: Infrastructure objectives of the MPWH's Strategic Development Plan, 2015–2019 attained [a]			
Results Chain	**Performance Indicators with Targets and Baselines**	**Data Sources and Reporting**	**Risks**
Outcome Capacity of MPWH's DGH, DGHS, and DGWR strengthened to efficiently design and implement MPWH's public investment program	By the end of 2019: a. Utilization of MPWH infrastructure budget increased to at least 97% (2015 baseline: 92%) b. At least 30% of MPWH's annual infrastructure budget is committed by the end of January each year[b] (2015 baseline: 10%)	a. MPWH annual performance reports b. MPWH annual performance reports	Natural calamities or external shocks Reduction of MPWH capital budget
Outputs 1. Quality and timely start-up of infrastructure projects improved	By the end of 2019: 1a. Feasibility studies, detailed engineering designs, EIA, and LARP compliant with government requirements and improved standards, and bidding documents developed for 9 national road projects of DGH; 15 projects of DGWR in the irrigation, flood management, bulk water, and dams sectors; and 13 water supply and sanitation projects of DGHS (2015 baseline: NA)[c] 1b. Improved construction supervision and technical and financial assessment conducted for 3 infrastructure projects of DGH (2015 baseline: NA)	1a. MPWH reports and ADB administration missions 1b. MPWH reports and ADB administration missions	Delayed selection of consultants due to disruption of SPSE's operation Delayed implementation of viable ESP-prepared projects due to delayed action by local governments
2. Capacity in public investment management strengthened	By the end of 2019: 2a. Project staff of DGH, DGHS, and DGWR at central and local levels successfully trained in priority areas of public investment management (2015 baseline: NA) 2b. Action plans on strengthening master planning and public investment management systems implemented by DGH, DGHS, and DGWR (2015 baseline: NA)	2a. MPWH website, reports, and ADB administration missions 2b. DGH, DGHS, and DGWR reports	Change in MPWH's organizational structure Resistance to change due to vested interests or lack of capacity

Key Activities with Milestones

Output 1: Quality and timely start-up of infrastructure projects improved

1.1 Adopt ESP implementation structure (MPWH steering committee, PMOs, PIUs) (Q3 2016) [G/CD]
1.2 For each project preparation assignment, establish a project team to review consultant outputs (Q4 2016–Q4 2018)
1.3 Establish panels of project preparation consulting firms for DGWR, DGHS, and DGH (Q4 2016)
1.4 Recruit consultants for the preparation of (i) feasibility studies; (ii) detailed engineering designs; (iii) plans and compliance documents on land acquisition, resettlement, and environmental impact; and (iv) bidding documents and other project start-up activities (Q4 2016–Q4 2018)
1.5 Review the studies and other deliverables of the project preparation consultants, and undertake advance procurement and other project start-up actions (Q4 2017–Q2 2019)
1.6 Conduct a survey of the engineering consulting industry and recommend MPWH-relevant actions to improve the quality of the recruited consultants (Q2 2017)
1.7 For selected projects, recruit and administer consultants for construction supervision and technical and financial assessment during construction (Q2 2018–Q4 2019)

Output 2: Capacity in public investment management strengthened

2.1 Recruit project management consulting firms to support the PMOs and PIUs at DGWR, DGHS, and DGH (Q4 2016)
2.2 Provide operational support to PMOs and PIUs at DGWR, DGHS, and DGH with implementation of the ESP (Q4 2016–Q4 2019)
2.3 Conduct assessment of DGWR, DGH, and DGHS public investment management systems and capacity development needs (e.g., master planning, identification, prioritization, preparation, approval, budgeting, procurement and contract management, implementation monitoring, impact evaluation of infrastructure projects, and mainstreaming of value engineering in project preparation) (Q4 2018) [G/CD]
2.4 Develop and implement DGWR's, DGH's, and DGHS's plans on the improvement of public investment management systems, including capacity building of project staff in priority areas (Q2 2019)
2.5 Conduct capacity building for DGWR's, DGH's, and DGHS's procurement service units (Q2 2018)
2.6 Conduct capacity building on safeguards for MPWH's safeguards units and technical staff (Q2 2018)

Inputs

ADB: $148,200,000 (loan)
Government: $19,400,000

Assumptions for Partner Financing

NA

ADB = Asian Development Bank, DGH = Directorate General of Highways, DGHS = Directorate General of Human Settlements, DGWR = Directorate General of Water Resources, EIA = environmental impact assessment, ESP = Accelerating Infrastructure Delivery through Better Engineering Services Project, G/CD = governance and capacity development, LARP = land acquisition and resettlement plan, MPWH = Ministry of Public Works and Housing, NA = not applicable, PIU = project implementation unit, PMO = project management office, Q = quarter, SPSE = Sistem Pengadaan Secara Elektronik (government e-procurement system).

[a] Government of Indonesia, MPWH. *Strategic Plan of MPWH for Years 2015 to 2019*. Jakarta. MPWH Regulation No. 13.1/PRT/M/2015.

[b] This will require that by November of the preceding year (i) the bid documents have been launched, and (ii) land has been transferred to the MPWH for project purposes. Achieving design readiness is a prerequisite for meeting procurement readiness. Design readiness means completion of either (i) a detailed engineering design suitable for preparing and launching construction bidding documents; or (ii) a preliminary design and specifications suitable for preparing and launching bidding documents for (a) construction contracts that include detailed design as its part; and/or (b) turnkey or engineering, procurement, and construction contracts. For both (i) and (ii), completion of an EIA and required clearances as well as completion of land acquisition procedures up to compensation payment will be also required.

[c] An indicative list of projects is in Appendix 1 of the Project Administration Manual (accessible from the list of linked documents in Appendix 2). This list of projects may change subject to agreement between the MPWH and ADB.

Source: ADB.

LIST OF LINKED DOCUMENTS

http://www.adb.org/Documents/RRPs/?id=49141-001-3

1. Loan Agreement
2. Sector Assessment (Summary): Multisector
3. Project Administration Manual
4. Contribution to the ADB Results Framework
5. Development Coordination
6. Economic and Financial Analysis
7. Country Economic Indicators
8. Summary Poverty Reduction and Social Strategy
9. Risk Assessment and Risk Management Plan

Supplementary Documents

10. Ministry of Public Works and Housing: Needs Assessment of Capacity Strengthening in Environment and Social Safeguards
11. Procurement Risk Assessment
12. Financial Management Assessment