Project Administration Manual

Republic of Indonesia: Emergency Assistance for Rehabilitation and Reconstruction

Component 2: Transportation Infrastructure
ABBREVIATIONS

ADB – Asian Development Bank
CPIU – Central Project Implementation Unit
DGFB – Directorate General of Fiscal Balance
DGCA – Directorate General of Civil Aviation
DGST – Directorate General of Sea Transportation
DMF – Design and Monitoring Framework
DSC – Design and Construction Supervision Consultant
EA – Executing Agency
EARF – Environmental Assessment and Review Framework
EARR – Emergency Assistance for Rehabilitation and Reconstruction
EMP – Environmental Management Plan
IA – Implementing Agency
IEE – Initial Environmental Examination
KPPN – Kantor Pelayanan Perbendaharaan Negara (Office of State Treasury Office)
MPWH – Ministry of Public Works and Housing
MOT – Ministry of Transportation
PAM – Project Administration Manual
PIU – Project Implementation Unit
RCCDF – Resettlement and Customary Communities Development Framework
RCCDP – Resettlement and Customary Communities Development Plan
RRP – Report and Recommendation of the President to the Board
SBD – Standard Bidding Documents
SKPD – Satuan Kerja Perangkat Daerah (Provincial/District Working Unit)
SOE – Statement of Expenditure
SPM – Surat Perintah Membayar (Letter of Order to Pay from Treasurer to KPPN)
SPS – Safeguard Policy Statement 2009
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Project Administration Manual Purpose and Process

The project administration manual (PAM) describes the essential administrative and management requirements to implement the project on time, within budget, and in accordance with the policies and procedures of the government and Asian Development Bank (ADB). The PAM should include references to all available templates and instructions either through linkages to relevant URLs or directly incorporated in the PAM.

The executing and implementing agencies are wholly responsible for the implementation of ADB-financed projects, as agreed jointly between the borrower and ADB, and in accordance with the policies and procedures of the government and ADB. ADB staff is responsible for supporting implementation including compliance by executing and implementing agencies of their obligations and responsibilities for project implementation in accordance with ADB’s policies and procedures.

At loan negotiations, the borrower and ADB shall agree to the PAM and ensure consistency with the loan agreement. Such agreement shall be reflected in the minutes of the loan negotiations. In the event of any discrepancy or contradiction between the PAM and loan agreement, the provisions of the loan agreement shall prevail.

After ADB Board approval of the project’s report and recommendations of the President (RRP), changes in implementation arrangements are subject to agreement and approval pursuant to relevant government and ADB administrative procedures (including the Project Administration Instructions) and upon such approval, they will be subsequently incorporated in the PAM.
I. PROJECT DESCRIPTION

1. The Government of Indonesia has requested Asian Development Bank (ADB) a loan in the amount of $297.75 million for the Emergency Assistance for Rehabilitation and Reconstruction (EARR), which supports the government in rebuilding infrastructure damaged by devastating disaster events in Central Sulawesi in September 2018. It will support rehabilitation and reconstruction of education facilities, water supply treatment and distribution facilities, water resources infrastructure, ports, and airport. All infrastructure will be built to higher standards of disaster resilience.

A. Impact and Outcome

2. The EARR is aligned with the following impact: socio-economic impact of disasters reduced. The EARR will have the following outcome: access for affected people, including women and children, to resilient and inclusive infrastructure restored.

B. Outputs

3. Component 1: Public Works Infrastructure:
   (i) Output 1: Human settlements infrastructure constructed, rehabilitated, and upgraded. The output will construct, rehabilitate, and/or upgrade (a) education facilities, and (b) water supply (treatment and distribution facilities) infrastructure. The facilities will be built back better to higher standards of disaster resilience, which will ensure that risks from future hazards are reduced through structural design features. At the same time, nonstructural measures such as disaster preparedness plans will also be implemented. The output will ensure that sustainability plans are in place and the capacity of agencies is strengthened to better manage water supply services.
   (ii) Output 2: Water resources infrastructure constructed, rehabilitated, and upgraded. The output will (a) reconstruct the Gumbasa irrigation system, (b) reconstruct and upgrade the Palu-Sigi-Donggala (PASIGALA) raw water supply system, and (c) construct coastal protection to prevent erosion and tidal flooding. Where possible, nature-based solutions will be promoted. The river basin organization will be strengthened to better design resilient infrastructure, improve the O&M of assets, and stay equipped with hydrometeorological instruments for managing water flows across the river basin.

4. Component 2: Transportation Infrastructure comprising:
   (i) Output 3: Ports rehabilitated and reconstructed. The output will (a) rehabilitate the damaged ports in Pantoloan, Donggala, and Wani; (b) restore and improve their operating capacity; and (c) establish safety and emergency response plans for the rehabilitated ports.
   (ii) Output 4: Airport rehabilitated and reconstructed. The output will repair and/or reconstruct the runway, terminal building, and related infrastructure of Mutiara Sis Al Jufri Airport in Palu, and will establish a safety and emergency response plan for the rehabilitated airport.

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2 This includes reconstruction of the National Islamic University, one of the main universities in Central Sulawesi, which was severely damaged as a result of the tsunami.
5. **Subprojects.** The EARR will apply a sector lending approach in selecting subprojects under each of the outputs. To be financed under the EARR, these subprojects will need to comply with the applicable selection criteria described in Section III(D) hereof. Brief profiles of 4 potential subprojects linked to Outputs 3 and 4, together with description of how such subprojects are to be supported through ADB’s technical assistance resources, are in Appendix 1.³

6. The Ministry of Public Works and Housing (MPWH) will be responsible for activities under Component 1 (Outputs 1 and 2) while Ministry of Transportation (MOT) will cover activities under Component 2 (Output 3 and 4).

7. This Project Administration Manual (PAM) describes the implementation arrangements for Component 2: Transportation Infrastructure.

### II. IMPLEMENTATION PLANS

#### A. Project Readiness Activities

<table>
<thead>
<tr>
<th>Indicative Activities</th>
<th>April</th>
<th>May</th>
<th>June</th>
<th>July</th>
<th>Aug</th>
<th>Sept</th>
<th>Responsible Party</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advance contracting actions</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>MOT, ADB</td>
</tr>
<tr>
<td>Government budget inclusion</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>MOT, MOF</td>
</tr>
<tr>
<td>Retroactive financing actions</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>MOT, ADB</td>
</tr>
<tr>
<td>Establish project implementation arrangements</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>MOT, BAPPENAS (steering committee)</td>
</tr>
<tr>
<td>Loan Negotiations</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>ADB, MOF</td>
</tr>
<tr>
<td>ADB Board approval</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>ADB</td>
</tr>
<tr>
<td>Loan signing</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td>ADB, MOF</td>
</tr>
<tr>
<td>Government legal opinion provided</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>MOLHR</td>
</tr>
<tr>
<td>Loan effectiveness</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>ADB, MOF</td>
</tr>
</tbody>
</table>


³ Current and planned technical assistance subprojects under Sustainable Infrastructure Assistance Program phases 1 and 2 are expected to allocate up to $1.4 million to support implementation of activities under Outputs 3 and 4.
### B. Overall Project Implementation Plan

#### Table 2: Project Implementation Plan

<table>
<thead>
<tr>
<th>No.</th>
<th>Activities</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
<td>Q4</td>
</tr>
<tr>
<td>1</td>
<td>Preliminary Design Management Consultant (PMC), and Individual Consultants</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Design and Supervision Consultants (DSCs)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a. Seaport</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. Airport</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Preparation of SPARs/Safeguard Documents</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Biddings and Construction</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a. Seaport</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>i) Donggala Port</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ii) Wani Port</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>iii) Pantoloan Port</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>iv) Equipment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. Airport</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>i) Landside</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ii) Airside</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Asian Development Bank estimates.
III. PROJECT MANAGEMENT ARRANGEMENTS

A. Project Implementation Organizations

Table 3: Roles and Responsibilities of Implementation Organizations

<table>
<thead>
<tr>
<th>Project Implementation Organizations</th>
<th>Management Roles and Responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Steering Committee</strong></td>
<td></td>
</tr>
<tr>
<td>Ministry of Finance</td>
<td>• Oversee progress and provide guidance on the Emergency Assistance for Rehabilitation and Reconstruction (EARR) implementation</td>
</tr>
<tr>
<td>National Development Planning Ministry</td>
<td>• Monitor and evaluate the overall project performance and outcomes</td>
</tr>
<tr>
<td>Ministry of Public Works and Housing</td>
<td>• Review and endorse annual work plans</td>
</tr>
<tr>
<td>Ministry of Transportation</td>
<td></td>
</tr>
<tr>
<td>Ministry of Religious Affairs</td>
<td></td>
</tr>
<tr>
<td><strong>Executing Agency</strong></td>
<td></td>
</tr>
<tr>
<td>Ministry of Transportation through the Secretariat General</td>
<td>• Overall responsible for implementation of subprojects relating to ports and airport</td>
</tr>
<tr>
<td></td>
<td>• Will establish a Central Project Management Unit (CPMU) to consolidate activities and reporting from implementing agencies.</td>
</tr>
<tr>
<td></td>
<td>• Recruit design and supervision consultant for all subprojects based on the request from each implementing agency</td>
</tr>
<tr>
<td></td>
<td>• Procure civils works and equipment packages for all subprojects based on the request from each implementing agency</td>
</tr>
<tr>
<td></td>
<td>• Consolidate quarterly and annual reports, including safeguards and audited annual project financial statements and submit to ADB</td>
</tr>
<tr>
<td></td>
<td>• Submit withdrawal applications (through MOF) to ADB</td>
</tr>
<tr>
<td></td>
<td>• Ensure that loan covenants are complied with</td>
</tr>
<tr>
<td><strong>Ministry of Finance</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Establishment and administration of advance account</td>
</tr>
<tr>
<td></td>
<td>• Allocation and timely release of counterpart funds</td>
</tr>
<tr>
<td></td>
<td>• Facilitate disbursement and withdrawal application</td>
</tr>
<tr>
<td></td>
<td>• Communicate with ADB for any amendments in the reallocation of the loan amount</td>
</tr>
<tr>
<td></td>
<td>• Administer advance account</td>
</tr>
<tr>
<td><strong>Implementing Agencies</strong></td>
<td></td>
</tr>
<tr>
<td>Output 3 (airports):</td>
<td>• Submit subprojects for ADB approval</td>
</tr>
<tr>
<td>Directorate General of Civil Aviation (DGCA) through Directorate of Airports</td>
<td>• Responsible for implementation of all subprojects under each implementing agency’s purview</td>
</tr>
<tr>
<td>Output 4 (ports):</td>
<td>• Establish Project Implementation units (PIUs) headed by a project director and staffed with social and environmental safeguards, gender, procurement, financial management and technical personnel</td>
</tr>
<tr>
<td>Directorate General of Sea Transportation (DGST) through Directorate of Port Affairs</td>
<td>• Ensure that loan covenants are complied with</td>
</tr>
<tr>
<td></td>
<td>• Provide operational support for project activities</td>
</tr>
<tr>
<td></td>
<td>• Coordinate with the government and partner agencies for successful implementation of the project</td>
</tr>
<tr>
<td><strong>Project Implementation Units</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Undertake day-to-day implementation activities</td>
</tr>
<tr>
<td></td>
<td>• Prepare subprojects according to subproject selection criteria</td>
</tr>
<tr>
<td></td>
<td>• Prepare bidding documents and support procurement process as required</td>
</tr>
<tr>
<td></td>
<td>• Supervise contracts with design, supervision and management consultants, contractors and equipment suppliers</td>
</tr>
<tr>
<td></td>
<td>• Manage detailed survey, investigations and engineering designs</td>
</tr>
<tr>
<td></td>
<td>• Prepare safeguards documents, implement environmental and social safeguards and gender plans, and monitor safeguards-related activities</td>
</tr>
<tr>
<td></td>
<td>• Maintain project accounts and monitor financial and physical progress</td>
</tr>
</tbody>
</table>
### Project Implementation Organizations

<table>
<thead>
<tr>
<th>Management Roles and Responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Prepare annual contract awards and disbursement projections, requesting budgetary allocations for counterpart funds</td>
</tr>
<tr>
<td>• Provide quarterly and annual reports including audited annual financial statements as required under the loan agreement</td>
</tr>
<tr>
<td>• Prepare withdrawal applications for submission to ADB</td>
</tr>
</tbody>
</table>

#### Asian Development Bank

<table>
<thead>
<tr>
<th>Management Roles and Responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Undertake regular project reviews and facilitate implementation of the project, including compliance by the executing agency and implementation agencies to obligations and responsibilities</td>
</tr>
</tbody>
</table>


### B. Key Persons Involved in Implementation

**Table 4: Key Persons Involved in Implementation**

<table>
<thead>
<tr>
<th>Executing Agencies</th>
<th>Officer's Name</th>
<th>Position</th>
<th>Office Address</th>
<th>Email address</th>
<th>Telephone No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ministry of Transport</td>
<td>Mr. Djoko Sasono</td>
<td>Secretary General</td>
<td>Jl Medan Merdeka Barat 8, Jakarta</td>
<td><a href="mailto:Info151@debhub.go.id">Info151@debhub.go.id</a></td>
<td>+62213813269</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Implementing Agencies</th>
<th>Officer's Name</th>
<th>Position</th>
<th>Office Address</th>
<th>Email address</th>
<th>Telephone No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Directorate General of Sea Transportation, Ministry of Transportation</td>
<td>Mr. M. Tohir</td>
<td>Director of Port Affairs</td>
<td>Jl Medan Merdeka Barat 8, Jakarta</td>
<td><a href="mailto:Info151@debhub.go.id">Info151@debhub.go.id</a></td>
<td>+62213813269</td>
</tr>
<tr>
<td>Directorate General of Civil Aviation, Ministry of Transportation</td>
<td>Pramintohadi Sukarno</td>
<td>Director of Airports</td>
<td>Jl Medan Merdeka Barat 8, Jakarta</td>
<td><a href="mailto:Info151@debhub.go.id">Info151@debhub.go.id</a></td>
<td>+62213813269</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Asian Development Bank</th>
<th>Officer's Name</th>
<th>Position</th>
<th>Office Address</th>
<th>Email address</th>
<th>Telephone No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indonesia Resident Mission</td>
<td>Mr. Winfried Wicklein</td>
<td>Country Director, Indonesia Resident Mission</td>
<td>The Plaza Office Tower, 11th Floor, Jl. MH Thamrin 28-30, Central Jakarta, Indonesia 10350</td>
<td><a href="mailto:wwicklein@adb.org">wwicklein@adb.org</a></td>
<td>+62 21 29927388</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mission Leader</th>
<th>Officer's Name</th>
<th>Position</th>
<th>Office Address</th>
<th>Email address</th>
<th>Telephone No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mission Leader</td>
<td>Mr. Amr Qari</td>
<td>Principal Infrastructure Specialist</td>
<td>The Plaza Office Tower, 11th Floor, Jl. MH Thamrin 28-30, Central Jakarta, Indonesia 10350</td>
<td><a href="mailto:agari@adb.org">agari@adb.org</a></td>
<td>+62 21 29927388</td>
</tr>
</tbody>
</table>
C. Project Organization Structure

Figure 1: Project Organization Structure

Steering Committee
Ministry of Finance (MOF), National Development Planning Ministry (BAPPENAS), Ministry of Public Works and Housing (MPWH), Ministry of Transportation (MOT), Ministry of Religious Affairs (MORA)

Ministry of Transportation (MOT)
Secretariat General of MOT

Central Project Management Unit

Directorate General of Sea Transportation
Project Implementation Unit under Directorate for Port Affairs

Preliminary Design Management Consultant
Design and Supervision Consultant

Directorate General of Civil Aviation
Project Implementation Unit under Directorate for Airports

Design and Supervision Consultant
D. Selection and Approval of Subprojects

8. The project implementation units (PIUs) established under each implementing agency (IA) will identify, evaluate, and select subprojects for endorsement by each Directorate General, based on the following criteria: (i) consistency of subproject objectives with the overall purpose of the EARR and their inclusion in Master Plan for Recovery and Reconstruction for Central Sulawesi and/or MOT action plan; (ii) quality standards; (iii) safeguards compliance; and (iv) technical feasibility, economic viability and financial sustainability.

1. Subproject Selection Criteria

a. Criterion 1: Subproject Objectives

9. Subproject will be included if:
   (i) it is listed in the Master Plan for Recovery and Reconstruction for Central Sulawesi and/or MOT Action Plan;
   (ii) it will reconstruct, retrofit, or repair damaged infrastructure consistent with the EARR output description; and
   (iii) it will restore and/or improve or build back better of damaged facilities to pre-disaster conditions.
   (iv) it will not finance deferred operation and maintenance activities.

b. Criterion 2: Quality Control Standards

10. Reconstruction or rehabilitation of infrastructures will be in accordance with (i) best practices in disaster risk reduction and management, multi-hazard resistance standards, cost effectiveness alternatives based on a review of technical options available to address the identified problems and lessons learned from previous disasters and/or similar projects in the country or region; and (ii) incorporation of technological improvements, and the Government of Indonesia’s and ADB requirements for quality control. The design will (i) consider a range of technical alternatives and select options based on least life-cycle costs and economic viability; (ii) maximize support to communities and minimize adverse environmental and social impacts; and (iii) optimize timescales for implementation.

11. Subprojects will use appropriate design and construction standards. As applicable, geotechnical and relevant surveys and investigations will be undertaken.

c. Criterion 3: Environmental and Social Safeguards

12. Subprojects will conform with ADB’s Safeguards Policy Statement (SPS) 2009 with respect to social and environment considerations. Subprojects with significant environmental and involuntary resettlement impact (category A), or with significant impacts on indigenous peoples or customary communities (category A), will be excluded. Subprojects with activities described in ADB’s Prohibited Investment Activities List (Appendix 5 of ADB’s SPS 2009) will also be excluded.

   i. Environment

13. The following subprojects are not eligible for funding under the emergency assistance project:
   (i) Subprojects classified as Category A per ADB’s SPS 2009;
14. Subprojects should be screened and assessed based on procedures defined in the EARR’s environmental assessment and review framework (EARF).

   ii. Social Safeguards, Involuntary Resettlement and Indigenous People or Customary Communities

15. Involuntary resettlement is considered when the affected persons have no right to refuse the land acquisition by the government that result in their displacement. This occurs when land is acquired through (i) expropriation by invoking the eminent domain power of the state or (ii) land is acquired through negotiated settlement when the pricing is negotiated in a process where expropriation will be the consequence of a failure in the negotiation.

16. Subprojects with significant impacts classified as Category A for involuntary resettlement will not be financed under the EARR, with significant impact being defined as:

   (i) 200 or more persons being physically displaced from housing, and/or
   (ii) 200 or more persons losing 10% or more of their productive (income generating) assets.

17. Subprojects classified as Category A for indigenous people or customary communities (CC) as per ADB’s SPS 2009 will not be eligible under the emergency assistance project. The subproject likely to have significant (category A) CC impacts, among others:

   (i) Acquires a huge land area or forest that makes villagers unable to continue their existing traditional livelihood system;
   (ii) Changes the status of CC from self-subsistence farmers and forest products gatherers to factory workers;
   (iii) Results in physically displacing a sub-community far away from its wider community of origin;
   (iv) Causes contamination of the major communal water sources resulting in water borne diseases of the CC;
   (v) Restricts forest-dependent CC from accessing the forest area where for generations they used to hunt boars and collect rattan, wild fruits and other forest products; and
   (vi) Undermines the existing traditional irrigating system and the associated institutional arrangement for water distribution.

18. Subprojects should be screened and assessed based on procedures defined in the EARR’s Resettlement and Customary Communities Development Framework (RCCDF) that combines the involuntary resettlement framework with the indigenous people’s development framework.

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4 Protected Areas as defined in Annex III of Minister of Environment Regulation No. 5/2012 on Types of Business Plans and/or Activities Requiring AMDAL.
5 Key Biodiversity Areas as defined in the World Database of Key Biodiversity Areas.
d. Criteria 4: Economic Viability and Financial Sustainability

19. The design of the subproject will ensure the technical feasibility and the adoption of the least-cost approach, both in respect of capital, as well as operation and maintenance (O&M) costs, keeping in view achievement of the EARR's objective(s) and without compromising quality and disaster resilience. Financial analysis to ensure subprojects viability or sustainability needs to be conducted.

20. For subprojects that are estimated to cost more than $1 million, an Economic Internal Rate of Return (EIRR) should be calculated. The subproject will need to register an EIRR in excess of 9% with economic benefits quantified based on reliable data.

2. Prior Review and Approval by ADB

21. The first subproject to be carried out by each IA will be subject to prior review and approval by ADB. Subsequent subprojects exceeding $500,000 equivalent shall be sent to ADB for information only, while all subprojects exceeding $5 million equivalent will require prior review and approval by ADB.6

22. Subproject safeguards categorizations will be sent to ADB. Subproject safeguard documents will need prior approval by ADB, including resettlement plans, resettlement and customary community development plan (RCCDP), due diligence report completed with corrective action plan (DDR – CAP), and initial environmental examinations with environmental management plans, as needed. Safeguards documents will need to be consistent with the EARR’s EARF and RCCDF, ADB’s SPS 2009, and government laws and regulations.

3. Procedures

23. Each subproject will be prepared and processed in accordance with the following procedures:

(i) Technical study, for all subprojects, will be conducted by the IAs including its cost estimate. The IAs will also prepare and categorize for (a) involuntary resettlement; (b) indigenous peoples; and (c) environment and send all categorization results to ADB.

(ii) The DGST/DGCA will translate resettlement plans in the local language and disclose it to affected people, incorporating results of consultations. DGST/DGCA will prepare the appraisal reports for all subprojects to be considered following the selection criteria, together with the required attachments, i.e. safeguards documents and submit these to ADB for approval. Safeguards documents will be disclosed on ADB’s website, and the website of the EAs.

(iii) ADB will review the summary appraisal report, which should follow the template set forth in Appendix 2, together with the required attachments. If ADB finds that a proposed subproject does not satisfy the selection criteria and/or agreed procedures, ADB will advise the IA either (a) to modify the subproject proposal in a manner that will make it eligible for approval; or (b) that the subproject be rejected.

(iv) The above procedure described in (iii) will be applied only to those subprojects

---

6 ADB approval of a subproject does not guarantee automatic approval of the withdrawal application for this subproject to be submitted by the Borrower.
whose estimated cost exceeds $5 million. Subprojects equal to or less than $5 million will be reviewed by DGST/DGCA and ADB will conduct post-facto review of such subprojects on a sample basis.

IV. COSTS AND FINANCING

24. Component 2 of the EARR is estimated to cost $124.55 million, including contingencies. ADB will finance $109.75 million and the Government will fund $14.80 million. Cost estimates are presented in the table below.

A. Cost Estimates Preparation and Revisions

25. The cost estimate was prepared jointly by ADB and implementing agencies using 2019 prices. The cost estimate will be revised at the loan midterm review stage (planned in 2020).

B. Key Assumptions

26. The following key assumptions underpin the cost estimates and financing plan:

(i) Exchange rate: Rp14,000 = $1.00 (1 February 2019)
(ii) Price contingencies based on expected cumulative inflation over the implementation period are as follows:

<table>
<thead>
<tr>
<th>Item</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreign rate of price inflation</td>
<td>1.50%</td>
<td>1.50%</td>
<td>1.50%</td>
<td>1.60%</td>
<td>1.60%</td>
<td>1.54%</td>
</tr>
<tr>
<td>Domestic rate of price inflation</td>
<td>3.40%</td>
<td>3.20%</td>
<td>3.30%</td>
<td>3.00%</td>
<td>3.00%</td>
<td>3.18%</td>
</tr>
</tbody>
</table>

### C. Breakdown of Cost Estimates

#### Table 6: Cost Estimates by Expenditure Category and by Output

<table>
<thead>
<tr>
<th>Item</th>
<th>Total Cost ($ million)</th>
<th>Ports ($ million)</th>
<th>% of Cost Category</th>
<th>Airport ($ million)</th>
<th>% of Cost Category</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Investment Costs</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Civil works</td>
<td>81.84</td>
<td>59.71</td>
<td>73%</td>
<td>22.13</td>
<td>27%</td>
</tr>
<tr>
<td>2. Mechanical and equipment</td>
<td>7.46</td>
<td>7.46</td>
<td>100%</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3. Consultants</td>
<td>6.26</td>
<td>5.01</td>
<td>80%</td>
<td>1.25</td>
<td>20%</td>
</tr>
<tr>
<td>a. Design/Supervision</td>
<td>4.71</td>
<td>3.71</td>
<td>79%</td>
<td>1.00</td>
<td>21%</td>
</tr>
<tr>
<td>b. Capacity Development</td>
<td>1.55</td>
<td>1.30</td>
<td>84%</td>
<td>0.25</td>
<td>16%</td>
</tr>
<tr>
<td>4. Tax*</td>
<td>9.56</td>
<td>7.22</td>
<td>76%</td>
<td>2.34</td>
<td>24%</td>
</tr>
<tr>
<td><strong>Subtotal (A)</strong></td>
<td>105.12</td>
<td>79.40</td>
<td>76%</td>
<td>25.72</td>
<td>24%</td>
</tr>
<tr>
<td><strong>B. Recurrent Costs</strong></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1. Salaries</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2. Accommodation</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3. Equipment operation and maintenance</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Subtotal (B)</strong></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total - Base Cost</strong></td>
<td>105.12</td>
<td>79.40</td>
<td>76%</td>
<td>25.72</td>
<td>24%</td>
</tr>
<tr>
<td><strong>C. Contingencies</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Physical</td>
<td>5.80</td>
<td>4.38</td>
<td>76%</td>
<td>1.42</td>
<td>24%</td>
</tr>
<tr>
<td>2. Price</td>
<td>8.39</td>
<td>6.34</td>
<td>76%</td>
<td>2.05</td>
<td>24%</td>
</tr>
<tr>
<td><strong>Subtotal (c)</strong></td>
<td>14.19</td>
<td>10.72</td>
<td>76%</td>
<td>3.47</td>
<td>24%</td>
</tr>
<tr>
<td><strong>D. Financial Charges During Implementation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Interest During Construction</td>
<td>4.83</td>
<td>3.65</td>
<td>76%</td>
<td>1.18</td>
<td>24%</td>
</tr>
<tr>
<td>2. Commitment Charges</td>
<td>0.41</td>
<td>0.31</td>
<td>76%</td>
<td>0.10</td>
<td>24%</td>
</tr>
<tr>
<td><strong>Subtotal (D)</strong></td>
<td>5.24</td>
<td>3.96</td>
<td>76%</td>
<td>1.28</td>
<td>24%</td>
</tr>
<tr>
<td><strong>Total Project Cost</strong></td>
<td>124.55</td>
<td>94.07</td>
<td>76%</td>
<td>30.47</td>
<td>24%</td>
</tr>
</tbody>
</table>

**Notes:**
1. The government will finance tax through exemption and/or cash contribution.
2. Numbers may not tally due to rounding.
<table>
<thead>
<tr>
<th>Item</th>
<th>Base Cost</th>
<th>ADB</th>
<th>%</th>
<th>Govt</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Investment Costs</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Civil works</td>
<td>81.84</td>
<td>81.84</td>
<td>100%</td>
<td>-</td>
<td>0%</td>
</tr>
<tr>
<td>2. Mechanical and equipment</td>
<td>7.46</td>
<td>7.46</td>
<td>100%</td>
<td>-</td>
<td>0%</td>
</tr>
<tr>
<td>3. Consultants</td>
<td>6.26</td>
<td>6.26</td>
<td>100%</td>
<td>-</td>
<td>0%</td>
</tr>
<tr>
<td>a. Design/Supervision</td>
<td>4.71</td>
<td>4.71</td>
<td>100%</td>
<td>-</td>
<td>0%</td>
</tr>
<tr>
<td>b. Capacity Development</td>
<td>1.55</td>
<td>1.55</td>
<td>100%</td>
<td>-</td>
<td>0%</td>
</tr>
<tr>
<td>4. Tax*</td>
<td>9.56</td>
<td>0.00</td>
<td>0%</td>
<td>9.56</td>
<td>100%</td>
</tr>
<tr>
<td><strong>Subtotal (A)</strong></td>
<td>105.12</td>
<td>95.56</td>
<td>91%</td>
<td>9.56</td>
<td>9%</td>
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<tr>
<td><strong>B. Recurrent Costs</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Salaries</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2. Accommodation</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3. Equipment operation and maintenance</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Subtotal (B)</strong></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total - Base Cost</strong></td>
<td>105.12</td>
<td>95.56</td>
<td>91%</td>
<td>9.56</td>
<td>9%</td>
</tr>
<tr>
<td><strong>C. Contingencies</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>1. Physical</td>
<td>5.80</td>
<td>5.80</td>
<td>100%</td>
<td>0.00</td>
<td>0%</td>
</tr>
<tr>
<td>2. Price</td>
<td>8.39</td>
<td>8.39</td>
<td>100%</td>
<td>0.00</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Subtotal (C)</strong></td>
<td>14.19</td>
<td>14.19</td>
<td>100%</td>
<td>0.00</td>
<td>0%</td>
</tr>
<tr>
<td><strong>D. Financial Charges During Implementation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Interest During Construction</td>
<td>4.83</td>
<td>-</td>
<td>0%</td>
<td>4.83</td>
<td>100%</td>
</tr>
<tr>
<td>2. Commitment Charges</td>
<td>0.41</td>
<td>-</td>
<td>0%</td>
<td>0.41</td>
<td>100%</td>
</tr>
<tr>
<td><strong>Subtotal (D)</strong></td>
<td>5.24</td>
<td>-</td>
<td>0%</td>
<td>5.24</td>
<td>100%</td>
</tr>
<tr>
<td><strong>Total Project Cost</strong></td>
<td>124.55</td>
<td>109.75</td>
<td>88%</td>
<td>14.80</td>
<td>12%</td>
</tr>
</tbody>
</table>

Notes: 1. The government will finance tax through exemption and/or cash contribution.
2. Numbers may not tally due to rounding.
Source: ADB estimates.
# Table 8: Detailed Cost Estimates by Year

<table>
<thead>
<tr>
<th>Item</th>
<th>Base Cost</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Investment Costs</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Civil works</td>
<td>81.84</td>
<td>-</td>
<td>16.61</td>
<td>48.09</td>
<td>17.14</td>
</tr>
<tr>
<td>2. Mechanical and equipment</td>
<td>7.46</td>
<td>-</td>
<td>-</td>
<td>3.73</td>
<td>3.73</td>
</tr>
<tr>
<td>3. Consultants</td>
<td>6.26</td>
<td>0.49</td>
<td>2.95</td>
<td>2.25</td>
<td>0.56</td>
</tr>
<tr>
<td>a. Design/Supervision</td>
<td>4.71</td>
<td>0.10</td>
<td>1.79</td>
<td>2.25</td>
<td>0.56</td>
</tr>
<tr>
<td>b. Capacity Development</td>
<td>1.55</td>
<td>0.39</td>
<td>1.16</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>4. Tax</td>
<td>9.56</td>
<td>0.05</td>
<td>1.96</td>
<td>5.41</td>
<td>2.14</td>
</tr>
<tr>
<td><strong>Subtotal (A)</strong></td>
<td>105.12</td>
<td>0.54</td>
<td>21.52</td>
<td>59.48</td>
<td>23.58</td>
</tr>
<tr>
<td><strong>B. Recurrent Costs</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>1. Salaries</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2. Accommodation</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3. Equipment operation and maintenance</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Subtotal (B)</strong></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total - Base Cost</strong></td>
<td>105.12</td>
<td>0.54</td>
<td>21.52</td>
<td>59.48</td>
<td>23.58</td>
</tr>
<tr>
<td><strong>C. Contingencies</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Physical</td>
<td>5.80</td>
<td>0.03</td>
<td>1.20</td>
<td>3.27</td>
<td>1.29</td>
</tr>
<tr>
<td>2. Price</td>
<td>8.39</td>
<td>0.02</td>
<td>1.16</td>
<td>4.75</td>
<td>2.47</td>
</tr>
<tr>
<td><strong>Subtotal (C)</strong></td>
<td>14.19</td>
<td>0.05</td>
<td>2.36</td>
<td>8.02</td>
<td>3.76</td>
</tr>
<tr>
<td><strong>D. Financial Charges During Implementation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Interest During Construction</td>
<td>4.83</td>
<td>0.01</td>
<td>0.34</td>
<td>1.59</td>
<td>2.89</td>
</tr>
<tr>
<td>2. Commitment Charges</td>
<td>0.41</td>
<td>0.16</td>
<td>0.15</td>
<td>0.08</td>
<td>0.02</td>
</tr>
<tr>
<td><strong>Subtotal (D)</strong></td>
<td>5.24</td>
<td>0.17</td>
<td>0.49</td>
<td>1.67</td>
<td>2.90</td>
</tr>
<tr>
<td><strong>Total Project Cost</strong></td>
<td>124.55</td>
<td>0.76</td>
<td>24.37</td>
<td>69.18</td>
<td>30.24</td>
</tr>
</tbody>
</table>

Notes: 1. The government will finance tax through exemption and/or cash contribution.
   2. Numbers may not tally due to rounding.
Source: ADB estimates.
D. Allocation and Withdrawal of Loan Proceeds

Table 9: Allocation and Withdrawal of Loan Proceeds

<table>
<thead>
<tr>
<th>Number</th>
<th>Item</th>
<th>Total Amount Allocated for ADB Financing $</th>
<th>Basis for Withdrawal from the Loan Account</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Project Cost (Component 2)</td>
<td>109,750,000</td>
<td>100% of total expenditure claimed *</td>
</tr>
<tr>
<td></td>
<td>TOTAL</td>
<td>109,750,000</td>
<td></td>
</tr>
</tbody>
</table>

*Exclusive of taxes and duties imposed within the territory of the Borrower.

E. Contract and Disbursement S-Curve

27. The projections for contract award and disbursement is presented in Appendix 3.
F. Fund Flow Diagram

Figure 2: Funds Flow

7 Fund flow from the advance account to the EA/IA and/or contractors, consultants, suppliers and service provider will be based on submission of an Instruction Order and Payment Voucher and its supporting documents from the EA/IAs to Office of State Treasury, MOF. ADB provides initial deposit to the account. The EA/IA will submit withdrawal applications for replenishment to the account.

---

7 Fund flow from the advance account to the EA/IA and/or contractors, consultants, suppliers and service provider will be based on submission of an Instruction Order and Payment Voucher and its supporting documents from the EA/IAs to Office of State Treasury, MOF. ADB provides initial deposit to the account. The EA/IA will submit withdrawal applications for replenishment to the account.
V. FINANCIAL MANAGEMENT

A. Financial Management Assessment

28. The Financial Management Assessment (FMA) was conducted in accordance with ADB’s guidelines on Financial Management Technical Guidance Note (2015) and the Financial Due Diligence: A Methodology Note (2009). The FMA considered the capacity of the executing agencies and the implementing agencies, including funds-flow arrangements, staffing, accounting and financial reporting systems, financial information systems, and internal and external auditing arrangements.

29. The Public Financial Management (PFM) assessment indicates that, as a whole, the government’s prevailing financial, accounting, auditing rules, and systems meet generally accepted international accounting and auditing standards. The 2017 Public Expenditure and Financial Accountability Assessment for Indonesia showed that 17 of the 31 indicators scored A or B, which are both considered above the basic alignment with international good practice. Indicators with particularly good assessment results included transparency of public finance, and accounting and reporting—all key for the successful implementation of the EARR. The assessment also identified some areas for improvement, including the strategic allocation of resources and the efficiency of public spending by linking performance information more effectively to planning and budgeting. The established legal and regulatory framework for public financial management was strengthened in 2017 through the government regulations mandating coordination between the National Planning Agency and the MOF to improve the policy orientation of budgeting.

30. MOT’s financial management is governed by the government’s prevailing financial, accounting, auditing rules and systems. MOT has adequate internal control systems and financial reporting arrangements. Although MOT has no project loan with ADB in the past 20 years, it has been implementing large number of project loans from other development partners such as the World Bank and JICA. MOT has relevant experience in implementing externally financed subprojects and in managing loan disbursements. Furthermore, as most ADB project loans in Indonesia have used advance account procedures, MOF as the borrower has extensive experience and capacity to establish and administer advance accounts.

31. The pre-mitigated financial management risk level for the MOT component of EARR is high mainly due to complex implementation arrangements and limited experience of MOT and the implementing agencies with ADB project management. Overall, an emergency project has high risk overlooking FM systems and controls due to focus on quick implementation. These projects require FM Specialist support and oversight during implementation to address risks and mitigation activities identified in this Financial Management Assessment.

32. Major fiduciary risks identified are considered manageable with the following mitigation measures: (i) recruitment of a FM consultant to support MOT in standard procedures development and preparation of project financial statements; (ii) recruitment of a design and supervision consultants to support the DGs in all fiduciary aspects of the EARR implementation on a daily basis and provide necessary on-the-job capacity building; (iii) ensuring MOT’s responsibility for aligning the project preparation schedules with the budgeting process. Post-mitigated financial

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9 ADB. 2009. Financial Due Diligence: A Methodology Note. Manila
management risk is rated as moderate.

33. Appropriate action plan was prepared to mitigate these risks. This will be closely monitored during EARR implementation.

Table 10: Financial Management, Internal Control, Risk Assessment and Mitigating Action Plan

<table>
<thead>
<tr>
<th>Risk Description</th>
<th>Risk Rating</th>
<th>Mitigation Measures</th>
<th>Responsibility</th>
<th>Timing</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Country / Sector Risk</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Lack of capacity at subnational level                                             | S           | - MOT will coordinate implementation under DGST/DGCA  
- Development partners’ continuous support to strengthen the public financial management systems in Indonesia through policy-based, projects, and technical assistance activities. | MOT            | a. prior to project implementation                                         |
| Some government procedures for accounting and financial reporting have weaknesses, i.e., different system and regulation between central government (line ministry) and local government. | M           | - Establish coordination between MOT and DGST/DGCA.  
- Build capacity and strengthen monitoring in financial management and reporting. | MOT            | a. Q4 2019                                                                                           |
| **B. Project Risk**                                                                                                                             |             |                                                                                                                                                                                                                     |                |                             |
| Reporting and Monitoring Limited MOT capacity for preparation of financial statements due to lack of staff capacity and standardized business processes. | H           | MOT to ensure:  
a. CPMU and PIUs are properly staffed with qualified resources;  
b. FM consultant is hired for the Project financial statements preparation  
c. Standardized financial reporting procedures and FM manual are developed and implemented  
d. Training on standard procedures are delivered to staff involved. | a-c. MOT and ADB | a. within one month of loan effectiveness  
b. within 3 months of loan effectiveness  
c. within one year from loan effectiveness throughout implementatio n period |
<p>| Limited experience of MOT and DGST/DGCA with implementation of ADB-funded projects | S           | Recruitment of EARR-financed consultants to support MOT and DGST/DGCA with implementation of the project, including assistance in financial management | MOT and DGST/DGCA | From the beginning of the project |</p>
<table>
<thead>
<tr>
<th><strong>Fund Flow</strong></th>
<th>S</th>
<th>Fund flow procedures and disbursement arrangements to be discussed and agreed with MOF and MOT to avoid any delays in replenishment of advance accounts and disbursements</th>
<th>MOF and ADB</th>
<th>a. during loan negotiations</th>
</tr>
</thead>
</table>
| **Human Resource and Staffing** | M | a. Prior to implementation, MOT to properly assess FM resource requirements for the Project and ensure PIUs are staffed adequately. 
 b. Trainings and capacity building activities to be delivered to staff involved in Project implementation. | MOT and ADB | a. prior to loan effectiveness 
 b. throughout project implementation |
| **Human Resource and Staffing** | M | MOT and DGST/DGCA to establish clear organizational structure of the MOT, DGST/DGCA and PIUs | MOT and DGST/DGCA | prior to loan effectiveness |
| **Implementing Entity** | M | Establishment of Central PMU at MOT to ensure regular coordination, communication and resolution of issues. Development of clear working arrangements and protocols. | Project Steering Committee, MOT | prior to loan effectiveness |
| **External Audit** | M | MOT to ensure timely submission of project financial statements for audit | MOT | throughout project implementation |
| **Internal Audit** | L | - | - | - |
| **Information Systems** | L | - | - | - |
| **Overall MOT Component of Project Risk** | H | - | - | - |
| **Overall (Combined) Risks** | H | - | - | - |

* H = High; S = Substantive; M = Moderate; L = Low or Negligible.*
B. Disbursement

1. Disbursement Arrangements for ADB Funds

34. The loan proceeds will be disbursed in accordance with ADB’s Loan Disbursement Handbook (2017, as amended from time to time),\(^\text{11}\) and detailed arrangements agreed upon between the government and ADB. Online training for project staff on disbursement policies and procedures is available.\(^\text{12}\) Project staff are encouraged to avail of this training to help ensure efficient disbursement and fiduciary control.

35. **Advance account procedure.** The government (MOF) will establish an advance account for MOT at the central bank (Bank Indonesia) to facilitate the timely release loan funds. The currency of the advance account will be US Dollar. The advance accounts will be administered by MOF. The advance account will be established, managed, replenished, and liquidated in accordance with ADB’s Loan Disbursement Handbook (2017, as amended from time to time). The advance account is to be used exclusively for ADB’s share of eligible expenditures. MOF who administer the advance account is accountable and responsible for proper use of advances to the advance account.

36. The total outstanding advance to the advance account should not exceed the estimate of ADB’s share of expenditures to be paid through the advance account for the forthcoming 6 months. MOF will request for initial and additional advances to the advance account based on an Estimate of Expenditure Sheet\(^\text{13}\) setting out the estimated expenditures to be financed through the accounts for the forthcoming 6 months. Supporting documents should be submitted to ADB or retained by the Borrower (MOF, MOT or DGST/DGCA) in accordance with ADB’s Loan Disbursement Handbook (2017, as amended from time to time) when liquidating or replenishing the advance account.

37. **Statement of expenditure procedure.**\(^\text{14}\) The statement of expenditure (SOE) procedure may be used for reimbursement and liquidation of the advance account. Supporting documents and records for the expenditures claimed under the SOE should be maintained and made readily available for review by ADB’s disbursement and review mission or upon ADB’s request for submission of supporting documents on a sampling basis, and for independent audit.

38. Before the submission of the first withdrawal application (WA), the Borrower should submit to ADB sufficient evidence of the authority of the persons who will sign the WAs on behalf of the government, together with the authenticated specimen signatures of each authorized person. The minimum value per WA is stipulated in the Loan Disbursement Handbook (2017, as amended from time to time). Individual payments below such amount should be paid (i) by MOT and subsequently claimed to ADB through reimbursement, or (ii) through the advance fund procedure, unless otherwise accepted by ADB. The borrower should ensure sufficient category and contract balances before requesting disbursements. Use of ADB’s Client Portal Disbursement (CPD)\(^\text{15}\)

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\(^{11}\) The handbook is available electronically from the ADB website (http://www.adb.org/documents/loan-disbursement-handbook).


\(^{13}\) Estimate of Expenditure sheet is available in Appendix 8A of ADB’s Loan Disbursement Handbook (2017, as amended from time to time)

\(^{14}\) SOE forms are available in Appendix 7B and 7D of ADB’s Loan Disbursement Handbook (2017, as amended from time to time)

\(^{15}\) The CPD facilitates online submission of WA to ADB, resulting in faster disbursement. The forms to be completed by the Borrower are available online at [https://www.adb.org/documents/client-portal-disbursements-guide](https://www.adb.org/documents/client-portal-disbursements-guide).
system is encouraged for submission of WAs to ADB. Sample forms for withdrawal applications of loan proceeds can be downloaded from the ADB website.

39. Sufficient supporting documentation, as defined in ADB’s Loan Disbursement Handbook (2017, as amended from time to time) will be kept at each level of EARR implementation to substantiate all expenditures incurred from the loan proceeds. Relevant project staff will be trained in ADB’s disbursement procedures.

2. Disbursement Arrangements for Counterpart Fund

40. The implementing agencies are responsible for preparing and requesting budgetary allocations for counterpart funds to be included in the DIPA. Disbursement procedures for the counterpart funds will follow the government regulations. Local taxes and duties under the EARR will be financed by the government and budgeted in the counterpart funds.

C. Accounting

41. Each implementing agency will maintain, or cause to be maintained, separate books and records by funding source for all expenditures incurred by the EARR. The executing agency will prepare consolidated project financial statements in accordance with the government's accounting laws and regulations which are consistent with international accounting principles and practices.

D. Auditing and Public Disclosure

42. The executing agency will cause the detailed consolidated project financial statements to be audited in accordance with International Standards on Auditing and with the Government's audit regulations, by an independent auditor acceptable to ADB. In addition, the MOF will cause the EARR advance account opened in Bank Indonesia to be audited in accordance with International Standards on Auditing and with the Government's audit regulations, by an independent auditor acceptable to ADB.

43. Such audited consolidated project financial statements and audited EARR advance account will be submitted in the English language to ADB within six months of the end of the fiscal year by executing agency.

44. The audit report for the EARR project financial statements and special bank account will include auditor's opinions, which cover (i) whether the EARR financial statements present an accurate and fair view or are presented fairly, in all material respects, in accordance with the applicable financial reporting standards; (ii) whether the proceeds of the EARR were used only for the purpose(s) of the EARR; and (iii) whether the borrower or EA was in compliance with the financial covenants contained in the legal agreements (where applicable). In addition, the audit report for the EARR project financial statements will include a management letter.

45. Compliance with financial reporting and auditing requirements will be monitored by review missions and during normal program supervision, and followed up regularly with all concerned, including the external auditor.

46. The government, the executing agency and the implementing agencies have been made aware of ADB’s approach to delayed submission, and the requirements for satisfactory and
acceptable quality of the audited project financial statements. ADB reserves the right to require a change in the auditor (in a manner consistent with the constitution of the borrower), or for additional support to be provided to the auditor, if the audits required are not conducted in a manner satisfactory to ADB, or if the audits are substantially delayed. ADB reserves the right to verify the project's financial accounts to confirm that the share of ADB’s financing is used in accordance with ADB’s policies and procedures.

47. Public disclosure of the audited financial reports, including the auditor’s opinion, will be guided by ADB’s Public Communications Policy 2011. After the review, ADB will disclose the audited EARR financial statements and the opinion of the auditors on the EARR financial statements no later than 14 days of ADB’s confirmation of their acceptability by posting them on ADB’s website. The management letter, additional auditor’s opinions, and audited entity financial statements will not be disclosed.

VI. PROCUREMENT AND CONSULTING SERVICES

A. Advance Contracting and Retroactive Financing

48. All advance contracting and retroactive financing will be undertaken in conformity with ADB Procurement Policy (2017, as amended from time to time) and the Procurement Regulations for ADB Borrowers (2017, as amended from time to time). The issuance of invitations to bid under advance contracting and retroactive financing will be subject to ADB approval. The borrower, the EAs, and the IAs have been advised that approval of advance contracting and retroactive financing does not commit ADB to finance the EARR.

49. Advance Contracting. Advance contracting under the EARR will be applicable for recruitment of consultants and procurement of goods, related services and civil works including inviting and receiving bids, evaluation of bids, and recruitment of consultants for implementation prior to loan effectiveness. Individual consultant selections to support the PIUs may follow advance contracting actions.

50. Retroactive financing. Retroactive financing will be allowed for up to 30% of the EARR amount for eligible expenditures incurred under the EARR, provided that such expenditures have been incurred not earlier than 28 September 2018 for all subprojects.

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16 ADB’s approach and procedures regarding delayed submission of audited project financial statements:
   (i) When audited EARR financial statements are not received by the due date, ADB will write to the EA advising that (a) the audit documents are overdue; and (b) if they are not received within the next 6 months, requests for new contract awards and disbursement such as new replenishment of advance accounts, processing of new reimbursement, and issuance of new commitment letters will not be processed.
   (ii) When audited EARR financial statements are not received within 6 months after the due date, ADB will withhold processing of requests for new contract awards and disbursement such as new replenishment of advance accounts, processing of new reimbursement, and issuance of new commitment letters. ADB will (a) inform the EA of ADB’s actions; and (b) advise that the EARR may be suspended if the audit documents are not received within the next 6 months.
   (iii) When audited EARR financial statements are not received within 12 months after the due date, ADB may suspend the EARR.


18 This type of information would generally fall under public communications policy exceptions to disclosure. ADB. 2011. Public Communications Policy. Paragraph 97(iv) and/or 97(v).

19 If the borrower proceeds with the initial steps of procurement before signing the financing agreement, the procurement procedures shall be acceptable to ADB and in accordance with the Procurement Plan for any contracts subsequently awarded to be eligible for ADB financing. Furthermore, if the contract is signed, reimbursement by ADB
B. Procurement of Goods, Works, and Consulting Services

51. All procurement of goods and works and consulting services will be undertaken in accordance with ADB Procurement Policy (2017, as amended from time to time) and the Procurement Regulations for ADB Borrowers (2017, as amended from time to time).

52. Most civil works and goods contracts will be procured through open competitive bidding (OCB). To ensure efficiency, special procedures for emergency lending will be used as guided by the Guidance Note on Fragile, Conflict-affected, and Emergency Situations, including (i) wider use of post qualification, (ii) reducing the bidding period to 15 working days for international competition and 7 working days for national competition when appropriate, (iii) using single-stage one-envelope bidding procedures, (iv) developing a time-bound action plan to award contracts, including a contract management plan.

53. A rapid procurement risk assessment was conducted for MOT. Considering limited number of procurements managed by MOT following ADB procedures in recent years, prior review will be applied for MOT component with an option to apply post review for succeeding packages if the review results are positive.

54. Individual consultants will be recruited using the individual selection method with international and/or national advertisements, based on the project’s requirements.

55. Consultants who are already engaged in ADB-financed projects and provide similar services as those required for the project may be recruited directly under the project or ongoing loans, subject to their satisfactory performance.\(^\text{20}\)

C. Procurement Plan

56. The initial procurement plan is in Appendix 4. The information in the procurement plan is indicative and will be further detailed during the EARR start-up period through a discussion between ADB and MOT.

D. Consultant’s Terms of Reference

57. The terms of reference for consultants are in Appendix 5.

VII. SAFEGUARDS

58. Environment. The EARR is classified as category B for environmental safeguards per ADB’s Safeguards Policy Statement (SPS), 2009. Subprojects classifying as category A,\(^\text{21}\) and subprojects with activities described in ADB’s Prohibited Investment Activities List shall not be eligible for financing under the EARR. Subprojects will not be undertaken in protected areas of any expenses incurred by the borrower under the contract prior to effectiveness of the financing agreement is referred to as retroactive financing.


\(^{21}\) Subprojects likely to have significant impacts that are irreversible, diverse, or unprecedented as per ADB’s Safeguard Policy Statement (2009)
including those either legally protected or officially proposed for protection.\textsuperscript{22}

59. The exclusion of subprojects classifying as category A from the EARR scope will be ensured through screening of all subprojects in accordance with the EARR’s environmental assessment and review framework (EARF)\textsuperscript{23} that was prepared for the EARR and endorsed by the EAs. Each subproject will be classified individually using the screening procedure and the rapid environmental assessment (REA) screening checklists defined in the EARF. Only subprojects classifying as category B or C are eligible.

60. For subprojects classifying as category B for environment, initial environmental examinations (IEE) and environmental management plans (EMP) will be prepared consistent with the EARF. These will be submitted to and cleared by ADB and disclosed on the EAs’ website and to potentially affected communities. The IEEs and EMPs will be incorporated into bidding documents and contract documents to be implemented by contractors.

61. Indonesia environmental assessment procedure will also be followed, and consultation with relevant district/provincial authorities will be undertaken prior to commencing the activity. All subproject proposals will undergo screening according to relevant government laws and regulations to classify whether a project proposal would need AMDAL, or UKL/UPL (equal to category B), or SPPL (equal to category C). All subprojects will undertake environmental assessment and shall obtain environmental clearance before proceeding to implementation. In addition, all applicable government environmental permits/approvals/concurrences and ADB approval must be obtained prior to any contract award for civil works.

62. A grievance redress mechanism (GRM) should be established during construction of the project to address unforeseen problems and issues that may arise due to construction and operational impacts. The executing agencies will establish a mechanism to receive and facilitate resolution of affected peoples’ concerns, complaints, and grievances about the EARR’s environmental safeguard performance.

63. **Involuntary Resettlement.** The project is classified as category B for involuntary resettlement (IR) in accordance with ADB’s SPS 2009 because the project is likely to have minor impact on IR. Subproject triggering category A for IR will be excluded. IAs will screen potential subprojects early to identify past, present, and future land acquisition and resettlement impacts and will adopt measures to avoid or minimize these impacts. Subproject with category B and C will be eligible.

64. Meaningful consultations will be conducted with affected persons and concerned parties to ensure their participation from planning, implementation, and monitoring. Special attention will be provided to the needs of vulnerable groups (especially those below the poverty line, the landless, the elderly, women and children, those without legal title to land, and indigenous peoples).

65. Negotiated land acquisition and voluntary donation will follow procedure in a transparent, consistent, and equitable manner and be confirmed through written record and

\textsuperscript{22} Including (i) Protected Areas as defined in Annex III of Minister of Environment Regulation No. 5/2012 on Types of Business Plans and/or Activities Requiring AMDAL; and (ii) Key Biodiversity Areas as defined in the World Database of Key Biodiversity Areas managed by BirdLife International on behalf of the KBA Partnership. World Database of Key Biodiversity Areas.

\textsuperscript{23} Environmental assessment and review framework (EARF). Available from list of linked documents.
verified by an independent third party. Ensuring that voluntary donations do not severely affect the living standards of the affected persons.

66. **Indigenous Peoples.** The project is classified as category B for Indigenous People because the project is likely to have limited impact (positive and negative) on Indigenous People or Customary Communities (IP/CC). The IAs shall screen each subproject and ensure that subprojects triggering A for IP as per ADB SPS 2009 will be excluded. The magnitude of impact is assessed through the following aspects; (i) customary rights of use and access to land and natural resources; (ii) socioeconomic status; (iii) cultural and communal integrity; (iv) health, education, livelihood, and social security status; and (v) recognition of indigenous people.

67. Meaningful consultations with customary communities (including women and youth) at each stage of the project will be conducted to identify customary communities' perspectives, issues and concerns. Culturally appropriate and gender inclusive grievance mechanism to receive and facilitate resolution of the Indigenous Peoples' concerns will be set up.

68. **Social Safeguards Plans.** As most of project activities cover infrastructure in various sectors with almost similar impacts, an RCCDF has been prepared for the project in line with (a) applicable Indonesian laws and regulations related to land acquisition and customary communities; (b) ADB Safeguards Policy of 2009 specifically on IR and IP Safeguards. Impact assessments and safeguard plans are prepared during subproject preparation in conformity with the RCCDF.

69. The RCCDF is to guide subproject selection, screening and categorization, social assessment, and implementation of social safeguard plan during project implementation. Screening guidance is provided to establish the type of social safeguards document required for future subprojects. There are three possible documents that may be required during project implementation: resettlement plan, RCCDP, and DDR-CAP, if any. DGST/DGCA shall prepare a safeguard planning document for the subproject if land acquisition and involuntary resettlement and/or indigenous people safeguard is triggered. These documents will be disclosed to the affected persons and posted on ADB and project websites.

70. **Institutional arrangements for safeguards.** The executing agency will be responsible for overall project implementation including safeguards. DGST and DGCA will form PIUs which will have Safeguards Focal Persons to coordinate environmental and social safeguards planning and implementation, assisted by construction supervision consultants. The construction supervision consultants will include environment specialists and resettlement specialists engaged during EARR implementation. PIUs will ensure that the EARF and RCCDF are followed during subproject implementation. PIUs will undertake screening and classification of subprojects consistent with the EARF and RCCDF for submission to MOT and DGST/DGCA, relevant local agencies, and ADB. PIUs will prepare the respective safeguards documents (IEE, resettlement plan, RCCDP, DDR-CAP) for proposed subprojects. Safeguards documents will be reviewed and approved by relevant local agencies and ADB. PIUs will be tasked with the day-to-day implementation and monitoring of safeguards plans. PIUs will also obtain all clearances and fulfill government requirements. PIUs will be responsible for data required for safeguards plan preparation and monitoring and progress reports, and coordination with relevant departments such as provincial or district environmental agency (*Dinas Lingkungan Hidup*, DLH) to consult and/or obtain endorsement if necessary. Institutional roles and responsibilities are detailed in the

24 Environment categorization of subprojects per Minister of Environment Regulation No. 5/2012 shall be confirmed by the relevant provincial or district environmental agency (*Dinas Lingkungan Hidup*, DLH).
EARR and RCCDF.

VIII. GENDER AND SOCIAL DIMENSIONS

71. **Gender category at entry.** The EARR's gender classification is "Effective Gender Mainstreaming" (EGM) which means that at least 50% of the outputs integrate gender targets and design features. It is expected that women, children, people living with disabilities and the elderly can participate and fully benefit from the disaster rehabilitation and reconstruction interventions supported by the EARR.

72. **Key actions.** The EARR's gender action plan (GAP) includes the following actions and targets: (i) reconstruction/rehabilitation of infrastructure (housing, education institutions, health facilities, irrigation, water supply and sanitation, and transport) integrate gender responsive and inclusive design features and/or safety measures for women, children, the elderly and people with disability; (ii) safety standards for disaster resilient infrastructure and/or disaster preparedness and response plans developed in consultation with local stakeholders including women (45% women's participation); and (iii) labor opportunities, and ensuring equal pay for work of equal value.

73. **GAP implementation arrangements.** MOT will be responsible for ensuring the implementation of the gender action plan (GAP), more particularly the gender actions and targets related to the relevant components of their respective sectors/sub-sectors. The measures included in the EARR's GAP are in line with Head of BNPB Regulation No. 13 Year 2014 on Gender Mainstreaming in Disaster Management that mandates gender responsive planning and budgeting during rehabilitation and reconstruction phase.

    (i) Two national Gender Consultants will be hired on an intermittent basis in DGST/DGCA and will be responsible to support MOT and DGST/DGCA in implementing, monitoring and reporting on the GAP for the concerned sectors/sub-sectors and ensuring that GAP implementation is on-track. The Gender Consultants will also be responsible for delivering gender awareness training.

    (ii) The GAP will be implemented by the IAs with assistance of consultant teams and gender focal points. Gender focal points (from existing government GAD Focal Point System) will be appointed/designated for the EARR to manage day-to-day GAP activities and monitoring in coordination with the MOT and DGST/DGCA; confirming sex-disaggregated baseline data at EARR inception; maintain sex-disaggregated data during project implementation; and be responsible for reporting on the GAP implementation progress.

    (iii) Project monitoring and evaluation systems will track sex-disaggregated data and quantitative and qualitative information on GAP implementation. Status and monitoring reports will be included in the EARR’s quarterly progress reports reviewed by ADB and EARR steering committee.

74. The gender staff/consultant based in the ADB's Indonesia Resident Mission will participate in EARR review missions when deemed necessary. ADB will conduct in-depth GAP reviews as part of the EARR's mid-term and final evaluations.
### Table 11: Gender Action Plan

<table>
<thead>
<tr>
<th>Outputs</th>
<th>GAP Actions &amp; Targets</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Output 3. Ports rehabilitated and reconstructed</strong></td>
<td>3.1. Three ports rehabilitated that include safety features for women, children, the elderly and PWDs (concrete examples of such safety features will need to be reported).</td>
</tr>
<tr>
<td></td>
<td>3.2. Ports infrastructure include gender responsive and inclusive facilities: (i) well-lit waiting room with priority seating for pregnant women, children, the elderly, PWDs; (ii) separate restrooms for men, women and PWDs (with adequate female:male toilet ratio); (iii) priority ticketing counters for pregnant women, the elderly and PWDs; (iv) installation of CCTV at strategic locations; (v) instruction boards with helpline numbers, and color-coded directional signs in local languages strategically placed, and (vi) visible reporting desks to address incidents of gender-based violence and other crimes.</td>
</tr>
<tr>
<td></td>
<td>3.3. Safety standards for disaster resilient ports and disaster preparedness and response plans formulated with prior local consultation (at least 45% participation of women).</td>
</tr>
<tr>
<td></td>
<td>3.4. Gender analysis and mainstreaming shall be an integral part of the process in the formulation of safety standards for disaster resilient ports and disaster preparedness and response plans.</td>
</tr>
<tr>
<td><strong>Output 4. Airport rehabilitated and reconstructed</strong></td>
<td>4.1. 1 airport rehabilitated that include safety features for women, children, the elderly and PWDs (concrete examples of such safety features will need to be reported).</td>
</tr>
<tr>
<td></td>
<td>4.2. Airport infrastructure include gender responsive and inclusive facilities: (i) well-lit waiting room with priority seating for pregnant women, children, the elderly, PWDs; (ii) separate restrooms for men, women and PWDs (with adequate female:male toilet ratio); (iii) priority ticketing counters for pregnant women, the elderly and PWDs; (iv) installation of CCTV at strategic locations; (v) instruction boards with helpline numbers, and color-coded directional signs in local languages strategically placed, and (vi) visible reporting desks to address incidents of gender-based violence and other crimes.</td>
</tr>
<tr>
<td></td>
<td>4.3. Safety standards for disaster resilient airport and disaster preparedness and response plans formulated with prior local consultation (at least 45% participation of women).</td>
</tr>
<tr>
<td></td>
<td>4.4. Gender analysis and mainstreaming shall be an integral part of the process in the formulation of safety standards for disaster resilient airport and disaster preparedness and response plans.</td>
</tr>
</tbody>
</table>

### Common GAP Actions:
1. Ensure that land acquisition and compensation process is transparent, and that compensation is equal for male and female APs, and where applicable compensation and allowances are provided in the name of both spouses and/or female-headed households/widows.
2. Contractors will be encouraged to employ local workers and at least 10% women in skilled and unskilled positions in civil works (this will need to be reported by skilled/unskilled positions).
3. Ensure equal pay for work of equal value for women and men in all construction and maintenance work.
4. Ensure that basic facilities (separate toilets and clean water) are provided for female as well as male construction workers at construction sites.
5. Ensure that contractors have mechanisms in place to raise awareness on zero tolerance to sexual harassment and gender-based violence among workers and against women/girls and men/boys in the communities and respond adequately to any such incidents.
**Project Management:**

1. Recruitment of national Gender Specialists in MOT to support GAP implementation, monitoring and reporting for the relevant components/sub-sectors under the respective Ministry.
2. Formal appointment/designation of gender focal points (from existing government gender and development Focal Point System (GAD-FPS))1 gender focal each in Directorate General for Civil Aviation and Directorate General for Sea Transport.
3. Orientation and capacity building on GAP implementation and related requirements are conducted for the EA, IAs, contractors and other key implementing partners.
4. Collection of sex-disaggregated and gender-related information relevant to the design and monitoring framework GAP is integrated in the overall project performance and monitoring system.
5. Project annual, mid-term and completion reports include details on progress against GAP indicators and results (good practices, lessons learnt, etc.).
6. GAP implementation is integrated in the Annual Gender and Development (GAD) Plans and Budgets and Annual GAD Reports of MOT, and other government partners, where applicable.
7. Representatives of the GAD Focal Point System (GAD-FPS) of each government agency-member of the steering committee shall form the GAD-FPS of the committee, tasked to oversee GAP implementation.
IX. PERFORMANCE MONITORING, EVALUATION, REPORTING, AND COMMUNICATION

A. Project Design and Monitoring Framework

Table 12: Design and Monitoring Framework

<table>
<thead>
<tr>
<th>Impact the EARR is Aligned with</th>
<th>Results Chain</th>
<th>Performance Indicators with Targets and Baselines</th>
<th>Data Sources and Reporting Mechanisms</th>
<th>Risks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Socioeconomic impact of disasters reduced (National Medium-Term Development Plan [RPJMN] 2016–2019)a</td>
<td>Outcome</td>
<td>Access for affected people, including women and children, to resilient and inclusive infrastructure restored</td>
<td>By end of 2023: At least 200,000 individuals have access to infrastructure that is resilient, inclusive, and operational (2019 baseline: 0)</td>
<td>Periodic progress reports prepared by the executing agencies</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Outputs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Ports rehabilitated and reconstructed</td>
<td>By 2023: 3a. Three ports rehabilitated to disaster resilient standards and with gender responsive and inclusive featuresb (2019 Baseline: 0)</td>
<td>3a. Periodic progress report prepared by Ministry of Transportation</td>
<td>Delay in implementation due to labor and material shortages</td>
</tr>
<tr>
<td></td>
<td>4. Airport rehabilitated and reconstructed</td>
<td>4a. One airport rehabilitated and/or reconstructed to disaster-resilient standards and gender-responsive and inclusive featuresb (2019 Baseline: 0)</td>
<td>4a. Periodic progress report prepared by Ministry of Transportation</td>
<td></td>
</tr>
</tbody>
</table>

Key Activity with Milestone

3. Ports rehabilitated and reconstructed
3.1 Recruit consultants (by Q4 2019)
3.2 Identify and appraise subprojects, as required (by Q1 2020)
3.3 Prepare engineering designs and bidding documents and undertake social and environmental safeguards activities (by Q2 2020)
3.4 Procure works (by Q4 2020)
3.5 Construct assets (by Q2 2022)
3.6 Assets operational (by Q3 2022)

4. Airport rehabilitated and reconstructed
4.1 Recruit consultants (by Q3 2019)
4.2 Identify and appraise subprojects, as required (by Q3 2019)
4.3 Prepare engineering designs and bidding documents and undertake social and environmental safeguards activities (by Q4 2019)
4.4 Procure works (by Q2 2020)
4.5 Construct assets (by Q3 2021)
4.6 Assets operational (by Q4 2021)
**Inputs**
ADB: $109.75 million (loan)
Government: $14.80 million

**Assumptions for Partner Financing**
Not Applicable

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*b These include: (i) well-lit waiting room with priority seating for pregnant women, children, the elderly, and persons with disabilities; and (ii) separate restrooms for men, women and persons with disabilities (with adequate female: male toilet ratio). For more details, refer to the Gender Action Plan.


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**B. Monitoring**

75. **Project performance monitoring.** DGST/DGCA will be responsible for all aspects of monitoring and evaluation, including: (i) performance testing against project milestones; (ii) safeguards monitoring; and (iii) financial commitments. Reports on project achievements will be provided quarterly and summarized annually. Quarterly reports will contain update contract awards and disbursements projections based on Project Performance Review requirement presented in Appendix 2. In addition, the consultants will develop, and each Directorate General will approve, a project performance monitoring system (PPMS) based on existing PPMS in use for other ADB projects and will include spatial visualization interface (GIS based). The PIUs will conduct regular monitoring, using the same indicators and submit reports to Directorate General and ADB.

76. **Compliance monitoring.** The status of compliance with loan covenants will be reviewed at each ADB review mission. Any non-compliance issues will be specified in the quarterly progress reports together with remedial actions.

77. **Safeguards monitoring.** The executing and implementing agencies will brief the PIU Safeguards Focal Persons on monitoring requirements for IEE/EMP, RP, RCCDP, and CAP implementation and RCCDF implementation. Monitoring data will be generated by the PIUs. The PIUs will submit semi-annual safeguards monitoring reports to each DGST/DGCA. Each DGST/DGCA supported by the consultants will prepare consolidated semi-annual monitoring reports (one for environment and one for involuntary resettlement) that describe progress of safeguards implementation, compliance issues, and corrective actions. Reports will be posted on the project website, and the implementing agencies (through the PIUs) will make hard copies accessible to the public. Safeguards monitoring requirements including suggested monitoring report formats are in the EARF and RCCDF.

78. **Gender and social dimensions monitoring** Regular monitoring of gender related indicators/targets included in the DMF and the GAP will be done during project implementation. The PPMS will ensure that data disaggregated by sex is collected, analyzed, and reported on whenever relevant and will allow to monitor women’s participation in all construction and capacity-building activities supported by the project. Progress reports on the implementation of the GAP will be submitted to ADB at least on a semi-annual basis using the GAP progress monitoring template (Appendix 2). Participatory monitoring of project impacts will be implemented at the midterm of the project and this will include focus group discussions and interviews with women and girls.

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adolescent girls who are direct beneficiaries of activities supported by the project to obtain both quantitative and qualitative data.

C. Evaluation

79. An inception mission will be scheduled shortly after loan effectiveness. Implementation review missions will be held every three to six months. A midterm review is tentatively scheduled for mid-2020. Within 6 months of physical completion of the EARR, the executing agency will submit a project completion report to ADB.

D. Reporting

80. The executing agency will provide ADB with (i) quarterly progress reports in a format consistent with ADB’s project performance reporting system; (ii) consolidated annual reports including (a) progress achieved by output as measured through the indicator’s performance targets, (b) key implementation issues and solutions, (c) updated procurement plan, and (d) updated implementation plan for the next 12 months; (iii) semi-annual safeguards monitoring reports (one for environment and one for involuntary resettlement); and (iv) a project completion report within 6 months of physical completion of the project. To ensure that the EARR will continue to be both viable and sustainable, EARR accounts and DGST/DGCA’s audited project financial statements together with the associated auditor’s report, should be adequately reviewed. An outline of quarterly report progress format is in Appendix 2.

E. Stakeholder Communication Strategy

81. The project will comply with the policy of transparency and accountability of the ADB Public Communications Policy (PCP) 2011 and –beginning 1 January 2019– the Access to Information Policy (AIP). To do so, it will establish a communications strategy that will ensure an efficient two-way communication about ADB projects with stakeholders. The strategy will adopt the following approach:

(i) **Stakeholders.** Stakeholders include but are not limited to project-affected persons, women and vulnerable groups, other interested groups including people affected by the disasters, executing and implementing agencies, government officials at national and sub-national levels, interested community-based organizations, interested civil society organizations, interested private sector entities, and interested development partners especially those working on the rehabilitation and reconstruction of the area.

(ii) **Disclosure.** MOT will disclose on its website all key project-related information, including the scope, cost, and financial and institutional arrangements of the project, project safeguard reports, project progress such as procurement and contract award, and the audited financial project financial statements. The project will also provide contact details on MOT and PIU counterpart staff; The website will provide the contact details of PIU staff in English and Bahasa Indonesia including entry points for the grievance redress mechanism of the EARR.

(iii) **Awareness-raising materials.** EARR will prepare: (a) a Project Fact Sheet or Project Information Booklet which contains details such as project’s objectives, components, activities, timeline, contact details, and grievance redress mechanism; (b) a Project Brief which summarizes all the project’s details in a simple language
and utilizing stories and infographics targeting a wider group of audience, including the poor and women. Both documents will be available in Indonesian and English languages and will be posted on ADB websites. Other information materials may be developed for distinct stakeholder groups.

(iv) Channels. For an effective dissemination and efficient use of resources, collaboration with other readily available channels should be highly prioritized, including but not limited to: government websites both at national and subnational levels; government social media accounts; and ADB website and its other online platforms. All online platforms will be optimally utilized to ensure unrestricted public access to information and documents repository. Meanwhile, conventional methods will remain be used as appropriate, including but not limited to: face-to-face communications during stakeholders’ consultations and outreach; setting up EARR signage at the areas of civil works; displaying posters and banners at the relevant government offices; making project fact sheets and brief available at these offices; and re-using project information as interview materials, articles, and advertorials in media. The EARR will seek creative partnership with national and local print, electronic, and digital media organizations to disseminate project’s information. The EARR will also proactively seek opportunities to participate in local community activities and promote the EARR objectives.

(v) Communication focal point. DGST/DGCA will be responsible for implementation and monitoring of information dissemination and disclosure of the EARR’s components. DGST/DGCA shall also designate a focal point to identify, strategize, and coordinate such implementation and monitoring as well as being the custodian of all EARR information.

(vi) Coordination. The EARR through the focal point will coordinate with relevant government agencies and development partners particularly those working on the rehabilitation and reconstruction of the area to ensure effective communication effort by avoiding overlaps and identity potential collaboration if possible.

82. This strategy will be presented in detail as an EARR’s communications strategy matrix of the government and ADB. The matrix will outline project’s communications context and outcomes, objectives, key messages, specific channels and activities, timeline of delivery, work responsibility and resource allocation.

X. ANTICORRUPTION POLICY

83. ADB reserves the right to investigate, directly or through its agents, any violations of the Anticorruption Policy relating to the EARR. All contracts financed by ADB shall include provisions specifying the right of ADB to audit and examine the records and accounts of the executing agency and all project contractors, suppliers, consultants, and other service providers. Individuals and/or entities on ADB’s anticorruption debarment list are ineligible to participate in ADB-financed activity and may not be awarded any contracts under the EARR.

84. To support these efforts, relevant provisions are included in the loan agreement and the bidding documents for the EARR.

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27 ADB’s Integrity Office web site: [http://www.adb.org/integrity/unit.asp](http://www.adb.org/integrity/unit.asp)
XI. ACCOUNTABILITY MECHANISM

85. People who are, or may in the future be, adversely affected by the project may submit complaints to ADB’s Accountability Mechanism. The Accountability Mechanism provides an independent forum and process whereby people adversely affected by ADB-assisted projects can voice, and seek a resolution of their problems, as well as report alleged violations of ADB’s operational policies and procedures. Before submitting a complaint to the Accountability Mechanism, affected people should try in good faith to solve their problems by working with the concerned ADB operations department. Only after doing that, and if they are still dissatisfied, should they approach the Accountability Mechanism.28

XII. RECORD OF CHANGES TO THE PROJECT ADMINISTRATION MANUAL

86. The PAM will be subject to change after ADB Board approval of the project and during the period of project implementation. All revisions and updates of the PAM made should be recorded in this section to provide a chronological history of the changes to the implementation arrangements recorded in PAM.

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## Profiles of Potential Subprojects Under Outputs 3 and 4

<table>
<thead>
<tr>
<th>Output</th>
<th>Ports rehabilitated and reconstructed</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Subproject</strong></td>
<td>Rehabilitation and Reconstruction of Pantoloan port</td>
</tr>
<tr>
<td><strong>Agency in charge</strong></td>
<td>Directorate General of Sea Transportation through Directorate of Port Affairs</td>
</tr>
</tbody>
</table>

**Description**

Damage suffered by the Pantoloan port following the September 2018 earthquake includes:

- Container and luffing crane wharf show damage and evidence of movement. Safety factor for operations is unknown.
- The single ship to shore crane used to handle containers collapsed during the earthquake. Immediate post disaster container volume declined from 6000 TEUs/month to 1000 TEUs/month as container could only be unloaded using ships’ cranes; volumes are recovering but constrained by the lack of effective equipment. Container handling capability of the port fell from about 17 containers per hour to around 5 containers per hour. A ship to shore crane has been relocated from Bitung to Pantoloan port and attempts to commission the crane are ongoing. The crane is over twenty years old and is reported to be beyond its normal functional life; spares and reliability of the crane are substantial concerns to the operator. The crane has been placed on a wharf that has not been certified as to strength. The crane rails on which the crane is to run have not been reset and remain out of alignment (as verified by visual inspection); this will cause incremental damage to the crane should it be operated.
- A luffing crane suffered structural damage and is not able to be restored to a functional state due to an inability to identify appropriate spares.
- Container yard, backup/storage areas, passenger terminal, gates, fences, trestles, and buildings at the port sustained damage and require repair and/or replacement. Equipment in the container yard is functional though its movement is restricted by the condition of the backup/storage area.

Subproject is expected to support:

- Detailed design to the latest Indonesian seismic and construction supervision
- Repair of damaged wharf and extension by 100m
- Repair of container yard, backup/storage areas, passenger terminal, gates, fences, trestles, and buildings
- Procurement and installation of 2 ship to shore cranes
- Procurement of cargo handling equipment with commissioning, operations training and maintenance support
- Emergency response plans
<table>
<thead>
<tr>
<th>Critical enhancements to be introduced by the subproject include:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Expansion of cargo handling capability to 200,000 TEUs by 2022 from 70,000 TEUs in 2017</td>
</tr>
<tr>
<td>• Doubling of productivity to 40 containers per hour to meet ship turnaround requirements for reliable services compared to 17 containers per hour in 2017</td>
</tr>
<tr>
<td>• Reduction in freight costs by more than 25%</td>
</tr>
</tbody>
</table>

Through TA subprojects under Sustainable Infrastructure Assistance Program (SIAP), ADB will provide (i) port operations experts to assist in the revision of port masterplan, (ii) marine civil engineer to review detailed designs, assist in monitoring of works contracts and help prepare port emergency response plans, (iii) procurement expert to expedite contracting of consultants and contractors and (iv) public financial management expert to strengthen financial management of the project. Such experts will be expected to build capacity of implementing agencies. It is worth noting that ADB’s technical assistance has been used to strengthen the port damage assessment.
<table>
<thead>
<tr>
<th><strong>Output</strong></th>
<th><strong>Ports rehabilitated and reconstructed</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Subproject</strong></td>
<td><strong>Rehabilitation of Donggala port</strong></td>
</tr>
<tr>
<td><strong>Agency in charge</strong></td>
<td>Directorate General of Sea Transportation through Directorate of Port Affairs</td>
</tr>
</tbody>
</table>

**Description**

Damage suffered by Donggala port following the September 2018 earthquake includes:

- 50m x 12m main wharf destroyed with the quay deck failed.
- Remainder of the wharf and access bridges show severe damage (movement of perhaps 1m) but can be used at an unknown level of safety.
- Backup storage areas and buildings at the port have sustained damage and require repair and/or replacement.
- Port operations undertaken have declined by at least 50%.

Subproject is expected to support:

- Detailed design and construction supervision
- Replacement of wharf, trestles, gates and pavement
- Procurement of cargo handling equipment with commissioning, operations training and maintenance support
- Emergency response plan

**Proposed enhancements**

Critical enhancements to be introduced by the subproject include restoration of port operations and heightened resilience to disasters.

Through TA subprojects under Sustainable Infrastructure Assistance Program (SIAP), ADB will provide (i) port operations experts to assist in the revision of port masterplan, (ii) marine civil engineer to review detailed designs, assist in monitoring of works contracts and help prepare port emergency response plans, (iii) procurement expert to expedite contracting of consultants and contractors and (iv) public financial management expert to strengthen financial management of the project. Such experts will be expected to build capacity of implementing agencies. It is worth noting that ADB’s technical assistance has been used to strengthen the port damage assessment.
<table>
<thead>
<tr>
<th>Output</th>
<th>Ports rehabilitated and reconstructed</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Subproject</strong></td>
<td>Rehabilitation of Wani port</td>
</tr>
<tr>
<td><strong>Agency in charge</strong></td>
<td>Directorate General of Sea Transportation through Directorate of Port Affairs</td>
</tr>
</tbody>
</table>
| **Description** | Damage suffered by Wani port following the September 2018 earthquake includes:  
  - 80m x 12m wharf completely destroyed.  
  - Second wharf has been damaged with half of it collapsing into the sea  
  - Cargo yard, passenger terminal, two DGST office buildings, two government houses destroyed.  
  - Ferry (3,000 DWT) was stranded on part of a margin quay but was successfully removed.  
  - Limited operations have been restored. These operations are unsafe and inefficient due to the change in level between shore and the remaining quay that resulted from the earthquake.  
  - Port operations undertaken through traditional vessels have declined by at least 75%. |
| **Proposed enhancements** | Critical enhancements to be introduced by the subproject include restoration of port operations and heightened resilience to disasters. |

Through TA subprojects under Sustainable Infrastructure Assistance Program (SIAP), ADB will provide (i) port operations experts to assist in the revision of port masterplan, (ii) marine civil engineer to review detailed designs, assist in monitoring of works contracts and help prepare port emergency response plans, (iii) procurement expert to expedite contracting of consultants and contractors and (iv) public financial management expert to strengthen financial management of the project. Such experts will be expected to build capacity of implementing agencies. It is worth noting that ADB’s technical assistance has been used to strengthen the port damage assessment.
<table>
<thead>
<tr>
<th>Output</th>
<th>Airport rehabilitated and reconstructed</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Subproject</strong></td>
<td>Air and Landside infrastructure rehabilitation and reconstruction at Mutiara Sis Al Jufri Airport</td>
</tr>
<tr>
<td><strong>Agency in charge</strong></td>
<td>Directorate General of Civil Aviation through Directorate of Airports</td>
</tr>
</tbody>
</table>
| **Description** | Damage suffered by the airport following the September 2018 earthquake includes:  
  - Out of 2500m runway, there was extensive damage to 250m x 45m area (at the 33 threshold) with cracks exceeding 100cm in depth. Serious damage to another 250m section of runway (at the 15 threshold)  
  - Minor cracks and uneven surface along entire length of runway. International Civil Aviation Organization (ICAO) prescribed longitudinal and transverse slopes are damaged. Unpaved shoulders alongside the runway have suffered similar misalignment.  
  - Significant damage to terminal building, warehouse, firehouse and control tower. Most structures are presently being used and pose safety risk to occupants.  
  - Airport rescue and firefighting facility truck bay has failing columns and poses very high safety risk for occupants. |
| | Given the damage described above, safety of passengers as well as those employed in airline, retail, or airport operations is at risk, particularly if another earthquake strikes. Also, shorter usable runway creates increased logistics costs since planes are forced to fly with reduced payloads. |
| | The subproject is expected to support the following:  
  - Detailed design preparation and construction supervision  
  - Rehabilitation of runway to enhance safety and operability  
    - Reshape the runway strip to ICAO recommended slopes providing rapid drainage for the runway  
    - Construct 7.5m paved shoulders on both sides along runway  
    - Complete comprehensive soil testing program for the backfilled area of thresholds 15 and 33 to determine the compaction levels and California Bearing Ratio (CBR) of the installed backfill  
    - Complete full depth repair for the 250-meter lengths of the runway thresholds 15 and 33.  
  - Rehabilitation/reconstruction of terminal building and other supporting infrastructure facilities  
    - Structural repairs for the Passenger Terminal with special attention given to reinforcing details for the top and bottom of the columns to assure proper confinement.  
    - Incorporate nonstructural seismic restraints for all installed elements (e.g., lighting, AC)  
    - Reconstruct airport rescue and firefighting facility truck bay and living quarters compliant to the latest version of the Indonesia seismic code. |
<table>
<thead>
<tr>
<th>Proposed enhancements</th>
<th>Critical enhancements to be introduced by the subproject include:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Ensuring compliance with ICAO standards with immediate</td>
</tr>
<tr>
<td></td>
<td>improvements in safety levels (e.g. through construction of 7.5m</td>
</tr>
<tr>
<td></td>
<td>paved shoulders alongside runway to make them capable of</td>
</tr>
<tr>
<td></td>
<td>supporting 60% of the max landing load of “C” aircraft)</td>
</tr>
<tr>
<td></td>
<td>• Exploration of use of geo-grids on both thresholds (but</td>
</tr>
<tr>
<td></td>
<td>especially the one closest to the liquefaction site) to reinforce</td>
</tr>
<tr>
<td></td>
<td>the subbase while reducing material costs. Geo-grids consist of</td>
</tr>
<tr>
<td></td>
<td>fiberglass 3-dimensional reinforcement for the soil and provide</td>
</tr>
<tr>
<td></td>
<td>additional strength in three directions.</td>
</tr>
<tr>
<td></td>
<td>• Use of modern seismic design considerations (i.e. strong</td>
</tr>
<tr>
<td></td>
<td>column-weak beams) to avoid a shear failure (damage to the top</td>
</tr>
<tr>
<td></td>
<td>and bottom of the columns) in a future earthquake event.</td>
</tr>
<tr>
<td></td>
<td>• Use of seismic restraints to hold non-structural elements</td>
</tr>
<tr>
<td></td>
<td>• Preparation of airport emergency response plan and training on</td>
</tr>
<tr>
<td></td>
<td>the same</td>
</tr>
</tbody>
</table>

Through TA subprojects under Sustainable Infrastructure Assistance Program (SIAP), ADB will provide (i) structural engineer to review detailed designs, assist in monitoring of works contracts and help prepare emergency response plans, (ii) procurement expert to expedite contracting of consultants and contractors and (iii) public financial management expert to strengthen financial management of the project. Such experts will be expected to build capacity of implementing agencies. It is worth noting that ADB’s technical assistance has been used to strengthen the airport damage assessment and enhance quality of conceptual designs that are currently under preparation.
Outline Quarterly Progress Report Format

All information will be provided for quarter preceding issuance of report.

Section A: Implementation Progress
1. General data on progress in implementation
2. Problems encountered and resolved
3. Other issues pending
4. Other information or data relevant for project
5. Safeguard compliance on projects
6. GAP implementation progress
7. Updated implementation progress

Section B: Procurement Information
1. Detailed report on procurement activities
   a. Status of bidding documents
   b. Status of bids in progress
   c. Contracts awarded
   d. Contracts closed
   e. Contracts with issues
2. Procurement plan for next quarter (or updated procurement plan spreadsheet)

Section C: Financial Information
1. Disbursement status
2. Special account status
3. Loan and Grant commitments
4. Contract payments
5. Status of audits
6. Other financial management issues

Section D: Other Information
1. Major/minor change in scope
   a. Cost escalations
   b. Revision in cost category
   c. Change in implementation procedures
2. 2 Major activities planned for next quarter

Attachments:
1. **PPR**: The quarterly report will be accompanied by an updated Project Performance Review (PPR) spreadsheet comprising (i) updated project implementation plan, (ii) contract awards and disbursement graphs and (ii) contract awards and disbursement plan.
2. **GAP**: GAP monitoring will accompany the quarterly report and provide information on progress achieved to meet each target identified in the GAP.
3. **Stakeholder Communication Strategy**: At EARR inception, the government and ADB will agree on a strategy and action plan to disseminate information on the EARR’s objective, outcome, and outputs. The quarterly report will provide details on activities and progress towards EARR outcome.
Subproject Summary Report Template

i. FOREWORD

1 GENERAL
1.1 Objective and Scope of Report
1.2 Information Basis

2 PROFILE OF PROJECT AREA IN THE PRESENT SITUATION
2.1 General
2.2 Infrastructure
2.3 Socio-Economic Aspects
2.4 Climate Change

3 WORKS PROPOSED UNDER THE SUBPROJECT
3.1 Project Objective
3.2 Scope of Work
   A. Civil Works
   B. Non-civil Works
3.3 Estimated Construction/Implementation Cost of the Proposed Works
3.4 Project Implementation

4 SUBPROJECT IMPACT
4.1 Future “Without-the-Project” Situation
4.2 Subproject Beneficiaries
4.3 Subproject Benefits
   4.3.1 Direct Benefits
   4.3.2 Indirect Tangible Benefits
   4.3.3 Intangible Benefits
   4.3.4 Summary of Subproject Project Benefits
4.4 Social and Gender Impact
4.5 Environmental Impact

5 ECONOMIC ANALYSIS
5.1 Cost-Benefit Analysis
   5.1.1 Project Economic Costs and Benefits
   5.1.2 Economic Evaluation
5.2 Sensitivity Analysis

6 CONCLUSIONS AND RECOMMENDATIONS
Appendix 3

Contract Awards and Disbursement Projections in $ Million

A. Project – to - Date Contract Awards and Disbursement

<table>
<thead>
<tr>
<th>Year</th>
<th>Contract Awards (in USD million)</th>
<th>Disbursements (in USD million)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Q1</td>
<td>Q2</td>
</tr>
<tr>
<td>2019</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>2020</td>
<td>2.93</td>
<td>18.65</td>
</tr>
<tr>
<td>2022</td>
<td>109.75</td>
<td>109.75</td>
</tr>
<tr>
<td>2023</td>
<td>109.75</td>
<td>-</td>
</tr>
</tbody>
</table>

Note: Numbers may not tally due to rounding.

B. Year – to - Date Contract Awards and Disbursement

<table>
<thead>
<tr>
<th>Year</th>
<th>Contract Awards (in USD million)</th>
<th>Disbursements (in USD million)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Q1</td>
<td>Q2</td>
</tr>
<tr>
<td>2019</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>2020</td>
<td>0.00</td>
<td>15.72</td>
</tr>
<tr>
<td>2021</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>2022</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>2023</td>
<td>0.00</td>
<td>0.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
<th>Disbursements (in USD million)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
</tr>
<tr>
<td>2019</td>
<td>2.93</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>2020</td>
<td>0.00</td>
<td>15.72</td>
<td>13.95</td>
</tr>
<tr>
<td>2022</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>2023</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>Total contract awards: 109.75</th>
<th>Total Disbursement: 109.75</th>
</tr>
</thead>
</table>

Note: Numbers may not tally due to rounding.
Procurement Plan

<table>
<thead>
<tr>
<th>Basic Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Name: Emergency Assistance for Rehabilitation and Reconstruction</td>
</tr>
<tr>
<td>Project Number: 53216-001</td>
</tr>
<tr>
<td>Country: Indonesia</td>
</tr>
<tr>
<td>Project Procurement Classification: A</td>
</tr>
<tr>
<td>Procurement Risk: Medium</td>
</tr>
<tr>
<td>Project Financing Amount: $124.55 million</td>
</tr>
<tr>
<td>ADB Financing: $109.75 million</td>
</tr>
<tr>
<td>Non-ADB Financing: $14.80 million</td>
</tr>
<tr>
<td>Date of First Procurement Plan: 23 May 2019</td>
</tr>
<tr>
<td>Procurement Plan Duration: 18 months</td>
</tr>
</tbody>
</table>

A. Methods, Review and Procurement Plan

Except as the Asian Development Bank (ADB) may otherwise agree, the following methods shall apply to procurement of goods, works, non-consulting services, and consulting services.

<table>
<thead>
<tr>
<th>Procurement of Goods, Works, and Non-consulting Services</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Method</strong></td>
</tr>
<tr>
<td>OCB (Open Competitive Bidding) for Works</td>
</tr>
<tr>
<td>OCB (Open Competitive Bidding) for Goods</td>
</tr>
<tr>
<td>RFQ (Request for Quotation)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Consulting Services</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Method</strong></td>
</tr>
<tr>
<td>Quality and Cost Based Selection (QCBS)</td>
</tr>
<tr>
<td>Consultants’ Qualifications Selection (CQS)</td>
</tr>
<tr>
<td>Individual Consultant Selection (ICS)</td>
</tr>
</tbody>
</table>
B. List of Active Procurement Packages (Contracts)

The following table lists goods, works and consulting services contracts for which the procurement activity is either ongoing or expected to commence within the procurement plan duration.

<table>
<thead>
<tr>
<th>Package Number</th>
<th>General Description</th>
<th>Estimated Value ($ million)</th>
<th>Procurement Method</th>
<th>Review</th>
<th>Bidding Procedure</th>
<th>Advertisement Date</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>CW Sea Port 1</td>
<td>Works for reconstruction of Donggala port</td>
<td>7.81</td>
<td>OCB</td>
<td>Prior</td>
<td>1S1E</td>
<td>Q1 2020</td>
<td>Advertisement: National, Prequalification of Bidders: No Domestic Preference Applicable: No Type of bidding document: ADB’s SBD Small Works.</td>
</tr>
<tr>
<td>CW Sea Port 2</td>
<td>Works for reconstruction of Wani port</td>
<td>6.08</td>
<td>OCB</td>
<td>Prior</td>
<td>1S1E</td>
<td>Q1 2020</td>
<td>Advertisement: National, Prequalification of Bidders: No Domestic Preference Applicable: No Type of bidding document: ADB’s SBD Small Works.</td>
</tr>
<tr>
<td>CW Sea Port 3</td>
<td>Works for reconstruction of Pantoloan port</td>
<td>45.83</td>
<td>OCB</td>
<td>Prior</td>
<td>1S1E</td>
<td>Q2 2020</td>
<td>Advertisement: International, Prequalification of Bidders: No Domestic Preference Applicable: No Type of bidding document: ADB’s SBD Large Works</td>
</tr>
<tr>
<td>EQ 02</td>
<td>Equipment - Cargo Handling Equipment and Training</td>
<td>7.46</td>
<td>OCB</td>
<td>Prior</td>
<td>1S1E</td>
<td>Q2, 2020</td>
<td>Advertisement: International, Prequalification of Bidders: No</td>
</tr>
<tr>
<td>Package Number</td>
<td>General Description</td>
<td>Estimated Value ($ million)</td>
<td>Procurement Method</td>
<td>Review</td>
<td>Bidding Procedure</td>
<td>Advertisement Date</td>
<td>Comments</td>
</tr>
<tr>
<td>----------------</td>
<td>-------------------------------------------</td>
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<td>----------</td>
</tr>
<tr>
<td>CW Airport 1</td>
<td>Works - reconstruction of runway</td>
<td>9.98</td>
<td>OCB</td>
<td>Prior</td>
<td>1S1E</td>
<td>Q4, 2019</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CW Airport 2</td>
<td>Works - reconstruction of terminal and other buildings</td>
<td>12.15</td>
<td>OCB</td>
<td>Prior</td>
<td>1S1E</td>
<td>Q4, 2019</td>
<td></td>
</tr>
</tbody>
</table>

Domestic Preference Applicable: No
Type of bidding document: ADB's SBD Goods

1S1E = single-stage: one-envelope, ADB = Asian Development Bank, OCB = open competitive bidding, Q = quarter, SBD = standard bidding documents.
<table>
<thead>
<tr>
<th>Package Number</th>
<th>General Description</th>
<th>Estimated Value ($ million)</th>
<th>Selection Method</th>
<th>Review</th>
<th>Type of Proposal</th>
<th>Advertisement Date</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS1 Port</td>
<td>Preliminary Design Management Consultant</td>
<td>0.80</td>
<td>CQS</td>
<td>Prior</td>
<td>BTP</td>
<td>Q2 2019</td>
<td>Advance procurement: Yes National advertisement</td>
</tr>
<tr>
<td>CS 2 Port</td>
<td>Design and Construction Supervision Consultant</td>
<td>3.71</td>
<td>QCBS</td>
<td>Prior</td>
<td>FTP</td>
<td>Q2 2019</td>
<td>Advance procurement: Yes International advertisement</td>
</tr>
<tr>
<td>CS1 Airport</td>
<td>Design and Construction Supervision</td>
<td>1.0</td>
<td>CQS</td>
<td>Prior</td>
<td>BTP</td>
<td>Q2 2019</td>
<td>Advance procurement: Yes National advertisement</td>
</tr>
<tr>
<td>CS Individuals (Multiple contracts)</td>
<td>Individual Consultant</td>
<td>0.75</td>
<td>ICS</td>
<td>Prior/ Post</td>
<td>NA</td>
<td>Q1 2019</td>
<td>Assignment/ Advertisement: International/ National</td>
</tr>
</tbody>
</table>

BTP = biodata technical proposal, CQS = consultants’ qualifications selection, FTP = full technical proposal, ICS = individual consultant selection, NA = not applicable, Q = quarter, QCBS = quality- and cost-based selection.
Terms of Reference of Consultants
CONSULTANT TERMS OF REFERENCE FOR PORTS COMPONENT

I. Terms of Reference for Preliminary Design Management Consultant
II. Terms of Reference for Design and Construction Supervision Consultant
III. Terms of Reference for Individual Consultants
I. Terms of Reference for Preliminary Design Management Consultant (PMC) Services for Port Sector

A. Background

1. Earthquakes and an associated tsunami in late September 2018 caused major damage at three ports in Central Sulawesi. The damage included marine facilities, backup/storage areas and buildings. Services including electrical supplies and communications have also been damaged. The three ports are: (i) Pantoloan, which is the main container facility for the region, (ii) Donggala, a significant general cargo and bulk port supporting the region and (iii) Wani, which handles regional cargo and traditional vessels. At all ports the shoreline has changed shape and position suggesting significant changes to the bathymetry and topography of the area that may impact marine and shoreside operations. The Government of Indonesia has secured an Emergency Assistance for Rehabilitation and Reconstruction loan (EARR) from the Asian Development Bank (ADB), which will finance the rehabilitation, reconstruction and enhancement of the three ports. The executing agency will be Ministry of Transportation (MOT) with the Directorate General of Sea Transport (DGST) being the implementing agency. To do this it has established a Project Implementation Unit (PIU). The services of a Preliminary Design Management Consultant (PMC) are sought to assist MOT and DGST/PIU in the implementation of EARR.

B. Objectives

2. DGST requires the services of a Preliminary Design Management Consultant (PMC) to assist PIU in preparing conceptual engineering designs, revising the master plan for ports in the region and to support in the recruitment of a Design and Construction Supervision Consultant (DSC).

C. Scope of Services

3. The scope of services to be provided by PMC shall include, but not be limited to, the following:
   a. Review available data and relevant reports on earthquake and tsunami damage.
   b. Review the recommendations of the PIU on the type of port facilities at the three locations to best serve the future requirements of Central Sulawesi including the logistical requirements of rehabilitation efforts in the region.
   c. Assess the scale, nature and causal mode of damage caused to the port by the earthquake and tsunami by undertaking physical surveys and structural and geotechnical analysis of all structures, support areas, buildings and equipment. The surveys should include bathymetric surveys, side-scan sonar (to locate and map major debris on the seabed), diver inspection to check integrity of piles and geotechnical surveys to determine susceptibility to liquefaction and design parameters for rehabilitation and enhancement works.
   d. Prepare interim and long-term port operations plans, budgets and rehabilitation schedules for each port that are consistent with port masterplan for Palu bay ports. Such operations plans should include safety and emergency response plans.
   e. Based on damage assessment, prepare conceptual engineering designs and specifications for Donggala, Wani, and Pantoloan ports that include all appropriate safety and disaster resilience measures.
   f. Prepare appropriate environmental and social safeguard assessments in accordance
with ADB’s Safeguard Policy Statement (2009), the environmental assessment and review framework (EARF) and the Resettlement and Customary Community Development Framework (RCCDF)).

g. Prepare the Subproject Appraisal Reports (SPAR) for the subprojects in Donggala, Wani and Pantoloan in conformity with outline provided in Project administration Manual of EARF.

h. Provide capacity development to PIU and relevant stakeholders on the operations plan.

i. Recommend measures to enable the project(s) to be delivered as soon as practical to meet the need to support wider reconstruction in the region.

j. Provide assistance during bid evaluation and contract negotiations for design and construction supervision consultant (DSC).

4. The duration of the PMC contract is expected to be 12 months.

D. Reports and Deliverables

5. The PMC shall prepare and submit reports in English and Bahasa Indonesia as indicated in Table 1. Each report shall be produced in four hard copies (three for the PIU and one for ADB) and three CD-ROM (two for the PIU and one for ADB). Additional copies of CD-ROMs may be required.

**Table 1: Reporting Schedule**

<table>
<thead>
<tr>
<th>Report</th>
<th>Description</th>
<th>Deadline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inception Report</td>
<td>Comments on the TOR suggesting variation and observation on issues which may have technical or financial implications, or which may affect the progress of the works, if any.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Description of proposed methodology, works and staffing schedules.</td>
<td>Within one month of starting the services.</td>
</tr>
<tr>
<td>Monthly Reports</td>
<td>A summary of the monthly progress is required together with a plan for the following month. The report should include details and recommendations of any hindrances to performance of the work.</td>
<td>7 days after each month end</td>
</tr>
<tr>
<td>Long Term Operations Plan and Conceptual Design</td>
<td>This report shall be in three parts:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A. Surveys including:</td>
<td>Within 5 months</td>
</tr>
<tr>
<td></td>
<td>1) Bathymetric surveys with tidal analysis</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2) Topographical survey</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3) Maps and photos of major debris on the nearby sea bed from side scan sonar</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4) Diver inspection of pile foundations with photos to check integrity of the piles</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5) Visual assessment of all structures, support areas, buildings and equipment</td>
<td></td>
</tr>
</tbody>
</table>
### E. Requirements

6. An estimate of the staff required with their qualifications and experience is given in Table 2.

**Table 2: Staff Requirements**

<table>
<thead>
<tr>
<th>Key Expert</th>
<th>Type</th>
<th>Qualification</th>
<th>Person-Months</th>
</tr>
</thead>
</table>
| Team Leader / Port Operations and Management | International | • Degree in engineering  
• Preference to be given to candidates with at professional engineering license or internationally recognized accreditation (e.g. Chartered Engineer, Professional Engineer, or equivalent)  
• At least 20 years of experience covering port design and construction, port operations, cargo handling equipment procurement.  
• Ability to prepare reports and otherwise communicate effectively in English | 6             |
<table>
<thead>
<tr>
<th>Key Expert</th>
<th>Type</th>
<th>Qualification</th>
<th>Person-Months</th>
</tr>
</thead>
</table>
| Deputy Project Manager                   | National | • Degree in civil engineering  
• Preference to be given to candidates with at professional engineering license or internationally recognized accreditation (e.g. Chartered Engineer, Professional Engineer, or equivalent)  
• At least 20 years of experience in managing and administering construction contracts in the maritime or related projects with preference  
• Preference given to candidates with exposure to projects financed by international financing institutions. | 9            |
| Port Design Engineer                     | International | • Degree in civil engineering  
• Preference to be given to candidates with at professional engineering license or internationally recognized accreditation (e.g. Chartered Engineer, Professional Engineer, or equivalent)  
• At least 15 years of experience in marine civil engineering design.  
• Ability to prepare reports and otherwise communicate effectively in English | 3            |
| Deputy Port Design Engineer              | National | • Degree in civil engineering  
• Preference to be given to candidates with at professional engineering license or internationally recognized accreditation (e.g. Chartered Engineer, Professional Engineer, or equivalent)  
• At least 7 years of experience in marine civil engineering design with preference  
• Preference given to candidates with exposure to projects financed by international financing institutions. | 5            |
| Geotechnical and foundation design engineer | International | • Degree in civil engineering  
• Preference to be given to candidates with at professional engineering license or internationally recognized accreditation (e.g. Chartered Engineer, Professional Engineer, or equivalent)  
• At least 10 years of experience in geotechnical and pavement design including liquefaction  
• Ability to prepare reports and otherwise communicate effectively in English | 2            |
| Deputy geotechnical and                  | National | • Degree in civil engineering  
• Preference to be given to candidates with | 4            |
<table>
<thead>
<tr>
<th>Key Expert</th>
<th>Type</th>
<th>Qualification</th>
<th>Person-Months</th>
</tr>
</thead>
</table>
| foundation design engineer|               | at professional engineering license or internationally recognized accreditation (e.g. Chartered Engineer, Professional Engineer, or equivalent)  
• At least 10 years of experience in geotechnical and pavement design with preference  
• Preference given to candidates with exposure to projects financed by international financing institutions. |               |
| Procurement Specialist / Quantity Surveyor | National | • Degree in degree in civil engineering, law, commerce or related field  
• At least 10 years of experience including 7 years in procurement and preparing contract documents for internationally funded infrastructure projects.  
• Ability to prepare documents/reports and otherwise communicate effectively in English | 6             |
| Transport economist       | National     | • Postgraduate degree in economics, finance, or related field  
• At least 10 years of relevant experience working as an economist and/or financial analyst in port sector with preference  
• Preference given to candidates with exposure to projects financed by international financing institutions. | 1             |
| Environment Safeguard Specialist | International | • Degree in environmental science, natural sciences/engineering or related field  
• At least 10 years of experience in environmental assessment in maritime or related infrastructure projects.  
• Preference given to candidates with demonstrated knowledge of ADB’s Safeguard Policy Statement (2009)  
• Ability to prepare reports and otherwise communicate effectively in English | 1             |
| Environment Safeguard Specialist | National | • Degree in environmental sciences, natural sciences, planning or related field.  
• At least 5 years of relevant experience in and demonstrated familiarity with Indonesia’s regulatory framework for environmental assessment and management in maritime or related infrastructure projects  
• Preference given to candidates with exposure to projects financed by | 1.5           |
### Key Expert | Type | Qualification | Person-Months
---|---|---|---
Social Safeguard Specialist | National | • Degree in social science or related field  
• At least 7 years of experience in social impact assessment, land acquisition and resettlement planning for infrastructure projects. Experience in social safeguards monitoring of projects  
• Preference given to candidates with demonstrated knowledge of ADB’s Safeguard Policy Statement (2009)  
• Preference given to candidates with exposure to projects financed by international financing institutions. | 2

### F. Consultant Responsibilities

7. The following table indicates responsibilities of the individual experts.

**Table 3: Individual Responsibilities**

<table>
<thead>
<tr>
<th>Key Expert</th>
<th>Responsibilities</th>
</tr>
</thead>
</table>
| Team Leader / Port Operations and Management | 1) Manage and coordinate the entire team and ensure timely delivery and high quality of the deliverables.  
2) Review the available data and relevant reports on the earthquake and tsunami damage at the ports.  
3) Coordinate activities with PIU, port operators, TKBM and other key stakeholders  
4) Review port masterplan for ports in Palu bay and make recommendations regarding appropriate amendments  
5) Based on review of port masterplan, prepare interim and long-term port operations plans, including safety and emergency response plans (port preparation on warning, evacuation plans, training and exercise requirements etc.), budgets and rehabilitation schedules for each port taking into account different key stakeholders including DGST, port operators and TKBM  
6) Present key findings of each required report outlined in paragraph 6 above and seek comments and approval as necessary from PIU.  
7) Provide assistance during bid evaluation and negotiations for the Design and Supervision Consultant (DSC) |  
| Deputy Team Leader | 1) Support the Team Leader in execution of their tasks including facilitation of stakeholder consultations  
2) Conduct annual review of progress of the activities following |
### Key Expert | Responsibilities
---|---
Port Design Engineer | 1) Lead all the work related to damage assessments  
2) Provide the technical input into the survey contracts, supervise work of survey providers and interpret the results  
3) Develop recommendations on the type and location of all required facilities  
4) Prepare conceptual engineering designs, budgets and schedules

Deputy Port Design Engineer | 1) Support the international port design engineer in execution of their tasks  
2) Supervise surveys on site as required

Geotechnical and Foundation Design Engineer | 1) Specify, organize and supervise various geotechnical surveys necessary for design of the facilities.  
2) Assess the potential for liquefaction at the ports and recommend ground improvement measures if necessary.  
3) Carry out conceptual design of the pavement areas  
4) Estimate the probable range of pile lengths

Deputy Geotechnical and Foundation Design Engineer | 1) Support the international Geotechnical Engineer in execution of their tasks  
2) Supervise surveys on site as required

Procurement Specialist / QS | 1) Assist the Port Design Engineer in the preparation of budgets and schedules for the rehabilitation works  
2) Provide assistance during bid evaluation and negotiations for the Design and Supervision Consultant (DSC)  
3) Procure surveys as required following direction of the Team Leader and other relevant experts

Transport Economist | 1) Prepare economic or/and financial analysis for port subprojects to ensure that the proposed projects are economically or financially viable.  
2) Prepare relevant sections of the SPARs for the reconstruction of the ports.

Environment Safeguard Specialists | 1) Prepare a consolidated initial environmental examination (IEE) including 3 environmental management plans (EMP) for the proposed rehabilitation works at the 3 ports in accordance with the Environmental Assessment and Review Framework (EARF) and ADB’s Safeguard Policy Statement (2009).  
2) Establish relevant environmental baseline for project area of influence, including acquisition of additional baseline (marine ecology, air quality, noise, socio-economic resources) as needed.  
3) Ensure meaningful public consultation during IEE preparation.  
4) Establish grievance redress mechanism (GRM) in accordance with the EARF.  
5) Provide training to relevant PIU staff and DSC team.  
6) Support incorporation of environmental clauses and the EMPs in the bidding documents for works contracts.  
7) Prepare environment monitoring and reporting protocols to be
<table>
<thead>
<tr>
<th>Key Expert</th>
<th>Responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environment Safeguard Specialist (national)</td>
<td>1) Support the international Environment Safeguard Specialist in execution of their tasks</td>
</tr>
<tr>
<td></td>
<td>following/used by the DSC team during project construction.</td>
</tr>
<tr>
<td>Social Safeguards Specialists</td>
<td>1) Identify social safeguard risks and impacts (for land acquisition and impact on customary communities) based on EARR’s Resettlement and Customary Communities Development Framework (RCCDF) and determine whether Resettlement and Customary Communities Development Plan (RCDDP), or resettlement plan (RP) must be prepared</td>
</tr>
<tr>
<td></td>
<td>2) Determine if due diligence report and corrective action plan (DDR-CAP) has to be prepared</td>
</tr>
<tr>
<td></td>
<td>3) Prepare socio-economic information and other relevant information regarding affected peoples</td>
</tr>
<tr>
<td></td>
<td>4) Ensure meaningful consultation and recording of the same during preparation of RCCDP. or RP or DDR-CAP</td>
</tr>
<tr>
<td></td>
<td>5) Establish grievance redress mechanism (GRM) in accordance with the RCCDF.</td>
</tr>
<tr>
<td></td>
<td>6) Provide training to relevant PIU staff and DSC team in coordination with environmental safeguards activities</td>
</tr>
<tr>
<td></td>
<td>7) Ensure RCDDP or RP or DDR-CAP is reflected in the bidding documents</td>
</tr>
<tr>
<td></td>
<td>8) Prepare outline for social safeguards monitoring report to be followed by DSC during implementation</td>
</tr>
</tbody>
</table>
II. Terms of Reference for Design and Construction Supervision Consultant (DSC) for Port Component

A. Background

1. Earthquakes and an associated tsunami in late September 2018 caused major damage at three ports in Central Sulawesi. The damage included marine facilities, backup/storage areas and buildings. Services including electrical supplies and communications have also been damaged. The three ports are: (i) Pantoloan, which is the main container facility for the region, (ii) Donggala, a significant general cargo and bulk port supporting the region and (iii) Wani, which handles regional cargo and traditional vessels. At all ports the shoreline has changed shape and position suggesting significant changes to the bathymetry and topography of the area that may impact marine and shoreside operations. The Government of Indonesia has applied for an Emergency Assistance for Rehabilitation and Reconstruction loan (EARR) from the Asian Development Bank (ADB), which will finance the rehabilitation, reconstruction and enhancement of the three ports. The scope of rehabilitation works shall include wharves, approach trestles, pavements, buildings (maintenance, government, port administration, warehousing), lighting, control and communications systems, water, waste water, power systems and cargo handling equipment. The executing agency will be Ministry of Transportation (MOT) with the Directorate General of Sea Transportation (DGST) being the implementing agency. DGST has established a Project Implementation Unit (PIU) under the Directorate of Port Affairs to implement the project.

B. Objectives

2. DGST requires the services of a Design and Construction Supervision Consultant (DSC) to assist PIU in preparing detailed engineering designs and supervising implementation of rehabilitation, reconstruction and enhancement works at the three ports based on conceptual designs developed by the Project Management Consultant (PMC) under a separate contract.

C. Scope of Services

3. The services will be performed in two phases: detailed engineering design (DED) and construction supervision. Duration of the DSC contract is estimated at approximately 30 months based in part on (i) estimated construction period of 540 days for Pantoloan port and construction period of 510 days for each of Donggala and Wani ports and (ii) plan to procure and install cargo handling equipment prior to completion of civil works contracts.

4. In the design phase the scope of services to be provided by the DSC will include, but not be limited to, the following activities:

   a. Review the surveys, damage assessments, recommendations and conceptual engineering designs carried out by the PMC and recommend and supervise any additional surveys (e.g., boreholes) considered necessary for preparation of DED
   b. Develop DED and specifications for rehabilitation works based on the conceptual engineering designs developed by PMC
   c. Prepare bidding documents for rehabilitation works and cargo handling equipment at the three ports
   d. Assist the DGST in the tender process, review the bids and prepare a recommendation for the preferred bidder
   e. Revise and update, as needed, the initial environmental examination (IEE) and the
environmental management plans (EMPs) prepared by the PMC to reflect DEDs for Pantoloan, Donggala and Wani Ports

f. Consult with Dinas Lingkungan Hidup (DLH) for preparing an amendment to the DELH (Dokumen Evaluasi Lingkungan Hidup) which is equal to AMDAL for the Pantoloan port and (ii) updating the existing Dokumen Pengelolaan Lingkungan Hidup (DPLH) which is equal to UKL-UPL for Donggala and Wani ports

g. Ensure that possible existence of sensitive habitats (coral reef, diving area, and mangrove stands) in Palu Bay are adequately assessed.

h. Ensure that the updated IEE and EMPs are reflected in bidding documents and implementation of works contracts for the 3 ports.

i. Provide training to the PIU and DGST staff on implementation of EMP and on operation of grievance redress process.

j. Update assessments of social safeguards risks and impacts for Pantoloan, Wani and Donggala Ports.

k. Prepare as applicable Resettlement Plan (RP), Resettlement and Customary Community Development Plan (RCCDP) depending on the impacts/potential impacts of the rehabilitation works on the community; or prepare Due Diligence Report – Corrective Action Plan (DDR-CAP)

l. Ensure RP or RCCDP or DDR-CAR are reflected in the bidding documents of work contracts for the three ports

m. Conduct meaningful consultation with the affected communities

n. Provide on-the-job training on RP/RCCDP/DDR supervision/monitoring and reporting, grievance redress to the PIU and DGST staff

o. Develop owner’s cost estimate of rehabilitation works and equipment packages and indicative implementation period in line with overall rehabilitation schedule

5. During the construction phase, DSC will assume the role, power and authorities of the (i) “Engineer” as set out in the general conditions of contract of FIDIC Pink Book in supervising implementation of rehabilitation works at Pantoloan port and (ii) “Project Manager” as set out in the general conditions of contract in ADB’s standard bidding document for small works in supervising implementation of rehabilitation works at Wani and Donggala ports. Supervision activities will include but not be limited to the following:

a. Prepare documentation to support DGST for all submissions to be made during the project implementation for approvals required from other government agencies.

b. Approve contractor’s work program, method statements, material sources, CEMP and health and safety plan and materials extraction and management plan(s).

c. Approve and/or issue working drawings, approving the setting out of the works, and giving instructions to the contractor.

d. Supervise and review the quality control programs of the contractor.

e. Supervise the construction quality, progress, safety, and cost.

f. Certify interim payment certificates, prepare withdrawal applications and keep records of any disbursement under the project.

g. Prepare and regularly update the forecast disbursement schedules

h. Conduct testing and inspection of materials and works to ensure compliance with specifications and giving immediate notice to the contractor in the event that such materials and works fail to comply with the specifications.

i. Identify any problem areas during project implementation, proposing remedial actions, and promptly report any outstanding issues to PIU.

j. Conduct field visits and appropriate tests of civil works at regular and appropriate times during construction, testing and commissioning.
k. Regularly inspect and report on contractors’ environment, health and safety (EHS) performance to ensure the approved CEMP is being implemented. Issue corrective action requests for non-compliances as required to the contractor. This will require preparing suitable checklists and monitoring forms that will be completed during the inspections and included in the progress and semi-annual social and environmental safeguards monitoring reports.

l. Accept or reject any part or parts of the completed works.

m. Make measurements and keep measurement records as per contract requirements.

n. Maintain records, correspondence, and diaries.

o. Certify work volume and interim certificates for progress payments.

p. Assist the Employer's Representative with the maintenance of consolidated project accounts, and with preparation of financial statements and withdrawal applications for submission to ADB.

q. Certify completion of part or all of the works.

r. Periodically check the remaining quantities and undertake constant monitoring of each contract's costs.

s. Review and recommend action on variation orders, extensions of time, claims, and other matters that may come from the contractor.

t. Negotiate with the contractor and recommend to the Employer the rates for any unscheduled items of work that may arise.

u. Advise PIU on all matters relating to the execution of the works; and assist with processing the contractor's possible and actual claims.

v. Prepare, at the completion of the contract, a consolidated project completion report in a format provided by ADB.

w. Check and certify as-built drawings for the works prepared by the contractor.

x. Inspect the works at appropriate intervals during the defects liability period and certifying the defects liability certificate for issuance.

y. Provide PIU complete records, and inception, monthly, and completion reports.

z. Provide on-site training where required for the PIU field staff on quality assurance and contract administration.

aa. Provide on-the-job training on construction and CEMP, RP/RCCDP/DDR supervision to PIU.

bb. Assist PIU in ensuring a well-functioning and accessible grievance redress mechanism (GRM) is established and maintained for timely resolution of complaints during construction and facilitate the implementation of the consultation and communications plan.

c. Ensure that all complaints are properly recorded in a complaint register.

dd. Assist PIU in ensuring safeguards compliance during construction in line with the requirements of ADB SPS, relevant national laws and regulations.

ee. Prepare safeguards inputs to quarterly progress reports and semi-annual safeguards monitoring reports for submission to MOT and ADB. Assist with local disclosure of monitoring reports cleared for release DSC will prepare.

ff. Review safety and emergency response plans prepared by PMC. Further, examine resilience measures that can be implemented. Specific areas within the plans will be structural inspection capability, methods of testing of engineering structures, cranes, and other equipment. Temporary repair options that can be used will be developed and operational alternatives to the ports as well as materials and parts resupply sourcing plans (pre-negotiated contracts).
D. Reports and Deliverables

6. The DSC shall prepare and submit reports in English and Bahasa as indicated in Table 1. Each report shall be produced in four hard copies (three for the PIU and one for ADB) and three CD-ROM (two for the PIU and one for ADB). Additional copies of CD-ROMs may be required.

Table 1: Reporting Schedule

<table>
<thead>
<tr>
<th>REPORT</th>
<th>DESCRIPTION</th>
<th>SUBMISSION DEADLINE (months)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inception Report</td>
<td>Comments on the TOR suggesting variation and observation on issues which may have technical or financial implications, or which may affect the progress of the works, if any. Description of proposed methodology, works and staffing schedules.</td>
<td>1 Within one month of starting the services.</td>
</tr>
<tr>
<td>Monthly Reports</td>
<td>A summary of the monthly progress is required for each port separately summarizing the work accomplished and any problems encountered, together with a plan for the following month. The report should include details and recommendations of any hindrances to performance of the work and a schedule showing progress against approved schedules.</td>
<td>7 days after each month end</td>
</tr>
<tr>
<td>Quarterly Reports</td>
<td>For each port, summarize progress achieved, environmental and social safeguard status, disbursement and contracting status, compliance with loan covenants, key issues and solutions, updated procurement plan and estimated cost to completion</td>
<td>1 month after each quarter</td>
</tr>
<tr>
<td>Draft Final Design Report</td>
<td>This report covers all items in the Scope of Services in draft form for comments by PIU including updated environmental and safeguards assessments, detailed designs and specifications, cost estimates, construction schedules and tender documents</td>
<td>5</td>
</tr>
<tr>
<td>Final Design Report</td>
<td>This report updates the draft incorporating the PIU comments</td>
<td>6</td>
</tr>
<tr>
<td>Completion Report</td>
<td>This brief report describes the activities conducted by the consultant in the implementation stage</td>
<td>30</td>
</tr>
</tbody>
</table>
### Table 2: Key Experts Minimum Qualification Requirements

<table>
<thead>
<tr>
<th>Positions</th>
<th>Type</th>
<th>Qualification</th>
<th>Person-Months</th>
</tr>
</thead>
</table>
| Port Design Engineer/Team Leader | International     | • At least bachelor’s degree in civil engineering  
• Preference to be given to candidates with professional engineering license or internationally recognized accreditation (e.g. Chartered Engineer, Professional Engineer, or equivalent)  
• At least 20 years of experience in marine civil engineering design  
• Ability to prepare reports and otherwise communicate effectively in English | 12             |
| Port Design Engineer        | National          | • At least bachelor’s degree in civil engineering  
• Preference to be given to | 15             |
<table>
<thead>
<tr>
<th>Positions</th>
<th>Type</th>
<th>Qualification</th>
<th>Person-Months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geotechnical/Foundation and pavement design engineer</td>
<td>International</td>
<td>• Candidates with professional engineering license or internationally recognized accreditation (e.g. Chartered Engineer, Professional Engineer, or equivalent) &lt;ul&gt; • At least 15 years of experience in marine civil engineering design • Preference given to candidates with exposure to projects financed by international financing institutions. &lt;/ul&gt;</td>
<td>6</td>
</tr>
<tr>
<td>Geotechnical Engineer</td>
<td>National</td>
<td>• At least bachelor’s degree in civil engineering &lt;ul&gt; • Preference to be given to candidates with professional engineering license or internationally recognized accreditation (e.g. Chartered Engineer, Professional Engineer, or equivalent) • At least 15 years of experience in geotechnical engineering design including container storage area design and pile foundations • Ability to prepare reports and otherwise communicate effectively in English &lt;/ul&gt;</td>
<td>6</td>
</tr>
<tr>
<td>Positions</td>
<td>Type</td>
<td>Qualification</td>
<td>Person-Months</td>
</tr>
<tr>
<td>------------------------</td>
<td>---------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>---------------</td>
</tr>
</tbody>
</table>
| Hydraulics Engineer    | National      | • At least bachelor’s degree in civil engineering  
• Preference to be given to candidates with professional engineering license or internationally recognized accreditation (e.g. Chartered Engineer, Professional Engineer, or equivalent)  
• At least 15 years of experience in port design                                                                                           | 6             |
| Contracts/Procurement  | International | • At least bachelor’s degree in civil engineering or related field  
• At least 20 years of experience as Quantity Surveyor or Contract Manager covering preparation documentation and contract management including the negotiation of claims  
• Preference given to candidates with contract management experience in contract management for internationally funded infrastructure projects  
• Ability to prepare documents/reports and otherwise communicate effectively in English                                                                 | 9             |
| Financial management   | National      | • At least bachelor’s degree in accounting, business administration or finance  
• At least 10 years of experience including 8 years of relevant experience in financial management of                                                                                   | 6             |
<table>
<thead>
<tr>
<th>Positions</th>
<th>Type</th>
<th>Qualification</th>
<th>Person-Months</th>
</tr>
</thead>
</table>
| Environmental Specialist International | internationally financed infrastructure projects  
• Preference will be given to those who are certified public accountants, chartered accountants or have other internationally recognized accounting accreditation.  
• Ability to prepare reports and otherwise communicate effectively in English | 2             |
| Environmental Specialist National | At least a bachelor’s degree in environmental management, natural sciences or a related field  
• At least 15 years of experience in environmental assessment in maritime or related infrastructure projects.  
• Preference given to candidates with demonstrated knowledge of ADB’s Safeguard Policy Statement (2009)  
• Ability to prepare reports and otherwise communicate effectively in English | 12            |
<table>
<thead>
<tr>
<th>Positions</th>
<th>Type</th>
<th>Qualification</th>
<th>Person-Months</th>
</tr>
</thead>
</table>
| Social Safeguards specialist    | National   | • At least bachelor’s degree in social science or related field  
• At least 7 years of experience in social impact assessment, land acquisition and resettlement planning for infrastructure projects.  
• Preference given to candidates with demonstrated knowledge of ADB’s Safeguard Policy Statement (2009)  
• Preference given to candidates with exposure to projects financed by international financing institutions. |
| Gender Specialist               | National   | • At least a bachelor’s degree in social sciences, development studies, gender or a related discipline  
• At least 5 years’ experience in gender-related work including gender analysis and mainstreaming  
• Preference given to candidate with gender related experience under ADB financed project  
• Demonstrated familiarity with relevant policies and practices in Indonesia  
• Ability to prepare reports and otherwise communicate effectively in English |
| Port Engineer/Team Leader Site  | International | • At least bachelor’s degree in civil engineering  
• Preference to be given to candidates with professional engineering license or internationally recognized accreditation | 18            |
<table>
<thead>
<tr>
<th>Positions</th>
<th>Type</th>
<th>Qualification</th>
<th>Person-Months</th>
</tr>
</thead>
</table>
| Port Operations and Management  | International    | • At least bachelor’s degree in civil engineering  
• At least 15 years of experience in port operations, cargo handling, equipment procurement  
• Ability to prepare reports and otherwise communicate effectively in English                                      | 6              |
| Resident Engineer (Pantoloan port) | National         | • At least bachelor’s degree in civil engineering  
• Preference to be given to candidates with professional engineering license or internationally recognized accreditation (e.g. Chartered Engineer, Professional Engineer, or equivalent)  
• At least 20 years of experience in (i) managing construction contracts in the maritime or related projects and (ii) port operations, cargo handling, equipment procurement and commissioning  
• At least 20 years of experience in (i) managing construction contracts in the maritime or related projects and (ii) container terminal construction | 24             |
| Resident Engineer (Donggala and Wani Port) | 2 Nationals  | • At least bachelor’s degree in civil engineering  
• Preference to be given to candidates with professional engineering license or internationally recognized accreditation (e.g. Chartered Engineer, Professional Engineer, or equivalent) | 15             |
<table>
<thead>
<tr>
<th>Positions</th>
<th>Type</th>
<th>Qualification</th>
<th>Person-Months</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>license or internationally recognized accreditation (e.g. Chartered Engineer, Professional Engineer, or equivalent)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>At least 12 years of experience in managing construction contracts in the maritime or related projects</td>
<td></td>
</tr>
</tbody>
</table>

### National Non-key Experts and Support Staff for Construction Supervision

<table>
<thead>
<tr>
<th>Position</th>
<th>Qualification</th>
<th>Person-Months</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Non-key Experts and Support Staff</td>
<td></td>
<td></td>
</tr>
<tr>
<td>for Construction Supervision</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Material and Geotechnical Engineer</td>
<td>Degree in civil engineering with at least 7 years of experience in construction</td>
<td>6</td>
</tr>
<tr>
<td>Marine civil engineer</td>
<td>Degree in civil engineering with at least 10 years of experience in design and construction of maritime or related projects</td>
<td>6</td>
</tr>
<tr>
<td>Structural Engineer</td>
<td>Degree in civil engineering with at least 7 years of experience in building construction</td>
<td>4</td>
</tr>
<tr>
<td>Assistant Resident Engineer: Buildings (2)</td>
<td>Degree in civil engineering with at least 5 years of relevant experience</td>
<td>12</td>
</tr>
<tr>
<td>Architects</td>
<td>Degree in architecture</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>At least 10 years of experience in port</td>
<td></td>
</tr>
<tr>
<td>Landscape Specialist</td>
<td>Degree in architecture of landscaping</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>At least 10 years of experience in port</td>
<td></td>
</tr>
<tr>
<td>Quantity Surveyor</td>
<td>Survey certification and minimum 5 years experience in quantity surveying</td>
<td>12</td>
</tr>
<tr>
<td>Surveyors (2)</td>
<td>Engineering qualification and minimum 3 years experience in construction supervision</td>
<td>30</td>
</tr>
<tr>
<td>Inspectors (3)</td>
<td>Relevant degree with at least 10 years’ experience of port logistics and operating and/or designing customs facilities in similar freight and port terminals.</td>
<td>30</td>
</tr>
<tr>
<td>Translator</td>
<td>Professional qualification with at least 10 years experience as an English-Indonesian translator including a minimum of 3 years in technical matters</td>
<td>30</td>
</tr>
</tbody>
</table>

### E. Consultant Responsibilities

The following table indicates responsibilities of the individual experts but the Team Leader has the overall responsibility for the completeness and quality of the assignment and apportioning the work accordingly between the members of his team.
**Table 3: Individual Responsibilities**

<table>
<thead>
<tr>
<th>Key Expert</th>
<th>Responsibilities</th>
</tr>
</thead>
</table>
| Port Design Engineer/Team Leader               | 1) Review and comment on work done by PMC  
2) Manage and coordinate the consultant team to ensure timely high-quality delivery  
3) Coordinate with PIU management  
4) Approve design parameters and methods  
5) Manage design process  
6) Check and approve all detailed design work  
7) Check and approve materials and other specifications  
8) Prepare design report  
9) Review owners estimate for works  
10) Review bid documents  
11) Coordinate answers to bidders’ queries and provide general support to DGST during bid process  
12) Author bid review recommendations                                                                                                         |
| Port Design Engineer                           | 1) Support Team Leader in all responsibilities including coordination with all consultant team  
2) Prepare submissions to governmental stakeholders as required  
3) Management the main design team and their work                                                                                                 |
| Geotechnical/Foundation and pavement design engineer | 1) Undertake geotechnical and pavement design  
2) Prepare initial geotechnical and pavement designs  
3) Manage drawing production as required  
4) Comment on contractors’ proposals for construction  
5) Advise on contractors’ tender queries                                                                                                           |
| Geotechnical Engineer                          | 2) Provide geotechnical advice to design team  
3) Review site investigation work and detail soil parameters to be used within the detailed design  
4) Prepare earthworks specification as required  
5) Review pavement designs                                                                                                                       |
| Hydraulics Engineer                            | 1) Pavement layout design  
2) Prepare drainage designs (surface and sewage)  
3) Manage drawing production  
4) Comment on contractors’ proposals for construction  
5) Advise on contractors’ tender queries                                                                                                           |
| Contracts/Procurement specialist               | 1) Assist PIU in preparing procurement documents in line with ADB procurement policies and regulations;  
2) Assist PIU in procurement of the packages specified in procurement plan and build capacity of MOT’s procurement team;  
3) Support PIU through bid submission, bid evaluation, contract negotiation, contract signing and contract administration phases  
4) Set up a procurement management tracking system for the PIU that would monitor the implementation of procurement activities;                                                                   |
<table>
<thead>
<tr>
<th>Key Expert</th>
<th>Responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>5) Provide inputs on procurement related</td>
<td>matters to the team leader for preparing consultant’s report.</td>
</tr>
<tr>
<td>6) Review and assess all financial claims</td>
<td></td>
</tr>
<tr>
<td>7) Review and assess all amendments to works</td>
<td></td>
</tr>
<tr>
<td>8) Provide contractual advice and support</td>
<td></td>
</tr>
<tr>
<td>Financial management</td>
<td>1) Assist PIU in preparing good quality and timely submission of the monthly, quarterly and annual project financial statements</td>
</tr>
<tr>
<td>Specialist</td>
<td>2) Assist PIU in managing fund flow in accordance with component and expenditure categories funded by the project</td>
</tr>
<tr>
<td></td>
<td>3) Assist PIU in preparing annual budgets for project activities</td>
</tr>
<tr>
<td></td>
<td>4) Assist PIU in evaluating invoices submitted by contractors and convert them to applicable withdrawal applications in ADB’s required format</td>
</tr>
<tr>
<td></td>
<td>5) Monitor and update status of project financial expenditures per loan categories/components from time to time</td>
</tr>
<tr>
<td></td>
<td>6) Identify any issues in the financial management system for project implementation and recommend measures to address the issues identified</td>
</tr>
<tr>
<td></td>
<td>7) Develop financial management system and update it regularly</td>
</tr>
<tr>
<td>Environmental Specialist</td>
<td>1) Support the PIU and DGST during review and supervision of site-specific contractor environmental management plan (CEMP).</td>
</tr>
<tr>
<td>(International and National)</td>
<td>2) Review and clear the CEMP and health and safety plan.</td>
</tr>
<tr>
<td></td>
<td>3) Regularly inspect and report on Contractors' environment, health and safety (EHS) performance to ensure the approved CEMP is being implemented.</td>
</tr>
<tr>
<td></td>
<td>4) Issue corrective action requests for non-compliances as required to the Contractor.</td>
</tr>
<tr>
<td></td>
<td>5) Provide on-the-job training on construction and CEMP supervision to PIU.</td>
</tr>
<tr>
<td></td>
<td>6) Assist PIU in ensuring a well-functioning and accessible grievance redress mechanism (GRM) is established and maintained for timely resolution of complaints during construction and facilitate the implementation of the consultation and communications plan. Ensure that all complaints are properly recorded in a complaint register.</td>
</tr>
<tr>
<td></td>
<td>7) Provide inputs on EMP implementation in the quarterly progress reports; prepare and submit to MOT and ADB semi-annual environment safeguards monitoring reports. Assist with local disclosure of monitoring reports cleared for release.</td>
</tr>
<tr>
<td></td>
<td>8) Contribute to environment, health and safety sections of the project completion report.</td>
</tr>
<tr>
<td>Social Safeguard Specialist</td>
<td>1) Assess social safeguards risks and impacts for Pantoloan, Wani and Donggala Ports</td>
</tr>
<tr>
<td></td>
<td>2) Prepare Resettlement Plan or RCCDP depending on the...</td>
</tr>
<tr>
<td>Key Expert</td>
<td>Responsibilities</td>
</tr>
<tr>
<td>---------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>impacts/potential impacts of the rehabilitation works on the community; or prepare Due Diligence Report – Corrective Action Plan (DDR-CAP) as required 3) Ensure RP or RCCDP or DDR-CAP are reflected in the bidding documents of work contracts for the three ports 4) Conduct meaningful consultation with the affected communities 5) Provide on-the job training on RP/RCCDP/DDR supervision/monitoring and reporting, grievance redress to the PIU and DGST staff 6) Assist PIU in preparing and executing a project awareness campaign in the community 7) Regularly inspect the work of contractor related to land acquisition if any 8) Issue corrective action plan for non-compliance as required to the contractor 9) Provide inputs on RP or RCCDP implementation and/or DDR in the quarterly progress reports; prepare and submit to MOT and ADB semi-annual social safeguards monitoring reports. Assist with local disclosure of monitoring reports cleared for release.</td>
</tr>
<tr>
<td>Gender Specialist</td>
<td>1) Conduct gender analysis and provide recommendations on safety standards for 3 ports with gender responsive and inclusive design features; 2) Support GAP implementation, monitoring and reporting (see ADB Gender Tip Sheets No. 3, 4 and 5 available online) 3) Ensure that PIU translates the GAP into Bahasa Indonesia and distributes it to all key stakeholders including at the local levels during the first quarter 4) Provide orientation and regular briefings on GAP and related requirements for the PIU, consultants and contractors 5) Integrate gender sensitive indicators from the Design Monitoring Framework (DMF) and the GAP into the Project Performance Management System (PPMS) 6) Support PIU in ensuring relevant GAP activities are integrated into the project annual work plans and budget 7) Build capacity through delivering awareness raising and training sessions and mentoring of PIU and other stakeholders in gender equality in disaster rehabilitation and reconstruction, and on the gender requirements of the project 8) Support quarterly monitoring and reporting to ADB on the progress of GAP implementation 9) Conduct field trips to monitor GAP implementation and achievement of gender targets 10) Work with the M&amp;E consultants, Gender Focal Points, and multi-media specialist to gather and analyze sex-disaggregated quantitative data and qualitative information</td>
</tr>
<tr>
<td>Key Expert</td>
<td>Responsibilities</td>
</tr>
<tr>
<td>------------</td>
<td>------------------</td>
</tr>
<tr>
<td></td>
<td>on the gender impacts of project interventions on beneficiaries (e.g., via success stories, case studies and quality of life changes) of women, children, people with disability, and the elderly. Human stories need to be collected during project implementation for inclusion in the project completion report to document achievement of gender equality results/outcomes; 11) Provide support for ADB review mission teams to ensure that GAP implementation is being adequately assessed and reported on 12) Prepare the draft Gender Appendix and required gender inputs for the project completion report to be submitted at project completion (in line with the ADB Gender Tip Sheet No. 5)</td>
</tr>
<tr>
<td>Port Engineer/Team Leader Site Supervision</td>
<td>1) Take overall responsibility for site supervision contract and program management for all contractors and procurement including design approval and quality control 2) Provide support and advice to DGST during implementation of contract 3) Ensure all supervision services are supplied to a high standard</td>
</tr>
<tr>
<td>Port Operations and Management</td>
<td>1) Support Team Leader in all responsibilities 2) Liaise between contractor, supervision team and port operators in Pantoloan, Donggala and Wani. 3) Provide all reporting and submissions required by DGST to others</td>
</tr>
<tr>
<td>Resident Engineer (Pantoloan port)</td>
<td>1) Manage site supervision and delivery of works at Pantoloan 2) Ensure all services are delivered within the context of works at Pantoloan</td>
</tr>
<tr>
<td>Resident Engineer Donggala</td>
<td>1) Manage site supervision and delivery of works at Wani and Donggala 2) Ensure all services are delivered within the context of works at Donggala</td>
</tr>
<tr>
<td>Resident Engineer Wani Port</td>
<td>1) Manage site supervision and delivery of works at Wani and Donggala 2) Ensure all services are delivered within the context of works at Wani</td>
</tr>
</tbody>
</table>
III. Individual Consultants Terms of Reference for Ports

1. Port Operations Specialist (1 position, 12 person-months, international)

The consultant should be a graduate in civil engineering with at least 20 years experience in port operations in senior management positions and at least 10 years of port operations experience in Indonesia. Preference will be given to candidates with experience in preparing port emergency response plans and dealing with projects funded by Multilateral Development Banks.

The consultant’s tasks shall include:
(i) Support review of Port Masterplan
(ii) Support PIU in DGST on port reconstruction and expansion planning
(iii) Advise on deeply integrating transport component of EARR with overall reconstruction plan for Central Sulawesi
(iv) Monitor quality of conceptual and detailed designs prepared by preliminary design management and design and construction supervision consultants respectively
(v) Support timely procurement of consulting services, works and equipment packages to be undertaken by PIUs in 2019 in conformity with ADB procurement policy.
(vi) Support preparation of port emergency response plans
(vii) Lead capacity building workshops covering the following: port design, port planning, port operations port emergency response planning and other related topics.

2. Financial Management Specialist (1 position, 12 person-months, national)

The consultant should have a minimum of bachelor’s degree in accounting, finance or another relevant field. They should also have at least 10 years of experience in setting up and operating financial management systems associated with projects funded by multilateral funding agencies.

The tasks of the consultant will include:
(i) Review and ensure compliance with covenants and, other requirements with respect to financial management, in the financing agreement;
(ii) Ensure that all financial procedures are complied with;
(iii) Lead capacity development workshops to ensure familiarity with ADB’s policy and procedures on financial management;
(iv) Assist in setting up the project’s cost control and accounting system to record and monitor the project expenditure and provide the information that is accurate and up-to-date and in line with the government accounting system;
(v) Assist in setting up a system for authoring and approving expenditures, for maintaining books of the accounts and for classifying, recording and reporting transactions;
(vi) Assist in formulating the budget to ensure timely inclusion of funds for DIPA and the disbursements in accordance with established procedures and practices;
(vii) Assist in preparing monthly, quarterly and annual project financial statements (accrual-basis), both in Bahasa Indonesian and English. Accrual-based financial statements include, statement of financial position (balance sheet), statement of financial performance (income statement, a statement of cash flows, a statement of changes in net assets/equity (where applicable), a summary of expenditures (where applicable), statement of budgeted versus actual expenditures, significant
accounting policies and explanatory notes, and any additional schedules agreed;

(viii) Prepare manual and templates for preparing project financial statements;

(ix) Assist the PIU in preparing and analyzing budget projection (contract awards and
    disbursement), managing funds flow and monitoring utilization of budget allocation
    in accordance with component and expenditure categories funded by the project;

(x) Assist the PIU in evaluating invoices submitted by contractors and convert them to
    applicable withdrawal applications in ADB format;

(xi) Identify any issues in the financial management system for project implementation
    and recommend measures to address the same;

(xii) Develop project performance management system and update it regularly.

3. Transport Economist (1 position, 6 person-months, national)

The consultant should be a postgraduate in economics, finance, or related field with
excellent analytical and economic evaluation skills gained from experience in projects of the
Indonesian government and multilateral institutions. He/she should have at least 10 years of
relevant professional work experience in working as economist and/or financial analyst in
transport sector, with solid understanding of economic and financial factors related to ports project
development.

The tasks will include:

(i) Reviewing policy and planning issues related to the project and subprojects and
    providing support in discussions with other departments within the Indonesian
    Government.

(ii) Reviewing the pre- and post-earthquake traffic patterns, assessing future
    requirements for the Palu region, and recommending a coordinated plan for the
    three ports. In particular to determine what facilities at Donggala and Wani would
    now best integrate with an expanded Pantoloan and suit the future traffic
    requirements of Central Sulawesi including the requirements to support the
    reconstruction efforts in the region.

(iii) Supporting the development of systems for the collection and monitoring of
    economic and operational data.

(iv) Forecasting port traffic volumes and logistics costs including the study and
    monitoring of sea-freight charges.

(v) Preparing economic or/and financial analysis for port subprojects to ensure that
    the proposed projects are economically or financially viable.

(vi) Reviewing and supporting the preparation of the Subproject Appraisal Reports
    (SPARs).

4. IT Specialist (1 position, 12 person-months, national)

The consultant should be a graduate in IT or a related field with experience in projects of
the Indonesian government and multilateral institutions. He/she should have at least 5 years of
relevant professional work experience.

The tasks will include:

(i) Setup and maintain IT systems that support the management of the project and
    subprojects.

(ii) Develop systems that support the collection and monitoring of data related to port
    operations and planning.

(iii) Develop a digital archive capability for port information including geographical and
technical information. This should be easy to access and have open format capability to ensure all forms of data can be integrated and searched.

5. **Procurement Specialist (1 position, 12 person-months, national)**

The candidate shall have minimum of at least bachelor's degree in civil engineering, business administration, or related fields with minimum 10 years in procurement of public infrastructure. The candidate shall be familiar with national public procurement practices and procedures, and possess at least 7 years of procurement experience under ADB or WB funded projects. The candidate should be able to write documents/reports and otherwise communicate effectively in English.

The scope of the services shall include, but not be limited to, the following tasks:

(i) Support the PIU in drafting of detailed terms of reference for EARR funded Preliminary Design Management Consultants and Design and Supervision consultants and Request for Proposals in line with ADB Procurement Policy and Regulations;

(ii) Provide advice to PIU and POKJA to ensure evaluation of consultant proposals is conducted in accordance with ADB Procurement Policy and Regulations;

(iii) Set up a procurement management tracking system for the PIU that would monitor the implementation of procurement activities;

(iv) Assist the PIU in managing project procurement activities so the contracts are awarded timely;

(v) Act as resource person in capacity building workshops to ensure familiarity with ADB procurement policy and procedures.
CONSULTANT TERMS OF REFERENCE FOR AIRPORT COMPONENT

I. Terms of Reference for Design and Construction Supervision Consultant
II. Terms of Reference for Individual Consultants
I. Terms of Reference for the Design and Supervision Consultant for Reconstruction and Rehabilitation of Mutiara Sis Aljufri Airport

A. Background

1. The Central Sulawesi Province of Indonesia was hit by a massive natural disaster due to earthquake and tsunami on 28 September 2018. This catastrophe resulted in loss of human lives, destruction of property and severe damage to the public infrastructure, including roads, hospitals and medical centers, schools, ports and airport. The airport damage includes: (i) the airside of the airport, i.e., runway, airstrip, and related mechanical/electrical equipment and (ii) the landside comprising terminal building, supporting buildings, and the related infrastructure facilities. The Government of Indonesia has applied for an Emergency Assistance for Rehabilitation and Reconstruction loan (EARR) from the Asian Development Bank (ADB), which will support the rehabilitation and reconstruction of the Palu airport. The Executing Agency will be Ministry of Transportation (MOT) and Directorate General of Civil Aviation (DGCA) will be the Implementing Agency for the airport component. Services of a Design and Supervision Consultant (DSC) are sought in order to prepare detailed design and supervise rehabilitation and reconstruction works.

2. DGCA finished emergency airside and land side repairs to the airport in December 2018.

B. Project Organization.

3. The Project Organization is shown in Fig. 1. DGCA will establish a Project Implementation Unit (PIU) at the Directorate for Airports. The PIU will report to the Central Project Management Unit (CPMU) at the Secretariat General of MOT office.

Figure 1 – Project Organization Structure
C. Objectives

4. The objectives of the DSC assignment is to (i) prepare detailed engineering design (DED) documents, (ii) assist in the preparation of bidding documents, support the bid evaluation and contract negotiation process, (iii) undertake construction supervision of the works and (iv) provide project management services, including financial management and safeguards monitoring reporting.

D. Scope of Services.

5. The scope of services of the DSC includes but is not limited to the following:

1. Preparation of DED

6. The DSC shall review the existing concept design and prepare the DED incorporating climate and disaster resilience features, in compliance with prevailing codes, standards, and other applicable regulations, notably ICAO Annex 14. DED package shall consist of “Issued for Construction” Drawings, Specifications, Engineering Documents and a detailed cost estimate. The following shall be taken into consideration during preparation of DED:

a. DED for Airfield Work

- Reconstruction and geometry improvement of the runway TH15 and reconstruction of runway TH33
  - Survey the runway to determine discrepancies with ICAO recommended cross slopes.
  - Improvement of turning area of runway TH15;
  - Conduct structural inspection of drainage box culvert system running underneath the runway to assure structural integrity.
  - Complete comprehensive soil testing program for the backfilled area of TH 15 and TH 33 to determine the compaction levels and California Bearing Ratio (CBR) of the installed backfill.
  - Complete full depth repair for the 250 meter lengths of the runway TH 15 and TH 33. Consider use of geo-grids on both thresholds but especially the one closest to the liquefaction site.
  - Reshape the runway strip to ICAO recommended slopes providing rapid drainage for the runway.
- Construction of 7.5m paved shoulders on each side of runway as per ICAO Annex 14 to support 60% of the max landing load of “C” aircraft
- Improvement of apron; and,
- Restoration of mechanical and electrical utilities in the airside.

b. DED for Buildings and infrastructure Work

- Rehabilitation of the terminal building
  - Pay special attention to reinforcing details for the top and bottom of the columns to assure proper confinement. Use modern seismic design consideration (i.e. strong column-weak beams) to avoid a shear failure (damage to the top and bottom of the columns) in a future earthquake event.
➢ Incorporate nonstructural seismic restraints for all installed elements (e.g., lighting, AC).

- Rehabilitation of administration building
- Reconstruction of Airport Rescue and Fire Fighting facility truck bay and living quarters, compliant to the latest version of the Indonesia seismic code.
- Construction of PKP-PK building
- Construction of multipurpose building
- Rehabilitation of official residences
- Construction of operational building
- Construction of other Supporting Facilities

2. Preparation of bidding documents in accordance with ADB Procurement Policies and Regulations

3. Support to the Procurement Committee (POKJA) in Bidding of Civil Works

- Ensure the bidding documents are accurate and ready for bidding.
- Ensure timely bidding process;
- Participate in pre-bid meeting and assist in addressing inquiries from bidders;
- Participate in the Contractor Evaluation, and selection process of the qualified Contractor;
- Respond to clarification queries from bidders;
- Review adequacy of the Quality Assurance plan, Environmental and Operational Health Plan and Implementation Plan developed by the contractors
- Prepare procurement summary reports.

4. Construction Supervision

7. During the construction phase, DSC will assume the role, power and authorities of the “Engineer” as set out in the general conditions of contract of FIDIC Pink Book in supervising implementation of rehabilitation works. Supervision activities will include but not be limited to the following:

- Review work plan submitted by the contractors prior to commencing the works;
- Ensure that contractors have a functioning quality assurance system;
- Ensure that project implementation in all aspects is in compliance with various laws/Acts concerning the safety requirements and labour welfare;
- Supervise airside and landside works including rehabilitation and reconstruction of runway, taxiway, airstrips, terminal building rehabilitation, installation of the mechanical and electrical works, and IT, reconstruction of supporting infrastructure facilities, and ensure that the technical specification meets the requirement;
- Monitor the project schedule, milestones and manpower requirements, to ensure the timely completion of the works; apply customary project control methodology.
- Ensure that the construction methods as proposed by the contractors are in compliance with the requirements and appropriate;
- Certify achievement of the contractual milestones, and the satisfactory quality of the progress in every step, in line with the progress milestones;
- Regularly inspect and report on Contractors’ environment, health and safety (EHS) performance to ensure the approved EMP is being implemented. Issue corrective action requests for non-compliances as required to the Contractor.
Appendix 5

- Inspect the works on final completion before hand over and indicate any outstanding work that needs to be carried out by the contractors; witness and verify all mandatory tests and inspections completed by the Contractor;
- Recommend approval of all submittals issued by the Contractor;
- Analyze and issue recommendations for Variation Orders (Change Orders) submitted by the Contractor; or, as required by the project.
- Ensure that the contractors submit as-built drawings prior to the request for certification of completion of the works;
- Issue certificate of completion, prepare provisional Taking Over (PHO) report, and final hand over (FHO) report once defects have been rectified.

5. Project Management

8. The DSC shall assist the PIU in day-to-day management by undertaking among others the following tasks:

- Prepare and maintain the Project Master Schedule for project implementation of DGCA component;
- Closely monitor project implementation of DGCA component;
- Assist the PIU in preparing annual budget allocation request in a timely manner in accordance with the government's budgeting cycle;
- Assist the PIU and PMU in preparing contract awards and disbursement projections;
- Assist the PIU in managing fund flow in accordance with component and expenditure categories funded by the project;
- Assist the PIU in examining invoices submitted by contractors;
- Assist acquisition of required permits from the national and local government prior to commencing the construction;
- Reflect the initial environmental examination (IEE) and the environmental management plan (EMP) in bidding documents of works contracts;
- Prepare unaudited project account to ensure that the project financial reporting is ready for external audits; and
- Prepare monthly, quarterly, semi-annual safeguards, annual and final reports, and other reports that may be required during project implementation.

E. Staffing

9. The tables below specify expert inputs from national consultants required under the DSC contract.

Table 1: Composition and Estimated Inputs of Key Experts During Design Phase

<table>
<thead>
<tr>
<th>DESIGN PHASE Key Experts</th>
<th>Input (Person-Months)</th>
<th>Qualifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senior Design Structural Engineer/Team Leader.</td>
<td>4</td>
<td>• Bachelors degree in Civil/Structural engineering</td>
</tr>
<tr>
<td>DESIGN PHASE</td>
<td>Key Experts</td>
<td>Input (Person-Months)</td>
</tr>
<tr>
<td>----------------------</td>
<td>--------------------------------------------------</td>
<td>-----------------------</td>
</tr>
</tbody>
</table>
|                      | Project Architect                                | 3                     | • Bachelors degree in Architecture  
• At least 10 years of experience in design of high occupancy buildings  
• Preference to be given to candidates with (i) proven knowledge of international building codes (ii) knowledge of standards of aerodrome designs, including ICAO Annex 14, IATA Terminal Design Standards. |
|                      | Electrical Engineer                              | 2                     | • Bachelors degree in Electrical Engineering  
• At least 10 years of experience in design of electrical distribution systems.  
• Preference to be given to candidates with proven knowledge of international electric codes (e.g NEC) (ii) prior work on operational facilities; (iii) candidates with professional engineering license or internationally recognized accreditation (e.g. Chartered Engineer, Professional Engineer, or equivalent) |
|                      | Mechanical Engineer                              | 2                     | • Bachelors degree in Mechanical Engineering  
• At least 10 years of experience in design of mechanical systems for buildings.  
• Preference to be given to candidates with proven knowledge of international mechanical engineering codes (e.g ASHRAE, NFPA) (ii) prior work on operational facilities; (iii) candidates with professional engineering license or internationally recognized accreditation |

- At least 15 years’ experience in structural design of high occupancy commercial buildings; with strong seismic engineering background.
- Prior experience leading design supervision assignments.
- Proficient in the use of Structural Analysis and Design Engineering Software (emphasis on ETABS)
- Preference to be given to candidates with (i) professional engineering license or internationally recognized accreditation (e.g. Chartered Engineer, Professional Engineer, or equivalent) and (ii) experience working in internationally financed projects (iii) Prior Airport Terminal Design Experience.
- Ability to prepare reports and otherwise communicate effectively in English.
<table>
<thead>
<tr>
<th>DESIGN PHASE Key Experts</th>
<th>Input (Person-Months)</th>
<th>Qualifications</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>accreditation (e.g. Chartered Engineer, Professional Engineer, or equivalent)</td>
</tr>
</tbody>
</table>
| Structural Engineer      | 3                     | • Bachelors degree in structural engineering  
|                          |                       | • At least 10 years of experience in structural design.  
|                          |                       | • Preference to be given to candidates with professional engineering license or internationally recognized accreditation (e.g. Chartered Engineer, Professional Engineer, or equivalent) |
| Civil / Geotechnical Engineer (Pavement) | 2 | • Bachelors degree in Civil engineering  
|                          |                       | • At least 10 years of experience in Pavement design.  
|                          |                       | • Preference to be given to candidates with (i) professional engineering license or internationally recognized accreditation (e.g. Chartered Engineer, Professional Engineer, or equivalent); (ii) Knowledge of FAAFARFIELD design; (iii) use and application of GeoGrids for Pavements. |
| Geodetic Engineer        | 2                     | • Degreed in geodetic engineering with demonstrated design work experience in undertaking geodetic surveys and design for airport or road projects. Appropriate experience will include topographical mapping and geometric runway design.  
|                          |                       | • 5 years of relevant experience working on topographical surveys.  
|                          |                       | • Must be thoroughly familiar with the procedures in use of Global Information Systems (GIS) and CAP 232 –Aerodrome Survey Information and ICAO surveying requirements.  
|                          |                       | • Preference to be given to candidates with (i) professional engineering license or internationally recognized accreditation (e.g. Chartered Engineer, Professional Engineer, or equivalent) |
| Procurement and Contract Specialist | 3 | • Bachelors degree in degree in civil engineering, law, commerce or related field  
|                          |                       | • At least 7 years of experience in procurement and contract management for international funded infrastructure projects.  
<p>|                          |                       | • Ability to prepare documents/reports and otherwise communicate effectively in English |</p>
<table>
<thead>
<tr>
<th>DESIGN PHASE Key Experts</th>
<th>Input (Person-Months)</th>
<th>Qualifications</th>
</tr>
</thead>
</table>
| Cost Engineer            | 1                     | • Bachelors degree in Civil-Cost engineering.  
• At least 5 years’ experience in building material, labor and equipment take off. Strong background as a cost estimator |
| Financial Management Specialist | 4 | • Bachelor’s degree in accounting, business administration or finance  
• At least 8 years of relevant experience in financial management of internationally financed construction projects  
• Preference will be given to those who are certified public accountants, chartered accountants or have other internationally recognized accounting accreditation.  
• Ability to prepare reports and otherwise communicate effectively in English |
| Environmental Specialist | 1 | • Bachelors degree in environmental management, natural sciences or a related field  
• At least 5 years of relevant experience and demonstrated familiarity with Indonesia’s regulatory framework for environmental management  
• Preference given to candidates with demonstrated knowledge of ADB’s Safeguard Policy Statement (2009)  
• Preference given to candidates with accreditation from the government as an environmental specialist as per the EIA Regulations in Indonesia  
• Ability to prepare reports and otherwise communicate effectively in English |
| Gender Specialist (National) | 1 | • Bachelors degree in social sciences, development studies, gender or a related discipline  
• At least 5 years experience in gender-related work including gender analysis and mainstreaming  
• Preference given to candidate with gender related experience under ADB financed project  
• Demonstrated familiarity with relevant policies and practices in Indonesia  
• Ability to prepare reports and otherwise communicate effectively in English |
### Table 2: Composition and Estimated Inputs of Key Experts During Supervision Phase

<table>
<thead>
<tr>
<th>SUPERVISION PHASE Key Experts</th>
<th>Input (Person-Months)</th>
<th>Qualifications</th>
</tr>
</thead>
</table>
| Senior Civil (Construction Management) Engineer/Team Leader.      | 18                    | • Bachelors degree in Civil Engineering/Construction Management  
• At least 15 years of experience in project management, with strong construction engineering background.  
• Prior experience leading construction supervision assignments preferably in the airport sector and/or high occupancy commercial buildings.  
• Preference to be given to candidates with (i) professional engineering license or internationally recognized accreditation (e.g. Chartered Engineer, Professional Engineer, or equivalent) and (ii) experience working in internationally financed projects (iii) Prior Airport Construction Experience.  
• Ability to prepare reports and otherwise communicate effectively in English |
| Structural Engineer                                               | 8                     | • Bachelors degree in civil/structural engineering  
• At least 10 years’ experience working on structural construction  
• Knowledge of seismic engineering.                                |
| Geodetic Engineer /Surveyor                                       | 6                     | • Degreed in geodetic engineering/ Surveying with demonstrated work experience in undertaking geodetic surveys for airport or road projects. Appropriate experience will include topographical mapping and geometric runway design.  
• 5 years of relevant experience working on topographical surveys.  
• Must be thoroughly familiar with the procedures in use of Global Information Systems (GIS) and CAP 232 –Aerodrome Survey Information and ICAO surveying requirements.  
• Preference to be given to candidates with (i) professional engineering license or internationally recognized accreditation (e.g. Chartered |
<table>
<thead>
<tr>
<th>SUPERVISION PHASE</th>
<th>Input (Person-Months)</th>
<th>Qualifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Key Experts</td>
<td></td>
<td>Engineer, Professional Engineer, or equivalent</td>
</tr>
</tbody>
</table>
| Project Architect | 8                     | • Bachelors degree in building architecture  
                     |                       | • At least 5 years of experience in design and supervision of building construction |
| Mechanical Engineer | 8                 | • Bachelors degree in mechanical engineering  
                     |                       | • At least 5 years of experience in supervising buildings’ mechanical installation, i.e., escalators, lifts, air conditioning,  
                     |                       | • Experience in mechanical installations for large commercial buildings or airport related installations will be preferable.  
                     |                       | • Preference to be given to candidates with professional engineering license or internationally recognized accreditation (e.g. Chartered Engineer, Professional Engineer, or equivalent) |
| Electrical Engineer | 8                | • Bachelors degree in Electrical Engineering  
                     |                       | • At least 5 years of experience in supervising buildings’ electrical installation,  
                     |                       | • Experience in electrical systems for airport related installations will be preferable.  
                     |                       | • Preference to be given to candidates with professional engineering license or internationally recognized accreditation (e.g. Chartered Engineer, Professional Engineer, or equivalent) |
| Civil/Geotechnical Engineer (Pavements) | 6 | • Bachelors degree in civil or geotechnical engineering.  
                     |                       | • At least 10 years of experience in earth works and airport pavements  
<pre><code>                 |                       | • Preference to be given to candidates with professional engineering license or internationally recognized accreditation |
</code></pre>
<table>
<thead>
<tr>
<th>SUPERVISION PHASE Key Experts</th>
<th>Input (Person-Months)</th>
<th>Qualifications</th>
</tr>
</thead>
</table>
| Cost and Quantity Surveyor    | 8                    | • Bachelors degree in civil engineering.  
• At least 8 years of overall engineering experience in of which at least 5 years of experience as construction cost estimator or quantity surveyor for large projects. |
| Financial Management Specialist (National) | 14 | • Bachelor’s degree in accounting, business administration or finance  
• At least 8 years of relevant experience in financial management of internationally financed construction projects  
• Preference will be given to those who are certified public accountants, chartered accountants or have other internationally recognized accounting accreditation.  
• Ability to prepare reports and otherwise communicate effectively in English |
| Environmental Specialist (National) | 2 | • Bachelors degree in environmental management, natural sciences or a related field  
• At least 5 years of relevant experience and demonstrated familiarity with Indonesia’s regulatory framework for environmental management  
• Preference given to candidates with demonstrated knowledge of ADB’s Safeguard Policy Statement (2009)  
• Preference given to candidates with accreditation from the government as an environmental specialist as per the EIA Regulations in Indonesia  
• Ability to prepare reports and otherwise communicate effectively in English |
| Gender Specialist (National)    | 2                    | • Bachelors degree in social sciences, development studies, gender or a related discipline  
• At least 5 years experience in gender-related work including gender analysis and mainstreaming  
• Preference given to candidate with gender related experience under ADB financed project |
## Appendix 5

### SUPERVISION PHASE

#### Key Experts

<table>
<thead>
<tr>
<th>Non-Key Experts</th>
<th>Input (Person-Months)</th>
<th>Qualifications</th>
</tr>
</thead>
</table>
| Procurement Specialist                 | 6                     | • Bachelors degree in degree in civil engineering, law, commerce or related field  
• At least 7 years of experience in procurement and contract management for international funded infrastructure projects.                             |

### Table 3: Composition and Estimated Inputs of Non-Key Experts

<table>
<thead>
<tr>
<th>Non-Key Experts</th>
<th>Input (Person-Months)</th>
<th>Qualifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chief Supervisor (National)</td>
<td>18</td>
<td>Bachelors degree in civil engineering or equivalent, with at least 10 years of experience in construction supervision of airports and building projects.</td>
</tr>
<tr>
<td>Supervisor (Civil Engineering) (National)</td>
<td>18</td>
<td>Bachelors degree in civil engineering or equivalent with at least 5 years of experience in supervising infrastructure construction.</td>
</tr>
<tr>
<td>Supervisor (Architects) (National)</td>
<td>18</td>
<td>Bachelors degree in architecture or equivalent or with at least 5 years of experience in supervising building construction.</td>
</tr>
<tr>
<td>Supervisor (Mechanical/Electrical) (National)</td>
<td>18</td>
<td>Bachelors degree in electrical or mechanical engineering or equivalent with at least 5 years of experience in supervising M/E installations and works in building construction.</td>
</tr>
</tbody>
</table>
Table 4: Composition and Estimated Inputs of Supporting Staff

<table>
<thead>
<tr>
<th>Support Staff</th>
<th>Input (Person-Months)</th>
<th>Qualifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAD Operators (2 persons, 3 months for design stage, 1 persons, 18 months for supervision stage)</td>
<td>24</td>
<td>Polytechnic degrees or equivalent with 5 year experience as CAD operators</td>
</tr>
<tr>
<td>Technical Writer</td>
<td>3</td>
<td>Bachelor degree in technical field, having 10 years prior experience writing construction specifications</td>
</tr>
<tr>
<td>Administration Assistant/Secretary</td>
<td>27</td>
<td>Academy degree or equivalent with 10 year experience as project administration assistant</td>
</tr>
<tr>
<td>Office Manager</td>
<td>24</td>
<td>Bachelor degree in any fields with 5 year experience as office manager</td>
</tr>
<tr>
<td>Drivers</td>
<td>24</td>
<td>10 year experience as driver, possesses driving license A</td>
</tr>
<tr>
<td>Security Guard (2 persons)</td>
<td>48</td>
<td>10 year experience as security guard</td>
</tr>
</tbody>
</table>

F. Consultant Responsibilities

10. Responsibilities of individual experts during design and supervision phases are specified below.

1. Design Phase

(i) **Senior Design Structural Engineer/Team Leader.** Responsible for leading the design team to develop DED from the existing concept design. The main responsibility of this professional will be to harmonize the design activities coordinating all involved engineering disciplines to produce a coherent buildable package considering the spatial requirements for the installation of each discipline. Coordinate with the PIU for a timely completion of the DED ensuring that the objective of this TOR is fulfilled to the satisfaction of the PIU, and ensure timely deliverable outputs. The Team Leader will also supervise the construction works in the airside and landside. The Team Leader shall provide technical guidance to all members of the team. S/he will have overall responsibility in technical advisory, management and monitoring all tasks under the contract, setting up technical guidance and standards as necessary. The responsibilities of the consultant shall include, but not be limited to, the following:

- Maintain close contact with the PIU and relevant governmental stakeholders to ensure that the design phase of the contract is implemented in accordance with the TORs;
• Lead the consultant team in coordination of inputs and review and management of individual outputs of various the experts to produce harmonized engineering packages;

• Review and revise DED documents as necessary to ensure their compliance with applicable airport building codes, standards, and regulations, notably ICAO Annex 14;

• Support PIU in tendering all construction and implementation packages under the Project;

• Chair weekly meetings with stakeholders;

• Ensure that all provisions of the TOR are fulfilled to the satisfaction of PIU;

• Ensure compliance with deliverable and reporting requirements; and

• Support capacity building programs focused on preparation of disaster resilient designs and emergency response planning.

(ii) **Project Architect**: The expert is responsible for retrofitting and adapting the architectural features of the architecture to the modified structure of the Passenger Terminal. Responsible for providing seismic support details for the nonstructural-architectural elements of the project. Responsible for designing the details of the architectural features of the Terminal to the modified structure while maintaining the existing architectural character of the project. The tasks of project architect include, but are not limited to, the following:

• Design all architectural works related to the refurbishing of the buildings, ensuring that the materials, methodology, and phasing of the works are in line with technical specifications and agreed work methodology.

• Selection of architectural materials in consultation with the PIU and to ensure proper installation of the architectural works

• Research and specify, in a clear concise manner, the responsibility of the Construction Contractor for all permitting requirements for the implementation project.

• Ensure construction safety and environmental considerations are included in each step of the design;

• Serve as Deputy Team leader responsible for supporting the Team leader in the assembly and coordination of all engineering disciplines to produce coordinated engineering packages.

(iii) **Electrical Engineer** Responsible for refurbishing and adapting the existing electrical system to the modified structure and architecture. Responsible for providing seismic support details for the nonstructural electrical elements, installations and equipment elements of the project. Responsible for designing work sequences that minimize the impact to the airport operational facilities. The tasks of the expert include, but are not limited to, the following:

• Design the electrical adaptations and refurbishing works related to the reconstruction of the buildings. Develop detail designs, specifications, work
methodology, and phasing of the works that will minimize the effects of the works to the continued operation of the Terminal Building.;

- Select of materials and electrical equipment in consultation with the PIU and to ensure proper installation of the architectural works
- Research and specify, in a clear concise manner, the responsibility of the Construction Contractor for all electrical work permitting requirements for the implementation project.
- Ensure construction safety and environmental considerations are included in each step of the design;
- Define all test requirements to certify equipment and installations.

(iv) **Mechanical Engineer** Responsible for refurbishing and adapting the existing electrical system to the modified structure and architecture. Responsible for providing seismic support details for the nonstructural electrical elements, installations and equipment elements of the project. Responsible for designing work sequences that minimize the impact to the airport operational facilities. The tasks of the expert include, but are not limited to, the following:

- Design the electrical adaptations and refurbishing works related to the reconstruction of the buildings. Develop detail designs, specifications, work methodology, and phasing of the works that will minimize the effects of the works to the continued operation of the Terminal Building.;
- Select of materials and mechanical equipment in consultation with the PIU and to ensure proper installation of the mechanical works
- Research and specify, in a clear concise manner, the responsibility of the Construction Contractor for all mechanical work permitting requirements for the implementation project.
- Ensure construction safety and environmental considerations are included in each step of the design;
- Define all test requirements to certify equipment and installations.

(v) **Structural Engineer** Responsible for refurbishing and adapting the existing structural system to the modified structure of the concept design. Provide structural engineering design and analysis software support (ETABS) to verify the seismic adequacy of the modified structure, reducing sway and deflections to allowable levels. Review adequacy and efficiency of the other disciplines seismic support details for the nonstructural elements, installations and equipment for the project. Responsible for designing work sequences that minimize the impact to the airport operational facilities. The tasks of the expert include, but are not limited to, the following:

- Design the structural details, adaptations and refurbishing works related to the reconstruction of the buildings;
- Select structural elements and connections; develop specifications, work methodology, and phasing of the works that will minimize the effects of the works to the existing operational Terminal Building;
- Ensure coordination with all other disciplines to avoid interferences and conflicts during the installation and constructions processes;
• Ensure construction safety and environmental considerations are included in each step of the design;
• For all structural steel, design connections minimizing the use of full penetration welds that require special inspection and certification qualifications.
• Define all test requirements and certification requirements for welded elements.

(vi) **Civil/Geotechnical Engineer (Pavements)** Responsible for the design of the reconstructed areas for the runway in accordance to FAA software design FAARFIELD for the airfield projected aircraft mix for the next 20 years. Review the concept design and use the information to develop detailed engineering drawings and specifications for the construction project. Consider the use of GEOGRIDS (mechanical reinforced base and sub-base structures) to reduce time and materials required to complete the reconstruction of the runway. The tasks of the expert include, but are not limited to, the following:

- Review geotechnical engineering data for the runway backfilled areas and runway strip areas;
- Review Geometric Design of the runway system, taxiways and aprons for compliance with ICAO ANNEX 14.
- Design typical sections for the pavement structure.
- Design corrective resurfacing for the runway longitudinal and transverse slopes, lost during the earthquake damages, to comply with ICAO ANNEX 14;
- Design runway strip to comply with ICAO ANNEX 14;
- If necessary design parallel ditch drainage at the end of the runway strip
- Design paved runway shoulders for “C” aircraft in compliance with the requirements of ICAO ANNEX 14
- Design Hot Asphalt Mix, using FAA AC No: 150/5320-6E - Airport Pavement Design and Evaluation AS A GUIDELINE, considering the availability of materials and Hot Mixed Asphalt technology in the project area.
- Review and design solutions for Apron and Taxiway distresses.
- Develop asphalt surface acceptance criteria using the FAA AC No: 150/5320-6E - Airport Pavement Design and Evaluation AS A GUIDELINE.
- Define all test requirements and certification requirements for welded elements.

(vii) **Geodetic Engineer**: The responsibilities of the Geodetic Engineer shall include, but not be limited to the following:

- Review the runway pavement reconstruction conceptual design and provide recommendations for improvement;
- Conduct due diligence of the prepared topographic surveys result by the previous consultant, and conduct field verification.
- Cross-check the prepared detailed engineering design and the actual existing runway alignment, inventory the deviation, and make propose necessary correction to the team leader, entailing horizontal and vertical alignment and cross sections, according to the geometric standards
- Supervise and verify the topographic surveys to be done by contractor;
- Analyze results of input from survey data from the contractor and ensure the accuracy;
- Prepare a Geographical Information System (GIS) database from all survey sources;
• Prepare additional layout plans, long sections and typical cross sections;
• closely coordinate with pavement engineer in supervising the runway and supporting facilities reconstruction;
• Assist team leader in timely preparation of reports; and
• Provide other required support to the project based on requirements of the Project Team
• Review and approve “as built” drawings from the contractor.

(viii) **Procurement and Contract Specialist:** The services will be continued to the supervision phase to:
• Assist the PIU in preparing bidding documents in accordance with ADB Procurement Policy and Regulations.
• Assist PIU in procurement of the packages specified in procurement plan and build capacity of MOT’s procurement team;
• Set up a procurement management tracking system for the PIU that would monitor the implementation of procurement activities;
• Provide inputs on procurement related matters to the team leader for preparing consultant’s report.

(ix) **Cost Engineer:** The tasks of the expert include, but are not limited to, the following:
• Develop a detailed cost estimate;
• Develop a “Project master Schedule”, identify major milestones type of schedule

(x) **Financial Management Specialist:** Develop the financial management system of the project, and establish a sound accounting practice and system to manage the resources available to the Project. The tasks of the expert include, but are not limited to, the following:
• Assist PIU in preparing draft good quality of monthly, quarterly and annual project financial statements;
• Assist the PIU in preparing draft fund flow in accordance with component and expenditure categories funded by the project;
• Assist the PIU in preparing annual budgets for project activities;
• Develop project financial management system.

(xi) **Environmental Specialist:** The expert shall assist the PIU in preparing an initial environmental examination (IEE) including environmental management plan (EMP) for the proposed rehabilitation works, in accordance with the environmental assessment and review framework (EARF) and in compliance with ADB’s Safeguard Policy Statement (2009). The consultant shall also ensure compliance with the Indonesian regulatory framework for environment (as defined in Minister of Environment Decree No. 5 of 2012 on Types of Business Plans and/or Activities Subject to Environmental Impact Analysis). The consultant's work shall include, but not be limited to, the following:
• Support in drafting and submitting a Project Proposal to the district or provincial DLH for environmental safeguard screening and categorization (i.e. confirming need for UKL-UPL or SPPL). Prepare UKL-UPL or SPPL of airport rehabilitation works based on impact significance and criteria in the Minister of Environment
Decree No. 5 of 2012 on Types of Business Plans and/or Activities Subject to Environmental Impact Analysis.

- Prepare an IEE including EMP for the proposed works, following the guidance provided in ADB’s SPS, Appendix 1 (Safeguard Requirements 1: Environment. Pages 30-40). IEE format shall be in accordance with ADB Safeguard Requirements 1: Environment, Annex to Appendix 1 (SPS page 41).
- Conduct site visits and surveys, as required, to collect/generate site-specific information including environment baseline on physical, ecological and socio-economic resources (including physical cultural resources) within project area of influence.
- Develop an environmental management plan (EMP), as part of an IEE, that describes the environmental management measures that will be carried out to mitigate identified negative impacts during implementation. The EMP shall outline specific mitigation measures, environmental monitoring requirements, and related institutional arrangements, including budget requirements for EMP implementation.
- Undertake the following public consultation process during preparation of the IEE: (i) Immediately upon commencement of the IEE, disclose relevant information about the proposed subproject to the public through local media, including by means of the prominent posting of legible sign boards at the subproject sites which are visible to the public; and (ii) during IEE or EMP preparation, at least one meeting with potentially affected people to collect their opinion about the draft IEE and EMP. Meetings shall include fair representation of women and vulnerable groups.

(xii) Gender Specialist: The expert shall prepare the outline Gender Action Plan (GAP) quarterly report, and ensure that the activities and indicators in the GAP are implemented by PIU. Actual actions shall be included in the GAP Quarterly Progress Monitoring Report. In addition, the consultant will also be responsible for overall support to GAP implementation, monitoring and reporting.

2. Supervision Phase

(i) Team Leader and Senior Civil Engineer: S/he will be responsible for overall coordination of Construction Supervision team activities and will be directly responsible to the PIU. The main responsibility will be to coordinate the Construction project activities in a timely manner and ensure that the objective of this TOR is fulfilled to the satisfaction of the PIU, and ensure timely deliverable outputs. The Team Leader shall provide technical guidance to all members of the team. S/he will have overall responsibility in technical advisory, management and monitoring all tasks under the contract, setting up technical guidance and standards as necessary. The responsibilities of the consultant shall include, but not be limited to, the following:
- Maintain close contact with the PIU and Project Team and relevant governmental stakeholders to ensure that the contract is implemented in accordance with the design and specifications;
- Lead the consultant team to produce coordinated periodic reports;
- Manage construction activities and promote value engineering options where appropriate;
• Review design documents related to landside reconstruction designs and provide recommendations for improvement;
• Review design documents related to the airside reconstruction designs including taxiway, apron etc, and provide recommendations;
• Conduct structural assessment to the damages of runway and other airside pavement facilities to ensure that the prepared design has adequately addressed the actual reconstruction requirements;
• Supervise the reconstruction of runway and airside pavement related facilities by the contractor and ensure that the works are in accordance with the technical specification requirements as stated in the bid documents;
• Chair weekly meetings with contractors;
• Ensure that all provisions of the TOR are fulfilled to the satisfaction of PIU;
• Ensure compliance with deliverable and reporting requirements

(ii) **Structural Engineer (Construction Inspector)** The responsibilities of the consultant shall include, but not be limited to, the following:

• Check designs and cost estimates prior to approving the contractor to start working;
• Verify and witness all installations and test as specified in the DED
• Respond to Contractor's Requests for Information (RFI) and other written queries.
• Prepare quality control documents related to deliverables;
• Prepare presentations related to deliverables,
• Review and recommend approval of submittals and shop drawings
• Prepare accurate evaluations of work done in relation to the defined milestones and facilitating the examination of work;
• Assist the Team Leader in timely preparation of reports;
• Advise and recommend approval to the Team Leader in the evaluation and practicability of Project Modification and change orders
• Review and approve “red line” and “as built” drawings from the contractor.

(iii) **Geodetic Engineer**: The responsibilities of the Geodetic Engineer shall include, but not be limited to the following:

• Review the runway pavement reconstruction design and provide recommendations for improvement;
• Review design documents related to the airside reconstruction designs including taxiway, apron etc, and provide recommendations;
• Conduct due diligence of the prepared topographic surveys result by the previous consultant, and conduct field verification.
• Cross-check the prepared detailed engineering design and the actual existing runway alignment, inventory the deviation, and make propose necessary correction to the team leader, entailing horizontal and vertical alignment and cross sections, according to the geometric standards
• Supervise and verify the topographic surveys to be done by contractor;
• Analyze results of input from survey data from the contractor and ensure the accuracy;
• Prepare a Geographical Information System (GIS) database from all survey sources;
• Prepare additional layout plans, long sections and typical cross sections;
• closely coordinate with pavement engineer in supervising the runway and supporting facilities reconstruction;
• Assist team leader in timely preparation of reports; and
• Provide other required support to the project based on requirements of the Project Team
• Review and approve “as built” drawings from the contractor.

(iv) Architect: The expert is responsible for recommending approval of the submittals for architectural materials in consultation with the PIU and to ensure proper installation of the architectural works. The tasks of project architect include, but are not limited to, the following:

• Supervise all architectural construction works and ensure that the materials, methodology, and phasing of the works are in line with technical specifications and agreed work methodology.
• Certify all materials to be used in the Project prior to construction;
• Check the required permits obtained by the contractors prior to construction
• Ensure construction safety in each step of implementation of the contractors
• Check and certify completed works for payment purposes

(v) Electrical Engineer: The tasks of the expert include, but are not limited to, the following:

• Supervise all electrical works and ensure that the materials, methodology, and phasing of the works are in line with technical specifications and agreed work methodology.
• Review the soundness, completeness, and accuracy of building electrical system.
• Certify all materials to be used in the Project prior to installation
• Check the required permits obtained by the contractors prior to installation
• Ensure installation safety in each step of implementation.
• Test completed installations
• Certify the completed works for payment purposes
• Check designs and cost estimates prior to approving the contractor to start working of every step of work;
• Verify and witness all installations and test as specified in the DED
• Respond to Contractor’s Requests for Information and other written queries.
• Prepare quality control documents related to deliverables;
• Prepare presentations related to deliverables,
• Review and recommend approval of submittals and shop drawings
• Prepare accurate evaluations of work done in relation to the defined milestones and facilitating the examination of work;
• Assist the Team Leader in timely preparation of reports;
• Advise and recommend approval to the Team Leader in the evaluation and practicability of Project Modification and change orders
• Review and approve “red line” and “as built” drawings from the contractor.
(vi) **Mechanical Engineer.** The tasks of the expert include, but are not limited to, the following:
- Supervise all electrical mechanical and electrical works and ensure that the materials, methodology, and phasing of the works are in line with technical specifications and agreed work methodology.
- Review the soundness, completeness, and accuracy of building mechanical, electrical, and plumbing system.
- Certify all materials to be used in the Project prior to installation.
- Check the required permits obtained by the contractors prior to installation.
- Ensure installation safety in each step of implementation.
- Test completed installations.
- Certify the completed works for payment purposes.
- Check designs and cost estimates prior to approving the contractor to start working of every step of work;
- Verify and witness all installations and test as specified in the DED.
- Respond to Contractor’s Requests for Information (RFI) and other written queries.
- Prepare quality control documents related to deliverables;
- Prepare presentations related to deliverables,
- Review and recommend approval of submittals and shop drawings.
- Prepare accurate evaluations of work done in relation to the defined milestones and facilitating the examination of work;
- Assist the Team Leader in timely preparation of reports;
- Advise and recommend approval to the Team Leader in the evaluation and practicability of Project Modification and change orders.
- Review and approve “red line” and “as built” drawings from the contractor.

(vii) **Civil/Geotechnical Engineer:** The tasks of the expert include, but are not limited to, the following:
- Specify and manage all required quality tests for earthworks, structures and pavement elements, and conduct geotechnical analyses;
- Conduct quality control of the soil and materials investigations;
- Develop design recommendations for both permanent and temporary works, including safety of construction activities based on the accepted data;
- Verify compliance of the Geometric Design of the runway system, taxiways and aprons with ICAO ANNEX 14.
- Review typical sections for the pavement structure.
- Review the corrective resurfacing for the runway longitudinal and transverse slopes, lost during the earthquake damages, to comply with ICAO ANNEX 14;
- Review design of the runway strip to comply with ICAO ANNEX 14;
- Review design of the parallel ditch drainage (if necessary) at the end of the runway strip.
- Review the design paved runway shoulders for “C” aircraft in compliance with the requirements of ICAO ANNEX 14.
- Review the design Hot Asphalt Mix, using FAA AC No: 150/5320-6E - Airport Pavement Design and Evaluation AS A GUIDELINE, considering
the availability of materials and Hot Mixed Asphalt technology in the project area.

- Review and design solutions for Apron and Taxiway distresses.
- Review and approve asphalt surface acceptance criteria using the FAA AC No: 150/5320-6E - Airport Pavement Design and Evaluation AS A GUIDELINE.
- Witness and verify all test requirements and certification requirements for welded elements.
- Propose quality assurance and quality control systems and procedures for earthworks and structural works to be adopted by the civil works contractor and incorporate such procedures in the bidding documents;
- Assist the Team Leader in timely preparation of reports; and

(viii) **Cost and Quantity Surveyor:** The responsibilities of the consultant to the Team Leader shall include, but not be limited to, the following:

- Evaluate the quality of data and documents as prepared by DED consultants;
- Evaluate quantity estimates based on the DED as prepared by the DED consultants;
- Check cost estimates based on approved specifications and formats;
- Assist in preparing bidding documents for works;
- Assist the Team Leader in timely preparation of reports; and
- Provide other required support to the project based on requirements of the PIU.

(ix) **Financial Management Specialist:** S/he will prepare and monitor the financial management system reporting of the project, and establish a sound accounting practice and system to manage the resources available to the Project. The tasks of the expert include, but are not limited to, the following:

- Assist PIU in preparing good quality and timely submission of the monthly, quarterly and annual project financial statements;
- Assist the PIU in managing fund flow in accordance with component and expenditure categories funded by the project;
- Assist the PIU in preparing annual budgets for project activities;
- Assist the PIU in evaluating invoices submitted by contractors and convert them to applicable withdrawal applications in ADB’s required format;
- Monitor and update status of project financial expenditures per loan categories/components from time to time;
- Identify any issues in the financial management system for project implementation and recommend measures to address the issues identified;

(x) **Procurement Specialist:** The tasks of the expert include, but are not limited to, the following:

- Assist PIU in updating procurement documents for bidding to be in line with ADB procurement policies and regulations;
- Assist PIU in procurement of the packages specified in procurement plan and build capacity of MOT’s procurement team;
- Assist the PIU managing contract with winning contractors;
• Set up a procurement management tracking system for the PIU that would monitor the implementation of procurement activities;
• Provide inputs on procurement related matters to the team leader for preparing consultant’s report.

(xi) **Environmental Specialist:** The expert shall assist the PIU to:

• Closely monitor environmental impact caused by the rehabilitation works, related to ecological and socio-economic resources (including physical cultural resources) within project area of influence. Ensure that pollution prevention and control technologies and practices are applied, consistent with international good practices as reflected in internationally recognized standards such as the World Bank Group’s Environmental, Health and Safety Guidelines (Table 1 of EARF).
• Ensure that occupational health safety and community health and safety risks are assessed in the IEE report and properly addressed in the EMP.
• As part of the IEE, assess presence and potential risk of asbestos containing materials (ACM) in construction debris. If ACM are identified, develop an asbestos management plan which clearly identifies the locations where the ACM is present, its condition (e.g. whether it is in friable form with the potential to release fibers), procedures to access the locations where ACM is present to avoid damage.
• As part of the IEE, assess debris and waste quantities and characteristics, and document how these waste streams will be managed, ensuring no indirect impact due to poor waste management and disposal.
• Submit IEE report including EMP to PIU and ADB for review and clearance.
• Ensure that the updated IEE and EMP are reflected in bidding documents of all works contracts.
• Regularly inspect and report on contractor’s environment, health and safety
• Establish protocols and templates for EMP supervision and monitoring, public consultation, grievance redress, and reporting to MOT and ADB.
• Issue corrective action requests for non-compliances as required to the Contractor.
• Assist the Employer in ensuring a well-functioning and accessible grievance redress mechanism (GRM) is established and maintained for timely resolution of complaints during construction and facilitate the implementation of the consultation and communications plan. Ensure that all complaints are properly recorded in a complaint register.
• Provide inputs on EMP implementation in the quarterly progress reports; prepare and submit to MOT and ADB semi-annual environment safeguards monitoring reports. Assist with local disclosure of monitoring reports cleared for release.

(xii) **Gender Specialist:** The expert will undertake actions to ensure the activities and indicators in the gender action plan (GAP) are implemented by PIU. Actual actions shall be included in the GAP Quarterly Progress Monitoring Report. In addition, the consultant will also be responsible for overall support to GAP implementation, monitoring and reporting. This involves -but is not limited to- the following:
• Ensure that the PIU translates the GAP into Bahasa Indonesia and distributes it to all key stakeholders including at the local levels during the first semester of the project’s implementation;
• Support the PIU in ensuring relevant GAP activities are integrated into the project work plans and budget;
• Build capacity through delivering awareness raising and training sessions and mentoring of MOT, steering committee and other stakeholders in gender equality in disaster rehabilitation and reconstruction, and on the gender requirements of the project;
• Disseminate the project GAP activities and targets in support of the Master Plan for Central Sulawesi;
• Ensure regular monitoring and reporting;
• Conduct field trips to monitor GAP implementation and achievement of gender targets;
• Based on the findings from regular monitoring of GAP implementation and field visits, amend if necessary and/or develop strategies with the main aim of ensuring GAP activities and targets, and intended gender equality results will be achieved;
• Provide support for ADB review mission teams to ensure that GAP implementation is being adequately assessed and reported.

Chief Supervisor: The expert shall be responsible for coordinating and supporting activities of supervisors focusing on structural works, architecture and M/E.

Supervisors (Structural/Architect/ME): The supervisors shall report to the Chief Supervisor for their respective fields i.e., structural works, architecture and M/E. The Tasks include, but are not limited to:
• Check the proposed site management by the contractors
• Supervise all construction works and ensure that the materials, methodology, and phasing of the works are in line with technical specifications and agreed work methodology.
• Certify all materials to be used in the Project prior to construction
• Check the required permits obtained by the contractors prior to construction
• Ensure construction safety in each step of implementation of the contractors
• Check and certify completed works for payment purposes
• Prepare daily reports and submit to the Chief Supervisor.

G. Duration of Services and Deliverables

11. Duration of Services. The expected duration of the consultants’ services is 27 months.

12. Deliverables. The following meetings, reporting, and preparing of operation manuals shall be delivered timely:

• Final Detailed Engineering Design.

The detailed engineering design will include:
(i) Detailed drawings, i.e., architecture, civil, structural, mechanical and electrical, and other drawings related to the project, covering landside and airside works;
(ii) Structural Calculations, Design Concept Documents and Structural engineering input and output records;
(iii) Cost Estimates;
(iv) Bill of Quantities.

- **Bidding Documents**

The DSC shall ensure quality bidding documents in accordance with ADB’s Policy and Regulation, and are ready for bid. The bidding documents will include draft invitation for bid (IFB), bidding documents (Bidding procedures, Requirements, Conditions of Contract and Contract Forms, including evaluation criteria)

(i) **Meetings.** The Consultant shall conduct meetings with the PIU, the contractors, and other stakeholders on a regular basis as necessary.

(ii) **Reporting.** The following reports shall be prepared in Bahasa Indonesia and English language:

- **Inception Report**

An inception report along with a construction supervision manual in 5 copies each shall be submitted by the Consultant within 15 days after commencement of services. The inception report shall contain:

(i) the details of all meetings held with the PIU and the Contractors and Suppliers/Vendors and the decisions taken therein, the resources mobilized by the DSC as well as the Contractor and the DSC’s views on the management and supervision of the project with detailed situational analysis of the current structure;

(ii) the master work program and resource mobilization plan for the project;

(iii) the supervision manual as the guidelines for administration, supervision and management of the project. Such a manual is not intended to be a contractual document, nor is it to take precedence over the specifications. The manual will merely act as a guide and reference to the various staff of the DSC in discharging their duties in a smooth and systematic manner.

- **Progress reports**

The progress reports should clearly indicate the contractor’s performance, quality of work, delays, deficiencies, constraints, and the project’s financial status, forecasts, and giving recommendation for actions. The reports consist of:

**Weekly progress report:** to be submitted on the last day of the week, every month.

**Monthly progress report:** Monthly progress report shall be submitted to the PIU and it shall be brief and concise and provide means of closely monitoring project progress and shall cover the following:

(i) Main activities undertaken and events for the period under review and progress.

(ii) Report on the activities of the contractor and supervision staff.

(iii) Monitoring and evaluation of project progress.
Appendix 5

(iv) Project accounts, payments of approved bills, claims, certificates and payment and variation orders.

(v) Photographs showing progress of the works.

(vi) Other issues as may be necessary to provide additional information to the PIU.

(vii) Monthly progress Report will be prepared at the end of each calendar month and delivered before 10th day of the following month in 10 copies.

Quarterly Progress Report: A detailed quarterly report in 5 copies shall be submitted within 7 days of the end of each quarter and one copy each to be sent to PIU. The PIU will then submit the reports to the CPMU, Bappenas and ADB. Quarterly reports should include description of project activities, illustrated by progress/completion photographs, status of any delays and contractual claims, and details of all latest financial projections. The progress reports (monthly and quarterly) shall contain details of all meetings, decisions taken therein, mobilization of resources (Consultants' and the Contractors'), physical and financial progress and the projected progress for the forthcoming periods. The report shall clearly bring out the delays, if any, reasons for such delay (s) and the recommendations for corrective measures. The report shall also contain the performance data for Contractor's plan and equipment.

Specific Report: The relevant specialists should prepare environmental, social safeguard and gender monitoring and assessment reports on quarterly basis. The reports shall consist of assessment to the inclusion of environmental, social safeguard and gender in the building designs and construction methodology, during construction, and the specialist's technical advices.

Semi-annual environment monitoring report: This report summarizes the project's compliance with the initial environmental examination (IEE), the environmental management plan (EMP) and the contractor EMPs (CEMPs); identifies necessary corrective actions in case of non-compliances; summarizes monitoring results, community consultation activities, grievances received and how these have been addressed.

Final report. A detailed final completion report in 5 copies should be submitted to the PIU. The final report is to be submitted, in draft form, one month before the completion of DSC services, summarizing the method of construction, the construction supervision performed, recommendations on future maintenance requirements, all technical matters arising during the construction of the buildings, potential problems on the newly or rehabilitated constructed works which may be expected, and giving suggestions, if any, for various needed improvements in future projects of similar nature undertaken by the DGCA. The final report shall also include a copy of all “As Built Drawings”. The Final Report shall be submitted at the completion of services, including any comments received on the draft final report.

- Maintenance Manual. Manual detailing routine and periodic maintenance tasks that will be required to maintain the completed project shall be prepared and submitted by the DSC. Draft copies of this manual should be submitted for comments to the PIU within 12 months of commencing services.

- Training Materials on preparation of disaster resilient design and emergency response planning.

H. Client’s Input and Counterpart Personnel

13. The PIU shall provide the following:
(i) All available documents, reports, data and all other information related to the proposed assignment.

(ii) Any letters or assistance required by the consultants in obtaining all necessary permits and authorizations for carrying out the services.

(iii) The PIU will assign a counterpart personnel to represent the PIU.

14. The Consultant shall provide the following:

(i) The Consultant shall establish a site office. All required furniture, hardware, software, internet/phone connections, office stationary etc shall be provided by the Consultant. The cost associated to this provision should be included in the financial proposal, as part of non-competitive component.

(ii) The Consultant shall include necessary transportation costs at the project site including vehicles rental and in their cost of operation.

I. Actions Requiring Specific Approval of the PIU

15. The Consultant will require specific approval from the PIU as listed in Table 5 below:

<table>
<thead>
<tr>
<th>Table 5: Actions Requiring Specific Approval from PIU</th>
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</thead>
<tbody>
<tr>
<td>Actions Requiring Specific Approval</td>
</tr>
<tr>
<td>1. Consenting to the subcontracting/subletting of any part of the works.</td>
</tr>
<tr>
<td>2. Certifying additional cost determined.</td>
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<tr>
<td>3. Ordering suspension of work.</td>
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<tr>
<td>4. Issuing the notice to commence the work.</td>
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<tr>
<td>5. Approval of any extension of contractual time limits.</td>
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<tr>
<td>6. Any variations or deviations proposed by the Contractor with financial implications including variation in work quantities.</td>
</tr>
<tr>
<td>7. Approval of any new rates either for existing items of work, which arises from variation quantities beyond the limit, defined in the contract or fixing rates of non-priced works involving any extra item and certifying any additional cost determined under the provisions of work contract;</td>
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<tr>
<td>8. Issuing the order for special tests not provided for in the contract and determining the cost of such tests, which shall be added to the contract price.</td>
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<tr>
<td>9. Issuing/approving the technical specifications, if not provided in the construction contract.</td>
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</tbody>
</table>
II. Outline Terms of Reference for Individual Consultants

A. Background

1. The Government of Indonesia has applied for Emergency Assistance for Rehabilitation and Reconstruction loan (EARR) from the Asian Development Bank (ADB), which will support the rehabilitation and reconstruction of the Palu airport and three ports. The executing agency (EA) will be Ministry of Transportation (MOT). The Directorate General of Civil Aviation (DGCA) will be the implementing agency for the airport component, and the Directorate General for Sea Transport (DGST) will be the implementing agency for the port component. The scope of the project covers (i) reconstruction and rehabilitation of the Mutiara Sis Aljufri airport in Palu including terminal buildings, the supporting buildings, and the damaged runways and the air stripes and (ii) three ports i.e., Pantoloan, which is the main container facility for the region, Donggala, a significant general cargo and bulk port support for the region and Wani, which handles regional cargo and traditional vessels.

2. Individual consultants listed in Table 1 below, together with Design and Supervision Consultant (DSC), will be recruited by PIU at the Directorate for Airports, DGCA to support implementation of the EARR for the Mutiara Sis Aljufri airport of Palu.

<table>
<thead>
<tr>
<th>No.</th>
<th>Position</th>
<th>Inputs (person-months)</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>Transport Economist (international)</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>Airport Specialists (international)</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>Social Safeguard Specialist (National)</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>Procurement Specialist (National)</td>
<td>5</td>
</tr>
</tbody>
</table>

B. Qualification of the Consultants and the Tasks.

3. The consultants’ qualifications and the tasks are listed below:

1. **Position: Transport Economist (1 position, 2 person-months, international)**

   **Qualification:** The candidate will preferably have a master's degree in civil engineering or relevant fields, with 15 years of experience in preparing feasibility studies for transport projects. Prior experience in preparing economic viability and financial sustainability assessment of an airport project is required. The candidate should be able to write reports and otherwise communicate effectively in English.

   **Tasks:** The consultant shall prepare the subproject appraisal report (SPAR) for the reconstruction and rehabilitation of the Mutiara Sis Al Jufri Airport of Palu. The SPAR has to demonstrate that the proposed project is economically viable and financially feasible. The design of the subproject will ensure the technical feasibility and the adoption of the least-cost approach, both in respect of capital, as well as operation and maintenance (O&M) costs, keeping in view achievement of the EARR’s objective(s) and without compromising quality and disaster resilience. Financial analysis
to ensure subprojects viability or sustainability needs to be conducted. Template of the SPAR will be provided to the consultant.

2. **Position: Airport Specialists (2 positions, 3 person-months, international)**

**Qualification:** The candidates will have at least a bachelor degree in civil engineering with relevant experience of at least 10 years in rehabilitation of airside and landside infrastructure in airports following earthquakes and preparation of airport emergency response plans. The candidate should be able to write reports and otherwise communicate effectively in English. Preference to be given to candidates with valid professional engineering license or internationally recognized accreditation (e.g. Chartered Engineer, Professional Engineer, or equivalent).

The specialists shall (i) review detailed engineering designs prepared by Design and Supervision Consultant (DSC) to be recruited by the PIU, (ii) monitor the construction supervision activities of the DSC and (iii) lead capacity building program focused on preparation of disaster resilient designs and emergency response planning.

3. **Position: Procurement Specialist (1 position, 5 person-months, national)**

**Qualification:** The candidate shall have minimum of at least bachelor degree in civil engineering, business administration, or related fields with minimum 10 years in procurement of public infrastructure. The candidate shall be familiar with national public procurement practices and procedures, and possess at least 7 years of procurement experience under ADB or WB funded projects. The candidate should be able to write documents/reports and otherwise communicate effectively in English.

**Tasks:** The consultant shall prepare Request for Proposal (RFP) for the selection of DSC, and bidding documents for the civil works packages of landside and airside airport, in coordination with POKJA. The scope of the services shall include, but not be limited to, the following tasks:

   (i) In coordination with technical specialists, prepare bid documents based on ADB’s Standard Bidding Documents;
   (ii) Provide procurement advice to PIUs and the POKJA when required;
   (iii) Participate in pre-bid meetings when required;
   (iv) Prepare summary of procurement reports;

4. **Position: Social Safeguard Specialist (1 position, 2 person-months, national)**

**Qualification:** The candidate shall have at least bachelor degree in Social Science, Social Engineering, or related subject and shall demonstrate familiarity with Indonesia legal framework on social land acquisition. Social safeguard experience working with international financial institutions will be a strong plus. The candidate shall demonstrate ability to prepare reports and otherwise communicate effectively in English.

**Tasks:** The scope of the services include, but not be limited to, the following tasks:

   (i) Assess the social risks/impacts of the rehabilitation project to affected neighboring communities.
   (ii) Reconfirm that there is a need or no requirement for preparing resettlement plans (RP) or resettlement and customary community development plan (RCCDP) or due diligence report;
   (iii) Prepare a short summary report reconfirming that the sub-project has no social safeguards impact.