



Concept Environmental and Social Review Summary

Concept Stage

(ESRS Concept Stage)

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BASIC INFORMATION

A. Basic Project Data

Country	Region	Project ID	Parent Project ID (if any)
Indonesia	EAST ASIA AND PACIFIC	P169548	
Project Name	Indonesian Mass Transit Program Support Project		
Practice Area (Lead)	Financing Instrument	Estimated Appraisal Date	Estimated Board Date
Transport	Investment Project Financing	9/28/2021	2/10/2022
Borrower(s)	Implementing Agency(ies)		
Ministry of Finance, Republic of Indonesia	Ministry of Transport		

Proposed Development Objective(s)

To improve urban mobility and accessibility on high priority corridors in selected cities of Indonesia and strengthen institutional capacity for mass transit development.

Financing (in USD Million)	Amount
Total Project Cost	710.00

B. Is the project being prepared in a Situation of Urgent Need of Assistance or Capacity Constraints, as per Bank IPF Policy, para. 12?

No

C. Summary Description of Proposed Project [including overview of Country, Sectoral & Institutional Contexts and Relationship to CPF]

Indonesia, the world's fourth most populous country, is becoming increasingly urban. Today over half of the population lives in cities; by 2045, the centenary of Indonesia's independence, nearly three-quarters will. In 2016, Indonesia had 14 cities with a population greater than 1 million and 12 cities with a population between 500,000 and 1 million. Rapid urbanization is increasing the importance of cities as living space for people and economic hubs. Mobility and accessibility to markets and services are requirements for cities' success, however congestion and poor transport services are among the main factors of low economic growth and inequality of Indonesian cities. As cities grow and prosper, people and freight movements increase in number and length, generating congestion and substantial negative externalities (such as air pollution, GHG emissions, noise, and traffic injuries and fatalities). High



traffic congestion in Indonesian cities costs at least US\$5.6 billion nationally per year (equivalent to 0.5 percent of national GDP) in terms of excess travel time, fuel consumption and Green House Gas (GHG) emissions.

In Indonesian cities people's access to jobs, places, activities and services becomes increasingly difficult (particularly for the poor) and quality of life and attractiveness for business and jobs decline. This is the reason why ensuring mobility through adequate urban transportation has become one of the major urban development priorities.

The proposed project will provide technical assistance and financing support for the first phase implementation of Indonesian Mass Transit Program (IMTP) in selected cities. The project is split into two components, the first of which will provide support for roll out and implementation of the IMTP and the second component will fund infrastructure, equipment, and necessary preparatory studies and designs of mass transit systems in two metropolitan areas namely Bandung and Medan.

Component 1 will include support for a project management unit (PMU) at national level and project implementation units (PIUs) to implement mass transit systems at sub-national level. Component 1 will also include institutional support and capacity building at national and sub-national levels. National level activities will focus on: developing a pipeline of projects for subsequent implementation in accordance with the priorities of the mid-term development plan (RPJMN); development of guidelines, procedures and systems required to implement and manage the IMTP; and institutional development and capacity building of a Technical Secretariat to take over the functions of the PMU for long-term management of the IMTP to ensure sustainability of the program. Sub-national-level institutional support and capacity building will comprise: establishment of sub-national institutional, to manage the integration, operations, revenue collection, and operator payment of mass transit systems in each city (taking over from the PIUs); and technical assistance, institutional development and capacity building of sub-national structures for the development of plans for integrated urban development, mobility plans, transit-oriented development, corridor and mode selection studies, and technical support for preparation, implementation and operation in each metropolitan area.

Component 2 of the project will focus on two priority areas, namely Bandung metropolitan area and Medan metropolitan area. It will support implementation of safe, resilient, green, and integrated mass transit systems and will fund infrastructure, equipment, and necessary preparatory studies and designs.

In Bandung the mass transit systems will comprise development of a north-south LRT corridor and improving the performance of the existing commuter rail line. An Urban Mobility Plan for Bandung City was prepared and will be updated to cover the Greater Bandung Area during project preparation. The output of the mobility plan will be used to confirm the prioritization. This will potentially impact the selection of corridor, alignment and mode of the LRT corridor, but is unlikely to have an impact on the commuter rail upgrading. The commuter rail upgrading will support the new high speed rail line (HSL), but construction of a new section of 4 km of double track branch line to link the HSL station at Tegal Luar with the commuter rail line is considered by the MoT as the responsibility of the consortium developing the HSL.

Feasibility studies for one LRT corridor and one BRT corridor in Medan were completed in early 2019. Implementation has, however not proceeded due to high costs of the proposed solution and inability of the city to allocate the necessary fiscal resources. It has been agreed that the French development agency, Agence Française de Développement (AFD), will support development of the Urban Mobility Plan for Greater Medan, which will assist to



confirm the most cost-effective and appropriate mode/technology. The BRT proposal has been assessed by the World Bank team as sound and viable, and has accordingly been included in the scope of the project. The LRT proposal needs a substantial refinement and is not included in the first phase of implementation.

During project preparation in Bandung an Urban Mobility Plan for Greater Bandung will be prepared and a Feasibility Study for the Bandung Commuter Rail upgrading will be completed. The Bandung LRT requires verification and the Feasibility Study for the Medan BRT will be updated to ensure compliance with World Bank requirements. The characteristics of the LRT sub-component of the Bandung system require definition based upon the findings of the Urban Mobility Plan. Feasibility Study and associated safeguard documentation will be prepared during project implementation. The project preparation phase for the Medan sub-component will involve completion of the Greater Medan Urban Mobility Plan, updating of the BRT feasibility Study and completion of required safeguard documents.

Sequencing of tasks will be as follows:

Program-wide activities during project preparation: i) National guidelines for Urban Mobility Plans; ii) Environmental and Social Commitment Plan (ESCP); iii) Environmental and Social Management Framework (ESMF); iv) Land Acquisition and Resettlement Policy Framework (LARPF); and v) Terms of Reference for Strategic Environmental and Social Assessment (SESA) and Draft SESA.

Sub-national level activities during preparation will comprise: i) Metropolitan Urban Mobility Plans for Greater Bandung and Greater Medan; ii) Terms of Reference for Environmental and Social Impact Assessment (ESIA) for Bandung Commuter Rail upgrading, Bandung LRT and Medan BRT; iii) Feasibility studies for; iv) Draft ESIA for Bandung Commuter Rail upgrading and Medan BRT.

Program-wide E&S activity during project implementation will be finalization of the SESA.

Sub-national level activities during implementation will consist of: i) Feasibility Study for Bandung LRT; ii) Draft and final ESIA for Bandung LRT and final ESIA for Bandung Commuter Rail upgrading and Medan BRT; iii) Environmental & Social Management Plan (ESMP) for all three mass transit systems; iv) Cultural Heritage Management Plan (CHMP) for all three systems; and Land Acquisition and Resettlement Action Plans (LARAP) for all three systems.

The World Bank Indonesia Country Partnership Framework (CPF), 2016-2020, encourages World Bank engagement to move from adhoc sectoral interventions to programs that have the potential for significant national impact. The CPF aims to develop urban infrastructure to help the country reap benefits of urbanization and reduce the congestion and other adverse impacts. Within the scope of the CPF, enhancing prosperity for the poor and vulnerable rests in large part on improving equality and opportunities through enhanced connectivity and better access to services and jobs. This requires a heavier emphasis on urban infrastructure and on an enabling environment for the private sector, which is captured in the following CPF engagement areas: Engagement Area 1: Infrastructure Platforms at the National Level; and Engagement Area 4: Delivery of Local Services and Infrastructure.

D. Environmental and Social Overview

D.1. Project location(s) and salient characteristics relevant to the ES assessment [geographic, environmental, social]

The World Bank is planning to support GoI in implementation of safe, green, resilient and integrated mass transport transit systems on high priority corridors in Bandung and Medan. The Project has two components: (i) Component 1 -



Strengthening the institutional capacity to implement mass transit projects and sustainable urban transport systems, as well as mobility plans, transit orientated development, corridor and mode selection studies and (ii) Component 2: Support implementation of safe, resilient, green, and integrated mass transit in selected cities. Component 2 has two Sub-components, as follows:

Sub-component 2A: Development of a Light Rapid Transit (LRT) corridor and improving the performance of a commuter rail line in Bandung. The project will fund 12-km long North-south LRT corridor and improvement of existing commuter line (including double tracking of 25 km existing rail, upgrading the signaling and telecommunication system, procuring new trains, and grade separating roads at 10 locations).

City of Bandung is the capital of West Java province, with over 2.5 million inhabitants. Greater Bandung Metropolitan Urban Area is the country's third-largest metropolitan area with over 8.5 million inhabitants. Located at 768 m above mean sea level (AMSL) and approximately 140 kilometers SE of Jakarta, the city lies in a river basin surrounded by volcanic mountains. The 400 km² flat of central Bandung plain is situated in the middle of the Citarum River Basin. The main river, Citarum, often causes flooding in the southern areas of the city. In the 20th century, Bandung gradually developed into a resort city for plantation owners. The city experienced ongoing development and urbanization, transforming from an idyllic town into a dense (16,500 people/km²) metropolitan area. The city has encountered many problems (ranging from waste disposal and floods, to a complicated traffic system resulting from a lack of road infrastructure), but still attracts a large number of tourists, weekend sightseers, and migrants from other parts of Indonesia. To improve the transport infrastructure, the construction of Jakarta-Bandung high speed rail was started in 2016, with projected completion date in late 2021. This rail line is to be complemented and expanded by Project-funded LRT.

Sub-component 2B: Development of a Bus Rapid Transit (BRT) corridor in Medan. Feasibility studies for BRT corridor were completed in early 2019. The BRT line will be 18-km long from Terminal Amplas in the east.

City of Medan, the capital of North Sumatra Province, has a population of over 2.2 million. The Medan Metropolitan Urban Area, which covers few surrounding regencies, is the fourth largest urban area in Indonesia and the largest metropolitan area outside Java, with 4.6 million inhabitants. Medan is a multicultural metropolis and a busy trading city bordered by the Strait of Malacca. The city sits at elevation between 2.5 and 37.5 m AMSL. Medan is close to the Barisan Mountains (also known as the Bukit Barisan) - a mountain range on the western side of Sumatra, spanning over 1,700 km from the north to the south of the Sumatra Island. The Sinabung Mountain (peak 2,500 m AMSL), located at the southern outskirts of the city is an active volcano. Medan features a tropical rain forest climate with no real dry season. The city often experiences flooding events due to poor drainage system. Average temperatures is 27 °C throughout the year, with annual precipitation of around 2,200 millimeters.

Medan is recognized as one among the six cities in Asia to have successfully featured and preserved several colonial architectural sites, while rapidly growing into the metropolitan city. The urbanization and city development processes have significantly accelerated in the recent years, mostly due to its favorable position and economic situation.

D. 2. Borrower's Institutional Capacity

The Ministry of Transport (MOT) as the implementing agency has some experience with environmental and social (E&S) safeguard requirements of other development partners such as the DG Sea Transport with implementation of an ADB port project and the DG Railway for Jakarta Mass Rapid Transport (MRT) which received financing from from JICA. MOT has an echelon 2 unit under the Secretariat General called Center of Sustainable Transport Management.



This unit supervises E&S aspects of projects under MOT and provides recommendations to the projects. This unit has permanent E&S staffs. There is, however, no experience with the Bank's E&S Framework (ESF) requirements or the Bank's E&S Operational Policies (OPs).

The DG Railways has substantial experience with large infrastructure projects such as:

- Double tracking Northern Java Intercity Railways corridor with total length of 727 km from Jakarta to Surabaya and completed in 2 years (2012-2014);
- Double tracking Southern Java Intercity Railways corridor with total length of 383 km from Cirebon to Solo and completed in 9 years (2011-2020);

During the preparation, the TT will explore different modalities that may include: on-lending and on-granting from the central government to the sub national governments (in this case, sub national governments will be the implementing agency and sub national government may form a sub national own enterprise to manage the project such as PT Jakarta MRT), infrastructure grant from MOT to sub national governments and sub national governments contribution on other elements of the system (in this case, MOT and sub national governments will be the implementing agencies & they will contract out the developments/procurement to a private sectors (contractors, suppliers, etc.)), and viability gap fund support to PPP project (in this case, sub national governments will be the implementing agency).

Component 1 of the project, among others, aims to establish and strengthen the institutional capacity of the National Project Management Unit (NPMU/Technical Secretariat) to manage the implementation of the first phase of the national program and develop a pipeline of cities for subsequent implementation in accordance with the RPJMN priority. This will also include the establishment of sub-national Project Implementation Units (PIU) in Bandung and Medan, to manage planning, procurement (including subsequent possible PPP & Transaction Advisory Services) and implementation of Mass Transit Systems. The project will fund the establishment of sub-national institutional structures with representation from provincial, kota and kabupatens, with appropriately trained & skilled manpower, to manage the integration, operations, revenue collection, & operator payment of Mass Transit Systems in each city. It will also include a technical support, institutional development & capacity building of sub-national structures for the development of integrated urban development plans, mobility plans, transit orientated development, corridor & mode selection studies, & project management support preparation, implementation and operation in both cities.

Since the entire institutional architecture for planning, implementation and operation support would be set up and the borrower capacity building is part of the Project preparation, the borrower's institutional capacity would be considered nascent especially on addressing complex E&S dimensions of the project's impacts and ensuring effective mitigation mechanism during implementation and operation. The Project design of Component 1 will ensure that adequate emphasis is placed on availability of adequately trained human resources in sufficient numbers to ensure efficient and comprehensive management of E&S risks associated with the Project-related activities. The TA that will support preparation for the future infrastructure investments will consider & include E&S aspects relevant for implementation & operation.

II. SCREENING OF POTENTIAL ENVIRONMENTAL AND SOCIAL (ES) RISKS AND IMPACTS

A. Environmental and Social Risk Classification (ESRC)

High

Environmental Risk Rating

High

Public Disclosure



The environmental risk rating is High, primarily because the project is supporting complex and large investments (mass transit systems in large cities), that have a high potential of long term, permanent and adverse environmental impacts. In addition, capacity of participating institutions is not sufficient to manage risk and impacts of such activities during construction and operation. The environmental risk is also rated high in magnitude and in spatial extent (i.e. the geographical area or size of the population likely to be affected is large to very large as referred to Section D.1.). Furthermore, some of the significant adverse environmental and social (ES) risks and impacts of the Project cannot be mitigated using standard mitigation measures and will require application of complex mitigation measures and technology; this includes factors outside the control of the Project, i.e. earthquake and flood that could have a significant adverse impact on the ES performance and outcomes of the Project. Finally, the Ministry of Transport (MOT) as the implementing agency has experiences with ES requirement of other development partners but, as noted in section D.2, not with the World Bank Environmental and Social Framework (ESF) or Operational Policies (OPs) requirements. The project has two components. The Technical Assistance (TA) under Component 1 is expected to support the preparation of future investment projects and strengthen the borrower capacity. Although the project will not finance any construction or physical investments and the activities within the TA are not predicted to generate any significant direct environmental impact, the TA will assist to develop future mass transit projects in other cities and support integrated urban development, mobility plans, transit orientated development, corridor and mode selection studies. (noting that the World Bank team is currently assisting the authorities in Greater Bandung to develop an Urban Mobility Strategy and Action Plan that provides an opportunity to reduce E&S risks and impacts early in the design phase). Future implementation of the these plans is expected to have direct and indirect ES impacts, e.g. air, soil, and water pollution from construction waste; noise emissions and vibration; use of natural resources; and work-related incidents. As the future projects will take place in urban setting, it is highly unlikely impacting any critical natural habitats or sensitive areas.

Activities planned under Component 2 will involve large civil works in urban settings that will entail potential risks on ES (details description are provided in each relevant ESS). Noise and vibration are among the potential impacts to be assessed comprehensively in all ESIA's, both during construction and operation. While modern mass transit operations tend to be less noisy than traffic on congested urban roads, noise modeling study will be performed, not only in order to obtain the baseline, but also to suggest appropriate mitigation measures (e.g. alternative alignments around sensitive areas where noise barriers are not appropriate).

Environmental and Social Impact Assessment (ESIAs) will be prepared according to the ESF requirements; risk factors related to low capacity of implementing institutions will be mitigated through massive capacity building activities, ensuring that environmental and social specialists supporting the PIUs are in place and well trained. List of documents to be prepared prior to the project appraisal is provided in the Section II B on ESS1 explanation.

Social Risk Rating

High

The social risk is rated high on account of the large magnitude of civil works in densely populated urban settings, the potential land acquisition and resettlement and rehabilitation impacts and associated accessibility, vulnerability and poverty impacts. The capacity and experience of the participating institutions is not sufficient to manage the social risks and impacts of these activities. Civil works supported by the Project under Project Component 2 may cause physical and economic displacement, restriction of access, temporary construction induced impacts on private assets and businesses, and disruptions to residents and local businesses. This is also likely to entail social risks related to labor influx; community health and safety, including Gender Based Violence/Sexual Exploitation and Abuse (GBV/SEA) risks. The social risks are also associated with potential social tensions due to impact on current road users and affected persons who derive their income/livelihood from trade associated with existing road transport corridors, small business owners at the corridors and adjacent streets, as well as noise/dust/vibration and lack of temporary



access to local residents. There might also be damages to urban utility service lines, access restrictions to residences during construction many of which could be site specific and require appropriate mitigation measures. There is the risk of exclusion of the poor, vulnerable and disabled in the technical design, planning and operation including affordable pricing of the transportation systems. Community health and safety, including GBV/SEA risks are relevant for the project including impacts from changes in transport arrangements and interactions with workers. There is some risk of economic displacement associated with the transformation of local economies connected to existing transport systems and networks, particularly for existing transport providers. Contextual risks that have impact on Environmental and Social performance including existence of legacy issues need to be taken into account. There is a need for effective community engagement and establishment of accessible and responsive Grievance Redress Mechanisms (GRM). An Environmental and Social Impact Assessment (ESIA) would be prepared following ESF requirements as part of project preparation to determine each of the expected impacts to help with the design of corresponding mitigation measures. The social impact on existing transport service providers and the need to provide for appropriate mitigation measures would also be included as part of the ESIA. To address risk factors associated with low capacity, in addition to concerted Environmental and Social (E&S) capacity building efforts through the Component 1 Technical Assistance, the National PMU/Technical Secretariat and the sub-national, city level PIUs would ensure recruitment of qualified and experienced social and environmental specialists who are well trained in ESF. Focused environmental and social capacity building inputs would be provided to them and all relevant PIU functionaries who require appropriate sensitization on social and environmental dimensions. They would be actively involved in the E&S dimensions of TA related activities of Urban Mobility Planning, developing future mass transit projects in other cities, supporting integrated urban development, mobility plans, transit oriented development, corridor and mode selection studies etc. The effort to reduce E&S risks in the design phase that the World Bank team is currently assisting the authorities in Greater Bandung through developing the Urban Mobility Strategy and Action Plan is an example of the type of activities that counterpart E&S capacity will be built with.

B. Environment and Social Standards (ESSs) that Apply to the Activities Being Considered

B.1. General Assessment

ESS1 Assessment and Management of Environmental and Social Risks and Impacts

Overview of the relevance of the Standard for the Project:

ESS1 is relevant as the Project interventions have the potential to cause adverse environmental and social impacts, community hazards, occupational health and safety, long term impact on land use and impact on the transport affecting population, land taking, resettlement and rehabilitation impacts. Livelihood impact on transport service providers, microbuses etc. street market sellers, Long term and irreversible impacts on the transport and land use and transport affecting 2.5 million people in Bandung and 2.2 million people in Medan. Component 1 focuses on strengthening the institutional capacity to implement mass transit projects and sustainable urban transport systems. As one of the first steps of the Project preparation, the institutional arrangements for project planning and implementation need to be clarified and agreed upon with all the key stakeholders. The capacity of the Ministry of Transport (MOT) and local governments to identify and address environmental and social impacts associated with the Project are limited, therefore this would need to be assessed and strengthened during project preparation. An Institutional Assessment of all relevant entities involved would help identify strengths and areas where additional supports are required for each of the relevant institutions (e.g. MOT, Municipal Transport Department, Railway company).



Component 1 offers the opportunity to incorporate concrete options and approaches for “greening” infrastructure and the urban planning process around mass transport investments. While this is not strictly a due diligence requirement of the ESF, it would provide significant value added to the design quality and long term ES sustainability of the project. Also, it would be consistent with the ESF’s requirement to apply the mitigation hierarchy, whereby this type of upstream strategic assessment and advisory work would contribute to avoiding and minimizing adverse impacts, while maximizing positive impacts. The requirement to provide design criteria for green transport infrastructure, and to develop guidance for further integration of ES sustainability through the planning sequence for the various investments planned under Component 2, needs to be reflected in the TOR for the TA consultancies and become part of the TA’s deliverables that subsequently would be used in project design and implementation of concrete investments under Component 2.

The development of a mass transit program will have impact on the existing modes of transport and those whose livelihoods are dependent on providing existing transport services. Feasibility studies for one LRT corridor and one BRT corridor in Medan were completed in early 2019 with support from PT SMI. Although a FS for the Medan BRT has been done, together with the Environmental and Social Impact Assessment (known as AMDAL) required by Indonesian legislation, the alignment and design features will be reviewed, and FS is to be updated prior to appraisal to ensure that ES aspects are fully considered in the design.

For the LRT in Bandung and Commuter Rail Improvement, the FS and ESIA will be prepared during project implementation, with the ESIA to be in accordance with the ESMF. The FS will be prepared alongside the ESIA and therefore, construction for the LRT will only start in the second year, or later, of the project after the FS and ESIA have been completed.

The ES team also note that i) upgrading of the Bandung commuter rail line will be within the existing rail reserve so there is no choice of alignment, however other issues identified in the ESIA will be incorporated into the system design; and ii) The FS for the Bandung LRT will use an existing Mass Transit Pre-FS as a base, however changes to the terminal points and alignment are envisaged. The FS and decision on the alignment and design features will incorporate ES issues.

In addition to an updated of the existing FS for Medan BRT and FS for Bandung LRT and Commuter Rail Improvement, in addressing ES impacts, during the Project preparation and prior to appraisal, the borrower will prepare, to the Bank’s satisfaction, and disclose:

- For Component 1: As the TA under Component 1 will assist the Borrower to develop future mass transit projects in other cities and support integrated urban development, mobility plans, transit orientated development, corridor and mode selection studies, the Borrower will prepare the ToRs for a SESA that focus on the analyses of alternatives for the routes which will be elaborated in the mobility plans.
- For Component 2: i) Environmental and Social Management Framework (ESMF) covering entire project, ii) Land Acquisition and Resettlement Policy Framework (LARPF), either standalone document or part of the ESMF, iii) Draft ESIA for Medan BRT with inclusion of Environmental and Social Management Plans (ESMPs) and Cultural Heritage Management Plan (CHMP) (based on existing documents prepared as part of FS and updated to ensure compliance with the World bank ESF), iv) Draft ESIA for Bandung Commuter Rail Improvement with inclusion of Environmental and Social Management Plans (ESMPs) and Cultural Heritage Management Plan (CHMP), v) Draft Land Acquisition and Resettlement Action Plans (LARAPs) for Medan BRT, v) Draft Land Acquisition and Resettlement Action Plans (LARAPs) for Bandung Commuter Rail Improvement, vi) as for Bandung LRT, TORs for FS, ESIA and LARAP will be prepared in accordance with ESMF and LARPF, vii) Draft Environmental and Social Commitment Plan (ESCP), viii) Draft Stakeholder Engagement Plans (SEPs), and ix) Draft Labor Management Procedures (LMP), including GRM for labor-related issues, x) Grievance Redress Mechanisms (GRMs) for project complaints, xi) Gender-Based Violence



and Sexual Exploitation & Abuse (GBV/SEA) Risk Assessment and Draft Action Plan, and xii) Community Health and Safety Plan.

The borrower jointly with the Bank will also prepare an ESCP prior to the project appraisal that details the timing for the finalization of the above mentioned documents as well for preparing the following instruments: i) for the works proposed under Component 2: design stage ESIA/ESMPs and LARAPs, with special focus on Bandung LRT ESIA as draft ESIA will not be finalized prior to the project appraisal; and ii) for the entire project: capacity building plans for key implementation agencies in proper environmental and social risk management of the project.

In addition, the ESCP will also require the Contractor to prepare its own ESMP, LMP, Grievance Redress Mechanism (GRM) for Contractor's personnel, and Environmental, Social, Health and Safety Code of Conduct – requirements to prepare all of these to be included into bidding documents for civil works contractors. The ESCP will also include a commitment to develop a Traffic Management Plan for construction and operation stage of the Project. The GBV risk rating tool is yet to be applied, a GBV assessment will be conducted and GBV prevention measures such as provision of GBV/Sexual Exploitation and Abuse (SEA)/Sexual Harassment (SH) related training, identification of GBV service providers, adoption and enforcement of Codes of Conduct, will be included in the ESMP and LMP based on the result.

Areas where “Use of Borrower Framework” is being considered:

None

ESS10 Stakeholder Engagement and Information Disclosure

Urban transport and mass transit development programs require systematic and intensive engagement of stakeholders to implement them effectively and successfully. There are a wide range of stakeholders to be consulted which may include political power-holders at city and national level; transport operators (both public and private); business and trade organizations; civil society organizations; other public sector institutions who have a large number of workforce commuting to the city for work; and the general public.

The Project would need to identify key stakeholders at the National level and at the level of the cities of Medan, and Bandung . Once the overall contours of the proposed operation are clear, this needs to be shared with all concerned stakeholders and their feedback obtained before the plan is firmed up. As is evident, the viability and sustainability of a mass transit system is highly dependent on the willingness of all stakeholders to use it and the use depends on what they are expected to pay for the same. The decision on the extent to which the mass transit system would need to be subsidized at least during the initial period after launch would be an important consideration in determining go ahead for the operation. Starting with these basics, all key stakeholders need to be proactively identified, provided with required factual information and their feedback sought. Stakeholder consultations need to be conducted openly and all available information shared with all stakeholders. Consultations need to be conducted in local language and in as many locations as considered desirable by the stakeholders. Focus would be on identifying those who are vulnerable, marginal or require special measures in order to participate in consultation and benefit from the project. Persons with disabilities and associated universal access issues are key stakeholders relevant to mass transport. Transport operators, squatters and land users without formal title, businesses without formal permission and others who livelihoods are affected by the project would also need to be reached out to and involved as part of stakeholder consultations. Consultations would focus on technical design, masterplan to ensure that any significant consequences



for business and livelihoods are taken into account through public discussion. Decisions on location of stations and routes, affordability etc. would also form an important topic of consultations.

The city and sub project specific Stakeholder Engagement Plans (SEP) for each city sub project will map project-affected persons and other interested parties, summarize their views on preferred modes of engagement throughout the Project, propose stakeholder engagement activities with the respective implementation responsibilities, timeline and budget to be carried out through the life of the Project. The SEPs would specify milestones for disclosure and consultation related to the finalization of the masterplan and technical designs and for periodic updates on the project progress to ensure stakeholders inputs are received and incorporated on a regular basis.

Grievance Redress Mechanism (GRM) systems that are accessible to all stakeholders including the poor and vulnerable would be set up in each of the cities. Separate GRM arrangements that are specific to contract labor and workers and to addressing concerns of Gender Based Violence, Sexual Exploitation and Abuse and Sexual Harassment would need to be set up with carefully selected, trained and adequately sensitized functionaries.

B.2. Specific Risks and Impacts

A brief description of the potential environmental and social risks and impacts relevant to the Project.

ESS2 Labor and Working Conditions

Once the key entities to be involved in the Project have been identified, the relevant workforce of each of the entities that will be involved with the Project needs to be determined. Besides employees of these entities, there would be contracted workers, contractors, indirect workers, workers associated with suppliers to the Project etc.. Potential risks associated with these diverse range of workers include poor working conditions, occupational health and safety, child labor, labor influx, Gender Based Violence (GBV) issues and possible conflict with local communities. The large and diverse workforce also has the potential risks and impacts of community health, safety and security from the illicit behavior of the construction workers.

In 2015 the population of Metropolitan Bandung was just under 8.5 million, with 2.5 million within the City of Bandung. The respective figures for Medan are 4.4 million in the metropolitan area and 2.3 million in the City. In 2019 of the total labor force in West Java Province, 92.3% was absorbed of which 7.2% was in construction industry, in North Sumatera Province, 94.5% was absorbed of which 5.6% was in construction industry. There are no anticipated problems with insufficient supply of labor or absorption capacity of either of the two cities.

The Project work force will include direct workers (Medan and Bandung City Administration staff and consultants), and contracted workers (employees of civil works contractors and sub-contractors under Component 2, and consultants who will be employed to conduct Component 1. Depending on whether the Project would primarily rely on supply of construction materials from the local market or from other markets, the risk of child and forced labor needs to be assessed. The borrower will prepare an Labour Management Plan (LMP) for the Project outlining the expected number and type of workers, key gaps between national legislation and regulations that need to be addressed at the Project level, as well as monitoring and supervision arrangements. Key aspects of the LMP pertaining to contracted workers, such as Occupational Health and Safety (OHS), adequate working conditions, adequate living conditions in the unlikely event of work camps, a functioning grievance and redress mechanism for workers, will be included in Contractor's ESMP. Bidding documents will make explicit reference to these aspects to



ensure the commitment of selected contractors to adhere to ESS 2 principles. The LMP would include an assessment of the borrower's internal HR procedures to ensure consistency with ESS 2 requirements and propose any gap filling measures. Government of Indonesia legislation on labor and working conditions is relatively advanced. The Labor Code includes measures on equal opportunity and non-discrimination, regulates hiring and firing procedures, allows for collective organization and bargaining; however, it lacks the requirement to establish worker's grievance mechanism. Such a mechanism will need to be established at project level.

ESS3 Resource Efficiency and Pollution Prevention and Management

Construction materials: Construction of the mass transit infrastructures in Bandung and Medan will require large quantities of the construction material, such as stone, sand, steel, concrete blocks and timber. These materials (i.e. quarries for sand and stone) has to be obtained from the local sources and its surrounding which have obtained relevant licenses for the exploitation/mining. In addition to the national relevant licenses, the quarry should comply with the requirements of the WBG EHS guidelines for construction material extraction.

Noise and vibration: During mobilization, construction and demobilization phase, noise and vibration are generated from the use of construction machinery and vehicle movements. As the construction sites are located in the urban areas, noise should be managed by proper arrangement of working hours and physical intervention as necessary to minimize noise to surrounding public areas. Construction of noise barriers may be needed in some sections, e.g. school, mosque. The ESIA's will assess impacts to nearest sensitive receptors and propose mitigation measures to minimize and manage the noise levels such by applying standard restrictions to hours of site work. Also part of the ESIA's will include the baseline noise monitoring and operational phase related cumulative traffic noise modeling. The main outcomes would be the primary set of noise mitigation measures for the projects under Component 2 such as noise barriers or alternative alignment.

Management of air pollution: During mobilization, construction and demobilization phase, fugitive dust generated by construction activities (e.g. excavation, heavy equipment operation) is expected to be main air pollution issue, in addition to air emissions from operation of heavy vehicles and machinery. Workers, people living within the proximity of the work sites and road users, street sellers, people deriving income from facilities adjacent to the road will be affected. The implementation of mitigation measures such as dust suppression and vehicle maintenance, regulation of car speed will be applied to minimize the impact of air emissions during construction, transportation of material, and residual impacts is expected to be limited in scope and duration. The ESIA's will also assess expected increased impacts to ambient air quality from projected increased road utilization by vehicles, using established models.

Management soil erosion and runoff: Large construction work which will certainly involve massive excavation will affect vegetation and soil that ultimately result in erosion and runoff, particularly during storm events. And this could adversely impact surface waters. The scope of work that will affect the soil erosion and runoff will be assessed as part of each ESIA. Mitigation measures would also be expected to be proposed in the ESMP to avoid, reduce or mitigate runoff from the Project sites during construction activities. The ESIA's will also assess potential for surface runoff from road surfaces during the operations phase and propose appropriate mitigation measures where erosion risks are high, such measures to improve drainage and/or slope stability.



Management of hazardous and nonhazardous wastes: Hydrocarbon (e.g. gasoline, diesel and lubricant) are used to run vehicles and machinery. Construction of storage for those hydrocarbon will have to meet the international standards (e.g. at minimum the volume of containment has to be 110% of the tank capacity). The ESIA's will identify all source of hazardous and nonhazardous waste and propose mitigation measures proportional to the level of risk. The ESIA's will also identify the presence and locations of licensed facilities for the transport, treatment and disposal of solid and hazardous wastes in the vicinity of project sites. The contractor will be responsible of developing and implementing a waste management plan during the Project implementation.

ESS4 Community Health and Safety

The main risks to community health and safety occur during the operational phase of the mass transit infrastructure and stem from the concentration of pedestrian movements in the vicinity of stations. Design and operational safety issues with the Commuter Rail, LRT and BRT systems will be identified in the ESIA's. Specific attention will be given to provision of safe accessibility of passengers to the systems and due consideration of gender aspects of personal safety on stations and on-board. Rolling stock operational safety issues including rail operational safety and interaction between BRT vehicles and general traffic will be investigated. Furthermore, emergency preparedness and response planning will also be elaborated.

Further community health and safety risks are associated with construction activity associated with the mass transit system. Construction of mass transit systems like LRT are associated with dust/noise, soil disturbance, traffic management, waste disposal, and associated disturbance to local communities (including risk of construction materials falling from the top). The ESIA/ESMP will include measures to address work related health risks; works and road safety; excessive noise and dust levels; site safety awareness; traffic management; and access restrictions in accordance with good international industry practice and WBG EHS Guidelines . The Project will ensure community safety during the works by adopting adequate OHS protocols following the World Bank Group Environmental Health and Safety Guidelines. Partition of construction area by putting in place fences, signaling, mitigation measures to control excessive noise and dust levels, and secure access to the area in the adjacent buildings for the office workers and public use will be ensured through a robust mitigation and management plan in the design stage (and contractor's) ESIA/ESMPs. The ESIA will include an evaluation of potential traffic and road safety risks to workers, affected communities and road users throughout the Project life cycle.

The Project implementing agency will identify, evaluate, and put in place a mechanism to manage potential road safety risks and risks to workers, nearby communities and other road users in relation to Component 2. The ESIA's/ESMPs will assess the potential scale and risk due to natural hazards associated with flooding and landslides. The seismic resilience would be incorporated into the engineering designs of the final structures. Fencing will be installed around all construction sites and areas where there is a risk to community health and safety. A Grievance Redress Mechanism (GRM) for the public will be prepared and consulted on with local communities during the Project preparation. Besides, Environmental Health and Safety (EHS) team, the contractor will be required to appoint designated social staff as part of the SEP plan who will keep local communities informed of construction schedule, expected impact and other issues of interest for them, and receive grievances or feedback from them. The GBV risk rating tool is yet to be applied, a GBV assessment will be conducted and GBV prevention measures, such as provision of GBV/Sexual Exploitation and Abuse (SEA)/Sexual Harassment (SH) related training, identification of GBV service



providers, adoption and enforcement of Codes of Conduct, will be included in the ESMP and LMP based on the result. At present, there is no expectation that security forces will be used during construction – this will be confirmed during appraisal. Universal access will be an important consideration as part of project design. Grievance Redress Mechanism (GRM) systems that are accessible to all stakeholders including the poor and vulnerable would be set up. Separate GRM arrangements that are specific to contract labor and workers and to addressing concerns of Gender Based Violence, Sexual Exploitation and Abuse and Sexual Harassment would need to be set up with carefully selected, trained and adequately sensitized functionaries.

ESS5 Land Acquisition, Restrictions on Land Use and Involuntary Resettlement

The extent of land acquisition, resettlement and rehabilitation impacts expected as part of implementation of Component 2 is yet to be determined. Project-related land acquisition and physical and economic displacement is expected along the proposed mass transit systems in both Bandung and Medan. In addition to those with formal land tenure, squatters without formal land tenure are also likely to be adversely impacted and these impacts would need to be assessed and compensated as per provisions of a Resettlement Policy Framework (RPF) to be formulated. Land Acquisition and Resettlement Action Plans (LARAPs) for Medan BRT, Land Acquisition and Resettlement Action Plans (LARAPs) for Bandung Commuter Rail Improvement and Terms of Reference for Feasibility Study, Environmental and Social Impact Assessment (ESIA) and LARAP will be prepared for Bandung LRT, in accordance with ESMF and LARPF. The Project will fund infrastructure, equipment, and necessary preparatory studies and designs of mass transit systems including LRT and improvement of commuter line in Bandung and BRT in Medan.

LRT corridor in Bandung. Bandung City Government has prepared pre-feasibility studies (pre-FS) for 3 mass transit corridors of which the Project will support one, likely to be Corridor 1 running north-south for which a pre-FS was completed in 2013. The specific project corridor, mode choice, alignment and terminal points will be reviewed under the ongoing Urban Mobility Plan update. A Land Acquisition and Resettlement Action Plan (LARAP) would be prepared with mapping and details of PAPs still to be defined. While most of the LRT works are expected to be accommodated within the existing road reserve there will be land acquisition and associated social safeguard requirements resulting from widening of the roadway to accommodate at least one lane of traffic per direction along limited stretches of the route. The turning radius required for efficient operation of an LRT is likely to require further land acquisition where the route makes turns at intersections. This investment will also require significant land for depot facilities where rolling stock will be stored overnight, and cleaning and maintenance work performed. Bandung Commuter Rail upgrading will be at-grade and within the existing rail reserve which is adequate to accommodate the full extent of double tracking. The presence of squatters within the rail reserve will, however, require investigation. For road safety reason, the at-grade alignment will necessitate grade separation of ten crossroads, which is likely to require limited land acquisition for roadway widening. This will be minimized by review of the volume and function of roads crossing the railway line, and closing low volume roads instead of grade separation. Land acquisition is minimized by use of existing depot facilities.

The BRT corridor in Medan has been defined in the FS completed in early 2019 with support from PT SMI. Subject to the Urban Mobility Plan confirming this corridor and depending on status of preparation of DPRs, a LARAP would be prepared for the corridor. The BRT lanes and stations will be located at grade, in the median of existing roadways. Land acquisition is expected to be limited. The alignment uses routes that are mainly multi-lane dual carriageways with generally adequate right of way for the median bus lanes. Additional widening may be required at some stations, which will be centrally located within the median bus lanes. Land acquisition will be minimized by



investigation of offset BRT stations where boarding platforms are separated for each direction, resulting in a narrower footprint for the median stations and use of publicly owned land at the existing Pinang Baris bus terminal without the need of additional land acquisition. Based on World bank review of the LRT proposal significant refinement of the LRT design is likely to be required before proceeding ahead with this investment. In addition to having well qualified and trained staff to manage the land acquisition and resettlement and rehabilitation requirements, the project would need to establish Grievance redress mechanisms that are responsive to complaints and grievances all sections of the community including in particular the poor and vulnerable.

ESS6 Biodiversity Conservation and Sustainable Management of Living Natural Resources

Based on information received, the Component 2 will be carried out in densely populated urban areas. As such the works will not be carried out in or near any of the identified protected areas. The alignment of the Medan BRT and Bandung Improvement of Commuter Railway has been decided; as for Bandung LRT, proposed alignment is available based on preliminary concept design.

Based on evaluation of the above information, it can be stated that there will be no impacts associated with ESS6. The ESIA/ESMPs will propose standard mitigation measures related to the indirect impacts on critical habitats and protected areas, if relevant. The evaluation will include off-site impacts of quarries and construction material sources, as identified under ESS3.

ESS7 Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities

ESS7 is not relevant since the project area of the urban area of Bandung and Medan cities does not have any Indigenous people that meet the requirements of paragraph 8 and 9 of ESS7 on Indigenous Peoples.

ESS8 Cultural Heritage

The ESIA will assess, the existence of tangible or intangible cultural heritage along the alignment of BRT and LRTs and propose adequate mitigation measures. It is very likely that the construction activities will affect the cultural heritage in old cities like Bandung and Medan, where buildings, mosques and temples have been declared as cultural heritage. In preparation of mobility plans and planing of the new routes, special focus will be given to protection of tangible or intangible cultural heritage.

For this reason, all construction contracts will include specific measures which will require contractors to preserve the cultural heritages that have been identified in project preparation. As for the cultural heritage found during project construction, contractor will stop the civil work if cultural property sites are encountered and follow national legal requirements for managing cultural heritage.

ESS9 Financial Intermediaries

This standard is not relevant for this project



C. Legal Operational Policies that Apply

OP 7.50 Projects on International Waterways No

OP 7.60 Projects in Disputed Areas No

III. WORLD BANK ENVIRONMENTAL AND SOCIAL DUE DILIGENCE

A. Is a common approach being considered? No

Financing Partners

Common approach is not being considered for this project.

B. Proposed Measures, Actions and Timing (Borrower’s commitments)

Actions to be completed prior to Bank Board Approval:

The ES team notes that parallel development of feasibility studies and the following ES instruments is essential to avoid, minimize and mitigate ES impacts

1. Environmental and Social Management Framework (ESMF);
2. Environmental and Social Commitment Plan (ESCP);
3. Stakeholder Engagement Plans for each of the 3 investments (SEP);
4. Labor Management Procedures (LMP), including GRM for labor-related issues;
5. Grievance Redress Mechanisms (GRMs) for project complaints;
6. Gender-Based Violence and Sexual Exploitation & Abuse (GBV/SEA) Risk Assessment and Draft Action Plan;
7. Community Health and Safety Plan (provided the fact of numbers of work accidents in transport infrastructures construction);
8. Draft Environmental and Social Impact Assessments (ESIAs) for Medan BRT and Bandung Commuter Railway Improvement with Environmental and Social Management Plans (ESMPs) and Cultural Heritage Management Plan (CHMP);
9. ToR for Environmental and Social Impact Assessments (ESIAs) for Bandung LRT;
10. ToR for Strategy Environmental and Social Impact Assessments (SESA) for Component 1 ;
11. Land Acquisition and Resettlement Policy Framework (LARPF) and ToRs for Land Acquisition and Resettlement Action Plans (LARAPs) for all proposed infrastructures.

Possible issues to be addressed in the Borrower Environmental and Social Commitment Plan (ESCP):

1. Institutional arrangement for safeguard responsibility in the Project, provided that MoT familiarity to World Bank safeguard requirement;
2. Staffing (for social, environmental and GBV/SEA responsibilities);
3. Measures to ensure establishment of a feasible and functional GRM;
4. GBV/SEA risk assessment and necessary measures to be included in GBV/SEA action plan;

Public Disclosure



5. Timing and measures to finalize the draft E&S instruments prepared during the project preparation, i.e. ESIA (including ESMPs and CHMP) for Medan BRT and Bandung Improvement Commuter Railway, LARAPs for all proposed investment;
6. Preparation and finalization of SESA with focus on the analyses of alternatives for the routes which will be elaborated in the mobility plans;
7. Preparation and finalization of ESIA and FS, with special focus on Bandung LRT ESIA
8. E&S Instruments would be updated Commitment to update and implement E&S instruments;
9. Training relevant stakeholder/ implementors on ESF requirements and;
10. Ensuring establishment of monitoring and evaluation mechanisms;
11. Security assessment and necessary measures to be included in project planning;
12. Capacity building for all stakeholders with environmental and social risk management responsibilities;
13. Costing and Budgeting for environmental and social risk management activities and measures including management of the GRMs;
14. Budget and plans for strengthening capacity of the client to manage labor, working conditions and community health and safety will be assessed;
15. Contractors Environmental and Social Management Plan (C-ESMP).

Public Disclosure

C. Timing

Tentative target date for preparing the Appraisal Stage ESRS

07-Dec-2020

IV. CONTACT POINTS

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Borrower/Client/Recipient

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Implementing Agency(ies)



Implementing Agency: Ministry of Transport

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VI. APPROVAL

Task Team Leader(s):	David John Ingham, Elena Y. Chesheva, Amilia Aldian
Practice Manager (ENR/Social)	Ann Jeannette Glauber Recommended on 08-Apr-2020 at 07:25:25 EDT
Safeguards Advisor ESSA	Peter Leonard (SAESSA) Cleared on 16-Apr-2020 at 07:49:49 EDT