



India: Mumbai Metro Rail Systems Project

Project Name	Mumbai Metro Rail Systems Project
Project Number	49469-007
Country	India
Project Status	Proposed
Project Type / Modality of Assistance	Loan
Source of Funding / Amount	Loan: Mumbai Metro Rail Systems Project Ordinary capital resources US\$ 926.00 million
Strategic Agendas	Environmentally sustainable growth Inclusive economic growth
Drivers of Change	Governance and capacity development Partnerships
Sector / Subsector	Transport - Transport policies and institutional development - Urban public transport
Gender Equity and Mainstreaming	Effective gender mainstreaming
Description	The project will support the implementation of the Mumbai Metro Rail System through (i) the procurement of 378 energy efficient standard gauge rolling stock carriages; (ii) the design, supply, installation, testing and commissioning of a modern signaling and training control system, and platform access systems and automated platform doors for the 58 kilometers (km) section covering Lines 2A, 2B, and 7; and (iii) establishment of a metro rail operations organization. The project will contribute to an increase in the use of rail-based urban transit system in Mumbai city.
Project Rationale and Linkage to Country/Regional Strategy	<p>The lines proposed for financial assistance by ADB are: (i) Line 2A from Dahisar (Charkhop) to DN Nagar; (ii) Line 2B from DN Nagar -Bandra -Mandale; and (iii) Line 7 from Dahisar (E) to Andheri (E). The aggregate length of these lines is about 58 km. MMRDA is implementing the civil works of these lines using state funds. ADB funding will be used to finance the rolling stock, signaling, platform access and safety systems, and multimodal integration, which will be mainly through systems supply and installation contracts.</p> <p>The conditions in and around the suburban rail system, such as overcrowding, people falling from the trains, and people crossing tracks, have caused over 3,000 deaths per annum since 2006. The project will significantly improve transport safety by decongesting the existing suburban rail system and moving passengers to a modern, comfortable, and safe transit system, equipped with best practice safety equipment such as platform doors and a fully grade separated right of way. This project also offers an excellent opportunity for ADB to participate in promoting gender- and socially-inclusive rail-based urban transport in one of the world's largest cities. The use of ADB's LIBOR-based US Dollar lending for purchase of items such as rolling stock, signaling, and control equipment will also benefit the project's finance requirement. ADB will also help establish an efficient and sustainable metro rail operations organization and support the development of last mile connectivity solutions and multimodal integration with non-motorized transport and electric vehicles.</p>
Impact	Urban mobility in the Mumbai Metropolitan Region improved
Outcome	Efficiency, safety, and gender- and social-inclusiveness of rail-based urban transit system in Mumbai city increased
Outputs	Rolling stock operational Signaling, control and telecommunications systems operational Institutional support for the Metro Rail Operations Organization and multimodal integration provided
Geographical Location	Mumbai
Safeguard Categories	
Environment	B
Involuntary Resettlement	C
Indigenous Peoples	C

Summary of Environmental and Social Aspects

Environmental Aspects	The project scope for ADB's financing involves specific items of goods supply for Lines 2A, 2B and 7 of the Mumbai Metro Rail network. No civil works are financed by ADB. The key long-term environmental impact anticipated is noise and vibration from the operation of the rolling stock. However, given the existing noisy conditions of the project area due to heavy road traffic, the incremental impacts are expected to be minimal. Some occupational health and safety impacts may also be experienced during installation and operation of the rolling stock and signaling and telecommunication systems. However, it is expected to be minor and easily mitigated. Hence, the project is categorized as B for environment safeguards. An initial environmental examination report including an environmental management plan and environmental monitoring plan has been prepared for all three lines.
Involuntary Resettlement	The project scope for ADB's financing only includes specific items of goods and equipment supply and no civil works, hence, the project is classified as category C for involuntary resettlement. MMRDA has acquired private land and assets based on the provisions of national law, state law, and sector policy. Due diligence of involuntary resettlement safeguards implementation for the three lines was conducted to assess if safeguards are consistent with applicable ADB requirements. Due diligence reports indicate that MMRDA land acquisition and resettlement plans are prepared and implemented to ensure that: (i) affected persons, including informal settlers, are compensated for lost assets prior to displacement and at replacement cost; (ii) income restoration programs are in place for those whose livelihood will be affected; (iii) there is meaningful consultation and information disclosure; (iv) standard of living of displaced poor and other vulnerable groups are improved; and (v) there are mechanisms for grievance redress and monitoring. MMRDA and ADB agreed that project implementation will closely monitor land acquisition and resettlement, and carry out corrective actions if necessary.
Indigenous Peoples	The project is categorized as C based on the ADB SPS. The project will finance goods and equipment supply only and is not expected to affect Indigenous Peoples communities within the meaning of the SPS.

Stakeholder Communication, Participation, and Consultation

During Project Design	The project will follow ADB's standard consultation and disclosure requirements and provide relevant information, including information from the above documents, in a timely manner, in an accessible place, and in a form and languages understandable to all affected people and other stakeholders. If the affected people are illiterate, other appropriate communication methods must be used, such as direct verbal communications through one-on-one or other meetings, and grievance redress meetings. In addition, the PIU will distribute leaflets outlining key project impacts and entitlements to affected persons, post the contact information about the grievance redress committee, conduct information sessions at the outset of project implementation, and follow up with consultation meetings to update road residents of civil work progress throughout the life of the project. The MMRDA already has a website in both Marathi and English outlining the features of the project (https://mmrda.maharashtra.gov.in/). A Public Information Center (PIC) for the metro project lines has been set up in the MMRDA office. It is also planned to create a PIC dedicated for each metro line. The PIC will have all the essential information regarding the project such as detailed project report, social impact assessment, census survey report, etc. All of these are available for sharing with the public.
During Project Implementation	Salient information regarding the project, including scope, general progress status, beneficiaries, invitation for bid, and consultant recruitment notices, will be provided to the public. The information will be made available and updated through the official website of the EA. The safeguard documents including environmental impact assessment reports, due diligence reports, and corrective action plan, if any, will be posted on the ADB website.

Business Opportunities

Consulting Services	All consultants will be recruited in accordance with ADB's Procurement Policy (2017, as amended from time to time) and ADB's Procurement Regulations (2017, as amended from time to time). Consulting services are required to support the operations institution of the metro rail system. These operations support consultants will be funded out of loan proceeds. Consulting firms will be engaged using the quality- and cost-based selection method with a standard quality:cost ratio of 80:20.
Procurement	ADB financing for this project will be primarily for three large goods supply contracts, which will be procured in accordance with ADB Procurement Policy (2017, as amended from time to time) and Procurement Regulations for ADB Borrowers (2017, as amended from time to time), through open competitive bidding with international advertisement. The bidding documents are prepared and approved for advance contracting, and the procurement actions for the three contracts commenced in May 2018.

Responsible ADB Officer	Saxena, Sharad
Responsible ADB Department	South Asia Department
Responsible ADB Division	Transport and Communications Division, SARD
Executing Agencies	<i>Mumbai Metropolitan Region Development Authority Bandra-Kurla Complex, Bandra (E), Mumbai - 400 051</i>

Timetable

Concept Clearance	15 Sep 2017
Fact Finding	23 Jul 2018 to 31 Jul 2018
MRM	16 Oct 2018
Approval	-
Last Review Mission	-
Last PDS Update	19 Sep 2018

Project Page	https://www.adb.org/projects/49469-007/main
Request for Information	http://www.adb.org/forms/request-information-form?subject=49469-007
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