

**Project Summary for Public Disclosure**  
**(after approval of NDB financing)**

Project Name	Mumbai Metro Rail Project
Country	The Republic of India
Type	Sovereign
Area of Operation	Transport Infrastructure
Concept Approval Date	17 Oct 2018
Financing Approval Date	16 November 2018
Total Project Cost	USD 2,500 million
Initial Limit of NDB Financing	USD 260 million
Current Limit of NDB Financing	USD 260 million
Borrower	The Republic of India
Project Entity	Mumbai Metropolitan Region Development Authority (MMRDA)
Project Context	<p>In India, the strong economic growth in the past few years has led to rapid pace of urbanization, with about one third of population currently residing in urban areas. The trend of urbanization is expected to continue and the ratio of population residing in urban areas is expected to increase to 53% by 2050. Developing efficient and sustainable urban transport system is critical at the current stage, in the backdrop of the nation's strong growth momentum, yet the pace of urban transportation development has lagged. In Mumbai, one of India's largest metropolitans and also known as the financial capital of India, challenges from urbanization are evident. Today Mumbai has become the second most densely populated city in the world. Current capacity of public transportation in Mumbai is far from being sufficient to meet the city's growing demand. Geographic constraints complicates the challenge for Mumbai's current transport system, as locations of the commercial areas and residential areas are in the opposite directions in the city. Mumbai's primary mode of transport, the suburban rail system, is often the most crowded public transportation in the world with safety concerns rising from frequently stretching its maximum capacity. In this context, the Project is designed to improve urban transport infrastructure in Mumbai through financing three metro lines, to ultimately support the sustainable development of the city. The Project is</p>

	in close alignment with NDB's mandate of supporting sustainable and infrastructure development.
Project Description	The objective of the Project is, through financing the construction of three metro lines in Mumbai with the total length aggregate about 58 km, to address the current transport challenges and to enhance the city's public transportation capacity. The Project includes construction of (i) Line 2A from Dahisar East to DN Nagar; (ii) Line 2B from DN Nagar to Mandale; (iii) Line 7 from Andheri East to Dahisar East. The Project will supplement the existing suburban railway network, which is currently operating beyond its maximum capacity. The Project will also provide rail based mass transit facility to areas that are not currently connected by the existing transport network. The proposed NDB loan through the modality of Project Loan will be used by the Government of India for on-lending to Government of Maharashtra for financing the equipment and system components of the Project.
Project Objective	An operational metro rail network covering Lines 2A, 2B and 7 will be built in Mumbai city. The Project's outputs will lead to reduced travel time for commuters, shift in travel pattern from road to rail thereby resulting in decongestion of roads and improved transport safety.
Implementation Arrangements	The Project contributes to (i) reduced travel time for commuters; (ii) reduced vehicle operating costs; (iii) a positive shift in travel pattern from road to rail thereby resulting in decongestion of roads and reduction of emissions; (iv) improved transport safety; (v) enhanced comfort of travel; (vi) improved connectivity for the residences and visitors in Mumbai; (vii) sustainable development of the city through better connectivity and improved access to markets, workplaces, education, health centers and etc. The Project is classified as Category "A" in accordance with the NDB Environmental and Social Framework. Negative environmental and social impacts mainly pertain to land acquisition and resettlement, noise and vibration from elevated metro lines, temporary disruption of transportation during construction, dust and emissions. Mitigation measures are in place to address the negative impacts. These impacts will also be mitigated by adherence to requirements of E&S country system. NDB will monitor the Project closely and engage with the Project Implementation Agency during implementation.

<p>Environmental and Social Information</p>	<p>The Project contributes to (i) reduced travel time for commuters; (ii) reduced vehicle operating costs; (iii) a positive shift in travel pattern from road to rail thereby resulting in decongestion of roads and reduction of emissions; (iv) improved transport safety; (v) enhanced comfort of travel; (vi) improved connectivity for the residences and visitors in Mumbai; (vii) sustainable development of the city through better connectivity and improved access to markets, workplaces, education, health centers and etc. The Project is classified as Category “A” in accordance with the NDB Environmental and Social Framework. Negative environmental and social impacts mainly pertain to land acquisition and resettlement, noise and vibration from elevated metro lines, temporary disruption of transportation during construction, dust and emissions. Mitigation measures are in place to address the negative impacts. These impacts will also be mitigated by adherence to requirements of E&amp;S country system. NDB will monitor the Project closely and engage with the Project Implementation Agency during implementation.</p>														
<p>Financing</p>	<p>The total cost of the Project is estimated to be USD 2,500 million. The NDB will finance USD 260 million, accounting for 10% of the total cost. The remaining balance will be financed by loans of USD 926 million from other banks and counterpart fund of USD 1,314 million from Mumbai Metropolitan Region Development Authority.</p>														
	<table border="1"> <thead> <tr> <th data-bbox="598 1310 1023 1361">Source of Fund</th> <th colspan="2" data-bbox="1023 1310 1449 1361">Amount (USD million)</th> </tr> </thead> <tbody> <tr> <td data-bbox="598 1361 1023 1406">NDB</td> <td colspan="2" data-bbox="1023 1361 1449 1406">260</td> </tr> <tr> <td data-bbox="598 1406 1023 1451">Other Banks</td> <td colspan="2" data-bbox="1023 1406 1449 1451">926</td> </tr> <tr> <td data-bbox="598 1451 1023 1496">MMRDA</td> <td colspan="2" data-bbox="1023 1451 1449 1496">1314</td> </tr> </tbody> </table>			Source of Fund	Amount (USD million)		NDB	260		Other Banks	926		MMRDA	1314	
Source of Fund	Amount (USD million)														
NDB	260														
Other Banks	926														
MMRDA	1314														
<p>Contacts</p>	<table border="1"> <thead> <tr> <th data-bbox="598 1496 850 1541">NDB</th> <th data-bbox="850 1496 1134 1541">Borrower</th> <th data-bbox="1134 1496 1449 1541">Project Entity</th> </tr> </thead> <tbody> <tr> <td data-bbox="598 1541 850 1675"> <p>Indian Regional Office</p> </td> <td data-bbox="850 1541 1134 1675"> <p>DEA, Ministry of Finance, Gov. of India</p> </td> <td data-bbox="1134 1541 1449 1675"> <p>Gov. of Maharashtra Hrishikes h Vhatkar</p> </td> </tr> <tr> <td data-bbox="598 1675 850 1762"> <p>Binitesh Kumar</p> </td> <td data-bbox="850 1675 1134 1762"> <p>Dr. P. V. Salian</p> </td> <td data-bbox="1134 1675 1449 1762"></td> </tr> </tbody> </table>	NDB	Borrower	Project Entity	<p>Indian Regional Office</p>	<p>DEA, Ministry of Finance, Gov. of India</p>	<p>Gov. of Maharashtra Hrishikes h Vhatkar</p>	<p>Binitesh Kumar</p>	<p>Dr. P. V. Salian</p>						
NDB	Borrower	Project Entity													
<p>Indian Regional Office</p>	<p>DEA, Ministry of Finance, Gov. of India</p>	<p>Gov. of Maharashtra Hrishikes h Vhatkar</p>													
<p>Binitesh Kumar</p>	<p>Dr. P. V. Salian</p>														