

Project Summary Information (PSI)

Project No: 000038

Project Name	Bangalore Metro Rail Project – Line R6
Country	Republic of India
Sector	Transport/Urban Rail
Project No	000038
Borrower	Republic of India
Implementation Agency	Bangalore Metro Rail Corporation Limited (BMRCL)
Environmental and Social Category	Category A
Date of PSI prepared or updated	November 28, 2022
Date of Concept Approval	July 3, 2017
Date of Appraisal Approval	September 15, 2017
Date of Board Approval	December 8, 2017

I. Introduction

India is a fast growing and large developing economy, averaging around 7% growth per annum in the past few years. Its Gross Domestic Product (GDP) was US\$2.1 trillion in 2016, with a per capita GDP of around US\$1,613. Urban Indians now form about one-third of the population and they produce more than three-fifths of India's GDP. It is estimated that by the year 2050, fifty percent of Indians will be living in the cities¹. However, infrastructure remains a key constraint to economic growth and urban development.

Bangalore is the capital city and the economic center of the State of Karnataka; it has been regarded as a fast-growing metropolis in India. Bangalore is also known as the Silicon Valley of India and is the major contributor to India's software growth story. As per the Census in 2011, Bangalore is the third most populated city in India and has a population of 9.6 million. It followed behind Mumbai and Delhi in terms of population of a city in India. The population growth in Bangalore in a decade during 2001-2011 was 47.18% and during 1991- 2001 was 35.09%, making it one of the top cities in India for population growth.

The supply of public transport has not kept pace with travel demand and high dependency on and growth of personal transport has exacerbated the traffic situation in Bangalore. This pattern has led to consistent traffic jams in the city of Bangalore causing great economic loss to the Silicon Valley of India. The average travel time via public transport compared with private transport in Bangalore has also been long as a result of lesser supply of public transport, higher number of private vehicles and more traffic congestion. The increase in personal vehicles for transportation has also caused severe air pollution and noise in Bangalore. As per the Karnataka State Pollution Control Board, transportation is the prominent source of air pollution in Bangalore.

Bangalore Metro Rail Corporation Limited (BMRCL) was established as a joint venture company of Government of India (GoI) and Government of the State of Karnataka (GoK), with equal holdings, to undertake the task of developing Metro in Bangalore. BMRCL was formed under the Companies Act, 1956 on 12 September, 2005. BMRCL plans the new metro lines and operates and maintains the existing metro lines (Bangalore Metro Phase I) complying with the National Urban Transport Policy formulated by the Ministry of Urban Development, GoI.

To enhance coverage of Bangalore Metro system and to extend the Metro system to other important areas of Bangalore per the Comprehensive Traffic and Transport Plan prepared in 2011, the Phase II project was approved by GoK in 2012 and subsequently by GoI in 2014. The Phase II project covers a total length of

¹ Country Profile: India, Population Division, Department of Economic and Social Affairs, United Nations

approximately 73 kilometers with 61 stations (49 elevated and 12 underground). This project includes four extension lines to the Phase I project and two new lines. The Project to be financed by the Bank is one of the new lines, known as Reach 6, which runs north to south across the center of the city and connects some of its most important nodes of development.

The European Investment Bank (EIB) will be the lead financier of the Project and will play a leading role in procurement, environmental and social compliance, and project monitoring and reporting for the Project. For further Project details, please see the following EIB's website:

<http://www.eib.org/projects/pipelines/pipeline/20160816>

II. Project Objectives and Expected Results

The objective of the Project is to provide efficient and high-capacity north-south connectivity through the center of Bangalore by expanding the city's metro system. The primary beneficiaries are the commuters who travel along the corridor for economic and social activities, and the secondary beneficiaries are the residents and commercial establishments along the corridor. The expected main result of the Project is improvement of the overall mobility of urban population through better connectivity.

III. Project Description

The Reach 6 to be supported by the Project runs from Gottigere to Nagavara in Bangalore and the length of the proposed corridor is approximately 22 km, with 6 elevated stations and 12 underground stations. The Project consists of four components.

- (i) **Construction of Elevated Viaduct and Stations:** The component consists of approximately 7.5 km of elevated metro section and 6 elevated stations.
- (ii) **Construction of Underground Section Tunnel and Stations:** The component consists of approximately 14.5 km of underground metro section and 12 underground stations.
- (iii) **Depot:** The component consists of a maintenance depot for the Reach 6 at Kothanur.
- (iv) **Tunnel Ventilation System and Environment Control System**

IV. Environmental and Social Category

The Bank has decided to use the EIB's Statement of Environmental Principles and Standards 2009 (Statement) since (i) it is consistent with the Bank's Articles of Agreement and materially consistent with the provisions of the Bank's Environmental and Social Policy and relevant Environmental and Social Standards; and (ii) the monitoring procedures that EIB has in place to ascertain compliance with its Statement are appropriate for the Project. The Bank has placed the Project in Category A. The EIA notification (2006) of the Ministry of Environment and Forest, GoI exempts metro rails from applying for environmental clearance. However, the BMRCL has voluntarily carried out an Environmental Impact Assessment (EIA) in line with EIB standards.

The Project will require the acquisition of about 26 ha of land and will include both permanent and temporary land acquisitions and involuntary resettlement of some residential households and businesses. Approximately 800 households are expected to be affected. An Environmental and Social Management Framework (ESMP) has been prepared based on the findings of the EIA, to mitigate the environmental and social impacts due to the Project.

A Resettlement Policy Framework (RPF) has been prepared to address the involuntary resettlement under the Project. The RPF has been subject to consultation with Project Affected Persons and disclosed, in English and local language, on the following BMRCL website:

http://english.bmrc.co.in/FileUploads/e12b9f_CareerFiles.pdf

Public Consultations for the Project are being conducted and will continue throughout the construction phase. Resettlement Action Plans (RAP), consistent with the RPF, is also being prepared concurrently. In order to implement and monitor RAPs effectively, a Social and Environmental Management Unit (SEMU) has been constituted in the BMRCL.

A Project-level Grievance Redress Mechanism has been set up to assist affected people to resolve their queries and complaints.

The EIA (including an ESMP) for the Project was prepared by BMRCL and approved by EIB. The EIA document is available on the following BMRCL's website:

http://english.bmrc.co.in/FileUploads/862da0_CareerFiles.pdf

V. Estimated Project Cost and Financing Plan (in US\$ million)

Total Project Cost:	1,785	Total AIIB Financing:	335
Loans/Credits/Others		Amount	
Borrower			867
AIIB			335
EIB			583
Total			1,785

VI. Implementation

The Project will be implemented by the BMRCL.

The procurement will be conducted in accordance with the EIB's 'Guidelines for Procurement'(GfP) as applied to 'Operations outside the European Union'. The GfP is materially consistent with both the Bank's Articles of Agreement and the Bank's Procurement Policy.

Expected project implementation period (Start Date and End Date): December 2017 – December 2023.

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