CORPORATE PLAN 2014-2034

1. INTRODUCTION

The Mumbai Suburban Railway network caters to 7.4 million commuters every day. It has the highest passenger density in the World, ahead of even Tokyo and Seoul. Almost half of the total daily passengers using the entire Indian Railway System are from Mumbai Suburban Railway system

(Mumbai Locals, in popular parlance) alone. In spite of heavy demands on it, the system has provided an efficient and reliable service. However, there are pressures upon it which have reached alarming proportions. Overcrowding in Mumbai Locals has grown to such an extent that during peak hours more than 6,000 passengers travel in 12 car train as against the rated carrying capacity of



2400. This results in what is known as *super dense crush load* of up to 16 standing passengers per square metre of floor space.



View of an overcrowded Mumbai suburban train

Given the geographical spread of the population and location of business areas, the rail network will continue to be the principal mode of mass transport in Mumbai. To enable the Mumbai Suburban Railway system to meet the demands of the ever-growing passenger traffic, Ministry of Railways and the Government of Maharashtra have joined hands through Mumbai Railway Vikas Corporation Ltd (MRVC) to face the challenge of making possible safe, fast and comfortable commute for the citizens of Mumbai Metropolitan Region (MMR).

2. MUMBAI RAILWAY VIKAS CORPORATION LTD

MRVC, a PSU of the Government of India under the Ministry of Railways (MOR), was incorporated under Companies Act, 1956 on 12.07.1999 with an equity capital of Crores shared in the ratio of 51:49 between Ministry of Railways and Government of Maharashtra implement the Rail Component of an rail-cum-road integrated urban transport project called Mumbai Urban



Transport Project (MUTP). The cost of the Rail Component of the project is to be shared equally by Ministry of Railways and Government of Maharashtra.

MRVC does not only execute projects identified under the Comprehensive Transport Study (CTS) but is also involved in further planning and development of Mumbai Suburban Rail system for improved rail services in close coordination with Indian Railways and Government of Maharashtra. The geographical jurisdiction of the works being executed under Mumbai Urban Transport Project (MUTP) is from Churchgate to Dahanu Road on Western Railway and from CSTM to Kasara, Karjat/ Khopoli and Panvel on Central Railway

3. MISSION/VISION OF MRVC

To develop world-class infrastructure for an efficient, safe and sustainable Railway system in Mumbai suburban section to provide comfortable and friendly train services to the commuters.

4. **OBJECTIVES OF MRVC**

- Integrate suburban rail capacity enhancement plans with urban development plan for Mumbai and propose investments.
- Implement the rail infrastructure projects in Mumbai suburban sections.
- Commercially develop railway land and airspace in Mumbai area to raise funds for suburban railway development.
- Resettlement & Rehabilitation of Project Affected Households.

5. ORGANIZATION

The company is governed by a Board of Directors comprising in following:

SN Sanctioned post of Directors

From Ministry of Railways

A. Functional Directors

- 1 Chairman and Managing Director
- 2 Director (Technical)
- 3 Director (Projects)
- 4 Director (Finance)

B Part-time Official Director/Nominee Director

5 Part-time Official Director (MoR)

C. Part-time Non-official Director/Independent Director

6. Part-time Non-official Director (MoR)

From Government of Maharashtra

A. Functional Directors

- 1 Director (Resettlement and Rehabilitation)
- 2 Director (Infrastructure and Commercial)

B. Part-time Official Director/Nominee Director

3 Part-time Official Director (GoM)

C. Part-time Non-official Director/Independent Director

4 Part-time Non-Official Director (GoM)

6. OVERVIEW OF MUMBAI SUBURBAN RAILWAY

The Suburban Railway system in Mumbai is one of the most complex, densely loaded and intensively utilized systems in the world. Spread over 399 route kms, it operates on 25kV AC power supply on WR and CR from an overhead catenary. The suburban services are run by electric multiple units (EMUs). Nearly 275 EMU rakes of 12 cars each are utilized in more than 3000 train services to carry 7.4 million passengers per day. Two zonal Railways, Western Railway (WR) and Central Railway (CR), operate the Mumbai Suburban Railway system.

Two corridors (one local and the other through) on Western Railway run northwards from Churchgate terminus parallel to the west coast up to Virar (60 kms) and extended in April 2013 up to Dahanu Road (124 kms). Two corridors (one local and other through) on Central Railway run from Chhatrapati Shivaji Terminus (CST) to Kalyan (54 Kms), from where they bifurcate into Kalyan-Kasara (67 kms) in the north-east and Kalyan-Karjat-Khapoli (61 kms) in south-east. A 5th corridor on Central Railway runs as the Harbour line starting from CST to Raoli Junction (11 kms) from where the line splits; one line goes North West to join WR at Bandra and goes up to Goregaon (16 kms) and the other goes eastward to terminate at Panvel (39 kms) via New-Mumbai. An additional suburban line, from Thane to Vashi via Turbhe (17 kms), was started in November 2004. At present, the fast corridors on Central Railway as well as on Western Railway are shared by long-distance Passenger (Main line) and Freight trains.

7. MUMBAI URBAN TRANSPORT PROJECT

7.1 MUTP PHASE I (RAIL COMPONENT)

MUTP Phase I (Rail Component)) has been completed and closed on March 2012.

MAJOR INFRASTRUCTURAL INPUTS IN MUTP PHASE I (RAIL COMPONENT)

- Addition of 93 track Kms
- Induction of 101 new 9-car rakes
- Resettlement & Rehabilitation of more than 15000 Project affected households.
- Running of 12-car rakes on all lines (excluding Harbour Line) by lengthening of all platforms
- Achieving 3 minutes headway on all the lines (re-spacing of signaling to be done).
- DC to AC conversion in all suburban sections except Thane-CSTM (taken up in Phase II).

7.2. MUTP PHASE II (RAIL COMPONENT)

MUTP II was sanctioned in the Railway Budget 2008-09. The present estimated cost of this project is Rs. 8087 cr. The work includes network expansion and capacity enhancement of Mumbai Suburban on Western and Central Railway. MUTP-II has been divided into two components 2A, 2B.

7.2.1 MAJOR INFRASTRUCTURAL INPUTS IN MUTP PHASE II

- Addition of 88 track Kms
- Induction of 72/12 car EMU rakes
- DC to AC conversion in Thane-CSTM section (172 Track km), completing the DC-AC conversion on Mumbai Suburban system.
- Resettlement & Rehabilitation of approx 2,500 Project affected households.

7.2.2 MUTP 2A

MUTP 2A was partly funded from a World Bank loan. The total cost of MUTP 2A was Rs. 4803 cr. out of which work costing Rs. 1727 crore was funded through loan taken from World Bank. The loan was also equally shared between GOM and IR.

The works under MUTP 2A were -

S.	Name of Work	Agency of	Completion	
N.		Execution	Target	
1	EMU Procurement/Manufacture (ICF)	MRVC/RDSO/ICF	Completed	
2	1500v DC to 25kV AC Conversion	CR, MRVC	Completed	
3	EMU Maintenance Facilities and Stabling Lines	CR, WR, MRVC	Completed	
4	Trespass Control measures	MRVC	Completed	
5	Technical Assistance and Institutional Strengthening	MRVC	Completed	

All the works under MUTP 2A have already been completed.

7.2.3 MUTP 2B

The works under MUTP 2B are entirely funded by both Government Maharashtra and Ministry of Railways on 50:50 basis. The major works under MUTP 2B are -

S.	Name of Work	Agency of	Completion Target
N.		Execution	
1	5th and 6th lines between CSTM- Kurla	CR	December 2026
2	5th and 6th lines between Thane-Diva	MRVC	Completed in February 2022
3	Extension of Harbour Line	MRVC	Completed in December 2017
4	6th line between Mumbai Central- Borivali	WR	December 2027
5	Station Improvement & Trespass control	CR, WR, MRVC	Completed in December 2018
6	Resettlement and Rehabilitation	MMRDA	Along with project

7.2.4 MUTP 2C – Running of 12 car on Harbour line

The work of Running of 12-coach Electrical Multiple Unit (EMU) trains on Harbour Line (MUTP 2C) was sanctioned during the rail budget 2012-13 at a cost of Rs. 714.10 cr. The project was entirely funded by GoM & MoR on 50:50 basis. All infrastructure works and supply of all 13 new EMU rakes under the project have been completed as a result of which all services in the section have been augmented from 9 Car rakes to 12 Car rakes since June 2016.

7.3 MUTP III

MUTP III was included in Rail Budget 2015-16 and sanctioned on 30.11.2016 by the Union Cabinet. Major works under MUTP III are as follows:

SN	MUTP III corridors	Time	Estimated Cost
1	Quadrupling of the Virar-Dahanu Road on	Cost (March 2016)	2868
	Western Railway	Completion cost	3578
2	New Suburban Railway corridor between	Cost (March 2016)	2272
	Panvel-Karjat on Central Railway (double line)	Completion cost	2783
3	New Suburban corridor link between	Cost (March 2016)	399
	Airoli-Kalwa (elevated) on Central Railway	Completion cost	476
4	Procurement of Rolling Stock (565	Cost (March 2016)	2635
	coaches)	Completion cost	3491
5	Trespass Control on mid-section on	Cost (March 2016)	449
	Central and Western Railway	Completion cost	551

6	Technical Assistance	Cost (March 2016)	56
		Completion cost	69
	Grand Total	Cost (March 2016)	8679
		Completion cost	10947

The cost of the project will be shared by MoR and GoM. Loan and Project Agreements have been signed for Asian Infrastructure Investment Bank (AIIB) loan of USD 500 million in August 2020. Contracts are in place and work is in progress.

7.3.1 Benefits of proposed MUTP III

The following benefits are expected after completion of MUTP III

- Introduction of 300 additional suburban train services.
- Enhanced quality of services due to introduction of Air-conditioned trains
- Improved safety and security of passengers due to trespass control measures and provision of Automatic door closure system on EMU rakes.
- Decongestion of Thane station due to Airoli-Kalva elevated link. It will provide seamless connectivity of Kalyan/Dombivli to Navi Mumbai bypassing Thane station.
- Saving of travel time of about half an hour from Mumbai CST to Karjat due to availability of new route.
- Enabling faster economic development of the area being served by the project such as Boisar, Palghar, NAINA (Navi Mumbai Airport Influence Notified Area) etc.

7.4 MUTP IIIA -

As MMR region is rapidly expanding in Northern and Eastern parts including the New Airport in Navi Mumbai, upgrading the suburban transport in Island City and expansion of the Network in Northern Part are essential. MRVC had conceptualized all rail projects for Sustainable Urban Transport in the City of Mumbai and put it in a single basket, named MUTP IIIA at the total cost of Rs. 54,777 crore, the cost of which was to be shared equally between the Ministry of Railways and Govt. of Maharashtra. On 7th March 2019, MUTP IIIA costing Rs 33690 crore, was approved by Union Cabinet and approval conveyed to Rly Board.

SN	MUTP IIIA corridors	Route	Completion	Executing
		km	Cost in cr	Agency
1	Extension of Harbour Line between Goregaon-	7	826	Western
	Borivali			Railway
2	5th and 6th lines between Borivali-Virar	26	2184	MRVC
3	4th line between Kalyan-Asangaon	32	1759	Central Railway
4	3rd and 4th lines between Kalyan-Badlapur	14	1510	MRVC
5	Kalyan Yard - Segregation of Long distance and		866	Central Railway
	Suburban Traffic			
6	a) CBTC on CSMT-Panvel on Harbour Line	49	1391	MRVC
	b) CBTC on CSMT-Kalyan on Central Railway	53	2166	MRVC
	c) CBTC on CCG-VR on Western Railway	60	2371	MRVC
7	Station Improvement		947	MRVC
8	Procurement of Rolling Stock – 191/12 car AC EMU		15802	MRVC
	rakes			
9	Maintenance facilities for Rolling Stock		2353	MRVC

10	Stabling Lines	557	CR and WR
11	Augmentation of Power Supply Arrangement	708	CR and WR
12	Technical Assistance	250	MRVC
	Total	33690	

Nomination has been done by DEA on 30.08.2019 for two loans of USD 500 million each - to Asian Infrastructure Investment Bank (AIIB) and New Development Bank (NDB). Loan Agreement for Station Improvement signed with AIIB for \$85 million on 29.11.2024. Works are in progress at various sites of MUTP IIIA works.

7.4.1 Major benefits expected after completion of MUTP Phase IIIA are –

- Improved network connectivity and service quality.
- Decongestion of existing overcrowded corridors and Stations
- Enhanced Safety and Security on suburban system
- Increase in number of services per hour to ease out peak time overloading.
- Increase in passenger comfort due to modern EMU rakes.