

### Note on Bangalore Metro Rail Project Phase-3

**Sub: Phase-3 of BMRCL for a length of 44.65 km with two corridors (Corridor-1 from JP Nagar 4<sup>th</sup> Phase to Kempapura along ORR West for 32.15 km and Corridor-2 from Hosahalli to Kadabagere along Magadi road for 12.50 km) on 20% Equity Sharing Model.**

1. In line with the Comprehensive Mobility Plan (CMP) for Bengaluru city, the DPR of Phase -3 of Bangalore Metro Rail Project for a length of 44.65 km consisting of two corridors, Corridor-1 from JP Nagar 4<sup>th</sup> Phase to Kempapura (along ORR West) for a length of 32.15 km with 22 stations and Corridor-2 from Hosahalli to Kadabagere (on Magadi Road) for a length of 12.50 km with 9 stations for which In-principle approval has been given by Government of Karnataka.

2. The salient features of two corridors of Phase-3:

**(i) Corridor-1: JP Nagar 4<sup>th</sup> Phase to Kempapura (ORR West):**

The corridor-1 has 22 stations and the details are as below:

Sl.No.	Station	Sl.No.	Station
1	JP Nagar 4 <sup>th</sup> Phase	12	BDA Complex Nagarbhavi
2	JP Nagar 5 <sup>th</sup> Phase	13	Sumanahalli Cross
3	JP Nagar	14	Chowdeshwari Nagar
4	Kadirenahalli	15	Freedom Fighter's colony
5	Kamakya Junction	16	Kanteerava Nagar
6	Hosakerehalli	17	Peenya
7	Dwaraka Nagar	18	Muthyala Nagar
8	Mysore Road	19	BEL Circle
9	Nagarbhavi Circle	20	Nagashetty Halli
10	Vinayaka Layout	21	Hebbal Railway Station
11	Papireddypalya	22	Kempapura

**(ii) Corridor-2: Hosahalli to Kadabagere (via Magadi Road):**

The Corridor has 9 stations and the details are as below:

Sl.No.	Station	Sl.No.	Station
1	Hosahalli	6	Herohalli
2	KHB colony	7	Byadarahalli
3	Kamakshipalya	8	Kamath Layout
4	Sumanahalli Cross	9	Kadabagere
5	Sunkadakatte		

3. The interchange stations for Phase-3 are as below:

Major interchange stations have been planned with other existing Bus stations/Rail terminals/Metro stations/Suburban stations which will serve as complimentary/feeder for the passengers from their respective origins to destinations and vice versa. The details are as below:

Sl. No.	Station	Mode of Integration	Interchange with
<b>Corridor-1: JP Nagar 4<sup>th</sup> Phase to Kempapura</b>			
1	JP Nagar 4 <sup>th</sup> Phase	Metro-Metro	JP Nagar 4 <sup>th</sup> Phase Station of under construction R6 line (Nagawara to Kalena Agrahara) of Phase-2
2	JP Nagar	Metro-Metro	Existing JP Nagar Station of line-2 (Nagasandra to Yelachanahalli)
3	Kamakya Junction	Metro-BMTC Bus Terminal	at Kamakya Junction with BMTC Bus Terminal
4	Mysore Road	Metro-Metro	Existing Mysore Road Station of line-1 (Baiyyappanhalli to Mysore Road)
5	Sumanahalli Cross	Metro-Metro	Proposed Sumanahalli Cross Station of Corridor-2 (Hosahalli to Kadabagere) of Phase-3
6	Peenya	Metro-Metro	Existing Peenya Metro Station of Reach-2 (Nagasandra to Yelachanahalli)
7	BEL Circle	Metro-Railway & Suburban	Proposed Lottegollahali Station of Suburban Rail Corridor & Existing Lottegollahali Station of Indian Railways
8	Hebbal Railway Station	Railway & Suburban	Proposed Hebbal Station of Suburban Rail Corridor & Existing Hebbal Station of Indian Railways
9	Kempapura	Metro-Metro	Kempapura Station of Under construction Phase-2B (KR Puram to Airport)
<b>Corridor-2: Hosahalli to Kadabagere</b>			
10	Hosahalli	Metro-Metro	Existing Hosahalli Station of Metro line-1 (Baiyyappanhalli to Mysore Road)
11	Sumanahalli Cross	Metro-Metro	Proposed Sumanahalli Cross Station of Corridor-1 (JP Nagar 4 <sup>th</sup> Phase to Kempapura) of Phase-3

4. **Integration with Road Infrastructure Proposals of BBMP:**

- (1) Flyover at Kanakapura Road Junction on ORR (Near JP Nagar Metro Station) for a length of 1.366 km
- (2) Flyover at Kamakya-Ittamadu-Hosakerehalli Junctions on ORR (Near Kamakya Metro Station) for a length of 1.563 km

The construction of Integrated structures (Flyover at level-1 and Metro at level-2) at Rs.507.29 Cr. will be built by BMRCL with the cost sharing basis between BMRCL and BBMP in a ratio of 75:25 respectively.

5. **The traffic forecast of two corridors of Phase-3 is as below:**

Corridors	Ridership Per Day (Lakhs)			
	2028	2031	2041	2051
Corridor-1	4.63	4.89	5.91	6.66
Corridor-2	1.72	1.81	2.18	2.46
<b>Total</b>	<b>6.35</b>	<b>6.70</b>	<b>8.10</b>	<b>9.12</b>

6. Depot has been planned at **Sunkadakatte**, common for both the corridors
7. **Project Cost:** The Estimated completion cost incl. escalation for 5 years and IDC (as per SPV Model with Innovative Finances) is **Rs.16,328.00 crores**
8. **Financing Plan:** The funding pattern under SPV (JV) Model is 20% by Government of Karnataka, 20% by Government of India and 60% through Senior Term Debt excluding Land and R&R which is separately borne by State Government. The Accruals from Value Capture Financing and Innovative Financing through private participation is also part of the Financing Plan.

Sources of Funds	Amount (Rs. crore)	% Share
Equity by Gol	2037	16.13%
SD for Central Taxes by Gol	489	3.87%
<b>Gol Share sub total (1)</b>	<b>2526</b>	<b>20.00%</b>
Equity by GoK	2037	16.13%
SD for Central Taxes by GoK	489	3.87%
<b>GoK Share sub total (2)</b>	<b>2526</b>	<b>20.00%</b>
Senior Debt in form of external assistance through	<b>7577</b>	<b>60%</b>

multilateral/bilateral agencies or commercial loans		
<b>Sub Total</b>	<b>12629</b>	<b>100%</b>
<b>Accruals from Value Capture Financing</b>	<b>400</b>	
SD for Land and R&R by GoK	2019	
SD for State taxes by GoK	855	
<b>Innovative Financing (Private Participation)</b>	<b>150</b>	
Interest during construction (IDC) to borne by GoK	275	
<b>Total Sources</b>	<b>16328</b>	

9. **Economic Internal rate of Return (EIRR):** As per the Metro Rail Policy, 2017, the EIRR should be more than 14% and the EIRR calculated for the Phase-3 Project is 16.65%.
10. Land Acquisition for Phase-3 Project including Depot is about 110 acres of both private (15%) and Government (85%) lands.