

DELHI MRTS PROJECTS

Delhi MRTS Project Phase I

The Delhi MRTS project is being implemented by the Delhi Metro Rail Corporation (DMRC) Ltd. set up in May 1995 with equity participation by the GOI & GNCTD in the ratio of 50:50, i.e., equal participation.

The Government of India approved the investment proposals for Phase-I of the Delhi MRTS Project on 17th September, 1996

On 4.8.2000 and 25.7.002 and 30.9.2004 further changes in the corridor were approved.

The first phase of the project consists of the following corridors:-

Line No.	Corridor	No. of stations	At Grade (Km)	Elevated (Km)	Underground (Km)	Total (Km)
1.	Shahdara–Rithala	18	4.5	17.56	0	22.06
2.	Vishwavidyalaya – Central Secretariat	10	0	0	10.84	10.84
3.	Indraprastha – Dwarka	25	0	23.48	2.17	25.65
	Total	53	4.5	41.04	13.01	58.55
	Dwarka Sub-city (Dwarka – Dwarka VI)	6	0	6.5	0	6.5
	Grand Total (Including Dwarka Sub-city)	59	4.5	47.54	13.01	65.05

The estimated cost of the project is Rs. 10571 crore.

Funding of the project

Financing Pattern as approved by the GoM on 16.12.2002 is:-

Government Equity (from GoI & GNCTD in equal proportion)	Rs.2928 (28%)
Subordinate debt towards cost of land(from GOI & GNCTD in equal proportion)	Rs. 504 crore (5%)
Japanese Bank for International Cooperation (JBIC) loan	Rs. 6839 crore (64%)
Proceeds from property development	Rs.300 crore (3%)

Total	Rs. 10571 crore
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Funds released by Ministry of Urban Development

(Rs. in crore)

Particulars	9 th Plan	10 th Plan
	1997 to 2002	2002 to 2007
	Phase I	Phase I
Equity	565.00	846.20
S. Debt*	199.00	53.00
PTA**	879.35	5477.10
Total	1643.35	6376.30

*Subordinate Debt for land acquisition.

**Pass Through Assistance against JBIC loan.

Schedule of completion

Line 1 Shahdara – Rithala

- Shahdara-Tis Hazari section has been completed and commissioned on 24.12.2002.
- Tis Hazari – Inderlok section has been commissioned on 3.10.2003.
- Inderlok – Rithala section has been commissioned on 31.3.2004.

Line 2 Vishwavidyalaya - Central Secretariat

- Vishwavidyalaya – Kashmere Gate section has been commissioned on 20.12.2004.
- Kashmere Gate – Central Secretariat has been commissioned on 3.7.2005.

Line 3 Barakhamba Road – Kirti Nagar – Dwarka

- Barakhamba Road – Dwarka section has been commissioned on 31.12.2005.

Extension of Line 3

- Extension into Dwarka sub-city commissioned on 1.4.2006.
- Barakhamba Road - Indraprastha commissioned on 11.11.2006

Cumulative expenditure incurred upto 31.3.2007 is Rs.10349.59 crore.

Cumulative physical progress is 100%.

Delhi MRTS Project Phase II

The project has been approved by the Government and necessary sanction issued by the Ministry on 30.3.2006 for implementation at an estimated cost of Rs.8118 crore and revised alignment from IIT to Qutab Minar on 4.12.2006 at an estimated cost of Rs.558 crore, i.e. a total of Rs.8676 crore) (54.675 km.).

Alignment :

The Phase II of the project will consist of the following alignment :-

	<u>Corridor</u>	<u>Lengh(Km.)</u>	<u>Target date</u>
(1)	Vishva Vidyalaya – Jahangir Puri	- 6.36	31.10.2009
(2)	Central Secretariat – Qutab Minar -	12.525	30.6.2010
(3)	Shahdara – Dilshad Garden -	3.09	31.12.2008
(4)	Indraprastha – New Ashok Nagar -	8.07	30.6.2009
(5)	Yamuna Bank – Anand Vihar ISBT -	6.16	31.12.2009
(6)	Kirti Nagar – Mundka (along with operational link to Inderlok)	- 18.47	31.3.2010

The proposals in respect of the IIT – Qutab Minar portion (2.88 Kms) of the proposed Central Secretariat to Qutab Minar line was reviewed and cost – benefit analysis of alternative proposals carried out in the context of its impact on the Qutab Minar, by DMRC as per decision of GoM.

The revised alignment from Green Park to Ambedkar Colony via Hauz Khas, Sarvapriya Vihar, Malviya Nagar and Saket has been approved by the GoM on 17.10.2006.

Capital Cost :

The original completion cost of the project was estimated at Rs.8118 crore. The revised alignment from Green Park to Ambedkar Colony will involve additional cost of Rs.558 crore. Thus revised completion cost is estimated at Rs.8676 crore (including land cost, but excluding interest during construction).

Financing Plans :

Particulars	Percentage of investment	Amount of investment (Rs. in crore)	Remarks
Equity	30	2435	To be shared equally by GoI and GNCTD
Loan from JBIC	56	5081	

Property Development	5	405	
Internal resources	5	405	
Sub-Ordinate Debt	4	350	To be shared equally by GoI and GNCTD
Total	100	8676	

JBIC Loan position

- Pursuant to the above investment approval, GoI had approached Japan Bank for International Co-operation (JBIC) for providing loan to the extent of Rs.6030 crore including cost of rolling stock.
- JBIC has committed first tranche of loan amount of Japanese Yen (JPY) 14,900 million (Rs.591 crore).
- JBIC has also committed 2nd tranche of JPY 13,583 million (Rs.539 crore) as against loan sought by DMRC of Rs. 2235.56 crore due to funds constraint.
- DEA has also requested to consider JBIC loan of Rs.2143 crore for Central Secretariat to Badarpur as part of Phase II.

Funds released by Ministry of Urban Development

(Rs. in crore)

Particulars	10th Plan	11th Plan
	2002 to 2007	2007-08
	Phase II	Phase II
Equity	387.00	150.00
S. Debt*	116.00	20.00
PTA**	424.00	309.41
Total	927.00	479.41

*Subordinate Debt for land acquisition.

**Pass Through Assistance against JBIC loan.

Present status

Cumulative expenditure upto 30.6.2007 is Rs.1065.81 crore

Overall physical progress is 12.32%.

Corridor

Progress (in %age)

(1)	Vishva Vidyalaya – Jahangir Puri	-	17
(2)	Central Secretariat – Qutab Minar	-	2
(3)	Shahdara – Dilshad Garden	-	11

(4)	Indraprastha – New Ashok Nagar -	8	
(5)	Yamuna Bank – Anand Vihar ISBT -		10
(6)	Kirti Nagar – Mundka -	11	

Extension of Delhi Metro Phase-II to Gurgaon

Extension of Delhi Metro from Ambedkar Colony in Delhi to Sushant Lok in Gurgaon (14.47 km.) has been approved by Government of India (GoI) for implementation at a total estimated completion cost of Rs.1600.92 crore including taxes and duties.

Approved funding plan is as under : –

Haryana portion:

- a) Land – Rs.20 crore by Govt. of Haryana (GoH).
- b) Capital cost of Network Rs.570 crore to be shared by GoH & GoI in 80:20 ratio.
- c) Rolling Stock – Rs.98 crore by DMRC.

Delhi portion:

- a) Land - Rs.49 crore to be shared equally by GoI and GNCTD as subordinate debt.
- b) Balance Project cost: Rs.685 crore of which Rs.352 crore proposed for JBIC loan and Rs.111 crore each by GoI, GNCTD as equity and GoH as grant.

Present Status

Project has been taken up for implementation by Delhi Metro Rail Corporation Ltd. (DMRC).

State Government has been requested to pass resolutions by Haryana State Assembly to enable Parliament to legislate for extension of Metro Railways (Construction of Works) Act, 1978 and Delhi Metro Railway (Operation and Maintenance) Act, 2002 to the State of Haryana for providing legal cover to the project.

Necessary resolutions have been passed by the Haryana Vidhan Sabha on 22.3.2007 which have been communicated by the State Government to this Ministry on 12.4.2007.

The project is targeted for completion by 31.7.2010.

Funds Position

DMRC had requested for release of following funds during 2006-07:-

				<u>(Rs. in crore)</u>
i)	Equity	:-		27.50
ii)	Subordinate Debt	:-		24.50
iii)	Grant	:-		28.50

Ministry of Finance was requested to provide the above funds in the 3rd Batch of Supplementary Demand for Grants and also subsequently by way of re-appropriation out of available savings in the Ministry's budget during 2006-07. However, this was not agreed to by that Ministry. As such, funds could not be sanctioned by this Ministry to DMRC during 2006-07.

Govt. of Haryana released its share of Rs.141.75 crore to DMRC during 2006-07.

It may be mentioned that following funds have been sanctioned by this Ministry to DMRC during 2007-08 based on 'Vote on Account' approved by Parliament :-

Equity (Delhi portion)	-	Rs.27.75 crore
Subordinate Debt (Delhi portion)	-	Rs.10.00 crore
Grant (Haryana portion)	-	Rs.10.01 crore

Extension of Delhi Metro Phase-II To NOIDA

- Extension of Delhi Metro from New Ashok Nagar to Sector 32, NOIDA (7 km) approved by GoM 'in principle' on 17.10.2006 subject to fulfillment of certain conditions by Govt. of Uttar Pradesh (GoUP), such as obtaining clearance of GNCTD which is 50% owner of DMRC.
- Estimated completion cost – Rs.736 crore excluding taxes and duties(Rs.840.56 crore including customs and excise duty).
- Funding Plan –
 - a) Land – Rs.32 crore by NOIDA
 - b) Capital cost of Network Rs. 611 crore to be shared by GoUP & GoI.
 - c) Rolling Stock – Rs.93 crore by DMRC.
- Contribution of GoUP/NOIDA as grant to DMRC.
- Contribution of GoI – 20% of Rs. 611 crore.
- Legal cover – GoUP has been requested and reminded to pass resolution by State Assembly to enable Parliament to legislate for extension of Metro Railways (Construction of Works) Act, 1978 and Delhi Metro Railway (Operation and Maintenance) Act, 2002 to the State of Uttar Pradesh. Copy of the resolution is awaited. GoUP has recently sought clarifications from the Ministry on this issue.
- GNCTD has communicated approval of the State Govt. for extension of Delhi Metro to NOIDA.
- DMRC has been requested to take further action to submit relevant documents for obtaining final approval of Empowered Group of Ministers (EGoM).

Central Secretariat – Badarpur

- Central Secretariat – Badarpur corridor has been considered and approved by EGoM at a cost of Rs.4012 crore (with taxes) on 20.4.2007.
- Sanction order has been issued by the Ministry on 17.5.2007 for implementation by DMRC.
- It will provide connectivity to Jawaharlal Nehru Stadium and Dr. Karni Singh Shooting Range at Tughlakabad for Commonwealth Games, 2010. State Government may exempt the State taxes.
- It will serve many important residential and commercial centres along the corridor and provide connectivity to Faridabad in future.
- Salient features are as under :-

Length

Underground : 5.16 km
 Elevated : 15.0 km
 Total length : 20.16 km

Gauge : Standard (1435mm)

No. of stations : 15

Area to be served : Central Secretariat, Khan Market, JLN Stadium, Lajpat Nagar, Moolchand, Kailash Colony, Nehru Place, Kalkaji, Okhla, Jasola, Sarita Vihar, Mohan Cooperative Industrial Estate , Tughlakabad, Badarpur.

Ridership : 3.60 lakh passengers/day in 2011
 5.05 lakh passengers/day in 2021

Maintenance Depot : Sarita Vihar

Estimated cost
 Without taxes : Rs. 3270 cr. (at June, 2006 prices)
 With Taxes : Rs. 3640 cr. (at June, 2006 prices)

Taxes and Duties : Rs. 370 cr.

Completion cost –
 Without taxes : Rs. 3603 cr.
 With taxes : Rs. 4012 cr.

FIRR : 2.95 % (without taxes and duties)
 : 1.45 % (with taxes and duties)

EIRR : 26.02%

Target completion date : June, 2010

Funding Plan

Equity by GoI	:	17%	Rs.612.50 cr.
Equity by GNCTD	:	17%	Rs.612.50 cr.
*Subordinate debt on account of land cost by GoI and GNCTD in equal proportion	:	6.52%	Rs. 235 cr. (Rs.117.50 cr. each)

**JBIC Loan (as pass through assistance to DMRC by GoI)	:	59.48%	Rs.2143 cr.
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* The Subordinate Debt shall be increased to provide for the additional cost on account of Central taxes and duties.

**Department of Economic Affairs has recommended to Government of Japan for JBIC loan. JBIC team has appraised the project

Financial Phasing

<u>Year</u>	<u>Rs. in Crore</u>	
	(without Taxes)	(with taxes)
2007-08	1219	1343
2008-09	1021	1143
2009-10	1250	1400
2010-11	113	126
Total:	3603	4012

- Rs.5 crore and Rs.100 crore as equity contribution by GoI has been sanctioned by the Ministry on 22.5.2007 and 28.6.2007 respectively.

High Speed Express Link from New Delhi Railway Station to IGI Airport

- High Speed Express Link from New Delhi Railway Station to IGI Airport has been considered and approved by Empowered Group of Ministers (EGoM) at a cost of Rs.3076 crore (with taxes) on 20.4.2007.
- Sanction order has been issued by the Ministry on 17.5.2007 for implementation by DMRC.
- The Express Link on completion will :-
 - cater to the growing traffic demands which is expected to grow from 12 million passengers in 2004-05 to 36.7 million in 2011-12 and 100 million by 2036; 30% of this traffic falls in the proposed area of the project out of which 50% are expected to use this link;
 - facilitate fast evacuation of passengers and visitors at the airport;
 - Duration time of travel to Airport will be reduced from 40-50 minutes to 16 minutes.
 - reduce road traffic congestion and pollution;
- The Express Link will be on standard gauge with maximum speed of 135 kmph.
- It will be different from a normal metro with provision for sitting arrangements and luggage carrying capacity.

Alignment

- New Delhi Railway Station, Baba Kharak Singh Marg, Wellington Crescent, Sardar Patel Marg, Dhaula Kuan and National High No.8 to IGI Airport.

Length

Underground length-	5.5 km
Elevated length	- 11.6 km
Switchover ramp	- 2.1 km

Total - 19.2 km

Cost estimates

The overall capital cost for the line at March, 2006 price level works out to be Rs.2380.70 crore (excluding taxes and duties). The completion cost is Rs.3076 crore (with taxes).

Financing Plan

It shall be implemented on PPP mode as follows :-

(Rs. in crore)

Particulars	With Taxes
Grant by Airport Operator towards civil jobs inside the airport	350 (12%)
Equity by the Government of India (GOI) towards civil jobs outside airport	599 (19%)
Equity by GNCTD towards Civil Jobs outside airport	599 (19%)
Equity by Concessionaire to maintain debt to equity ratio of 7:3	461 (15%)
Domestic Debt @ 10% by Concessionaire	1067(35%)
Total	3076 (100 %)

Financial Phasing

<u>Year</u>	<u>Rs. in Crore</u> (with taxes)
2007-08	353
2008-09	1073
2009-10	1193
2010-11	332
2011-12	125
Total:	3076

- DMRC would be executing the civil works and fix up the concessionaire for track signaling, OHE, rolling stock, operation and maintenance. The cost of all works except civil works shall be borne by concessionaire.

Funds released during 2007-08

- Rs.10 crore and Rs.100 crore as equity contribution by GoI has been sanctioned by the Ministry on 22.5.2007 and 28.6.2007.