

Brief**Dedicated Freight Corridor (DFC) project**

1. In order to augment the rail transport capacity to meet the growing requirement of movement of freight traffic, the Indian Railways have decided to develop freight corridors along its busy trunk routes. To start with, it is proposed to develop dedicated rail freight corridors (DFCs) on the Western and Eastern trunk routes. The Western DFC (1534 kms.) will be from Jawaharlal Nehru Port (JNPT) in Mumbai to Tughlakabad and Dadri near Delhi and would cater largely to the container transport requirements between the existing and emerging ports in Maharashtra and Gujarat and the northern hinterland. The Eastern DFC will be from Ludhiana in Punjab to Dankuni (1839 kms.) near Kolkata to be extended in future to serve the new deep sea port proposed in Kolkata area and will largely serve coal and steel traffic.
2. The Eastern corridor from Dankuni to Ludhiana will pass via Asansol, Gomoh, Sonnagar, Mughalsarai, Kanpur, Khurja and Saharanpur. It will be electrified single line on the Ludhiana-Khurja portion (400 kms.) and electrified automatic double line on the remaining portion. The Western corridor from JNPT to Tughlakabad/Dadri will pass via Surat, Vadodara, Ahmedabad, Palanpur, Ajmer and Rewari and will be an electrified automatic double-line corridor, except a 32 kms. Single line link from the main corridor to Tughlakabad. In February 2008, Government approved undertaking of work on both Western and Eastern freight corridors.
3. The DFC project on the Western and Eastern routes is one of the most ambitious projects that Indian Railways has ever taken up and once completed would meet the transport requirements of the two busy trunk routes for the next 15 to 20 years and would also help segregation of passenger and freight traffic on these routes. The project will be implemented by the Dedicated Freight Corridor Corporation of India Limited (DFCCIL), a Special Purpose Vehicle created in October 2006. DFCCIL (www.dfccil.org) is a wholly owned PSU of the Ministry of Railways.

4. The salient features of the two corridors are as below –

Features	Western Corridor	Eastern Corridor
Route Description	JNPT-Ahmedabad-Palanpur-Rewari-Tughlakabad/Dadri	Dankuni-Gomoh-Sonnagar-Mughalsarai-Kanpur-Khurja-Ludhiana
Route Kilometre	1534	1839
No. of lines	Double (Single-Tughlakabad-Pirthala)	Double (Single – Khurja-Ludhiana)
Signalling	Automatic signalling with 2 kms. spacing on double line. Absolute block system on single line.	Automatic signalling with 2 kms. spacing on double line. Absolute block system on single line.
Traction	Electrified (2x25 KV AC)	Electrified (2x25 KV AC)
Axle loads	25 Tonne (sub-structure of bridges fit for 32.5 tonne axle load)	25 Tonne (sub-structure of bridges fit for 32.5 tonne axle load)
Speeds	100 kmph	100 kmph
Traffic projections (2021-22)	128 million tonnes (6 million TEUs), (264 trains)	144 million tonnes (160 trains)
Feeder Routes	1516 Km	3071 Km
Total Cost [current excluding cost escalation, Taxes, Insurance, IDC, Private Investment and Cost of Land (Rs.4200 Cr.)]	Rs. 22,956 crore	Rs. 23,605 crore

5. Project Implementation

- After Government approval in February 2008 for undertaking work on the project, substantial amount of preparatory and preliminary work for implementation of the project has been undertaken.
- Eleven field units headed by Chief Project Managers have been set up in Mumbai, Surat, Vadodara, Ahmedabad, Ajmer and Jaipur for Western route and at Ludhiana, Meerut, Kanpur and Allahabad (2) for the Eastern route.

- Contracts have been awarded for detailed engineering survey including geo-technical investigations, collection and compilation of field data relating to L-Section, GAD for bridges, hydrological data and preparation of land plans for land acquisition wherever required.

5.1 Progress of the two corridors is as under:

(i) Western DFC (1534 Kms) –

Phase –I (Rewari-Vadodara, 950 Kms)

Phase-II (JNPT-Vadodara & Rewari-Dadri, 584 Kms)

This corridor is being funded with Japanese assistance.

JICA to fund about 80% of project cost. JICA funding estimated at Rs.32500 Crore (Phase-I- Rs.21,000 Crore, Phase II- Rs.11,500 Crore).

Progress on funding is as under:

- Phase-I The loan agreement for Engineering Services for phase-I (Rewari-Vadodara section of 950 kms.) for 2.6 billion Japanese Yen (approx. Rs.130 crores) was signed on 27.10.09 and contract for Engineering Services consultancy has been finalized by DFCCIL in May 2010 and consultants have commenced work. First tranche of main loan agreement for 90.262 billion Japanese Yen (approx. Rs.4500 crore) was signed on 31.03.2010. JICA assistance for phase-I is estimated at 405 billion Japanese Yen (approx. Rs.21,000 crores). Civil Contract for package 1 and 2 is targeted for award in January 2011.
- Phase-II- Engineering Services loan agreement for 160 billion JPY (approx. Rs.80 crores) has been signed with JICA on 26.07.2010. RFP for engagement of Engineering Services Consultant issued by DFCCIL on 09.07.2010 and technical proposals received by DFCCIL in October 2010. Government of Japan has sent a Preparatory survey team to undertake Environmental and Social Studies for phase-II of the project. The Preparatory Survey Team has commenced work in mid August 2010. EIA studies targeted for completion in May 2011 and main loan agreement targeted for September 2011.

Construction of 54 major and important bridges on Western Corridor

Contract for design and construction of 54 major and important bridges in Vaitarana-Bharuch section has been awarded by DFCCIL in February 2009 and work is in progress. This work is being executed from Railway's resources.

(ii) Eastern DFC (1839 Kms)

Dankuni –Sonnagar-Mughalsarai-Bhaupur-Ludhiana

- World Bank funding is proposed for 1133 km Ludhiana-Khurja-Bhaupur Ludhiana section. World Bank would be funding about 67% of the project cost and the funding is estimated at Rs.10,800 Crore (US\$ 2.4 billion).
- World Bank have suggested Adaptable Programme Loan (APL) scheme for sequential funding of the sections based on a trigger system which takes into account progress of previous sections with regard to land acquisition, civil contract award etc.,
 - Khurja-Kanpur FY 2011– APL I
 - Khurja-Ludhiana FY 2012 – APL II
 - Kanpur-Mughalsarai FY 2013 – APL III
- MOR has suggested World Bank to review the trigger system and keep the timelines of APL-I & APL-II (in view of preparedness of Ludhiana-Khurja section) and the timeline of APL-III in FY 2012.
- Khurja-Bhaupur (342 Kms)– Discussions for funding for this section with World Bank are currently on and are in advanced stage. World Bank Mission currently in India have decided following timelines
 - Appraisal Mission – 7 March 2011
 - Loan Negotiation – 28 March 2011
 - World bank Board Approval – 31 May 2011

Action is being taken to meet the prerequisites stipulated by World Bank for the above schedule.

Applications for Pre-Qualification for civil & track works for this section received on 14.07.2010 and are under evaluation.

- Other sectors of Eastern corridor which are to be funded by the World Bank:
 - Ludhiana-Khurja (400 km)
 - Bhaupur-Mughalsarai (391 km)

Action is underway for finalization of EIA/SIA/RAP and engagement of General Consultant for facilitation of the bidding process.

➤ Mughalsarai-Sonnagar (122 kms)

This section is being implemented with IR's resources and civil construction contract for 109 km section (New Ganjkhwaja to New Karwandia) was awarded in December 2008 and work is in progress.

➤ Dankuni-Sonnagar (534 kms)

- This sector is planned for execution through PPP mode
- PPP models are under finalization by DFCCIL
- Final Location Survey complete

6. Land Acquisition

Notifications for land acquisition under Section 20 E of the Indian Railways (Amendment) Act (RAA) 2008 have been issued for land area of 6849 Hectares. Award for compensation under section 20F of RAA 2008 has been declared for 3075 Hectares. Total land acquisition requirement is estimated at 11046 Hectares excluding Dankuni- Sonnagar section.

7. The project is targeted for completion in 2016-17.
