

### **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 (1483 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 (1806 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 extends from Dankuni to Ludhiana (1806 kms.) and Khurja-Dadri. It will pass via Asansol, Gomoh, Sonnagar, Mughalsarai, Kanpur, Khurja and Saharanpur. It will be electrified single line on the Ludhiana-Khurja portion (426 kms.) and electrified automatic double line on the remaining portion. The Western corridor (1483 km) 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. Government approved in February 2008, undertaking 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](http://www.dfccil.org)) is a wholly owned PSU of the Ministry of Railways.

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

| <b>Features</b>   | <b>Western Corridor</b>  | <b>Eastern Corridor</b>  |
|---|--|--|
| Route Description   | JNPT-Ahmedabad-Palanpur-Rewari-Tughlakabad/Dadri   | Dankuni-Gomoh-Sonnagar-Mughalsarai-Kanpur-Khurja-Ludhiana<br><br>Dadri-Khurja                  |
| Route Kilometre   | 1483   | 1806   |
| 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   |
| Total Cost estimates (current excluding cost escalation, contingency and IDC) | Rs.26,124 crore  | Rs.23,500 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 geotechnical 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.

Progress of the two corridors is as under:

**(i) Western DFC-** The entire Western DFC will be funded substantially by the Japan International Cooperation Agency (JICA) under the Special Terms of Economic Partnership (STEP) scheme of the Government of Japan and will be a tied loan with the 30% of the total value of contracts being sourced from Japan. Progress on funding is as under:

Phase I- The loan agreement for Engineering Services for phase-I (Rewari-Vadodara section of 920 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. First main loan agreement for 90.262 billion Japanese yen (approx Rs.4500 crores) was signed on 31.03.2010. JICA assistance for phase-I is estimated at 405 billion Japanese Yen.

(b) Phase II- Negotiations for funding for phase-II (JNPT-Vadodara and Rewari-Dadri, 550 kms) are on with Government of Japan and the Engineering Services loan agreement is targeted to be signed in June 2010. Government of Japan is sending a preparatory survey team in July 2010 to undertake Environmental and Social Studies studies for phase-II of the project. The main loan agreement is expected to be signed in May/June 2011.

Contract for design and construction of 54 major and important bridges in Vaitarna – 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-** For part of Eastern corridor – Mughalsarai-Kanpur-Khurja-Ludhiana section (1125 kms) funding is in advanced stage of negotiation with World Bank. Adaptable Program Loan (APL) scheme has been suggested by the World Bank for the three phases as per the following schedule:

- Khurja-Kanpur FY 2011 – APL I
- Khurja-Ludhiana FY 2012 – APL II
- Kanpur-Mughalsarai FY 2013 – APL III

World Bank has been requested to review the suggested timelines for APL I and II and to coincide them for finalization in FY 2011 and for APL III to be considered in FY 2012.

- Khurja-Kanpur section- General Consultants for Khurja-Kanpur section are in position and Pre Qualification document for Civil Works was issued on 05.04.2010 and pre-bid conference held on 29.04.2010. World Bank loan for this section is targeted to be considered in September 2010.
- Ludhiana-Khurja section - EIA/SIA/RRP studies commissioned earlier by ADB are in progress. World Bank is associating in the studies and report preparation to make them World Bank Compliant. Expression of Interest (EoI) for engagement of General Consultant has been approved by World Bank and issued by DFCCIL. Date for submission of applications is 25.05.2010.
- Mughalsarai-Kanpur section- EIA/SIA/RRP studies are to be undertaken for this section. Target for completion is 4<sup>th</sup> quarter of 2010-11.

Mughalasarai-Sonnagar section is being implemented with I.R'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.

Sonnagar-Dankuni section is to be implemented through PPP mode for which appropriate PPP model is being developed by DFCCIL with assistance of consultants. Final Location survey of this section is being undertaken by DFCCIL and is targeted for completion in July 2010.

## 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 6188 Hectares. Award for compensation under section 20 F of RAA 2008 has been made for 60.86 Hectare. Total land acquisition required is 11178 Hectare excluding Sonnagar-Dankuni section for which Final location survey is in progress.

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

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