



**New Delhi**

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**PRESS BRIEF**

**Dedicated Freight Corridor Corporation of India Limited (DFCCIL)**

Dedicated Freight Corridor Corporation of India (DFCCIL) is a Special Purpose Vehicle set up under the administrative control of Ministry of Railways to undertake planning & development, mobilization of financial resources and construction, maintenance and operation of the Dedicated Freight Corridors. DFCCIL was incorporated in October 2006 under Indian Companies Act 1956.

DFCCIL has been set up with 100% equity by Ministry of Railways and registered as a company under the Companies Act 1956 on 30th October, 2006. The genesis of the Dedicated Freight Corridor is due to saturation in rail transportation capacity of Indian Railways on the Golden Quadrilateral. The Indian Railways' network linking the four metropolitan cities of Delhi, Mumbai, Chennai and Howrah, along with its two diagonals (Delhi-Chennai and Mumbai-Howrah) commonly known as the Golden Quadrilateral, adding up to a total route length of 10,122 km, carries more than 58% of its revenue earning freight traffic.

The Indian Railways is the lifeline of the nation. Growth in Indian Economy is leading to surge in power demands requiring heavy coal movement, booming industrial growth & infrastructure construction. Growing international trade along existing Eastern and Western Routes has led to the demand for additional capacity for rail freight transportation. In the first phase, the Government of India has approved construction of two corridors-the Western DFC (1504 route km) and Eastern DFC (1840 route km)- spanning a total length of about 3344 route km.

The Eastern Corridor, starting from Dankuni in West Bengal will pass through the states of Jharkhand, Bihar, Uttar Pradesh and Haryana to terminate at Ludhiana in Punjab. The Western Corridor connecting Dadri in Uttar Pradesh to Mumbai - Jawaharlal Nehru Port (JNPT), will traverse through NCR and the states of Haryana, Rajasthan, Gujarat and Maharashtra.

## **Vision**

- To create a partnership with IR for retaining and expanding the market share of rail through efficient and reliable service with customer focus.

## **Mission**

- To build a corridor with appropriate technology that enables Indian Railways to regain its market share of freight transport by creating additional capacity and guaranteeing efficient, reliable, safe and cheaper options for mobility to its customers.
- To support the Government's initiatives toward ecological sustainability by encouraging users to adopt Railways as the most environment-friendly mode for their transportation requirements.
- DFC shall perform similar functions in respect of future phases of the DFCs, if any, including those connecting the other legs of the Golden Quadrilateral and its diagonals.

## **Objective of DFC**

- To create world-class rail infrastructure with advanced technology and knowledge to carry higher throughput per train.
- To improve overall transport efficiency.
- To offer customer guaranteed, faster transit, energy efficient, environment-friendly transport.
- To encourage total supply chain management.
- Reduce the unit cost of transport logistics.
- Increase Rail share in the freight market.

## **Mandate**

- Task of planning, construction and maintenance of infrastructure of the Dedicated Freight Corridors (DFC).
- Effective independence in decision-making and functions with a market focus and business orientation.
- Status of Railway Administration under the Railways Act 1989, to discharge the responsibility assigned to it under the concession agreement.
- Transfer of a minimum of 70% of freight traffic of Indian Railways to the DFCCIL.
- Track Access Charges from Indian Railways and other authorized rail operators in respect of construction and maintenance of the corridors.

- DFCC will provide non-discriminatory access to freight trains belonging to Indian Railways and other qualified operators.

### **Features of DFCC**

DFC will provide Paradigm shift in freight operation with reduction in unit cost of transportation due to :

- ✧ Less Operation and Maintenance Cost (O & M Cost)
- ✧ Lean organization with higher efficiency.
- ✧ Higher throughput per wagon and per train.
- ✧ Lower energy consumption.

### **Operating Features**

- Train Headway - 10 minutes
- End of Train Telemetry System(EOTT) - Trains to run without Guard
- Station spacing of 40 Kms
- Maximum Permissible Speed 100 KMPH
- Provision for Time Tabled Schedule Trains.
- Facility for long-haul operation
- Double Stack Container Train operation on WDFC increase throughput upto 360 TEU per train

### **Advanced Technology & Innovation**

- Unidirectional automatic signaling with 2 km inter-signal distance
- Stations with Electronic Inter-locking system with LED light Multi-aspect color light signals
- Mobile Radio Train Communication System (GSM-R)
- 2x25 KV, 50 Hz AT traction feeding system
- Usage of 60 kg curved thick web switches
- Ruling gradient in running track will be 1 into 200
- Distance between two TSS 60-80 km
- To run double stack containers on WDFC, the height of OHE is more than the conventional height
- To enhance safety, TPWS (Train Protection and Warning System) will be provided
- First time in India Mechanised laying of track by NTC has been adopted by DFCCIL
- Use of Canted Turnouts

## **Corridors of Industrial Growth**

### **(I) Multi Modal Logistic Hubs**

The DFC network would attract setting up of Multimodal Logistics Parks along the corridor to facilitate value addition including packaging, retailing, labeling, pelletizing, transportation etc. The last mile connectivity in terms of door to door services will be provided to the customers by 3PL service providers. Logistics Hubs will be developed either by DFCCIL or in Joint Venture with suitable partner at different locations along the corridor.

### **(II) Delhi-Mumbai Industrial Corridor (DMIC) & Amritsar-Kolkata Industrial Corridor (AKIC)**

Impact of DFCCIL is visible as a driver of Industrial Growth with planning and development of DMIC & AKIC along the DFC. Industrial Corridors have been planned using the backbone of the DFC. DMIC/ AKIC and DFCCIL are complementary to each other while Industrial Corridor will get benefits from the World-Class Rail Infrastructure of the DFC, the traffic originating from the Industrialized Corridor will contribute significantly to traffic on the DFC.

### **Western DFC**

- Western Corridor comprising of 1504 km of a double line track from Jawahar Lal Nehru Port Trust to Dadri via Vadodara-Sanand-PalanpurPhulera-Rewari. Alignment has been generally kept parallel to existing lines except provision of detours and entirely on a new alignment from Rewari to Dadri and also from Sanand to Vadodara.
- Western DFC will join Eastern Corridor at Dadri.
- The connectivity of WDFC with Indian Railways has been planned at Dadri, Prithala, Rewari, Ateli, Phulera, Bangurgram, Marwar, Palanpur, Chadotar, Mehsana, Sanand(N), Sanand(S), Makarpura, Udhna, Kharbao and JNPT.
- The Corridor will provide a boost to EXIM Trade. Traffic comprises of mainly EXIM containers, between Jawahar Lal Nehru Port Trust and Mumbai port and port of Pipavav, Mundra and Kandla and ICDs located in northern India. Besides this POL, imported Fertilizers, imported coal, Food grains, Cement, Salt, and Iron & Steel will have major contributions for traffic moving on the Corridor.
- Expected traffic over WDFC, year 2021-22: 152.24 (million tonnes).

### **Eastern DFC**

- The Eastern Corridor with a route length of 1840 km and consisting of the following distinct segments:
- An electrified single line segment of 389 km between Ludhiana and Khurja
- An electrified double line segment of 961 km between Khurja-Dadri-Mughalsari-Sonenagar.
- An electrified double line segment of 549 km between Sonnagar to Dankuni.
- The junctions with Indian Railways on the Eastern Corridor have been planned at Chawapail, Sirhind, Sambhu, Kalanaur, Pilkhani, Dadri(U), Khurja, Daudkhan, Tundla, Bhaupur, Bhimsen, Kanpur, Karchchna, Ahraura Road, Mughalsarai, Ganjkhwaja, Sonnagar, Gomoh, Andal(W), Andal, Andal(E) and Dankuni. Temporary junctions are planned at Karwandiya, Sasaram and Durgawati. This corridor will have 58 crossing stations.
- Traffic on EDFC comprises of coal for the power plants in the northern region of India from Coalfields located in state of Bihar, Jharkhand and Bengal, finished steel, food grains, cement, fertilizer, limestone from Rajasthan to steel plants in the east and general goods.
- Expected traffic over EDFC, year 2021-22: 153.23 (million tonnes)

### **Carbon Footprints**

DFC aims at to follow a low carbon path adopting various technological options which can help DFC to operate in a more energy-efficient fashion. As per detailed study on a Green House Gas (GHS) emission forecasting for a 30-year period Cumulative GHG emissions over the 30-year period in the case of no-DFC scenario would have been 582 million ton CO<sub>2</sub> while in the DFC scenario it would be 124.5 million ton CO<sub>2</sub>. This demonstrates that in absence of DFC implementation approximately 4.5 times more GHG would be emitted in 30-year period for freight transportation envisaged on the Eastern and Western Corridor.

### **Funding Arrangement**

- The total sanctioned cost of project is Rs. 81,459 crore (EDFC: Rs. 26,674 crore & WDFC: Rs. 46,718 crore, land cost Rs. 8067 cr.)
- The entire cost of capital expenditure will be financed by the Ministry of Railways through Debt and Equity. The Debt-Equity Ratio is 3:1. Debt will be financed through loans from multilateral leading agencies.
- Loan for Western DFC has been arranged through Japan International Cooperation Agency (JICA) which is providing debt of Rs. 38,722 crore.

- Eastern DFC (Mughalsarai-Allahabad-Kanpur-Khurja-Dadri- & Khurja-Ludhiana) is being funded by World Bank through loan of US\$ 2.725 billion.
- Dankuni-Sonnagar section of Eastern DFC will be implemented through PPP.

## **Major Achievements of DFCCIL since Jan 2016**

### **Award of Contracts**

- 100% award of contracts in Western DFC has been successfully achieved.
- Contracts worth Rs. 18,000 cr. were awarded during the year 2016, which is a record of highest value of award of contracts in a single calendar year. Following contracts were awarded since January 2016:

#### **● Eastern DFC**

- ✧ *Dehri on Sone-Sonnagar Junction Civil work (16 km) worth Rs. 365 cr.*
- ✧ *EDFC-2, Electrical Contract, Package 204 worth Rs. 847 cr.*
- ✧ *EDFC-3, Civil Contract, Pkg 301 (Saharanpur-Ludhiana) worth Rs. 1769 cr.*
- ✧ *EDFC-3, Civil Contract, Pkg 302 (Khurja-Dadri) worth Rs. 511 cr.*
- ✧ *EDFC-2, Signal & Telecom Contract, Package 203 worth Rs. 471 cr.*
- ✧ *PMC for Pilkhani-Sahnewal section worth Rs. 68 cr.*
- ✧ *PMC for Khurja-Dadri section worth Rs. 35 cr.*

#### **● Western DFC**

- ✧ *Electrical Packages, EMP-16 (Makarpura-JNPT) worth Rs. 1213 cr.*
- ✧ *PMC Phase II worth Rs. 555 cr.*
- ✧ *CTP 3R Iqbalgarh-Vadodara worth Rs. 4744 cr.*
- ✧ *STP-17 (Makarpura-JNPT) worth Rs. 631 cr.*
- ✧ *Civil & Track Package, CTP-11 (JNPT-Vaitarna) worth Rs. 2949 cr.*
- ✧ *Integrated Civil, Electrical, S&T Pkg, CTP-14 (Rewari-Dadri) worth Rs. 3799 cr.*

### **Finance**

- Three fold increase in Capital Expenditure during the year 2015-16 in comparison with 2014-15. Another 32% increase in Capital Expenditure projected in year 2016-17.

- Capex worth Rs. 6638 cr. have been incurred up to December 2016 as compared to Rs. 4998 in the corresponding period last year.
- Loan agreement of Rs. 103.664 Billion JPY for Western Corridor signed with JICA on 31.03.2016.
- Loan agreement of US\$ 650 million towards the third loan for the Eastern Corridor signed with World Bank on 21.10.2016.
- Funding arrangements for both the corridors have been successfully completed.

### **Progress of Awarded Works**

- Five-fold increase in pace of works in Khurja-Kanpur and Rewari-Palanpur sections.
- First commercial goods train was successfully run on 56 km long New Durgauti-Sasaram section of the Eastern DFC on 30th March 2016.
- Mechanized track laying with state-of- the-art NTC Machines have been completed in 480 kms in both the corridors till December 2016 out of which, more than 300 km tracks were laid during 2016.
- Drone and Geo Spatial based satellite technology was used for monitoring the progress of New Durgauti-Sasaram section of Eastern DFC and Rewari-Iqbalgarh section of Western DFC.

### **Unique features**

- One of the most unique features of DFC is that the complete network is planned to be free from all Level Crossing by constructing either Road Over Bridges (ROB) or Road Under Bridges (RUB).
- A total of **1003 level crossings (689 RUBs and 314 ROBs)** are planned to be eliminated which will help in unhindered movement of both Rail and Road Traffic.
- Savings of Rs 3000 crore achieved by sharing of the cost with State Governments.

### **Land Acquisition**

- The project is spread over a length of 3344 kms and is passing through 9 States, more than 60 districts involving 11765 Hectare of land with more than 3 lakhs Project Affected Persons (PAPs).

- DFCC has taken adequate care in the resettlement & rehabilitation (R&R) of the PAPs by providing them due compensation and R&R benefits and also providing multi-skill training for facilitating in job opportunities.
- DFCC has been able to acquire **95.8% of the land** (except PPP section of Sonnagar-Dankuni) till December 2016 and are pursuing for acquisition of balance land. Most of the environment clearances have been obtained.
- New Entitlement Matrix as per the Right to Fair Compensation and transparency in land acquisition, Rehabilitation & Resettlement Act, 2013 has been implemented w.e.f. 01.01.2015. All compensation and R&R after 01.01.2015 is being paid as per the new Act.
- Compensation amounting to Rs. 10915 crs. (WDFC: 5157 cr., EDFC: 5758 cr.) paid till December, 2016.

### **Awards & Acknowledgments**

- DFCCIL has been awarded the prestigious 'Golden Peacock Award for Sustainability' in transport sector for the year 2016.
- DFC also received MOU rating of 'Outstanding' for the year 2015-16 which has been 'Very Good' in the last few years.
- CRISIL has reaffirmed the "CCR AAA (pronounced Corporate Credit Rating Triple A) rating to DFCCIL
- ICRA, a unit of Moody's has also reaffirmed [ICRA]AAA (pronounced as ICRA triple A) rating for DFCCIL for the current financial year.
- India Ratings & Research, A Fitch Group Company has affirmed Long term issuer rating at IND AAA to DFCCIL.

### **CSR Activities: Project Saksham – A CSR initiative of DFCCIL**

- 'Project Saksham' A CSR initiative of DFCCIL: 1039 PAPs/BPL persons at four CPM units were imparted Skill Development Training at 13 Centers leading to their employment/self-employment in association with Confederation of Indian Industry (CII).

### **Other Achievements**

- DFCCIL Corporate Office Building was awarded with 5\*\*\*\*\* (five star) rating by BEE, Ministry of Power.



- Private Freight Terminal Policy, Port Rail Terminal Connectivity Policy and Private Siding Rail Connectivity Policy of DFCCIL have been finalized and approved by BOD and are available on the website. [www.dfccil.gov.in](http://www.dfccil.gov.in)

### **Future Corridors**

Railway Minister Honorable Sh. Suresh Prabhu, in his budget speech for the year 2016-17, proposed to take up three more DFCs:

- East-West Corridor (Kolkata-Mumbai) Approx 2327 Kms.
- North-South Corridor (Delhi-Chennai) Approx 2328 Kms.
- East Coast Corridor (Kharagpur-Vijaywada) Approx 1114 Kms.

(PETS study of these corridors have already been completed)

### **DFC- A Game Changer**

Both Eastern & Western Dedicated Freight Corridors are capable of carrying of train load of 13000 tonnes with average speed of 70-75 kmph as compared to the present train load capacity of 5000 tons with average speeds of around 25 kmph. DFCCIL will be a game changer in the freight transport logistics scenario in the country. The pace of progress during the last two years has brought this challenging task closer to reality.

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