

Implementation of Railway Freight Corridors

17th November 2015

Capacity augmentation to cater to growth in volumes

Rail Freight Business

- At over 1100 million tonnes is 4th in the world in rail freight volumes; targeted to grow to 1500 million tonnes in the next 5 years.

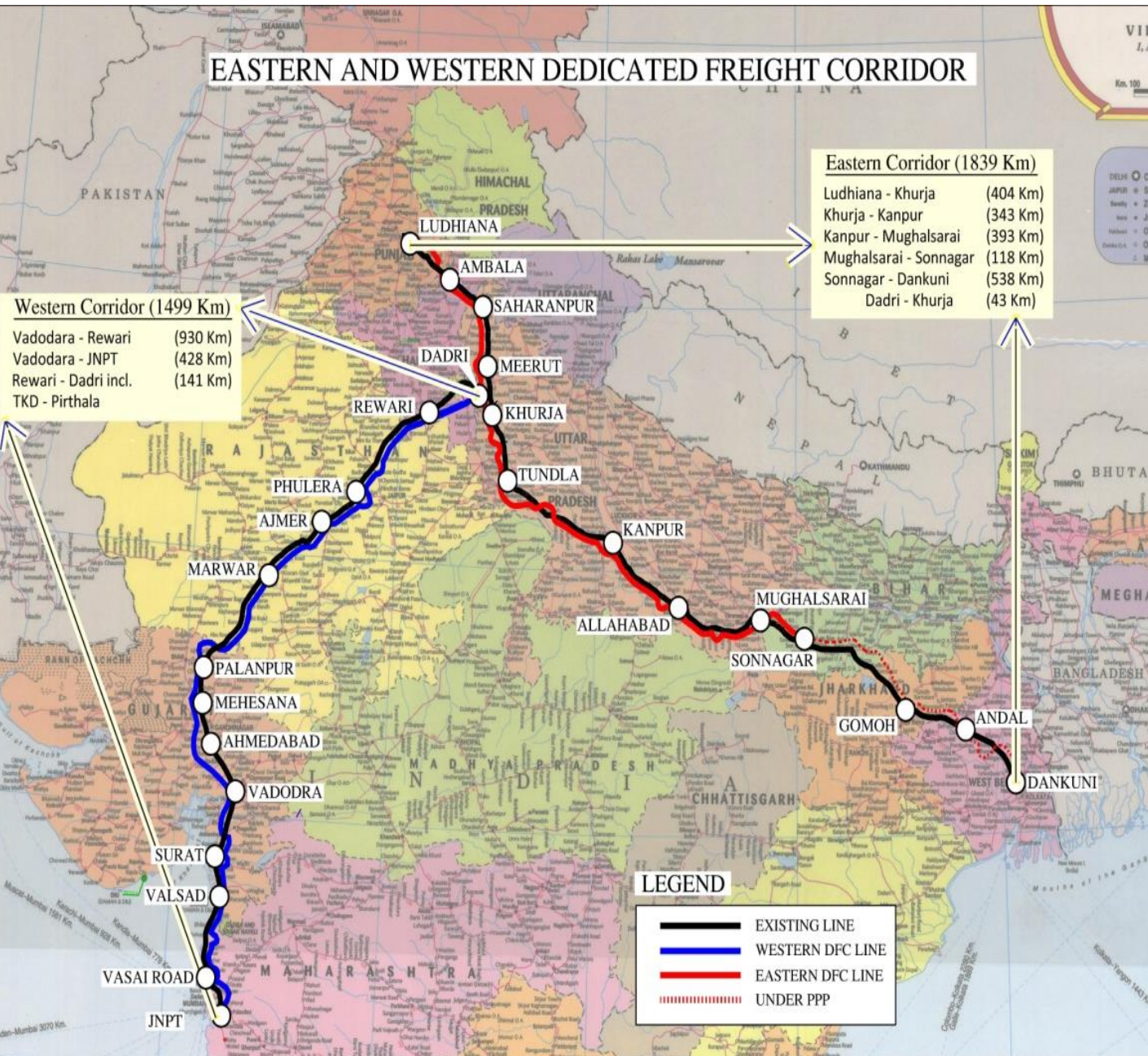
Network Expansion

- About 20,000 track km including two High axle load Dedicated Freight Corridors of 3300 km in next five years

Rolling Stock

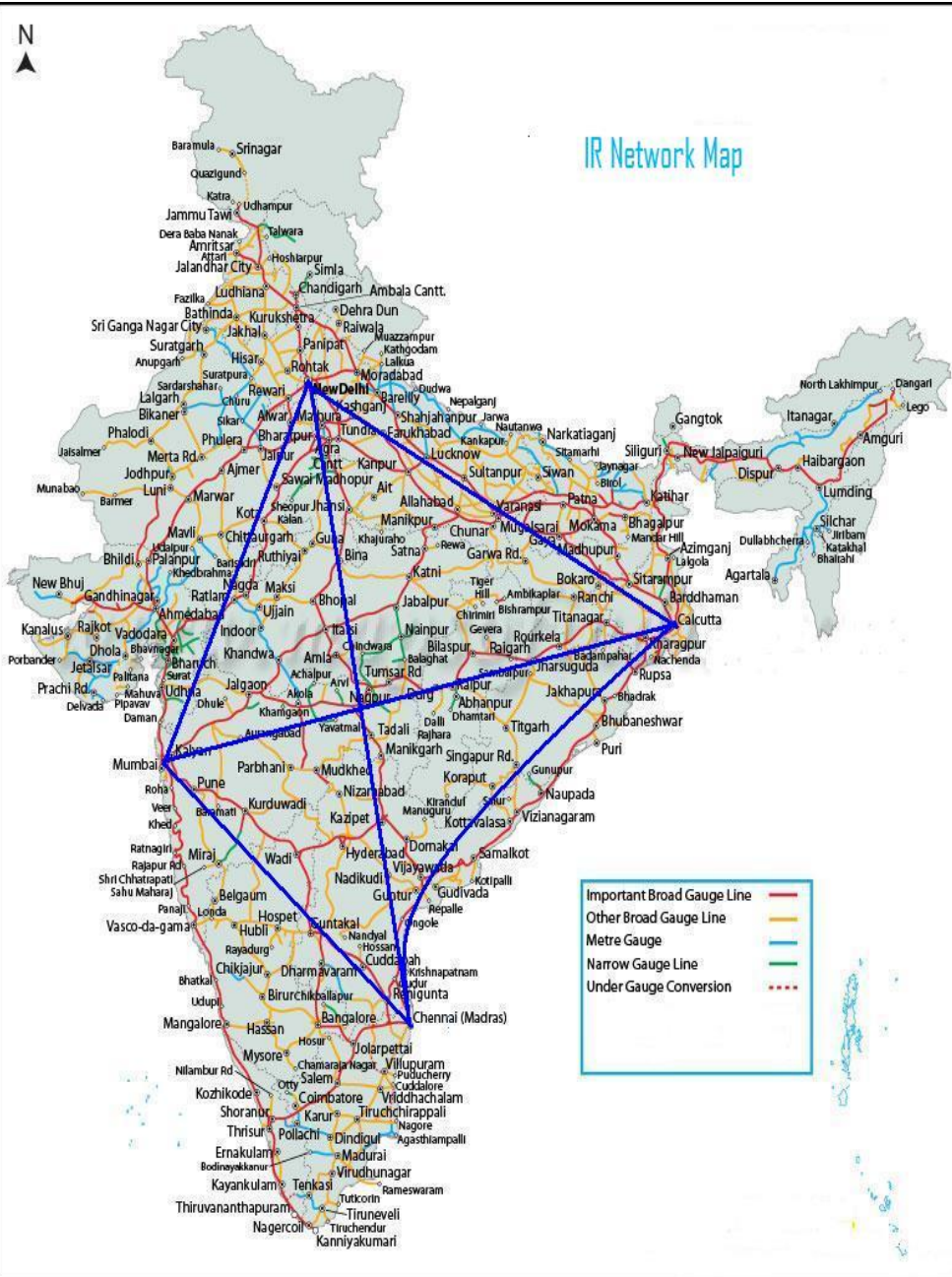
- Enhanced level of rolling stock procurement and new manufacturing facilities for High Horse Power electric & diesel locomotives
- High axle load and high capacity wagon development & procurement
- Introduction of train set technology

DEDICATED FREIGHT CORRIDORS



- 2 corridors:
Eastern & Western
- Target for commissioning:
2019
- Expected completion cost :
Rs.81,500 crore
(US\$ 13 billion)

Future DFCs at planning stage



- Feasibility study for additional 4 corridors:
 - **North-South corridor** (Delhi-Chennai) – 2343 kms, completion cost USD 17.4 bn)
 - **East-West corridor** (Howrah-Mumbai) – 2328 kms USD 18.42 bn)
 - **East Coast corridor** (Kharagpur Vijayawada) – project report September 2015
 - **Southern corridor** (Chennai-Goa) – project report March 2016

DFCs under implementation

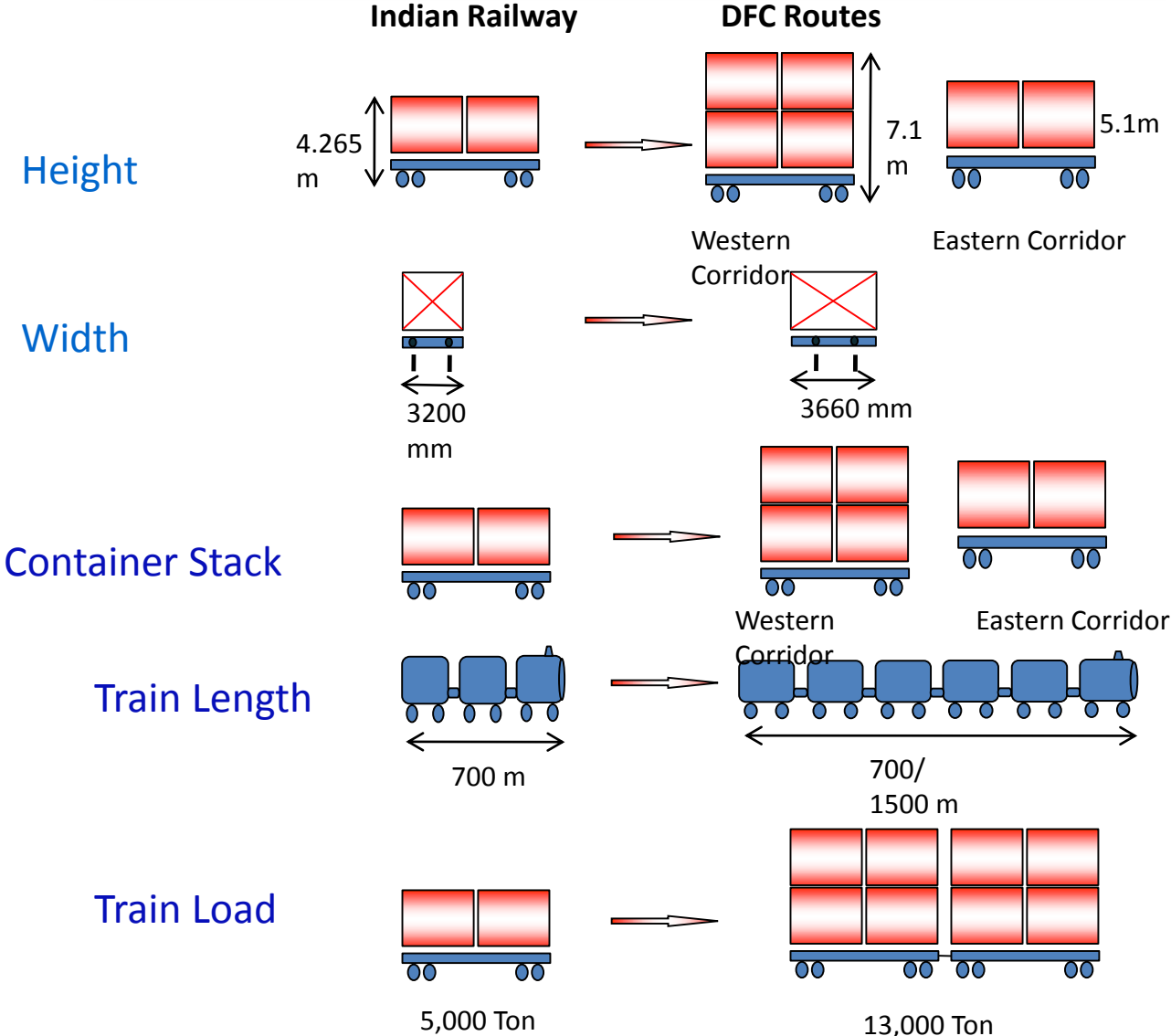
- 3300 km route length
 - Eastern DFC – from Dankuni to Ludhiana (1856 km), all double line except single line Ludhiana –Khurja (400 km)
 - Western DFC – from Jawaharlal Nehru Port (JNPT) to Dadri (1503 km) – double line
- Capacity creation – 150 to 180 freight trains each way each day against max of 50/60 freight trains each way today on trunk routes.
- Traffic
 - EDFC - Coal, Iron & Steel
 - WDFC - Container, Fertilizer, Coal

Projected Traffic on Eastern & Western DFCs

(in million Tonnes)

CORRIDOR	2021-22	2026-27	2031-32	2036-37
EDFC	153.2	181.7	213.6	251.0
WDFC	160.9	203.3	241.3	284.3

Technology in DFC



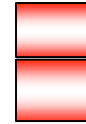
Technology in DFC

Indian Railway Routes

DFC

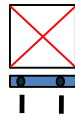
Axle
Load

22.9 t /
25 t

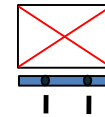


32.5t/2
5 t

Track
Loading
density



7.67 t/m



12 t/m

Maximum
Speed



75 Kmph



100

Kmph

Average
speed

25 kmph

70 kmph

Grade

Upto 1 in
100

1 in 200

Status of DFC Funding

Eastern DFC

- World Bank is funding USD 2.725 billion which is over 70% of the project cost in Mughalsarai-Ludhiana section (1183 kms)
- World Bank funding is in three phases
 - Khurja-Kanpur (343 kms, APL-1)
 - Kanpur-Mughalsarai (390 kms, APL-2)
 - Ludhiana-Khurja-Dadri (447 kms. APL-3)
- Loan agreement for APL-1 signed in October 2011
- Loan agreement for APL-2 signed in December 2014
- Loan agreement for APL-3 to be taken up 2015-16 (loan sanctioned)

Status of Western DFC

- Flagship project of Indo-Japan cooperation in the infrastructure sector
- JICA funding 100% of the eligible project cost
- First ODA funding under the STEP scheme
 - Prime contractors Japanese or Japanese-led JVs
 - Approx. Rs.12000 crore (US\$ 2 billion) goods from Japan
- Largest civil and systems contracts in the Rail sector
- 65% of the civil construction contracts awarded
- 65% of the electrical and signalling contracts awarded
- Balance contracts by April 2016
- Project commissioning by 2019

Status of Western DFC Funding

- JICA is funding Rs.38,722 crore (JPY 550 billion) which is 77% of project cost
- Funding is in two phases
 - Phase-I (Rewari-Vadodara, 930 kms)
 - Phase-II (JNPT-Vadodara & Rewari-Dadri, 569 kms)
- Funding for both phases is tied up and loan agreements for first tranche for both phases signed
 - Phase 1 – 90 billion JPY (Rs 6300 crore)
 - Phase 2 – 136 billion JPY (Rs 9580 crore)

Western DFC connectivities

- Ports of
 - Jawaharlal Nehru Port
 - Mumbai Port
 - Dighi/Rewas
 - Nandgaon/Nargol
 - Hazira
 - Dahej
 - Pipavav
 - Kandla
 - Tuna
 - Mundra
- Hinterland container terminals in
 - Delhi area
 - Haryana
 - Punjab
- Power plants in Northern and Western India

Further Prospects

- High Speed Rail projects
- Locomotive manufacturing facilities
- Passenger coach manufacturing
- Rail components manufacturing
- Station development

THANK YOU