





**CSX**  
INTERMODAL

WANNON HIGH PILE

24,000 lbs

**CSX**  
NEEDLE

**K**  
DAL

53'

CSXU 9300

SCC  
181  
14

7008



D1B





























**Sukhbir Singh, R N Lal, R K Mehta, Kishore Kumar and Bhupender Singh Bodh\***

Indian Railways has decided to forge ahead with the development of two Dedicated Freight Corridors (RG 6.08 p383). Work on the Eastern Corridor began on February 10, and a start on the Western Corridor is expected shortly.

The Eastern Corridor will consist of a double-track line over the 866 km from Sonnagar on the East Central Railway to Dadri on the North Central Railway, plus a single-track line over the 412 km from Khurja to Ludhiana on the Northern Railway. Traffic will consist mainly of bulk goods such as coal from the eastern coalfields destined for power stations in the north and west, together with finished steel products, food grains, cement, fertilisers, and limestone from western India bound for steel plants in the east.

The Western Corridor will have 1483 km of double track from Jawahar Lal Nehru Port Trust to Dadri via Vadodara, Ahmedabad, Palanpur, Phulera and Rewari. In addition, a 32 km single track connection from Pirthala Junction near Asaoti on the Delhi – Mathura line to Tughlakabad is planned, and there will also be a connection with the Eastern Corridor at Dadri. Much of the traffic on the Western Corridor will be ISO containers from JNPT and Mumbai port in Maharashtra and the ports of Pipavav, Mundra and Kandla in Gujarat destined for terminals in northern India



Tests with a loaded train were carried out during July 2008.

for optimum line capacity. In strategic terms electrification helps to reduce dependence on imported oil. There is also the prospect of earning carbon credits from regenerated power under the Kyoto Protocol — IR already has an extensive electrified network, which totalled approximately 19000 route-km on March 31 2009. With around 1000 route-km a year being wired, IR expects to have 20000

route-km electrified by 2010.

By far the most efficient way of moving large numbers of containers is to carry them in double-stack configuration, which has an excellent track record in North America. On the face of it, double-stack operation is not compatible with existing electrification as IR's standard contact wire height of 5500 mm above rail top is too low for double-stack operation. IR therefore decided to experiment with a high contact wire to ascertain whether sufficient clearance could be achieved.

### Table I. High-rise overhead line equipment for IR's Dedicated Freight Corridors

Contact wire height <i>mm</i>	7 450
Catenary wire height <i>mm</i>	8 650
Fabricated mast type	K-175, K-200, K-250

### Design parameters

When Chinese Railways decided to introduce double stack container

**\*Sukhbir Singh** is Member Electrical, Indian Railways Board. **R N Lal** is Senior Executive Director for Electric Locomotives at the Research, Design & Stand-























2011

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4С2-114

ТЭМ2-5525

ОМ  
пр





70  
km/h





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Faz sentido?