THE ROLE OF RAIL FOR INDIA'S DEVELOPMENT OBJECTIVES

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OVERVIEW

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RAIL V/S ROAD IN INDIA

02 RAILWAYS IN INDIA.

IR- PASSENGER-FREIGHT MIX-CHALLENGES.

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RAIL V/S ROAD IN INDIA



(Source: NTDPC Report-2014)

RAILWAYS IN INDIA

•No separation of Infrastructure and operations.

•Intense Freight-Passenger traffic on common infrastructure

•High Density Corridors

- Golden quadrilaterals and diagonals
- •16% of route Km carries 52% of passenger & 58 % of fr eight

•Coal and Iron ore routes

•Port traffic





RAILWAYS IN INDIA - Organisation

STATUS OF A GOVERNMENT DEPARTMENT WITH A SEPARATE MINISTRY



RAILWAYS IN INDIA-PASSENGER BUSINESS

PROFILE OF PASSENGERS AND PASSENGER KILOMETERS



RAILWAY IN INDIA-FREIGHT BUSINESS

REVENUE LOADING, LEADS AND TONNE KILOMETERS

FREIGHT LOADING (MILLION TONNES) 2011-12 2012:13 2013:14 2014-15 2015-16 2016-17 0017.18



AVERAGE LEAD(KMS)

FREIGHT NTKM (BILLIONS)



RAILWAYS IN INDIA-FREIGHT BUSINESS



IR- Passenger-Freight mix-Challenges

•Intense Freight-Passenger traffic on common infrastructure.

•35% of the network capacity used for freight operations generating 2/3rd % the revenues.

•65% of network capacity used for Passenger operations generating 1/3rd of the revenues

•INDIA -	0.24
•JAPAN –	1.9
•GERMANY	´ 1.5
•KOREA –	1.4
•FRANCE -	1.3
•CHINA –	1.2
•AUSTRALI	A - 1.1
•USA -	10.3

Source:- Planning Commission,2010 and US census bureau,2012

Average Realisation on Freight and Passenger and Fare-Freight ratio



-FARE-FREIGHT RATIO

INVESTMENT IN RAILWAYS

TRENDS IN FINANCING IR'S PLAN OUTLAY





INVESTMENT IN RAILWAYS-CAPACITY ENHANCEMENT

IR-Fixed Infrastructure Growth							
	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	
	(km)	(Km)	(Km)	(Km)	(Km)	Target (Km)	
Doubling	708	705	973	882	999	2100	
New Lines	449	313	813	953	409	1000	
Gauge Conversio n	404	527	1042	1020	454	1000	
Total	1561	1545	2828	2855	1862	4100	
Electrification	610	1176	1502	1646	4087	6000	

INVESTMENT IN RAILWAYS-CAPACITY ENHANCEMENT

ROLLING STOCK PROCUREMENT:-

Financing through Extra Budgetary Resources :-

• IRFC (Indian railway Finance Corporation limited) :- Set up in 1986 for sole purpose of raisi ng money from market to invest in rolling stock- has leased Rolling Stock worth more than \$20 Bn to IR .

• Private Investment in Freight Cars :- 244 rakes (excl container rakes)

LWIS-Liberalized wagon investment scheme

- •SFTO-Special freight train operator scheme
- •WLS-Wagon leasing scheme
- •AFTO-Automobile freight train operator scheme
- •GPWIS-General purpose wagon investment scheme

Private Investment in Locomotives:-

•General Motors:- Mahrowra Locomotive Factory- 1000 Diesel Locomotive of 6000hp •Alstom :- Madhepura Locomotive Factory- 800 Electric Locomotive of 12000hp.

MAJOR INITIATIVES - DEDICATED FREIGHT CORRIDORS



MAJOR INITIATIVES - DEDICATED FREIGHT CORRIDOR



MAJOR INITIATIVES-DEDICATED FREIGHT CORRIDOR

• Total length of Eastern & Western DFC

- 2822 Kms

Eastern DFC Western DFC

- 1318 Kms
- 1504 Kms

Completion Cost

- \$14 Bn

- Timelines for completion :-
 - 2018-19 975 Kms
 - 2019-20 1847 Kms
- DFCCIL An Infrastructure provider revenue stream will be Track Access charge
- Overall Financial progress (including land) 49%
- Overall Physical progress 52%
- Land acquisition 98%
- Use of Advance Technology in construction & maintenance
 - Track laying of 1067 km completed by Mechanised track Construction (NTC Machine) & all OHE mast foundation using mechanized means.



MAJOR INITIATIVES: INFORMATION TECHNOLOGY

FOIS :- Freight Operations Information System

- Complete management module for freight trains
- One Stop Shop for All Freight Related Information & Access
- Facilitates More than 99% Cashless Transactions in Freight
- Standard and Customized Reports & dashboards for Major Freight Customers
- More than 7,000 MIS generated
- More than 4,000 Freight Trains monitored on daily basis
- Pool of 2,70,000+ Wagons and 11,000+ Locomotives managed through FOIS

PRS:- Passenger Reservation System

•PRS Application CONCERT (Country-wide Network of C omputerized Enhanced Reservation and Ticketing) Is the world's largest online reservation application.

• 1.5 to 2.2 million passengers booked per day

• Seamless Integration with multiple channels of informati on dissemination like website, SMS, display boards, to uch panels, Hand-held terminals etc



MAJOR INITIATIVES: INFORMATION TECHNOLOGY

Real-time Train Information System

- •Satellite based train location and speed tracking every 30 seconds
- •Using network of Indian Geo-Synchronou s Satellites
- •Real time communication between Loco motive and control center
- Automatic acquisition of train movement data without any manual intervention
 Automated Train charting
- Dissemination of accurate train running status to passengers- Website, Mobile ph one applications, SMS, Station displays
 Roll out on Passenger trains in 2019
 Pan Indian Railways Roll out in 2020



WAY AHEAD- Challenges/Opportunities

- Speedy Completion of IR's Doubling projects and key traffic decong estion works.
- Commissioning and operationalization of eastern and western DFC s by 2020
- Electrification of all Key routes.
- Freight volume growth to increase Modal Share-Bulk Freight, autom obiles, containers
- Large scale Rolling stock induction through private participation
- Freight terminals infrastructure
- Passenger Terminals development
- Leveraging IT for better service delivery

THANK YOU