

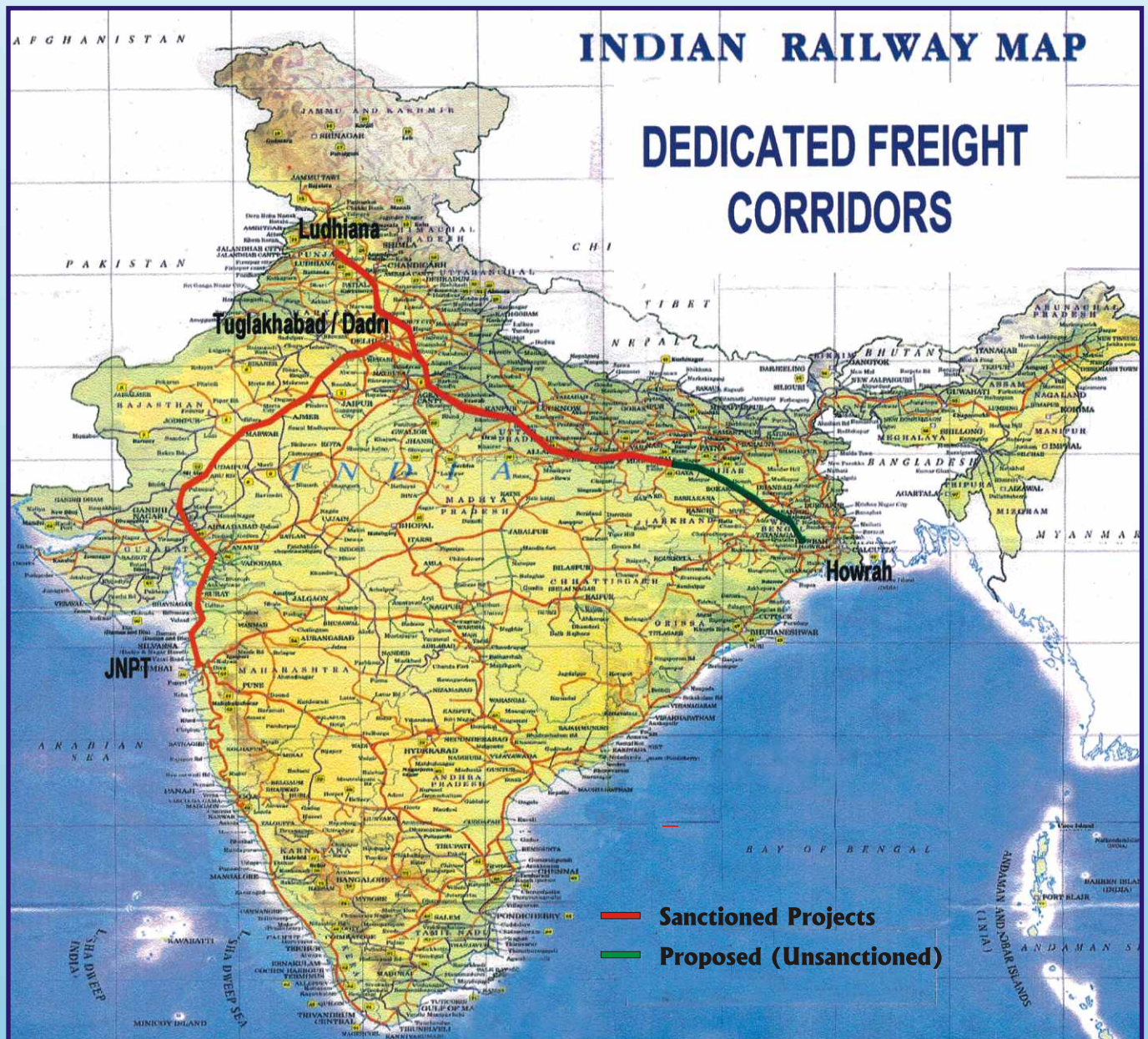


INDIAN RAILWAYS OPPORTUNITIES AND CHALLENGES

INDIAN
RAILWAYS



The Golden Moments



“.....Indian Railways has staged a dramatic turnaround with the same employees and assets. The turnaround strategy has been based on simple principles. Have higher freight volumes. Improve occupancy in passenger trains. Control costs. And most importantly reduce tariffs. Through this, Railways have improved their market share and operating margins....Our Government has been praised for improving customer services and reducing passenger fares, particularly for poorer sections of society. Railway reforms have been introduced without losing sight of our social obligation. This is what we call “inclusive growth.”

- Hon'ble Prime Minister in his speech delivered at Ludhiana on 27-09-06.

Indian Railways with 63,221 route kms of network, 1.42 Million employees, 440 BTKms and 615 BPKms of traffic is one of the largest rail networks of the world. It constitutes the lifeline and the mainstay of the country's transport infrastructure. Brief facts about Indian Railways are at Annexure I.

- Over the last few years, Indian Railways has managed to achieve a dramatic reinvention of its business and is presently witnessing one of the most impressive and unprecedented expansions in its history. The freight and passenger traffic on Indian Railways has been growing at average rate of 9.4% and 7.4% respectively during the last two years; the revenue has grown even faster. This is in sharp contrast to the historical trend rates of growth at 3-4% per annum. The sharp upturn in the performance has come about as a result of a conscious strategy to recapture the predominant position of railways in the transport sector. The carefully crafted strategy of reform has been built around generation of capacity through optimization of the existing infrastructure and assets and differentiated approach to the social and commercial segments of the traffic. On the supply side, increase in axle load from 20.3 to 22.9 tonnes, reduction in turnround time from 7 to 5 days has generated the necessary incremental freight-loading capacity. Similarly, augmentation of popular passenger trains by using the spare stocks of coaches and mopping up of the slack available has led to increase carrying capacity per train. These operational innovations have also led to lowering of unit cost of operation in the face of rising cost of inputs. This advantage has been capitalised on the demand side by a dynamic and market-driven tariff policy linked to seasonality and price elasticity of demand. The strategy of across -the -board increase in freight rates has



been replaced by selective changes in the tariff in response to market forces; however, the general trend has been reduction of tariff in real terms. In the passenger segment, while affordability continues to underpin the pricing for second-class passengers, there have been reduction in fares

Some Key Statistics of Railway's Performance

Year	2003-04	2004-05	2005-06
Originating freight tonnage (MT)	557.39 (7.5%)*	602.10 (8.02%)	667.00 (10.8%)
Freight revenues (Rs. Crores)	27618 (5.3%)	30778 (11.4%)	36490 (18.6%)
Originating passengers	5.11 (2.8%)	5.38 (5.3%)	5.89 (9.5%)
Total earnings including other coaching and sundries (Rs. Crores)	42842 (4.11%)	47038 (9.8%)	54600 (16.1%)
Operating ratio(%)	92	90.98	83.7
Closing balance of total railway funds as on 31 st March (Rs. Crores)	5228	7784.87	12654.00 (provisional)

Source : Indian Railways Year Book and the Statistical Directorate, Railway Board.

* Note : Figures in parentheses indicate change in percentage terms vis-à-vis the previous year.

for passengers in air-conditioned class and those traveling short distance. These measures have redefined the transport scene in the country and transformed the railways as a competitive and viable alternative to road transport. Instead of losing market share railways are now regaining market share. Instead of trailing GDP growth, traffic growth of railways is now exceeding that of GDP. This transformation has delivered huge efficiency gains, operating margins and healthy financial surpluses. The railways have earned a record surplus of Rs.13612 crores in the year 2005-06 and are headed for a surplus of Rs. 20000 crores in the year 2006-07.

- Vibrant growth in traffic volumes, revenues and surpluses, particularly over the last two years, has demonstrated that in the era of globalization and reform, employees and citizens at large could all emerge winners in an inclusive and win-win business model.
- Salient features of Indian Railway's performance over the last three years has been summarized in the table above.
- The scorching pace of growth in recent years makes this one of the most exciting periods in the history of Railways. This has not only renewed the public confidence in the Railway's ability to respond to the challenges of our rapidly developing economy and deliver against the exacting standards of globalised trade and commerce, it has also strengthened the self-belief among railwaymen to look forward to the future with a spirit of optimism. Ministry of Railways is determined to build on the solid foundations of



growth of the recent years. It is, therefore, seriously looking at all options to augment the infrastructure to prevent any bottleneck to growth.

6. By 2012, the railways are likely to handle double the traffic volumes currently handled. Indian Railways has chalked out a well - planned strategy to remove bottlenecks and augment capacity to match the requirement. The key elements of the strategy would entail investment in infrastructure as well as modernization of wagons technology, advanced signaling & telecommunication, induction of high horsepower locomotives, grade separation, and use of information technology specifically tailored to improve transit times and lower unit cost operation. It would also include building world - class passenger and freight terminals bench - marked to the best global standards.
7. The investment strategy over the next 5-10 year period would accord topmost priority to low-cost, rapid pay-back and high-return investments with the emphasis on accelerating the identified works of doubling, port connectivity, gauge conversion, signaling and telecom, renewal of assets, modernization of passenger terminals and augmentation of manufacturing for rolling stock etc. The financial side of the strategy would be to leverage the budgetary and internally generated resources to cater to the massive magnitude of investment needed. A large role has been assigned to Public Private Partnership (PPP) in the attainment of the strategic goals outlined above.
8. In the past Indian Railways had made several attempts to rope in private participation in areas such as catering, wagon ownership and leasing and joint ventures for rail infrastructure projects. These efforts were, however, limited in scale and scope. The current strategy is to leverage private capital through PPPs to the maximum extent in areas which are amenable to PPPs to improve efficiencies and control costs. To begin with the following projects have been identified to be implemented on PPP route:

(a) Construction of DFC with a large component of PPP

It has been planned to construct a new Dedicated Freight Corridor (DFC), initially covering about 2700 route kms equivalent to over 5000 of Track kms at an approximate Cost of Rs. 22,000 crores, linking the ports of western Indian and the ports and mines of Eastern India to Delhi and Punjab. The construction of this corridor will be implemented through an SPV being created for the purpose through a mix of Engineering Procurement and Construction (EPC) and PPP methods. Indian Railways is in the process of selecting a global consultant to advise on the concession agreement, principles of track access charges and other financing and bidding issues. It is envisaged that innovative ideas on design, construction and maintenance of railway to achieve optimal life – cycle costs would be forthcoming through PPP especially as the work progresses on the initial two corridors and





Dr. Silver : WAG-9H- phase Electric Engine with remote diagnostic System.

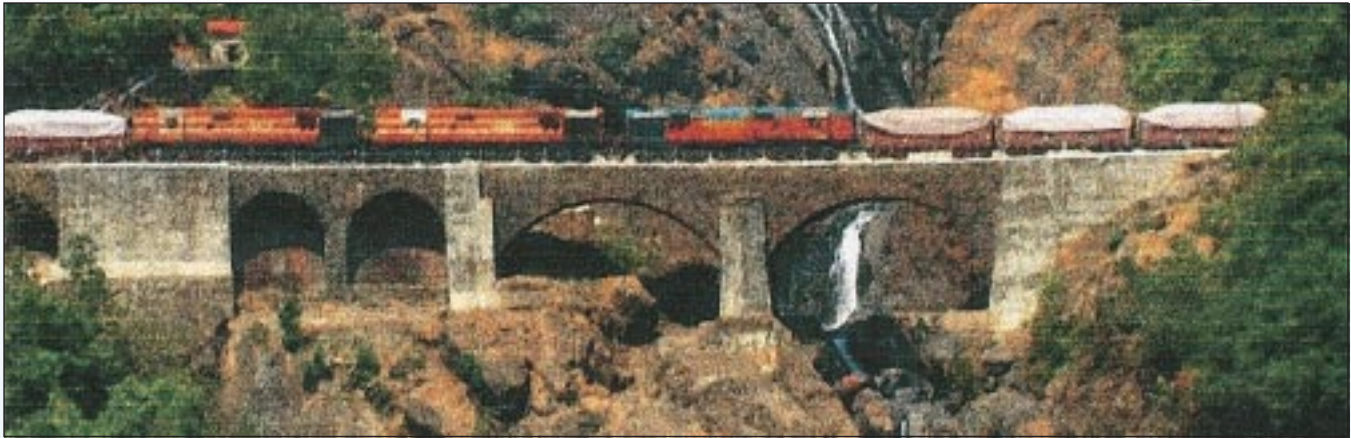
further corridors are taken up. The concessionaire could also tap additional ancillary revenue streams through commercial exploitation of land, construction of freight terminals/logistic parks/ICDs etc. Further, after firming up a wagon design for the DFC, private investment for its manufacture would be encouraged. All possible options, including PPP route through appropriate models will be considered.

(b) World Class Railway Stations, Passenger amenities and Commercial utilization of land.

Metro City Railway Stations like Delhi, Mumbai etc. need to be modernized to provide world – class passenger amenities and services to the large multitude of passengers using these stations. The Ministry is planning to do so by attracting private investments in the area by allowing the areas around the stations and the air space above platform to be commercially developed while operational / passenger – handling areas are separated from such commercial areas as in the case of airports. The concessionaire would be expected to construct and maintain the operational and passenger areas free of cost, share the revenue earned from the real-estate created and hand over the same after the concession period. The pilot project for New Delhi Station is on the anvil. Development of new green field passenger terminals would also be taken up in a similar manner.

Further, Indian Railways has approximately 43,000 hectares of vacant land. These are mostly situated alongside the tracks in a longitudinal strips, around railway stations and in railway colonies especially in metro and other important cities / towns with potential of being used commercially to generate revenue as well as capital for modernization





Middle portion of CC+8+2T loaded wagons rake hauled by 7 (Seven) locomotives.

and capacity addition. An authority, namely, Rail Land Development Authority (RLDA) has been set up under the Railway (Amendment) Act 2005 to pursue, inter alia, the main objectives of generating revenue, up grading railway assets and providing world – class, state – of – the – art passenger facilities / services at stations.

(c) Setting up of SPV for manufacturing of locomotives / coaches / wagons.

With a sustained economic growth and the resultant demand for rail transport, the requirement of rolling stock has increased manifold. The requirement of coaches/Electrical Multiple Units is projected at 22,689 vehicle units for the XIth Five Year Plan. The gap between the requirement and the combined capacity of the two Production Units at Integral Coach Factory, Perambur and Rail Coach Factory, Kapurthala (around 2500 per annum) is planned to be bridged by augmenting the existing capacity of these Production Units and setting up a new manufacturing unit through a Joint Venture under PPP.

Similarly, the requirement of Locomotives has been projected at 1800 each (Electric and Diesel) during the XIth Five Year Plan i.e. 360 locomotives per year. The existing in-house capacity for the manufacture of these locomotives is presently 150 per annum and can be augmented to 200 locos per annum for Electric & Diesel Locomotives. The gap between the requirement and capacity is planned to be bridged by setting up locomotive manufacturing units, through PPP. The possibility of PPP, through long – term demand guarantee to prospective manufacturers of modern wagons, is also being explored.





Kolkata Rajdhani Express on run with LHB Rake

(d) Super speciality Hospital

Ministry of Railways is also planning to build a super speciality Hospital at Patna with a private health-care group. If successful, this model could be replicated at other locations.

(e) Other PPP Opportunities

(i) Operation of container trains and construction of Private sidings, Inland Container Depots and Rail side warehouses

Private operators are being allowed to operate Container Services on Indian Railways. A concession agreement setting out the terms of such operation is under finalization. There are several areas like freight terminals, multi modal Logistics Park, warehouses, Inland Container Depots etc., which offer promising possibilities for private investment. Railways may provide land on lease to the private firms for such projects under mutually agreed terms of concession. In addition, Ministry of Railways intends to partner with state governments, private logistics operators and infrastructure providers to establish multi modal logistic parks equipped with rail sidings with sheds, large inland container depots, warehouses for storage, office buildings for logistics operators, highway connectivity, and smaller assembly units for processing imported raw materials for export. Such Parks could either be built independently at strategic locations or could be built in Special Economic Zones (SEZs).

(ii) Wagon investment Scheme

The Wagon Investment Scheme (WIS) with provision for freight rebate





and supply of a guaranteed number of rakes over periods ranging from 7-15 years for various categories of wagons has been well received. The scheme would be reviewed on the basis of feed back of the subscribers and continued further.

(iii) Port connectivity works and other infrastructure projects through Rail Vikas Nigam Limited (RVNL).

RVNL has been mandated to undertake capacity augmentation works and port connectivity projects by establishing Special Purpose Vehicles (SPVs). Some of the projects undertaken or under consideration of RVNL include Palampur – Gandhidham gauge conversion project (linking Kandla and Mundhra ports to North India), Haridaspur – Paradeep New Line (linking iron ore mines of Orissa and Jharkhand to Paradeep port) and Obulavaripalli-Krishnapatnam – New Line Project linking the Krishnapatnam Port of Andhra Pradesh.

(iv) Parcel Services

Piecemeal licensing of parcel vans in important mail express trains are already being carried out on Indian Railways. A more comprehensive policy of leasing full parcel vans and luggage space in trains between identified origins & destinations has been finalised.

(v) Catering services, Budget Hotels and Food Plazas

Indian Railway Catering and Tourism Corporation (IRCTC) has already been mandated to develop catering services, budget hotels and food





New Generation AC EMU with passenger friendly feature

plazas at major stations through the involvement of private entrepreneurs.

Letters of acceptance have been issued for two Budget Hotels at Madurai and Vijayawada. IRCTC intends to take up around 100 such Budget Hotel projects in the next five years with Public Private Partnerships (PPP).

IRCTC is also commissioning new Food Plazas in Railway premises with private participations. The license period for Food Plazas is of nine years with a provision of extension of three years. Already 37 such Food Plazas have been commissioned and five more are awaiting commissioning.

In the field of catering and on board services, Ministry of Railways is in the process of carrying out an examination of the scope of need based 'Base Kitchens' and 'Launderettes' with Public Private Partnerships to strengthen the infrastructure for on board services. Call Centres are also being planned under PPP by IRCTC to cater to the need for information dissemination to the railway customers.

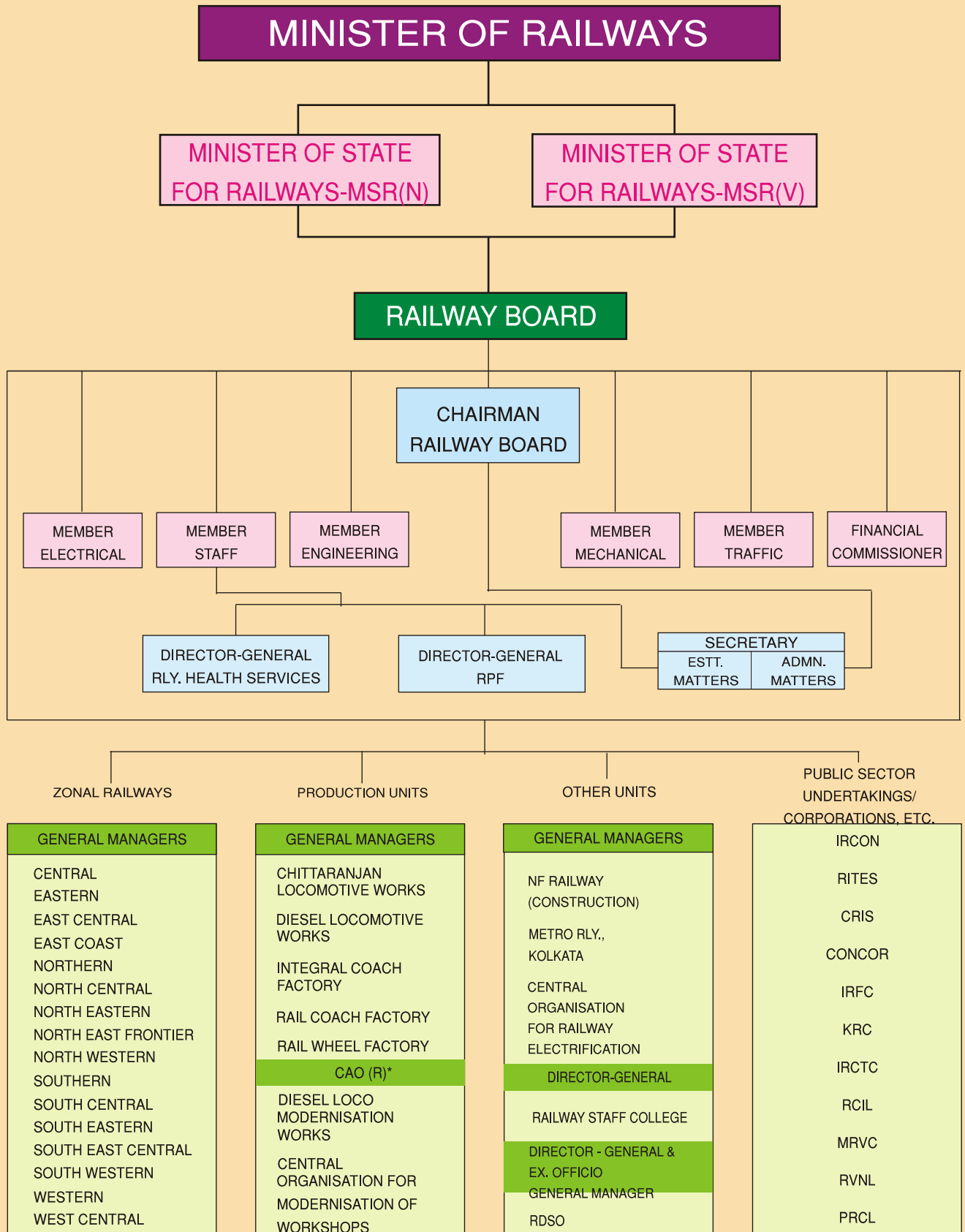
Apart from the above projects, for which Indian Railway Catering and Tourism Corporation (IRCTC) would act as a nodal agency, Indian Railways is also planning to launch new services for the luxury tourism segment on the pattern of 'Palace on Wheels' in partnership with other States who may evince interest. ■



INDIAN RAILWAYS AT A GLANCE

RAIL TRACK LENGTH IN	BG (1676 mm)		MG (1000 mm)		NG (762/610 mm)		TOTAL
ROUTE km	75%	47749	20%	12662	5%	3034	63465
TRACK km	83%	89771	14%	15684	3%	3350	108805
ELECTRIFICATION	27% OF THE TOTAL ROUTE KILOMETRE ELECTRIFIED						
NUMBER OF BRIDGES	IMPORTANT		MAJOR		MINOR		TOTAL
	667		9682		110936		121295
NUMBER OF LEVEL CROSSING	MANNED Level Crossing		UNMANNED Level Crossing			TOTAL	
	16642		18490			35132	
TOTAL LAND AREA (LAKH HECTARE)	4.23			(VACANT 0.43)			
NUMBER OF ZONES, DIVISION, STATIONS	Zones	Divisions	Stations	Production Units	Others	Public Sector Undertakings	
	16	67	7131	7	5	11	
NUMBER OF LOCOMOTIVES	STEAM		DIESEL		ELECTRIC		TOTAL
	44		4801		3065		7910
NUMBER OF COACHES AND WAGONS	COACHES				WAGONS		
	48263				222379		
NUMBER OF PASSENGER TRAINS RUN DAILY	BG		MG		NG		TOTAL
	8690		735		131		9556
REVENUE EARNING FREIGHT CARRIED DAILY	1.53 MILLION TONNES						
NUMBER OF TRAINS RUN DAILY	16021						
NUMBER OF FREIGHT TRAINS RUN DAILY	6465						
NUMBER OF PASSENGERS CARRIED DAILY	14.84 MILLION						
NUMBER OF RAILWAY PERSONNEL (in lakhs)	Group-A&B (1%)	Group 'C' (61%)		Group 'D' (38%)		TOTAL	
	(0.08+0.07) = 0.15	8.72		5.35		14.22	
AVERAGE ANNUAL WAGE PER EMPLOYEE	Rs. 158419						
ANNUAL SOCIAL SERVICE OBLIGATIONS	STAFF WELFARE	LAW & ORDER		OTHERS		TOTAL	
	Rs. 1398 crore	Rs. 844 crore		Rs. 5738 crore		Rs. 7980 crore	
OPERATING RATIO	90.98%						
NUMBER OF COMPUTERISED PRS CENTRES	1180						
NUMBER OF RAILWAY RECRUITMENT BOARDS (RRBs)	19						

ORGANISATION STRUCTURE



* Chief Administrative Officer (Railways)

(As on January 13, 2006)