

International Railway Conference New Delhi

A BACKGROUND NOTE



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Indian Railways — The Turnaround

Indian Railways (IR) has been the prime mover of the nation and has the distinction of being the largest railway system in Asia and the second largest railway system in the World under single management. IR operates more than 11,000 trains per day of which 7000 are passenger trains. The railways have played a critical role in catalysing the pace of economic development and continue to be an integral part of the growth engine of the country.

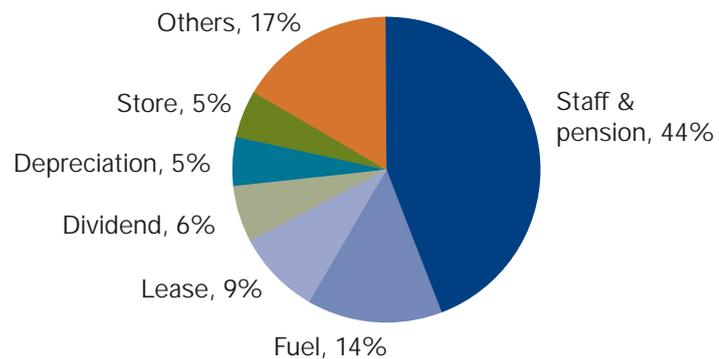
IR had its share of financial difficulties in the 1990s, which hampered its growth and there were concerns on its ability to provide competitive transport services in the future. This was in large part due to the tradition of seeing railways as an essential public service, the usage of which can not be denied even to those unable to pay. Under a tariff regime, where freight services continually subsidized passenger services and with IR losing traffic to the roads steadily, a financial crisis always seemed imminent within the Railways.

However, after being written off as a financially unviable concern by industry watchers and nonchalant soothsayers, Indian Railways has staged a dramatic turnaround in recent years. The Railway's renaissance has been engineered by simple entrepreneurial practices, which have evoked the admiration of internationally renowned institutions and companies alike. In a marked departure from its legacy, the focus on capacity utilization, reduction in unit costs, and improvement quality of service has yielded remarkable results. The Railways now looks all set to achieve the declared target of INR 20,000 Crores surplus revenue in the current financial year (2006-2007).

Modernization, safety and security of passengers, replacement and renewal of assets, track renewal, improvement in passenger amenities, reduced expenditure, increase in productivity and reduction in operating ratio, computerization of railway systems, induction of new technologies for signaling and telecom and prevention of leakages of revenue have been the salient features of the overall development of Indian Railways.

Indian Railways' total cost is dominated by staff cost (44%), depreciation and lease charges (14%) and fuel (14%) as can be seen from the break-up below: Both staff cost and fuel expenses are external to the system and have been increasing. In absence of productivity increases, the unit costs have also increased in tandem.

Indian Railway's Cost Structure



Source : Ministry of Railways

The Railways' new approach on tariff rationalization, improved wagon turnaround time and the reverse-flow discounts have helped it to augment its financial performance significantly. The financial highlights of the turnaround can be seen in the snapshot below:

Indian Railways : Financial Snapshot					
Rs b	FY91	FY01	FY05	FY06RE	FY07BE
Freight revenue	82	230	308	365	403
Passenger revenue	31	105	141	151	168
Total revenue	125	349	474	547	600
Net revenue	11	11	53	70	75
Operating ratio (%)	91.2	98.3	91	83.7	84.3
Wagon turn around time (Days)	11.5	7.5	6.4	5.5	5

Source : Ministry of Railways

Riding on the success of recent performance enhancement initiatives, IR has ambitious plans for the future. These include further capital investments into several thrust areas including upgrading axle load capacity, introducing high horse-power locomotives, modernizing wagon and signaling technology, revamping the passenger train time table de-novo and introducing double-stack container trains, further investment in IT systems, creating dedicated freight corridors along the Golden Quadrilateral (linking the four metros) and other crucial, value-adding port connectivity projects.

Recognizing the need for substantial financial and managerial capital, the Railways have been actively seeking and encouraging increased private sector participation in this massive exercise.



The first steps in this direction have been the awarding of container operation licenses to 14 private players. Other areas earmarked for Public Private Partnership (PPP) thrust include projects like the dedicated freight corridor, commercial utilization of surplus railway land, and creating inland container depots and warehouses.

Several PPP projects completed by the Railways have made use of the SPV route (Pipavav Rail Corporation Limited, Hassan-Mangalore Rail Development Company Limited, Kutch Rail Company Limited.).

The budget outlay for financial year 2006-2007 was Rs. 23,500 Crore (~ USD 5.1 billion) and is expected to be higher in 2007-2008, with the IR planning substantial investments in fixed infrastructure and rolling stock to achieve efficiency and productivity gains in freight operations that could in turn generate significant multiple benefits for the economy as a whole.

The 2007-08 Railway Budget is likely to focus on improving passenger services extensively. Indian Railways is looking at significantly improving passenger amenities, including refurbishment of the design and look of stations. Work to convert 16 major railway stations into world-class ones is expected to be set into motion in the this fiscal, including separating passenger handling areas from commercial areas, like in airports. Greenfield passenger terminals on similar lines are also being contemplated and could offer more opportunities for development through the PPP route.

The Railways is also actively considering a proposal to re-design the air-conditioned three-tier coaches for general trains and increase its passenger carrying capacity. Changes in the design could increase the capacity of an AC 3-tier coach in general trains to 81 from the existing 64. This exercise would not only bring additional revenue to the Railways, but also help in cutting short the long waiting list for travel, which is particularly severe during holiday seasons.

The Railways is also working with the Ministry of Tourism and the State Tourism Departments to jointly market major tourist destinations in the country through appropriate travel packages. Sporting the Tourism Ministry's "Incredible India" logo, many trains on the Indian Railways network would soon narrate the cultural story of the regions they travel through.

With the setting up of an independent entity, Rail Vikas Nigam Ltd (RVNL) in 2003, the development process of survey, tendering and construction of new lines is streamlined as per the original target dates of completion, which is a significant milestone in the history of Indian Railways.

In summary, the Indian Railways is in a dynamic phase of growth with new initiatives planned to capitalize on the existing gains and moving steadier and closer to the larger objective of offering world-class services in both freight and passenger transportation.



Strategic Performance

Enhancement Initiatives

An analysis of the Indian Railways turnaround story would reveal several key strategic initiatives. Some of these are listed below after classifying them into three distinct categories:

Capacity Enhancement

As highlighted previously, the Indian Railways has a massive infrastructure in place and the costs incurred are predominantly fixed and independent of the operations. The challenge was therefore to achieve enhanced capacity while not incurring additional capital expenditure. This was achieved by the following innovative and effective measures:

- Productivity Improvement - by increasing wagon loading capacity and significantly reducing wagon turnaround time. This translated into excess freight carrying capacity the extent of which is indicated by the statistics presented below:

Increasing Capacity Through Efficiency Improvements					
	Earlier	Now	Change	Proposed	Change
Wagons per train	58	58		58	
Axle load	20	23	13%	25	11%
Total weight (per wagon)	80	90		100	
Tare weight	22	22		22	
Payload	58	68	17%	78	15%
Payload to tare	2.6	3.1		3.5	
Total train payload capacity	3,364	3,944	17%	4,524	15%
Average turnaround time (days)	6.4	5.5	-14%	5.0	-9%
No of locomotives	3,750	3,750		3,750	
Locomotives available per day	586	682	16%	750	10%
Capacity available per day (m MT)	2.0	2.7	36%	3.4	26%

Source : Ministry of Railways, Deutsche Bank

- Most wagon sidings (equivalent of passenger platforms) were 1/4th the length of the train, making it impossible to load/unload all wagons (58 per train) simultaneously, thereby requiring 4 times as much time to load/unload. The IR started extending all such sidings to 650m (length of the train with 58 wagons) to ensure that loading/unloading happens simultaneously.

- Moreover, in the past, loading/unloading was done only during day time (10 hours a day on an average) and trains used to lie idle at customer sites overnight. The Indian Railways provided incentives to customers to undertake loading/unloading 24 hours a day. Consequently, the average time taken for loading came down from 30hrs to 16hrs and for unloading from 34hrs to 18hrs, reducing the turnaround time by over a day.
- IR did away with the system of train examination, which consumes about 16 hrs on an average. Earlier, train examination was done every time a train came back to its base station, irrespective of the distance traveled in the interim. In recent times, examination is being conducted only after 4,500 kms. or 15days (whichever is later). This strategy was very successful and has been later extended to 7,500 kms.
- In order to encourage public-private partnership, in procurement of wagons, the IR introduced a wagon investment scheme. Customers investing in railway wagons were assured of a guaranteed number of rakes based on the number of rakes procured and turn around of the type of wagons, over and above the existing supply. In addition, IR also extended discounts on freight rate for a period of 10-15 years. After initial skepticism, many customers started investing in rakes thereby contributing to the supply of rolling stock for the Railways.

Capacity Utilization

- The cornerstone of the unit cost focused strategy was to ensure optimal capacity utilization. Dramatic improvements in this area were achieved by a market-friendly dynamic pricing policy. Tariff based on demand-supply situation and hefty discounts in lean periods and in reverse flow directions resulted in a large increase in volumes to offset the lower tariffs.
- The Supreme Court order-banning overloading- has been a shot in the arm for the Railways as the road transporters traditionally over loaded 1.5 2 times the rated capacity on trucks. The average road freight rate for transportation shot up subsequently increasing the difference between road and rail freight cost.



Some of the key measures adopted by the Railways to boost capacity utilization were:

- Dynamic Pricing Policy:** The freight rates in road sector move on a daily basis, depending on the supply-demand scenario and direction of traffic. However, till recently, IR had a fixed price policy, irrespective of demand scenario and competition. In order to be able to effectively face the challenges posed by stiff competition, a Dynamic Pricing Policy was introduced for freight as well as passenger, for peak and non-peak seasons, premium and non-premium services, and for busy and non-busy routes. As per this policy the rates for non-peak season, non-premium service and empty flow directions would be less than the general rates and the rates for peak season and premium services could be higher than normal.
- Tariff Rationalization:** To simplify and rationalize goods tariff, the classification of items was reduced from over 4000 to a mere 28 groups of commodities. As a result, goods tariff, which was running into more than 500 pages earlier (the tariff tables), was condensed to a few pages. In 2005-06, the total number of classes in the freight tariff schedule was reduced from 27 to 19. The highest class - 250 for charging freight was lowered to 220 in 2006-07. Over the next three years the highest class is proposed to be below 200.
- Non-peak Season Incremental Freight Discount Scheme:** The demand for freight transportation typically dips from 1st July to 31st October on account of monsoon. It was estimated that over 400 trains remain idle in this period due to lack of demand. Hence, during this period, freight rebate of 15% was offered for incremental freight revenues of over Rs. 5 Crore in a month and 10 % for incremental earning of less than Rs. 5 Crore.
- Empty flow Direction Freight Discount Scheme:** The truck rate is considerably higher than the rate for the return trip whereas the Railways charge the same rate in both directions. Therefore, it was noted that up to 40% of trains returned empty. As the marginal expenditure incurred in loading freight in the empty flow direction was low, heavy discounts of up to 30% were announced on the reverse flow direction to ensure high utilization of assets through the year.

- **Loyalty Discount Scheme:** To encourage the transportation of cement, iron and steel by rail, a Loyalty Discount Scheme was announced. Under this scheme, during the non-peak season, if over 90% of the production of any steel or cement factory was transported by rail, a discount of 1% in freight was offered. The discount offered was 0.5% if the share of rail transportation was above 50% but less than 90% of the total production. This discount was applicable for the transportation of finished products only and not for transportation of raw materials or clinker used in these industries.
- **Long-term Freight Discount Scheme:** Merchants want to make transportation arrangement for goods on a long-term basis. Hence, long-term freight discounts were offered to attract new customers and new freight traffic. Under this scheme, zonal railway administrations were able to offer a discount of up to 20% during non-peak season and up to 10% in the peak season for a period of three years. For loading in empty flow direction, the discount was up to 20% and 30% during peak season and non-peak season respectively.
- **Terminal Incentive Engine-on-load Scheme:** With a view to bring down the wagon turnaround time, the Terminal Incentive cum Engine-on-load Scheme was formulated. Customers who fulfilled the conditions laid down in the scheme and invested in their terminals to bring down the loading and unloading time, qualified for 5% rebate in the first year. Over the next ten years the rebate would be given at a diminishing rate and would be 1% from the fifth year onwards.
- **Multiple Unloading:** Previously, the Railways did not allow unloading multiple times along the way. But this policy was changed and cement companies were allowed to unload multiple times on the way (2-3 times instead of once) and also offered mini-rakes (half carrying capacity of normal wagon). This has made a big difference to the logistics cost and enhanced the Railways' value proposition.
- **Mini Rake and 2-point Rake Scheme:** Under this scheme, mini-rakes and 2-point rakes were made available without any additional charge in the non-peak season and at a freight rates higher than block rake trains by 5% in the peak season.
- **Freight Forwarder Scheme:** To increase Railways share in the piecemeal traffic segment, a new Freight Forwarder Scheme was announced. This scheme offered discounts for non-peak and round trip loading for smaller volumes.



Revenue Enhancement

The incentives to ramp up volume were complemented by a two-pronged revenue enhancement strategy, which capitalized on opportunities and reduced losses by exiting non-core operations.

The strategy in freight operations was to recognize low-cost high-volume operations where the Railways enjoyed significant comparative advantage vis-à-vis road and air transport and achieve higher realizations on these operations. For example, the tariff on ore has been increased by 70% (virtually no competition) at a time when rate on iron and steel has been reduced 30%. The strategy to focus on capacity utilization resulted in high volumes and compensated for the discounts and the lowered tariffs.

Some of the innovative measures adopted in the passenger segment included increasing the number of coaches in popular trains and encouraging occupancy in the profitable upper classes. The passenger tariff was rationalized such that the fares of AC First and AC Second Class were 11.5 times and 6.5 times the Second Class fare respectively. This, coupled with the innovative automatic upgradation scheme, enabled higher occupancy in the profitable upper classes.

Fully air-conditioned Garib Raths were introduced to make AC travel more affordable. The fares on these trains were about 25% lower than the present AC-3 tier fares. Efforts are also underway to start fully air-conditioned double-decker trains.

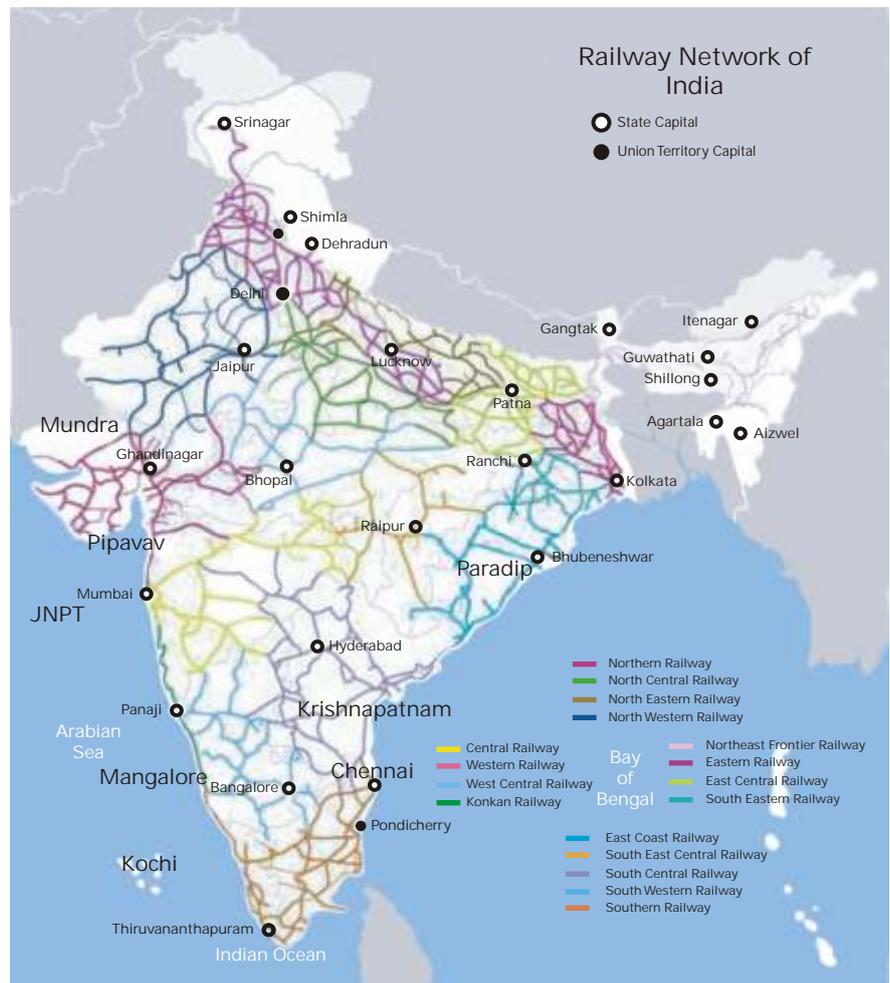
The Railways also exited from the loss-making parcel and catering services and offered it to private players on a bidding basis. There was also a significant thrust on non-fare income streams such as advertising and allied services including land-use rights at railway stations.



Key Initiatives Involving Private Sector Participation

Given the magnitude of financial and managerial resources required for its infrastructure upgradation and modernization programme, IR has now clearly recognized that private sector participation in key initiatives would be an integral component of all development proposals. Some important private sectors partnerships that have been witnessed in the past are in the following areas:

- Port connectivity projects including Hassan-Mangalore, Mundra and Pipavav. The Railways in partnership achieved railway connectivity between the port and existing rail infrastructure with a private port developer through the SPV route. This was a win-win proposition for both parties as the capital burden on the Railways was reduced while access to the rail network enabled better connectivity for the port. Key port links are highlighted in the picture below.



The Indian Railways constitute a critical component of India's transport network, both for passenger as well as freight services. Railways are cost effective and also environment friendly. Yet, capacity and efficiency constraints in the freight segment have, over the years, led to a significant shift from railways to road transport. A renewed focus of the Railway Ministry on efficiency, customer care, and commercial principles is aimed at reversing this trend. The recent turnaround in railway operations suggests that Indian Railways are poised for rapid growth.

The high-density Eastern and Western corridors are already saturated in terms of line capacity utilization. Accelerated growth of the economy is only adding to the congestion on these routes. A quantum jump in capacity is, therefore, necessary for meeting the rising freight demand on account of robust domestic growth as well as the rapid increase in international trade. Due to the major constraining factors on the existing high-density routes of Indian Railways, which limit throughput, the dedicated freight corridors need to be constructed on new alignments. Augmenting freight capacity on existing network would involve significantly heavier investments.

These corridors would be constructed, operated and maintained by a corporate entity on commercial principles, and would rely on efficient technological solutions. Scarce budgetary resources would be leveraged for raising debt from the markets, based on a sound business plan.

The proposed corporate entity would provide the rail infrastructure, but would not engage in freight business itself, thus providing non-discriminatory track access on payment of haulage charges by train operators. This approach would herald large-scale private investment and competition in freight operations. This underlying separation of rail from wheels would also mark a paradigm shift in the functioning of Indian Railways who have already introduced private participation and competition in the movement of container trains.

Source : Committee on Infrastructure (CoI) Govt. of India

- The Wagon Investment Scheme was yet another innovative means to enlist private sector participation. By providing incentives to private sector customers to invest in rakes, the Railways achieved additional rolling stock with minimum capital expenditure.
- Handling of the catering, luggage, and parcel services by private sector parties significantly reduced the losses incurred by the Railways in this area while increasing operating efficiency and quality of service.

Current Plans for PPP in Railways

The potential opportunities for Public-Private Partnerships (PPPs) in railway projects is set to take a quantum jump due to its identification as a thrust area by the Railways for future growth. The seriousness in this regard can be gauged from the formation of an Advisors group to frame the PPP roadmap in the 11th plan as well as a dedicated PPP cell to ensure a transparent policy framework. The major plans of the Railways where significant private participation is anticipated are as follows:

- The proposed dedicated freight corridor along the Delhi - Mumbai and Delhi Howrah Corridors (to be implemented through a SPV, see box for details) along the Golden Quadrilateral will ensure multi-modal logistic connectivity and will also significantly enhance railway freight capacity to handle the large volumes anticipated from the ports on the eastern and western coasts. This greenfield project entails a projected investment of INR 22,500 crores (~USD 5 billion) almost as much as the Plan outlay for financial year 2006-07 and is likely to involve substantial private sector participation for the construction and operation of the corridor.
- Other port connectivity projects from ports such as Gangavaram, Kakinada, and Ennore could also be implemented using the PPP model. Port-hinterland connectivity projects could also attract private sector interest in view of the pay-off to the port developer.
- Plans are also afoot to study the feasibility of high speed passenger corridors between major destinations to improve connectivity and slash travel time.
- IR has awarded licenses for container operations to 14 private sector companies ending the monopoly of Container Corporation of India (CCI) in this area. These operations are expected to commence soon. Most of the current parties are likely to use the operations for their internal use but dedicated third-party container operation providers might also emerge later to compete directly with CCI.



- In view of the significant potential freight traffic with the large-scale port development and the emerging retail supply chains, the Railways is setting up plants for manufacturing requisite coaches, electric and diesel locos and wheels. This is also expected to garner private sector interest if minimum orders and a reasonable rate of return are provided.
- The Railways is also planning to set up warehouses and Integrated Logistics Depots using existing railway land to cater to the supply chain requirements and multi-modal transfer of cargo. Private sector participation is expected in this area from customers who will make use of such facilities. The retail industry is planning massive investments in setting up the supply chain and logistics system which would be an important part of such plans.
- Land use is a key thrust area for the Railways with a stated objective of creating modern, world-class railway stations with the necessary passenger amenities. Private participation could play a significant part in the creation and more importantly in the maintenance of such facilities.
- With the explosive growth in inbound tourism, the Railways are seeking to enhance its profile and presence in this lucrative sector. Recognizing the superiority of the private sector in providing and maintaining passenger amenities and services, the Railways is encouraging private players in the field of marketing and Operation & Maintenance (O&M) of luxury tourist trains.



Other Initiatives

Coach Plant for Indian Railways

Indian Railways have decided to upgrade their coaching stock to international standards, shifting to stainless steel bodies, improved seating arrangements, completely air-conditioned trains, inter-carriage buffer gap completely covered by bellows to minimize wind resistance and ingress of dust into the train etc

The axle driven generators on each coach for the lighting and air conditioning, is to be met with end-on generating cars as in the Rajdhani Expresses. The coach support arrangements are being modified to air suspension with tire type springs with automatic weight control to maintain the riding quality with any degree of payload rating.

A state of the art audio-visual passenger communication system enabling automatic display of position of the train en route the next stopping station and the expected time of arrival etc. is being introduced in stages. Some of the above features are available on the Rajdhani Super fast trains running between New Delhi and various state capitals.

New Manufacturing Units

The Railway Ministry has proposed the creation of an SPV to bring in world-class technologies to set up locomotive, coach and wheel factories in India. To manufacture rolling stock in the country, the SPV would work in a joint venture with private companies.

Indian Railways has planned to establish a rail coach factory at Rae Bareli, a diesel locomotive factory at Maraura, a rail wheel factory at Chhapra, and an electric locomotive factory.

The proposed loco factories are expected to produce about 150 locomotives per year. The coach factory would manufacture about 1,100 coaches per year while the projected capacity of the wheel factory is about one lakh per year.

IR has proposed to hold a 26 percent stake in these joint ventures. The Ministry would engage a consultant to help it to make a strategy for the establishment of the factories. The consultant would also help the Ministry to select the best joint venture partners.

Double Stacking of Containers.

Special wagons BLCA/BLCB are being built by Titagarh Wagon Works and these can take double-stack containers. The wagons come in two types. 'A' type (BLCA, also BLC-A) has a normal CBC coupler at one end and a slackless drawbar at the other. The 'B' type wagon (BLCB, also BLC-B) has the slackless drawbar couplers at either end. Usually three, or sometimes five BLCB wagons are coupled together, with a BLCA wagon at either end, forming a semi-permanently coupled formation of five or seven wagons.

These wagons have 724 mm diameter wheels, smaller than the standard diameter of 1,000 mm on other standard IR wagons. When loaded with two high containers, the top height of the loaded wagon comes very close to the contact wire of electrified sections. Therefore, double - stacking is possible only on the present non-electrified sections.

For the proposed dedicated freight corridor, the electrified portions would have longer contact wire, which would permit operation of double - stacked container trains. The electric locos operating on this corridor would be designed with a different type of pantograph, which would be capable of reaching a greater height.



International Benchmarking

Brazil

Brazil has three gauges of rail track totaling about 32,000 kilometers of which about 2,000 kilometers are electrified. The different gauges used are 1,600 mm (5,000 kilometers), 1,440 mm (200 kilometers) and 1,000 mm (26,000 kilometers). The entire railway system covers mostly the eastern part of the country serving the ports on the South Atlantic coast.

The central and western part of the country do not have any railway system. The road lobby is understood to be very influential in Brazil. 82 percent of the freight traffic is carried by road leaving the rest mainly to rail-based transportation and to water-borne movement along the Amazon. Separate private companies own most of the main line routes and only metro rail in major cities are owned by the respective municipalities.

The urban areas are giving way to more and more road space shrinking the available area for housing people. Thus the cities and towns are getting overcrowded with road bottlenecks, similar to trends witnessed elsewhere in 'urbanizing' cities. This has hampered the movement of freight traffic to strategic ports; augmentation of the rail network is a priority for the state governments.

China

China has a total of about 72,000 kilometers of railway lines of which standard gauge (1,435 mm) is 68,000 kilometers while the rest are of 1,000 mm gauge. The population density in the eastern part of the country is denser than the rest of the country. The rail network is correspondingly denser in the eastern part. Being about three times larger in area than India, the population of China is more distributed and thus the route kilometers of railways per million of the population is only about 55 kilometers as against about 65 kilometers in India. The Chinese government operates about 60,000 kilometers; the rest is operated by private players.

Rail freight traffic in China was of the order of 2,100 million tons as compared to 602 million tons by Indian Railways in the financial year 2005-06.

China is focusing on the implementation of the 1,300 kilometers connection between Shanghai and Beijing. A separate dedicated high-speed rail corridor is also being constructed for commuting between the cities. The present operating speed on the rail network is about 160 kilometers per hour but China intends to augment this to about 300 kilometers per hour by 2010.

Australia

Australia is twice as large as India in area and has a total of about 45,000 kilometers of railways. Most of the northern part of Australia being arid and a desert, the population is concentrated in the eastern and southern coast. The iron ore and coal reserves are in the south and southwest regions. In order to optimize the total logistics, a substantial quantity of the material moves by rail to both the east and west coast almost along the entire southern belt of the country.

For operational economies, Australian Railway companies operate very long freight trains carrying a payload of more than 25,000 tons powered by three or four locos distributed along the length of the train. The locos are controlled wirelessly. High-speed trains are mainly confined to connecting the metro cities on the southeastern part of the country such as Melbourne, Sydney, Canberra and Brisbane.

General Overview of Indian Railways Compared with Other Railways of the World.

Taking into account the holistic picture of population distribution, raw material availability, location of industries and all other factors influencing material transport prospects, India appears to be unique in most respects.

The population density in the southern part of the peninsula is high and coal, iron ore and other mineral resources are concentrated in the Bengal, Bihar and Jharkhand areas. Major industries and power plants are distributed almost throughout the country. This unique feature presents enormous opportunities for the transport of people and material across the country, in all directions.

India also has an ancient history - the heritage locations and international tour promoters adding to the demand for most sophisticated passenger comfort showcase pilgrimage and other historic centres to the world. The popular Palace on Wheels is an example of the potential. Pilgrim specials are run across the country almost throughout the year at various seasons to different destinations. Many new 'tourist' trains on the lines of the Palace on Wheels are also being planned.



The Way Forward

The success of Indian Railways' recent initiatives has bred new confidence and enthusiasm to implement larger schemes and proposals on a war footing. The current situation is one of stock-taking and planning for the future. Some of the key areas that require attention have been identified as a wish list for the Railways. They include:

- Planning and implementation of freight and high-speed corridors in South India to complement the planned northern rail freight corridors. This would then be a perfect foil to the highway Golden Quadrilateral for inter-modal integration
- Providing investment (fiscal/ commercial) incentives to attract Foreign Direct Investment (FDI) in rail infrastructure. This would also result in access to advanced technology in this area from foreign participants
- Private sector investment to create captive and common rail links to main rail corridors to reduce the financial and operational burden on the Railways
- Development of infrastructure for inter-modal connectivity which includes creation of warehouses, ICDs, logistics parks, and Special Economic Zones (SEZs) among others
- Developing PPP frameworks for manufacture of state-of-the-art rolling stock, locomotives, passenger coaches, track equipment, and signaling infrastructure with technology transfer arrangements to enable future indigenous development
- Progressive separation of railway infrastructure and Operation & Maintenance (O&M) that would spur private sector initiatives and participation
- Progressive rationalization of freight tariffs to further simplify freight tariff slabs as well as reduce cross-subsidy for the passenger operations.
- Creation of an independent and transparent Rail Tariff Authority which is critical to ensuring increased private sector participation
- Opening up operation of passenger rail services to private operators on a revenue sharing framework which could dramatically improve customer service by providing for a competitive environment
- Co-operation and co-ordination with state PWD/NHAI which will become increasingly important during construction of corridors and over-bridges

About Confederation of Indian Industry

The Confederation of Indian Industry (CII) works to create and sustain an environment conducive to the growth of industry in India, partnering industry and government alike through advisory and consultative processes.

CII is a non-government, not-for-profit, industry led and industry managed organization, playing a proactive role in India's development process. Founded over 111 years ago, it is India's premier business association, with a direct membership of over 6000 organizations from the private as well as public sectors, including SMEs and MNCs and indirect membership of over 98,000 companies from around 342 national and regional sectoral associations.

A facilitator, CII catalyses change by working closely with government on policy issues, enhancing efficiency, competitiveness and expanding business opportunities for industry through a range of specialized services and global linkages. It also provides a platform for sectoral consensus building and networking. Major emphasis is laid on projecting a positive image of business, assisting industry identify and execute corporate citizenship programmes.

With 56 offices in India, 8 overseas in Australia, Austria, China, France, Japan, Singapore, UK, USA and institutional partnerships with 240 counterpart organizations in 101 countries, CII serves as a reference point for Indian industry and the international business community.

KPMG in India

KPMG is the global network of professional services firms of KPMG International. Our member firms provide audit, tax and advisory services through industry focused, and talented professionals who deliver value for the benefit of their clients and communities. With nearly 1,00,000 people worldwide, KPMG member firms provide services in 148 countries.

KPMG's member firms in India were established in September 1993. They respond to a client service environment by leveraging the resources of a globally aligned organization and providing detailed knowledge of local laws, regulations, markets and competition.

In India, KPMG's range of services includes audit, tax, and advisory services to over 2,000 international and national clients. Clients range across five sectors namely Financial Services; Consumer Markets; Industrial Markets; Information, Communication and Entertainment; and Infrastructure and Government. KPMG has offices in India in Mumbai, Delhi, Bangalore, Chennai, Hyderabad, Kolkata, and Pune. The firms in India have access to more than 1,700 Indian and expatriate professionals, many of whom are internationally trained. KPMG provides rapid, performance-based, industry focused and technology enabled services, which reflect a shared knowledge of global and local industries and experience of the Indian business environment.

KPMG also operates India Desks in a number of countries around the world. The objective of the India Desks is to help clients on India related issues such as conducting industry reviews; developing business strategies to invest in new projects; identifying opportunities for partnerships and acquisitions; rendering transaction advisory, and providing advisory on investment structures from a regulation and tax perspective.

KPMG's Infrastructure and Government (I&G) practice has undertaken a number of pioneering projects in sectors such as power, ports, roads, oil and gas, amongst others. These projects cover areas such as business planning, policy formulation, traffic assessment, capacity planning, competitor analysis, strategy development and business continuity services.

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