CHAPTER - 2

Management of Indian Railway

- Railway Management
- Objectives of Railway Management:
- Role of Indian railway
- Organisational Structure
- Ministry of Railway (Railway Board):
- Different Corporations of Railway
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- Maps of Indian railway
- Chart of Indian Railway
- Zones & Divisions
- Railway Employees
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RAILWAY MANAGEMENT

Indian Railways is a department of Government and the Ministry of Railways functions under the guidelines of Minister for Railways assisted by Minister of State for Railways. The policy formation and management of Indian Railway Board comprises of Chairman and six functional members. Wide powers are vested in the Board to effectively supervise the running of 16 zonal railways, metro rail and terms of transport output is 424 BTKMS, during the final year of the X plan (2006-07). During 2002-03, the revenue earning freight traffic moved by Railways was 518.7 million tonnes. The total passenger traffic in the year was 5048.2 million originating passengers. (Calcutta), production units, construction organisation and other rail establishments. These are generally headed by General Managers. Nine subsidiary organizations under the Ministry of Railways viz. IRCON, RITES, CONCOR, RCIL, RVNL, MRVC, IRFC, and KRCL undertake specialized jobs contributing to Indian Railways' growth and progress. RITES and IRCON have their business abroad also.

OBJECTIVES OF RAILWAY MANAGEMENT

The Corporate Management Objectives of Railway Undertaking are as under:

1. To provide all transport for both passenger and goods adequate to meet demand in areas where railway operation confers optimum benefit to the economy having due regard to the Government's policy of development of backward areas;

2. To provide such rail transport at the lowest cost consistent with requirements of the railway users and safety of operation
➢ adequate provision for replacement of assets and some provision for
development of business, and
➢ the least amount of pollution of environment

3. To work in association with or utilize other modes of transportation, such
   as pipe lines and road transport,

4. To engage in ancillary activities necessary to sub serve the above two
   objectives;

5. To develop organisation ally effective personnel with pride in their work
   and faith in the management

As is obvious railways form part of the basic infrastructure of the country. Broadly all infrastructure services can be divided into the following two categories

1) Open Access Services: These services are those from which people cannot
be easily excluded, irrespective of whether they have contributed
monetarily to the establishment and maintenance of the service or not. Some examples of this service include public lighting, intra city roads etc.

2) Limited Access Services: These services are those which can be provided
exclusively on an user pays basis and those who do not pay can be
excluded from enjoying the benefits of this service. These services thus can
be self-financing.

Railways ideally would fall in the latter category, as it would not be too
onerous a task to prevent somebody who has not paid fo easily excluded,
irrespective of whether they have contributed monetarily to the establishment
and maintenance of the service or not. Some examples of this service include
public lighting, intra city roads etc.

ROLE OF “INDIAN RAILWAYS”

Since their inception, Indian railways have successfully played the role of
prime mover to the economy and society of the Indian sub Continent. As the
principal constituent of the nation’s transport infrastructure, the railways
have an important role to play as indicated below:

(i) Integrate fragmented markets and thereby stimulate the emergence of
    a modern market economy

(ii) Connect Industrial production centres with markets and with sources
of raw material and thereby facilitate industrial development

(iii) Link agriculture production centres with distant markets and with sources of essential inputs thereby promoting rapid agricultural growth.

(iv) Provide rapid, reliable and cost effective bulk transportation to the energy sector, to move coal from the coal field to power plants and petroleum products from refineries to consumption centres and

(v) Most importantly link places to people enabling large scale rapid and low cost movement of people across the length and breath of the country.

In the process, Indian Railways have become a symbol of national integration and strategic instrument for enhancing our Defense preparedness.

ORGANIZATIONAL STRUCTURE

Background to the organization structure of the Indian Railways

The Indian Railways was built by a combination of private and public financiers and, till the early 1950s, remained the principal mode of transport. With the growth of national highways, the trucking industry grew in the private sector and the monopolistic position of the railways began to decline. The management was unable to respond to the competition and the railway mode is no longer the predominant player in the transport scene since it now carries about 40% of long distance freight and less than 20% of the passenger transport.

However, railways have some inherent advantages as a mode of mass transport in comparison to other modes. Some of these conditions such as better fuel efficiency, reduced pollution, reduced land use for the same volume of transport and reduced levels of accidents are well known. The inability of the railway organization to convert these fundamental advantages into a competitive edge can be traced to major organizational and managerial inadequacies.

Historically, railways developed as monolithic organizations. Since they operated in a monopolistic situation, the government thought it is necessary to have an Act that would ensure that the services provided were subject to some measure of regulation. The Indian railway was governed by the Indian Railway’s Act of 1890. A century later, in 1989, the Act was modified.
However, the railways now found themselves in competition with the road transport. Road transport, being in the private sector, had flexibility, entrepreneurship and innovative features by which they provided cost effective services. It is not surprising that the railways, with its rigid organizational structure and inflexible rules and regulations, did not exhibit the entrepreneurship necessary to deal with the competition even though it was widely accepted that the railways had to operate in a commercial environment. The first recognition of this was evident in 1924 when the Acworth Committee’s recommendations were implemented. The following observations of the Committee are particularly relevant:

And, ‘We assume that in future the Railway Commission will be responsible for its own administration, will itself fix scales of pay and conditions of services for its own staff, and be free to engage and dismiss them as it thinks proper; will prepare its own program of work and expenditure, and within the limits of its budget, as approved by the Government of India and the Secretary of State and accepted by the Legislative Assembly, will carry it into effect; that, in a word though remaining an integral part of the Government machine and subject to control on broad questions of policy and major questions of finance on which policy must depend, it will be an independent Administration’.

However, even this autonomy granted to it to fulfill its commercial responsibilities, has gradually been taken away from the Indian railways who are less capable today than they were in the past, to deal with the increasing challenges from the road sector. A monolith which operated under regulatory conditions framed when railways had a monopoly in transportation, found itself in a competitive environment but still shackled by century old legislation marginally modified a few years ago.

This dilemma in which the organization found itself has led to considerable introspection over the years. Several committees and commissions have discussed changes needed for the system. These include the Wanchoo Enquiry Committee on Railway Accidents 1968, Administrative Reforms Commission 1970, and Expert Group on Restructuring of Capital on Railways 1978, Rail Tariff Committee 1980 and Railway Reforms Committee 1984. However, none of these committees were specifically assigned to look into organizational and managerial issues.

Today, the headquarter of the Indian Railways is in Delhi.
Indian Railways is a publicly owned company controlled by the Government of India, via the Ministry of Railways. The ministry is currently headed by Laloo Prasad Yadav, the Union Minister for Railways and assisted by two junior Ministers of State for Railways, R. Velu and Naranbhai J. Rathwa. Reporting to them is the Railway Board, which has six members and a chairman.

Each of the sixteen zones is headed by a General Manager (GM) who reports directly to the Railway Board.
MINISTRY OF RAILWAY (RAILWAY BOARD)

President has framed rules for the convenient transaction to the business of the Government of India. The subjects allocated to the Ministry of Railways (Railway Board) are in charge of the Minister of Railway who is a Minister of cabinet rank. He is associated in his work by one or more Ministers who of the status of Minister of State or Deputy Minister. These Ministers perform such functions as may be assigned to them in relation to the business allocated to the Ministry.

The Railway Board is the Chief Administrative and Executive Body assisting the Minister of s in the discharge of his functions. It was constituted by a resolution of Government of India dated 18th February, 1905. The Railway Board is as at present constituted consists of:

1. Chairman, Railway Board;
2. Financial Commissioner, Railways; and
3. Five Members each in charge of Traffic, Staff, Mechanical Engineering, Civil Engineering and Electrical Engineering.

The Chairman Railway Board, is ex officio Principal Secretary to the government of India in the Ministry of Railways. He is solely responsible under the Minister of Railways for arriving at decisions on technical questions and advising the Government of India on the matters of Railway policy. The Chairman also functions as Member in respect of one or the other subjects as decided and is also responsible for co-ordination.

Financial Commissioner for Railways represents the Ministry of Finance on the Board and also functions as ex-officio Secretary to Government of India in the Ministry of Railways in financial matters. He has direct contact with the Finance Minister whom he keeps informed of developments in the Ministry of Railways. In case of any disagreement with Chairman or Railway Minister on any financial aspect, he has the right to refer to the Finance Minister Each of the Members is responsible for dealing with all aspects of the technical subject of which he is in charge. In order to be able to effectively discharge the duties and responsibilities from the increased tempo of development works, there are Additional Members in the Railway Board.

Railway Board are assisted by several Directorates each under an Adviser (post of Executive Directors upgraded as Adviser from 1988) such as Adviser Works, Mechanical, Traffic, Commercial and Civil Engineering. Such Advisers are assisted by Directors in S.A. Grade, Joint Directors, Deputy Directors and Assistant Directors.
The Advisers are responsible for issuing instructions direct to Railway Administrations including Production Units and other units controlled by Railway Board, and receive and deal with reference from general public and the other Ministries of the Government of India with their respective jurisdiction.

The zones are further divided into divisions under the control of Divisional Railway Managers (DRM). The divisional officers of engineering, mechanical, electrical, signal & telecommunication, accounts, personnel, operating, commercial and safety branches report to the respective Divisional Manager and are in charge of operation and maintenance of assets. Further down the hierarchy tree are the Station Masters who control individual stations and the train movement through the track territory under their stations' administration. In addition to the zones, the six production units (PUs) are each headed by a General Manager (GM), who also reports directly to the Railway Board.

In addition to this the Central Organization for Railway Electrification (CORE) is also headed by a GM. This is located at Allahabad. This organization undertakes electrification projects of Indian Railways and monitors the progress of various electrification projects all over the country. Apart from these zones and production units, a number of Public Sector Undertakings (PSU) are under the administrative control of the ministry of railways. These PSU's are:

1. Indian Railways Construction Company Limited (IRCON)
2. Rail India Technical and Economic Services Limited (RITES)
3. Indian Railways Finance Corporation (IRFC)
4. Container Corporation of India Limited (CONCOR)
5. Konkan Railway Corporation Limited (KRCL)
6. Indian Railways catering and tourism corporation Limited (IRCTC)
7. Railtel Corporation of India Limited (Rail Tel)
8. Pipavav Railway Corporation Limited (PRCL)
9. Centre for Railway Information System (CRIS)
10. Indian Railway Welfare Organization (IRWO)
DIFFERENT CORPORATIONS OF RAILWAYS IN DETAIL

(i) Rail India Technical and Economic Services Ltd. (RITES)

RITES, which is a Government of India Undertaking, provides consultancy services on all aspects of railways from concept to completion. RITES is closely linked with Indian Railways and is in privileged position to draw freely upon the huge pool of experience, expertise and technical know-how acquired over a century of operations on Indian Railways.

RITES is a multi-disciplinary, ISO 9001-2000 certified, consultancy organization in the field of transportation infrastructure and related technologies. It is a 'Mini Ratna' Company and provides consultancy services from concept to commissioning on the fields of railways, urban transport, urban development and urban engineering roads and highways, airports, ropeways, inland waterways, ports and harbour, information technology and export packages of rolling stock and railway related equipments. Its diversified device packages among others include feasibility design and detailed engineering, multi-modal transport studies, project management and Construction supervision, quality assurance and management materials management, workshop management, operation and maintenance, system, engineering economic and financial evolution, financing plan and privatization property development, railway electrification, signaling and telecommunication, environment impact assessment, training and human resources development etc.

RITES in year 2003-04 had total turn over of 285 crores and earned profit before tax of Rs. 82 crores

(ii) Indian Railways Construction Company Limited (IRCON)

IRCON international Limited, which is a public sector undertaking under the ministry of Railways was incorporated in 1976 as Indian railway Construction company as a specialized agency to undertake major railway’s projects both in India and abroad. this organization has been set up with a view to channelize the export of construction services, technological know-how and special skills gained by the Indian railways in last over 150 years. IRCON is in ideal position to undertake the entire spectrum of construction activities concerning various aspects of railways discipline such as civil, mechanical, electrical, signaling, telecommunication etc.

From being an exclusively Railway Construction company, IRCON diversified its activities in 1985 to other sectors like roads, highway, express
way, road bridges, flyover, cable stayed bridges, mass rapid transit system, buildings, industrial and residential complexes, airports, hangers etc. In 1993, IRCON included BOT, BOOT, BLT projects, business relating to leasing, real estate etc. And in 1997, business relating to commercial operations of air transport was included and extended. Finally in 1999, telecommunication for providing a full range of telecom and IT services in India and abroad were added.

Presently, IRCON is listed 128th amongst the top 225 international construction contractors, and is also amongst the top ten in mass transit and rail in McGraw Hill publication Engineering News Record rankings.

IRCON, which is an ISO 9002, certified ‘Construction Company” has completed projects in Algeria, Angola, Bangladesh, Indonesia, Iraq, Jordan, Italy. Lebanon, Malaysia, Nepal, Nigeria, Saudi Arabia, Syria, Tanzania, Turkey, United Kingdom and Zambia.

IRCON had during the year 1003-04 total turnover of Rs. 792 crores, with net profit of Rs 62 crores & net foreign exchange earnings of Rs. 114 crores.

(iii) Indian Railways Finance Corporation (IRFC)

IRFC was incorporated, as public limited company, in December 1986, with the sole objective of raising money from the market based on the requirement of the Ministry of Railways to part finance the Plan Outlay and meeting the developmental needs of IR

IRFC has successfully met the borrowing targets year after year. Funds are raised through issue of taxable and tax-free bonds, terms loan from banks financial institutions and through external commercial borrowings / export credit.

Since inception, IRFC has consistently earned profits and has already paid Rs.698 crore (including interim dividend of Rs. 65 crore for the fiscal year 2003-04) as dividend to the Government on the paid up capital of Rs. 232 crore.

(iiv) Container Corporation of India Limited (CONCOR)

Container Corporation of India Ltd, (CONCOR) was incorporated in March 1988 under the Companies Act. 1956, as a public sector enterprise under the Ministry of railways. The company was set up to promote, provide for and manage multi-model transport in the country with the prime objective to support the country’s growing international trade as well as for the transport
of domestic cargo in container by adopting the latest technology and practices. The company commenced operations in November 1989.

The corporation was set up with an authorized capital of Rs. 100 crore, The paid up capital of the company is Rs. 65 crore. The Government of India has gradually divested its equity holding in the company through three divestment exercises in 1994-95, 1995-96 and 1998-99. Currently the government holds 63% equity in the company and the financial institutions and individuals 37%.

CONCOR has evolved a strategy, which will transform the company from an operational entity into a marketing-driver organization thus ensuring its leadership in the multi-modal market. The four specific areas identified under this strategy are Total logistics solutions, Cold Chain, Coastal Shipping, Extension of inter modal services to neighbouring countries.

As a terminal and warehouse operator, CONCOR has created a network of 51 container terminals across the country. Except the few terminals which are exclusively road-fed Inland Container Depots (ICDs), majority of the terminals in its network are linked by rail.

CONCOR's custom bonded Inland Container Depots are dry ports in the hinterland and serve the purpose of bringing all port facilities including customs clearance to the customer's doorstep. Its terminals provide a spectrum of facilities in terms of warehousing, container parking, repair facilities and even office complexes.

CONCOR had total income of Rs. 1807 crores in 2003-04, and had net profit after tax of about Rs. 368 crores.

**Konkon Railway Corporation Limited (KRCL)**

The Konkon Railway is the first railway project in the country to be executed on BOT principle (Build, Operate and Transfer). A company formed with participation of the four states viz. Maharashtra, Goa, Karnataka and Kerala, along with the Ministry of Railways with Rs. 800 crore as equity and Rs. 2,750 crore raised in bonds, funding the total cost of the project of Rs. 3,550 crore. The work on construction began in 1990 and the whole 760 kms. line was completed in 1998 and dedicated to the nation on 1st May 1998. Konkon Railway has reduced distance and travel time to the Southern India.

At present there are 13 pairs of express trains and 5 pairs of passenger trains running over Konkon Railway route.
Some of the technologies used by KRC arc briefly indicated below:

(i) The innovative roll on - roll off, has enabled carrying more than 50,000 trucks in 5 years.

(ii) Various special safety measures adopted by K R on its route arc installation of inclinometers in soil cuttings for pre warning of collapsing of cutting, which is coupled with Raksha Dhaga and anti Collision Device (ACD) for warning and approaching train.

(iii) Konkan Railway is making extensive usage of the developments in IT to modernize its working style and bring more efficiency in its day operations.

KRC gross revenue from traffic for year 2003-04 was Rs. 235 crores

(vi) Indian Railways catering and tourism corporation Limited (IRCTC)

This is a new corporation under the Ministry of Railways. Some of the important projects undertaken by the corporation are:

(i) Catering services: IRCTC awarded 17 contracts for on-board catering services on IR trains taking the total number of trains covered to 71. These include 5 Rajdhani, 2 Shatabdi, 17 Jan shatabdi and 47 Mail/Express trains.

(ii) Internet Ticketing System: The facility of booking of railway tickets through internet has been extended to 120 cities across the country. The payment is accepted through credit cards, debit cards or direct debit of account of the customer.

(iii) Packaged Drinking Water Project (Railneer): The first Railneer plant of the corporation was inaugurated in May 2003 and a second one at loco colony, Khagul, Danapur (Bihar) in February 2004.

The drinking water, which has good quality, is supplied to all passengers & other rail users.

(vii) Railtel Corporation of India Limited (Rail Tel)

Railtel Corporation of India Ltd., (RailTel) is one of the PSUs under the administrative control of the Ministry of Railways. Rail Tel was incorporated in September, 2000 with an authorized capital of Rs. 1,000 crore.

The main objects of the Company, interalia, include building a nationwide telecom multimedia network for laying of Optical Fibre Cable (OFC) with a
view to modernize Indian Railway's communication systems for safe and efficient train operation and to generate revenue through commercial exploitation of the system.

Rail Vikas Nigam Limited (RVNL) is a special purpose vehicle to execute two vital components of National Rail Vikas Yojna, launched by the Government of India. Its main objects are to undertake project development, financial resource mobilization and execution of projects on a commercial format using largely non-budgetary funds. The projects are expected to remove the capacity bottlenecks on the golden quadrilateral and its diagonal to augment port connectivity.

Rail Vikas Nigam Limited is expected to take up only bankable projects which can attract market funding without Government guarantee.

(viii) Pipavan Railway Corporation Limited (PRCL)

Pipavan Railway Corporation Limited (PRCL), a joint venture company of ministry of railways and Gujrat Pipavan Port Limited (GPPL) with equal equity participation has been formed to execute the Surendra Nagar-Rajula-Pipavav Port gauge conversion/new line project. This is the first railway infrastructure executed through private sector participation. PRCL has concessionary rights to construct, operate and maintain this project line for 33 years. PRCL is entitled to the rights, obligation and duties of a Railway Administration enumerated in the Railways Act, 1989.

The project line has been commissioned in the month of March, 2003 for freight operation. During the year 2003-04, PRCL has handled 266 trains including 112 container trains and transported 0.4 million tonnes of cargo.

(ix) Centre for Railway Information System (CRIS)

CRIS, which is an autonomous body under the patronage of Ministry of Railways, has been established as a non-profit making organisation and has been entrusted with the design, development and information of all major computer services on the railways. During the last few years CRIS has made substantial progress in Freight Operation Information System (FOIS), passenger reservation system (PRS), National train enquiry system (NTES), Micro-Processor based self printing Ticketing Machines & Track management system.

(x) Indian Railways Welfare Organisation (IRWO)

An autonomous body under the patronage of Ministry of Railways called
Indian Railways Welfare Organisation (IRWO) has been registered on 25.9.1989 under the 'Societies Registration Act' for meeting specific needs of housing for serving and retired railway employees with its headquarters, at New Delhi. IRWO has been constructing houses in different cities and towns all over the country on a self financing basis for serving and retired railway employees purely as a welfare activity on 'No profit no loss basis'.

In last few years, IRWO has already acquired land at about 20 places and has announced group housing schemes at Noida, Gurgaon, Gorakhpur, Calcutta, Madras, Indirapuram (Ghaziabad), Hyderabad, Chandigarh and few other places. They have already completed the housing projects, at Noida, Gurgaon, Gorakhpur, Calcutta, Hyderabad, Chandigarh & Mumbai in record time and handed over the flats to owners.

Centre for Railway Information Systems is an autonomous society under Railway Board, which is responsible for developing the major software required by Indian Railways for its operations.

INTEGRAL COACH FACTORY

Integral Coach Factory is a premier rail coach building production unit of the Indian Railways. Integral Coach Factory was started in the year 1955 by Shri Jawarhalal Nehru and has celebrated its Golden Jubilee in 2005.

There are around 13000 employees in ICF. It is organised into 8 functional departments, spanning across two divisions - The Shell and the Furnishing divisions. The departments are: General Administration, Accounts, Electrical, Civil Engineering, Mechanical, Medical, Personnel, Security and Stores.

WORKING HOURS

<table>
<thead>
<tr>
<th>LOCATION</th>
<th>SHIFT</th>
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<th>REMARKS</th>
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<td>FACTORY</td>
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<td>7:30 - 11:30</td>
<td>12:30 - 18:30</td>
<td>Monday to Friday</td>
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<tr>
<td></td>
<td>NIGHT</td>
<td>17:00 - 21:00</td>
<td>21:45 - 03:30</td>
<td></td>
</tr>
<tr>
<td></td>
<td>DAY</td>
<td>7:00 - 12:00</td>
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<td>Saturday</td>
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<tr>
<td></td>
<td>NIGHT</td>
<td>12:30 - 18:45</td>
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<tr>
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<td>15:30 - 19:30</td>
<td>Monday to Friday</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>9:30 - 12:25</td>
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<td>Saturday</td>
</tr>
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## PRODUCTION UNITS

### Production units or manufacturing units

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<tr>
<th>S.N.</th>
<th>Manufacturing Unit</th>
<th>Head Quartered at</th>
<th>Functions</th>
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<tbody>
<tr>
<td>1.</td>
<td>Chittranjan Locomotive Works (CLW)</td>
<td>Chittaranjan</td>
<td>Manufacture of Electric Locomotives</td>
</tr>
<tr>
<td>2.</td>
<td>Diesel locomotive works (DLW)</td>
<td>Varanasi</td>
<td>Manufacture of Diesel locomotive</td>
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<tr>
<td>3.</td>
<td>Integral Coach Factory (ICF)</td>
<td>Madras</td>
<td>Manufacture of Coaches</td>
</tr>
<tr>
<td>4.</td>
<td>Diesel components Works (DCW/DMW)</td>
<td>Patiala</td>
<td>Manufacture of Diesel Component</td>
</tr>
<tr>
<td>5.</td>
<td>Rail Coach Factory (RCE)</td>
<td>Kapurthala</td>
<td>Manufacture of Coaches</td>
</tr>
<tr>
<td>6.</td>
<td>Wheel &amp; axle Plant (W &amp; AP)</td>
<td>Bangalore</td>
<td>Manufacture of Wheels &amp; Axles</td>
</tr>
</tbody>
</table>
Railway organization mainly consists of following 3 tiers:

1) Railway Board
2) Zonal Headquarters
3) Divisional Organizations

Railway Board mainly frames rules on establishment matters. Issues instructions on implementation of various reports (Pay commission, standing committee etc.).

Zonal Headquarters are responsible for circulation of various instructions issued by Railway Board. Project Man Power need and ensure to arrange them. On need based basis general instructions are also issued for uniform implementation of board’s directives. Acting as a governing body for implementation of board’s instructions. Maintaining cordial relations with organized labour in day-to-day smooth functioning of the organization. To conduct all Group ‘B’ selections, Pension Adalat etc. Draw action plan to achieve various goals and objectives set for the zonal railways. Inter action with Railway Board.

Divisional organizations are basically responsible for implementing various instructions issued by Railway board through Headquarters. Maintaining cordial relations with organized labour in day-to-day smooth functioning of the organization.

The powers and duties of officers are framed by Railway Board. Officers & employees exercise powers as laid down in Chapter - VI of SOPGEN and as red legated in SOPEST (schedule of powers on establishment matters) of Central Railway.

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**CHART OF INDIAN RAILWAY**
ZONES & DIVISIONS

For administrative purposes, Indian Railways is divided into sixteen zones.

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Abbr.</th>
<th>Headquarters</th>
<th>Date established</th>
</tr>
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<tbody>
<tr>
<td>1.</td>
<td>Northern Railway</td>
<td>NR</td>
<td>Delhi</td>
<td>April 14, 1952</td>
</tr>
<tr>
<td>2.</td>
<td>North Eastern Railway</td>
<td>NER</td>
<td>Gorakhpur</td>
<td>1952</td>
</tr>
<tr>
<td>3.</td>
<td>Northeast Frontier Railway</td>
<td>NFR</td>
<td>Maligaon(Guwahati)</td>
<td>1958</td>
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<td>4.</td>
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<td>Kolkata</td>
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<td>5.</td>
<td>South Eastern Railway</td>
<td>SER</td>
<td>Kolkata</td>
<td>1955,</td>
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<td>6.</td>
<td>South Central Railway</td>
<td>SCR</td>
<td>Secunderabad</td>
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<td>7.</td>
<td>Southern Railway</td>
<td>SR</td>
<td>Chennai</td>
<td>April 14, 1951</td>
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<td>8.</td>
<td>Central Railway</td>
<td>CR</td>
<td>Mumbai</td>
<td>November 5, 1951</td>
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<td>9.</td>
<td>Western Railway</td>
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<td>Mumbai</td>
<td>November 5, 1951</td>
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<td>10.</td>
<td>South Western Railway</td>
<td>SWR</td>
<td>Hubli</td>
<td>April 1, 2003</td>
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<td>Jaipur</td>
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<td>West Central Railway</td>
<td>WCR</td>
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<td>April 1, 2003</td>
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<td>April 1, 2003</td>
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<td>14.</td>
<td>South East Central Railway</td>
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<td>Bilaspur, CG</td>
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<td>East Coast Railway</td>
<td>ECOR</td>
<td>Bhubaneswar</td>
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<td>16.</td>
<td>East Central Railway</td>
<td>ECR</td>
<td>Hajipur</td>
<td>Oct 1, 2002</td>
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</table>

Konkan Railway (KR) is constituted as a separately incorporated railway, with its headquarters at Belapur CBD (Navi Mumbai). It comes under the control of the Railway Ministry and the Railway Board.

The Calcutta Metro is owned and operated by Indian Railways, but is not a part of any of the zones. It is administratively considered to have the status of a zonal railway. Each zonal railway is made up of a certain number of divisions, each having a divisional headquarters. There are a total of sixty-seven divisions.
<table>
<thead>
<tr>
<th>Zonal Railway</th>
<th>Divisions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northern Railway</td>
<td>Delhi, Ambala, Firozpur, Lucknow, Moradabad</td>
</tr>
<tr>
<td>North Eastern Railway</td>
<td>Izzatnagar, Lucknow, Varanasi</td>
</tr>
<tr>
<td>Northeast Frontier Railway</td>
<td>Alipurduar, Katihar, Lumding, Rangia, Tinsukia</td>
</tr>
<tr>
<td>Eastern Railway</td>
<td>Howrah, Sealdah, Asansol, Malda</td>
</tr>
<tr>
<td>South Eastern Railway</td>
<td>Adra, Chakradharpur, Kharagpur, Ranchi</td>
</tr>
<tr>
<td>South Central Railway</td>
<td>Secunderabad, Hyderabad, Guntakal, Guntur,</td>
</tr>
<tr>
<td></td>
<td>Nanded, Vijayawada</td>
</tr>
<tr>
<td>Southern Railway</td>
<td>Chennai, Madurai, Palghat, Tiruchchirapalli,</td>
</tr>
<tr>
<td></td>
<td>Trivandrum, Salem</td>
</tr>
<tr>
<td>Central Railway</td>
<td>Mumbai, Bhusawal, Pune, Solapur, Nagpur</td>
</tr>
<tr>
<td>Western Railway</td>
<td>Mumbai Central, Baroda, Ratlam, Ahmedabad,</td>
</tr>
<tr>
<td></td>
<td>Rajkot, Bhavnagar</td>
</tr>
<tr>
<td>South Western Railway</td>
<td>Hubli, Bangalore, Mysore</td>
</tr>
<tr>
<td>North Western Railway</td>
<td>Jaipur, Ajmer, Bikaner, Jodhpur</td>
</tr>
<tr>
<td>West Central Railway</td>
<td>Jabalpur, Bhopal, Kota</td>
</tr>
<tr>
<td>North Central Railway</td>
<td>Allahabad, Agra, Jhansi</td>
</tr>
<tr>
<td>South East Central Railway</td>
<td>Bilaspur, Raipur, Nagpur</td>
</tr>
<tr>
<td>East Coast Railway</td>
<td>Khurda Road, Sambalpur, Visakhapatnam</td>
</tr>
<tr>
<td>East Central Railway</td>
<td>Danapur, Dhanbad, Mughalsarai, Samastipur,</td>
</tr>
<tr>
<td></td>
<td>Sonpur</td>
</tr>
</tbody>
</table>
RAILWAY EMPLOYEES

The staff strength of railways has, compared to 1990, come down by about 3 lakhs, while the throughput in this period has gone up considerably. As a result the staff productivity in this period has approximately doubled. To maintain improved productivity Railway’s man power needs have been rationalized in such a way that there is no shortage of manpower in safety and operation and no staff are idling on unnecessary posts. At the same time, the railway employees are equipped with multiple skills and not just single skill. Given the growth rate of our throughput, we have to succeed in doubling the per employee productivity again in the next Indian Railways had a regular staff of 9.14 lakh in 1950-51 which increased to 16.54 lakh in 1991-92. Thereafter, the number declined to 15.86 lakh in the year 1999-2000. In 1995-96, the number of daily wage workers was nearly 57,000. In 1950-51, the average yearly wage per employee was Rs.1, 263 which increased to Rs.59,219 in 1999-2000.

Since 1990s, Railways have been following the policy of rightsizing manpower. During this exercise, railways have succeeded in bringing down their staff strength from 18.07 lakhs in 1990 to 15.10 lakhs in 2002, a reduction of almost 3 lakhs in 12 years.

Indian Railways have a work force of 14.41 lacs employees with a wage bill of Rs. 20928 crores during the year 2003-2004 as per break up given below:

<table>
<thead>
<tr>
<th>Year</th>
<th>GROUPS A &amp; B</th>
<th>GROUP C</th>
<th>GROUP D</th>
<th>TOTAL</th>
<th>Expenditure@ on staff( Rs. In Crores)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1950-51</td>
<td>2.3</td>
<td>223.5</td>
<td>687.8</td>
<td>913.6</td>
<td>113.8</td>
</tr>
<tr>
<td>1970-71</td>
<td>8.1</td>
<td>583.2</td>
<td>782.9</td>
<td>1374.2</td>
<td>459.9</td>
</tr>
<tr>
<td>1990-91</td>
<td>14.3</td>
<td>891.4</td>
<td>746.1</td>
<td>1651.8</td>
<td>5166.3</td>
</tr>
<tr>
<td>2000-2001</td>
<td>14.8</td>
<td>900.3</td>
<td>630.2</td>
<td>1545.3</td>
<td>18,841.4</td>
</tr>
<tr>
<td>2003-04</td>
<td>14.3</td>
<td>860.1</td>
<td>567.1</td>
<td>1441.5</td>
<td>20,928.7</td>
</tr>
<tr>
<td>S.C staff on 31.3.04</td>
<td>1211(A) +991(B)</td>
<td>135,445</td>
<td>77,651 +27079(sweeper”D”)</td>
<td>242,377</td>
<td></td>
</tr>
<tr>
<td>S.T. staff on 31.3.04</td>
<td>534(A) +369(B)</td>
<td>55,462</td>
<td>35,545 +1954(Sweeper” D”)</td>
<td>93,864</td>
<td></td>
</tr>
</tbody>
</table>
SPECIALIZED CADRES

Specialized cadres drawn from various disciplines covering humanities, sciences, engineering, medical etc., have been created by recruitment through Union Public Service Commission (UPSC) examinations for running the system, which requires.

an efficient asset management of a huge fleet of coaches, wagons and locomotives, and infrastructure facilities like track, signaling, overhead electrical equipment, stations, etc. This implies intensive application of business principles in areas like capital investment, optimum management of resources, inventory control, maintenance practices, communications, etc. There is need for customer satisfaction for which extensive developments have been made and are being put into use.

There are 9 organized services in IR as detailed below:

IRAS - Indian Railway Accounts Service
IRMS - Indian Railway Medical Service
IRPS - Indian Railway Personnel Service
IRSE - Indian Railway Service of Engineers
IRSEE - Indian Railway Service of Electrical Engineers
IRSME - Indian Railway Service of Mechanical Engineers
IRSS Indian Railway Stores Service
IRSSE - Indian Railway Service of Signal Engineers
IRTS - Indian Railway Traffic Service

(In addition, there is also a department of Railway Protection Force, officers of which is also recruited through UPSC, but are not part of FROA).

Recruitment to 3 of the above services, viz. IRAS, IRTS and IRPS is made through combined Civil Services examination along with IAS and other allied services. (Recruitment to RPF is also done through the same examination.) Recruitment to 5Engineering services, viz. IRSE, IRSSE, IRSEE, IRSS is made through the Engineering Services examination conducted by UPSC. For IRSME recruitment is done through Engineering Services /SCRA examinations conducted by the UPSC.

Classification of all Civil posts under the Central Government Services. The President hereby directs that with effect from the 20.4.1998, all Civil posts
under the Union shall be classified as follows:-

**GRADES OF EMPLOYEES**

<table>
<thead>
<tr>
<th>SI</th>
<th>Description of posts</th>
<th>Classification of posts</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>A Central Civil post carrying a pay or a scale of pay with a maximum or not less than Rs. 13,500</td>
<td>Group A</td>
</tr>
<tr>
<td>2.</td>
<td>A Central Civil post carrying a pay or a scale of pay with a maximum or not less than Rs. 9,000 but less than Rs. 13,500</td>
<td>Group B</td>
</tr>
<tr>
<td>3.</td>
<td>A Central Civil post carrying a pay or a scale of pay with a maximum of over Rs. 4,000 but less than Rs. 9,000</td>
<td>Group C</td>
</tr>
<tr>
<td>4.</td>
<td>A Central Civil post carrying a pay or a scale of pay the maximum of which is Rs. 4,000 or less</td>
<td>Group D</td>
</tr>
</tbody>
</table>

**Progress made till date**

By 1900, India's railways network had become the fifth largest in the world. Locomotives—steam, diesel, and electric engines—and rolling stock including coaches, all of which were formerly imported, were now produced locally. Some of the engines were real behemoths— locomotives weighing up to 230 tons, electric engines of 6,000 horsepower, and a 123-ton diesel engine with 3,100 horsepower. In 1862 the world's first double-decker train was introduced. India boasts the longest railway platform in the world, 2,733 feet [833 m], at Kharagpur in West Bengal, and the longest covered platforms, at 1,000 feet each, at Sealdah in Calcutta.

The first trains ran on broad-gauged tracks. Later, to save money, meter gauge was introduced along with narrow gauge for the hills. In 1992, Project Unigauge got under way, and to date almost 5,000 miles [about 7,800 km] of track has been converted from narrow and meter gauge to broad gauge.

Mumbai's suburban trains carry millions of commuters and seem to be permanently packed beyond capacity. Calcutta's underground metro can daily carry 1.7 million passengers. Chennai (formerly Madras) has India's first elevated rail system. Computerized booking and multimedia information kiosks are recent additions. This is a very busy and progressive giant.
GROWTH OF ASSETS

Route Kilometers

The Indian Railways has three gauges: broad gauge (1.676 meter), meters gauge (1 metre) and narrow gauge (0.762 and 0.610 metre). In 1950-51, the combined route kilometres of these gauges were 53,597. In 1995-96 the route length rose to 62,915 km showing a total increase of 9,336 m which represents an increase of 17.42 per cent and an average annual increase of 0.38 percent which was the highest in the Sixth Plan (2.9 per cent), followed by the First Plan (1.3 per cent).

Electrified route kilometers

Electrification in the Indian Railwayss started in 1925, but remained confined mostly to suburban traffic. Till 1955-56, the electrified route kilometers was just 388 which increased to 748 by 1960-61, registering an increase of 92.7 percent at an average growth of 18.5 per cent per year. The average annual growth ate till 1995-96 was 388. The electrified route length was 0.72 per cent of the total route length in 1950-51 which went up to 19.5 per cent in 1995-96.

Gauge-wise breakup of total route kilometers

Out of the three gauges, the broad gauge predominates with 25,292 km. It constituted 47.13 percent of the total route kms in 1951. Over the years, it has been increasing and in 1996 it was 40,620 km, (25,556 km single line and 15,064 km double/multiple line) forming 64.5 per cent of the total route km of 62,915. With a route length of 24,185 km, the metre gauge accounted from 45.12 per cent of the total route km in 1950-51. It increased to 25,865 km in 1970-71. Thereafter, mainly due to conversion of metre gauge routes to broad gauge routes, it declined to 18,501 km (18,408 km single line and 93 km double/multiple line) in 1995-96 and constituted 29.4 per cent of the total route kms.

Gauge conversion

The conversion of metre and narrow gauges into broad gauge has been an ongoing programme. However, in 1970-71, it was decided not to construct any more metre and narrow gauge railway lines. It was also decided to convert the railway lines of these gauges into broad gauge so as to have a uniform broad gauge in the country.
Railway stations

In 1950-55, the number of railway stations in the country was 5,976 which gradually rose to 7,068 in 1995-96.

**LOCOMOTIVES**

* Steam locomotives

In 1950-51 there were 8,120 steam locomotives which gradually increased to 10,810 in 1963-64. Since it was decided to phase out the steam locos, their number started declining from 1964 onwards. In 1995-96, the Indian Railways had only 209 steam locos in operation.

* Diesel locomotives

The number of diesel locos in 1950-51/1951-52 was 17 which went up to 28, and finally 45 at the end of the First Plan. Since then the number has been continuously rising and increased to 1,069 during the first year of the Fourth Plan. With rapid phasing out of steam locos, the number of diesel locos rose to 4,313 in 1995-96.

* Electric locomotives

In 1950-51, the number of electric locos was 72 and these were mostly employed on suburban traffic routes. This number reached the four-figure mark in 1980-81 and finally shot to 2,387 in 1995-96.

**Coach Stock**

* Passenger Coaches

In 1950-51, the number of passenger coaches was 13,022 which increased to 29,734 in 1995-96.

* Wagons

The number of wagons in the railways has been varying from time to time due to replacements or repairs. In 1950-51, their number was 2,05,596 and in 1995-96 it was 2,80,791.

* EMU coaches

In 1950-51, the number of EMU coaches was just 460. With the rising demand of suburban traffic their number has been increasing steadily and it was at 3,692 in 1995-96.
Manpower

Indian Railways had a regular staff of 9.14 lakh in 1950-51 which increased to 16.54 lakh in 1991-92. Thereafter, the number declined to 15.86 lakh in the year 1995-96. In 1995-96, the number of daily wage worker was nearly 57,000. In 1950-51, the average yearly wage per employee was Rs 1,263 which increased to Rs 59,219 in 1995-96.

The Indian Railways has 19 recruitment boards in the country. It training units are: Railway Staff College, Vadodara; Indian Railway Institute of Civil Engineering, Pune; Indian Railway Institute of Signal Engineering and Telecommunications, Secundarabad; Indian Railway Institute of Mechanical and Electrical Engineering, Jamalpur and Indian Railways Institute of Electric Engineering, Nasik.

Growth of Traffic

Freight traffic

In 1950-51, the freight traffic on railways was 93 million tonnes originating, of which the revenue-earning traffic was 73.2 million tonnes originating. Since then, both the total traffic and the revenue-earning traffic have been showing an upward trend though not consistently and have increased to 405.5 and 390.7 million tonnes originating respectively in 1995-96 with an annual average growth rate of 5.38 and 6.39 per cent respectively. The increase in revenue-earning traffic in recent years, particularly during the last five years, has been largely the result of reduction in the volume of non revenue-earning traffic.

Passenger traffic (suburban)

At the beginning of the First Five-Year Plan, suburban passenger traffic on the Indian Railways was 412 million passengers originating. The suburban traffic over the years rose steadily and reached the figure of 2,430 and 2,484 million passengers in 1994-95 and 1995-96 respectively; the annual rate of increase in 1995-96 was 2.2 per cent over the figure for 1994-95.

Passenger traffic (non-suburban)

From 1951-52 to 1953-54, the non-suburban passenger traffic witnessed a decline from 872 to 753 million passengers originating with an average decline of 3.69 per cent annually. The traffic resumed upward movement
during the first two years of the Sixth Plan with an annual growth rate of 0.68 and 1.67 per cent. Incidentally, the 1,640 million passengers originating in 1981-83 was the highest ever. Since then, the number has witnessed wide fluctuations, declining by 8.30 per cent in 1983-84 and further by 2.8 per cent in 1984-85. Traffic increased by 6.9 per cent in 1985-86, and reached 1,485 million in 1994-95. It rose to 1,533 million passengers originating in 1995-96.

**Freight Traffic Trends and Analysis**

Freight traffic carried in Financial Year 1997-98 was 430 million tons, which is 5.5 % up over the previous year. An annual growth rate of 5 percent has been assumed for the Ninth Five year plan period. (Source: Government of India) with reference to the Fig.1 we can say that the Indian Railways freight traffic volumes have increased over the years but the railway’s share of the total freight movement has reduced drastically.

![Rail vs Road Freight Traffic in %](chart)

(Source: Indian infrastructure report)

Railways freight traffic has come down from 89% in 1951 to 40% in 1995 with respect to the total freight traffic as can be seen in above Fig.

The main reason for this can be attributed to the fact that road sector has experienced booming growth, fast mode of transportation for short distances, can go for Door to Door Services and has been gradually eating out the rail freight traffic.
Future Outlook of the Industry

Despite a loss in terms of market share to the road industry, a growth rate of 5% is being assumed for the Ninth Plan period for railways and even higher growth rates will have to be achieved in the Tenth and Eleventh Plan in order to reverse the trends in modal split.