

## An overview of Indian Railways

### Brief History:

First passenger train ran in India on 16<sup>th</sup> April 1853 between Boribunder and Thane, since then Indian Railways has been a continuous progressing. Following independence in 1947, India inherited a decrepit rail network. About 40 per cent of the railway lines were in the newly created [Pakistan](#). Many lines had to be rerouted through Indian Territory and new lines had to be constructed to connect important cities such as Jammu. A total of 42 separate railway systems, including 32 lines owned by the former Indian princely states existed at the time of independence spanning a total of 55,000 km. These were amalgamated into the [Indian Railways](#).

In 1952, it was decided to replace the existing rail networks by zones. A total of six zones came into being in 1952. On 6 September 2003 six further zones were made from existing zones for administration purpose and one more zone added in 2006. The Indian Railways now has 17 zonal Railways.

Sr. No.	Name of Zone	Head Quarter	No. of Divisions	Route Kms.
1	Central Railway	Mumbai (CSTM)	5	3,905
2	East Central Railway	Hajipur	5	3,656
3	East Coast Railway	Bhubaneswar	3	2,676
4	Eastern Railway	Kolkata	4	2,447
5	Metro Railway	Kolkata	1	25
6	North Central Railway	Allahabad	3	3,151
7	North Eastern Railway	Gorakhpur	3	3,767
8	North East Frontier Railway	Guwahati	5	3,965
9	North Western Railway	Jaipur	4	5,502
10	Northern Railway	New Delhi	5	6,990
11	South Central Railway	Secunderabad	6	5,810
12	South East Central Railway	Bilaspur	3	2,455
13	South Eastern Railway	Kolkata	3	2,661
14	South Western Railway	Hubli	3	3,191
15	Southern Railway	Chennai	6	4,994
16	West Central Railway	Jabalpur	3	2,965
17	Western Railway	Mumbai (Churchgate)	6	6,440

Total 68 Divisions

Locomotives and rolling stock are two main components of the train. IR has been procuring goods wagons from the market however coaches and locomotives both Diesel and electrical are manufactured by IR with its production units. Later IR has taken over certain wagon manufacturing units also. At present following production units are taking care of needs of IR for locomotives and rolling stock.

<b>Sr. No</b>	<b>Name of Production Unit</b>	<b>Located at</b>	<b>Main Production</b>
1	Chittaranjan Loco Works	Chittaranjan (W.B.)	Electric Loco
2	Diesel Locomotive Works	Varanasi	Diesel Locos
3	Integral Coach Factory	Perambur	Coaches
4	Rail Coach Factory	Kapurthala	Coaches
5	Rail Wheel Factory	Bangaluru	Wheel & Axles
6	Diesel Loco Modernisation Works	Patiala	Diesel Loco Components
7	Rail Coach Factory	Raebareli	Coaches

IR has been a government Department carrying out transport needs of country. So transportation of passengers and goods has been core activity of IR and to facilitate this core activity and to support other supplementary activities 16 PSUs/Undertakings have been formed which are with the Ministry of Railways and carry out different supporting activities as shown below.

<b>Sr. No.</b>	<b>Name of PSU</b>	<b>Established in year</b>	<b>Main Activity</b>
1	RITES	1974	Technical & consultancy services
2	IRCON	1976	Construction activities in India & abroad
3	CRIS	1986	Consultancy & IT services to IR
4	IRFC	1986	To raise fund from the market to part finance the plan outlay
5	CONCOR	1988	Multimodal logistic support to containerized domestic & Exim cargo.
6	KRCL	1990	Construct and operate Railway lines, Construct ROB & rail line projects
7	RCIL (Railtel)	2000	To built nationwide OFC based broadband telecom & multimedia network
8	IRCTC	2001	To undertake catering and tourism activities on IR also facilitate internet ticketing through web.
9	PRCL	2001	To execute SUNR-Pipavav port gauge conversion and new line project
10	RVNL	2003	Cerate and augment capacity of rail infrastructure
11	RLDA	2005	To develop vacant railway land for commercial use
12	DFCCIL	2006	Plan & Construct Dedicated freight corridors
13	MRVC	1999	To plan & implement rail projects in Mumbai
14	BWEL	1978/2008*	To manufacture wagons & structural fabrication jobs
15	BSCL	1976/2010*	To manufacture Railway rolling stock
16	BCL	1976/2010*	To manufacture wagons, retrofitting of EOT cranes

\*-year of taken over by Ministry of Railways

Research and development is very important part of any organization. on Indian Railways Research and development is carried out by Research Design and Standards Organization (RDSO) which is located at Lucknow. RDSO is also mandated to test and certify new technologies or innovations in train operation.

HR development is another important aspect of the organization. On IR for development of its manpower training institutes are provided all across the country. Zonal training centers are located in zones for training of Group C staff. For training of officers on IR, six premier training institutes have been established.

SN	Name of Institute	Located at	For officers of
1	National Academy of Indian Railways (NAIR)	Vadodara	All Indian Railway Officers & centralized training of officers of Accounts, Personnel, Stores and Medical services.
2	Indian Railway Institute of Civil Engineering (IRICEN)	Pune	Engineering Officers
3	Indian Railway Institute of Electrical Engineering (IRIEEN)	Nasik	Electrical Officers
4	Indian Railway Institute of Mechanical & Electrical Engineering (IRIMEE)	Jamalpur	Mechanical Officers
5	Indian Railway Institute of Signal & Telecommunication (IRISET)	Secunderabad	Signal & Telecommunication officers
6	Indian Railway Institute of Transport Management (IRITM)	Lucknow	For Traffic Officers

### Salient features of IR:

Indian Railways is the fourth largest Railway network in the world after US, Russia and China. It runs about 20,000 trains carrying more than 2.5 crores passengers and 2.8 million tonnes of freight every day. In terms of passenger kms IR tops the list, with 1046 billion pkm. Indian Railways has become the fourth railway in the world which loads more than a billion tonnes of freight in a year. More than 12000 passenger trains which run across the country every day, cover a distance which is more than 4 times the distance between earth and moon.

Chhatrapati Shivaji Terminus, Mumbai has been given status of world heritage site by UNESCO in 2004. Three [Mountain Railways of India](#) i.e. [Darjeeling Himalayan Railway](#) a narrow gauge railways in West Bengal, [Nilgiri Mountain Railway](#), a [metre gauge](#) railway in the [Nilgiri Hills](#) in Tamil Nadu and [Kalka-Shimla Railway](#), a narrow gauge railway in the [Shivalik](#) mountains in [Himachal Pradesh](#) are already declared UNESCO world heritage sites in 1999.

Facts and figures are the best indicators to understand any organization. IR has been improving its output every year in both passenger and freight transportation. Following key statistics about IR will help you understand about IR, its assets, its performance and financial status.

## Key Statistics

SN	Plant & Equipment	Unit	2010-11	2011-12
1	Capital-at-charge	Rs in crore	*1,43,220.57	1,61,447.97
2	Total investment	"	2,31,615.25	2,57,958.35
3	Route length	Kms.	64,460	64,600
4	Locomotives	Nos.	9,213	9,549
5	Passenger service vehicles	"	53,220	55,339
6	Other coaching vehicles	"	*6,500	6,560
7	Wagons	"	*2,29,997	2,39,321
8	Railway stations	"	7,133	7,146
<b>II.</b>	<b>Volume of Traffic</b>			
1	Passengers originating	Millions	7,651	8,224
2	Passenger kms.	"	9,78,508	10,46,522
3.	No. of passenger trains run Daily		11,824	12,235
3	Revenue earning traffic	Millions	921.73	969.05
4	Total traffic (incl. non-revenue)	"	926.43	975.16
<b>III.</b>	<b>Employment and Wages</b>			
1	Regular employees	Thousands	*1,332	1,306
2	Wage bill of regular employees	Rs in crore	*51,776.57	58,680.57
3	Average annual wage per regular employee	Rs	*3,94,112	4,56,807
<b>IV.</b>	<b>Financial Results</b>			
1	Revenues	Rs. in crore	94,525.46	1,04,153.55
2	Expenses	Rs. in crore	89,474.22	98,677.41
3	Miscellaneous transactions	"	1,284.73	1,338.66
4	Net revenue (before dividend)	"	6,346.14	6,781.60
5	Rate of return on capital	Percent	*4.43	4.20
6	Dividend on capital	Rs. in crore	4,941.25	5,656.03
7	Shortfall(-)/Excess(+)	"	1,404.89	1,125.57
8	Passenger earnings	"	25,792.63	28,246.43
9	Other coaching earnings	"	2,469.84	2,716.53
10	Goods earnings	"	62,844.72	69,547.59
11	Sundry earnings	"	3,418.27	3,643.00

12	Gross earnings	“	94,525.46	104,110,36
13	Suspense	“	10.17	(-)43.19
14	Total working expenses	“	89,474.22	98,667.41
15	Operating Ratio	Percent	94.59	94.85

(\*Revised)

This chapter intends to give you an overview of Indian Railways and detail on various departments is given in subsequent chapters.

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