

INTRODUCTION

1.1 TRANSPORTATION

In today's modern world Transport plays a significant role. It helps in eliminating the barrier of distance. An adequate transport system is crucial for economic development of a nation which plays an important role in promoting national and global integration. A well-organized transport system is also useful for enhancing efficiency and improves competitiveness of the country's economy. Efficient transport is crucial for the economic development of a country.

It is regarded as the movement of living and non- living things from one place to another. At present there are various modes of transportation to choose from but earlier there were not so many options to travel. There was a time when people used to travel by walk or by using animals such as horse driven carriages, bullock – carts, and boats as means of transport. This kind of travel by own or by using animals takes very much time to travel and was not so comfortable, people have to take multiple halts while going for long distances. Much time and money were spending as they have to make arrangements for themselves and for their animals also. But in present days these modes of transport are rarely used and have been almost discarded in recent time due to the invention of various technologies and development. Now we have various modes of transportation for movement of living or nonliving things which include air, rail, water, road, cable and pipelines. Transportation is essential as it helps in development by transferring of goods from one place to another hence helping in trade between far places. The country's length and breadth is linked with the wide railway network and now travel from one place to another has become very easy. There are wide range of goods trains which carry thousands tons of food grain or other goods from one area of the country to other. Then in India the condition of roads are good and the individual can travel with a great speed. There are lots of transport companies which carry passengers as well as goods from different part of country and provide the facilities of transportation to other part. In the country all states having their own state corporation bus service and lots of people make use of them. In the water transportations steam

boats converted in the place of boats. Steamship included all the essential amenities of life just like as a big town built in it and moving with great speed in the sea. Air transportation is another mode of transport which connects national as well as international boundaries. A modern jet plane at a speed of five hundred miles an hour or more carries hundreds of passengers to transport. All the places like railway stations, airports and bus stops are always overcrowded with people. Millions of people travel from one place to other for different purpose such as tours, business, meetings friends and relatives etc.

1.2 HISTORICAL BACKGROUND OF INDIAN RAILWAY

The establishment of Indian railway is associated with the east India Company. The introduction phase of Indian railway is associated with British privately owned companies as a means of transport for goods from one place to another at a cheaper cost. The British government sold it initially to a private company on contract and could purchase it back after the end of contract. By 1990 ninety percent of the railway was in government control. The first steam engine train was started from Mumbai (Bombay) to thane on 16th April 1853, initially covered a distance of 34 km and now expanding to 34656 miles while growing each and every day more and more.

During British time the Indian railway development was under private companies due to which there was a frequent conflict between state groups and companies. It was directly controlled by the London office, all the major decisions like land allotment and stations, track to be developed was under the London office itself. All the developments were done on lease basis which was provided by government for 25-50 years after which government can regain the right to purchase that station or the lines developed by private companies. From 1874-1912 the regain of Indian Railway from private companies was on its fastest mode and regained control over all operation of Indian railway.

The evolution of Indian railway was started by the introduction of the First Railway Board in India by Lord Curzon's government in year 1905. The department was under the British Indian government. The Indian railway started earning profit from year 1900

onward and which attracted the public investment in Indian railway, due to this Mr. Thomson was recruited as the secretary of state for India in year 1901.

Mr. Thomson then wrote a report for the improvement of Indian railway and included various key points for the improvement of Indian railway which included the allotment of funds for the manufacturing and expansion of old lines. Mr. Thomson also proposed that all railway lines must be rent out to the railway corporations for managing. For taking care of all railway activities railway board was introduced. Then considering the Thomson report the railway board was constructed in year 1905 which was given the authority to control all railway activities and its development with continuous and growing phase. Before independence the British government was given a proposal of grouping the Indian railway for its better frequent development but British government doesn't want to go with that proposal as this will end up all the ties and contracts of British Indian railway with other participating companies. So the British government dismissed the proposal.

After Independence the leaders felt a need to form a single rail network under a single entity rather than under multiple small entities. So in the year 1948 Indian railway was reconstructed as a single administrative body. Further in the year 1951 the Indian railway was divided into six different zones. Each group was under group itself for its better working and developments. Also a central management system was retained to ensure that Indian railway work as single working entity.

The six original zones have since been divided into sixteen administrative zones covering almost 64015 route kilometers. By the year 1947 Indian railway was consisting of forty two independent systems which were then combined and brought under single central entity and new six zones were introduced for its better working development. In the year 1951 the Indian railway system was nationalized and becoming one of the biggest networks in the globe. In 1951-52, after the amalgamation of the princely states, the Railways were separated into the following six zones, beginning with the southern zone which is established on April 14, 1951 and ending with the Eastern zone established on April 14, 1952 name them Southern Railway zone, Western Railway zone, Central Railway zone, Northern Eastern Railway, Northern

Railway zone, Eastern Railway, soon after the regrouping of six zones, their working was found incompetent and additionally three new zones introduced between 1953 to 1966 namely North East Frontier Railway zone, South-Eastern Railway zone and South Central Railway zone. Moreover seven new zones introduced during the year 2003 and 2004. Today Indian railway is separated into seventeen zones.

The seven new zones are North Western Railway zone, North Coast Railway zone, East Coast Railway zone, East Central Railway zone, South Eastern Central Railway zone, South Western railway Zone and Western Coast Railway zone. Indian Railways is regrouped into different zones, which are additionally sub-categories into various divisions. The number of zones in Indian Railways enlarged from six to eight in 1951, nine in year 1952 and finally 16 in year 2003. Each Railway zone comprising various numbers of divisions and every division having a headquarters.

All Railway zones are headed by a General Manager who is responsible for providing report specifically to the Railway Board and under the control of the divisional railway manager every zone of Indian railway divided into division. The divisional officers of building, mechanical, flag and media transmission electrical, accounts, work force, working business and security branches answer to the distinct Divisional Manager are answerable for action and support of benefits. Additionally down the pecking order tree are the Station Masters who is controller singular stations and make improvement by tracking an area under their stations' organization

The significant zones of Indian Railway that have been defined here are as per the following:

Central zone of Indian Railway: The Central Railway zone is the oldest zone of Indian Railways. This is one among the biggest of the seventeen zones divided by Indian Railways.

Eastern Zone of Indian Railway: The Eastern Railway zone is one of the significant zones among all zones of Indian Railways. Its head office is located at Fairley Place in Kolkata, the Eastern zone is comprising four divisions namely Howrah, Asansol, Malda and Sealdah for improved administration and organization.

Northern Railway zone: The Northern Railway zone is one among the nine zones of Indian Railways. Headquarter of Northern Railway is located in Delhi, India's capital city.

Southern zone of Indian Railway: Southern Railway is defined to be the main zone of Railway that looked for foundation in freed India. On 14th April 1951, Southern Railway was built up by consolidating three state Railways comprising Madras and Southern Railway, Maharashtra Railway, Mysore State Railway and South Indian Railway.

Western Railway zone of India: In India Western Railway zone is one among the busiest rail organizes. Headquarter of Central Railway is located in Mumbai, additionally Mumbai delight in the expert over this Railroad organize as well, being the central command sited at Church gate (Mumbai).

There are more than 64,015 kilometers, 39,777 m of track and 6,909 stations of Indian Railway. Railway system of India is the world's fourth biggest network after United States, Russia and China. The Railways covers the length and broadness of the nation and extend twenty million passengers and two million tons of cargo daily. This is one among the world's largest business and utility managers, with more than 1.6 million representatives. As to moving stock, Indian railroad possesses more than two lakh (freight) wagons, fifty thousand mentors and eight thousand locomotives. Indian Railway now carrying increasingly thirteen million travelers' daily, functioning more than twelve thousand trains, with more than forty traveler mentors, along its system of more than sixty four thousand km of route, which interfaces more than seven stations.

Presently, to additionally enhance the services, Indian Railways have left upon different plans, in which they are gigantically aspiring. The railway has transformed from meter gage to wide gage and the general population has given it a heartfelt welcome. Presently, there are the noteworthy watching trains that pull the twenty first century harbingers-the Rajdhani and Shatabdi-at rates of 145 km with all luxuries and comfort. Along with, the burden of shifting to an alternate gage in transit to a goal will never again be felt. The whole situation of transport area, nonetheless, transformed after the autonomy and going with parcel of nation. The Indian government took up the

arrangement of blended economy, in this manner municipalizing the majority of the essential areas, comprising transport infrastructure. Social profit turned out to be more vital than private return. The immense system of Indian railways was nationalized. The little privately owned businesses were altogether combined. Railway extension has considered one of the fundamental points or desire of government. A distinct ministry has been framed just for the Railways and every year for the railway isolate spending plan is set. Both traveler or products benefit have expanded in the time in terms of numbers or in the sum of revenue.

In the year 1957, the Research, Designing and Standardizing Organization established in Lucknow which is the biggest Railway research organization in the world. It is always conceiving enhancements in the flagging frameworks, tracking plan and layout, coach insides for better travelling comfort and capacity and so on alongside changes in trains. The workshops of the Railways too have been given new types of gear to make superior coaches at Kapurthala and Perambur and diesel motor parts at Patiala. Trains electronic locomotive manufacturing's are made at Chittaranjan and diesel locomotive at Varanasi. This is in huge difference to the prior British belief that exclusive minor repairs would be possible in India, that's why all extra parts including stray pieces of trains need to be foreign made from England. Additional prepares and courses are continually being joined with the Railway system or administrations. The British legacy lives on in our Railway structure, changed yet always remembered. The system of railway track lines has developed to around sixty four thousand kilometers. In any case, the variation of Indian Railways is boundless. Regardless it has incredible toy trains on narrow gage in hill station segments.

The Kolkata Metro is an adequate case of profoundly many-sided building methods that has been received to lay an underground Railway in the thickly developed territories of Kolkata city. It is a treat to be seen. In addition Kolkata is the main city where the Metro Rail began working from 27 September 1995 over a length of 16.45 km. There is likewise a Circular Railway from Dum Dum to Princep Ghats covering 13.50 km to give passenger trains.

1.3 PRESENT STATUS OF INDIAN RAILWAY IN INDIA

India is one amongst the biggest countries in terms of its geographical size which requires effective means for long distance transportation. Among the varied modes of transport, railway is one in all the foremost convenient modes of transport for large scale product movement still as for long distance travel. The railway tested as a promising are for drawing economic and developmental process advantages by various countries. Indian railway is the largest network in Asia. It is the second largest employer with in the world over the china military.

It was in the year 1853 when for the first time train moved between Mumbai and Thane with a total distance of 34km. since then Indian railway in hand a complete route length of 64,000km 2,16,717 wagons, 39,263 coaches, 7,739 locomotives and runs about a total of 12,000 passenger trains and 7,000 freight trains daily. Indian Railways transports almost 23 million passengers every day. The headquarters of the Indian railway is located in New Delhi. Indian Railway is managed and controlled by Ministry of railways.

Railways are vital part of central transport. Railway is deemed to be one in every of the favored sectors of transportation practices in India owing to the low cost and pleasant journey. It is appropriate for all class people because fair is moderate comparison to alternative transport. Railway additionally provides service goods, vehicle moved from one place to different place because people get additional helpful for as. The railway faces long run competition pressures from luxury buses, airlines, personalized transport and upgraded public transport. Low cost carrier category airlines are giving stiff competition to upper class sections to the Indian railway passenger services. So as to contend with alternative mode of transportation, it is unavoidable for railways to accelerate the expansion of passenger's origination. This could be done by offering additional quality service to them. Indian railway services to a greater mass of the Indian population as well as the international travelers, its services quality is that the thought about because the primary concern. So, considering the massive population relying for the most part on this mode of travelling and transportation, there is needs to be a deep study for the development in railway services. It is necessary for the railway

authorities to understand concerning the view of the international passengers relating to the services offered to them so as to create future plans and policies, centered mostly upon the view of the passengers and their satisfaction level is set.

Indian railways can achieve success only when they provide satisfaction to the passengers in terms of providing better service quality. One of the major challenges among the railway authorities at the present is to confirm expected quality of services that the target audiences want to avail that makes use of this sector for many purposes. The railway is the backbone of Indian economy and society; however it's removed from healthy and adequate service providing. The services provided by the Indian railways are not up to the services as per the international standard. Subsequently, the customer choose to travel by train, there is very good demand for the rail service. If the Indian railway appropriately evaluate the precise client expectation and provide the services in step with their customer's expectation, it will be the chief gainful public sector organization in India. Indian railway has envisioned provision of various automated facilities focused on towards interfacing and supervising passengers to easily board trains and giving enquiry services at stations. Pay and use toilets, Provision of ticketing machines, signage, water vending machines, platform shelters at stations, effective lighting good retiring rooms with modern furniture, coach indication board, safety or security are also provided to fulfill the needs of the railway passengers . The Indian railway can accomplish well only when the passengers are pleased with the services they get. Hence the chief objective of the study is to recognize the present level of customer satisfaction.

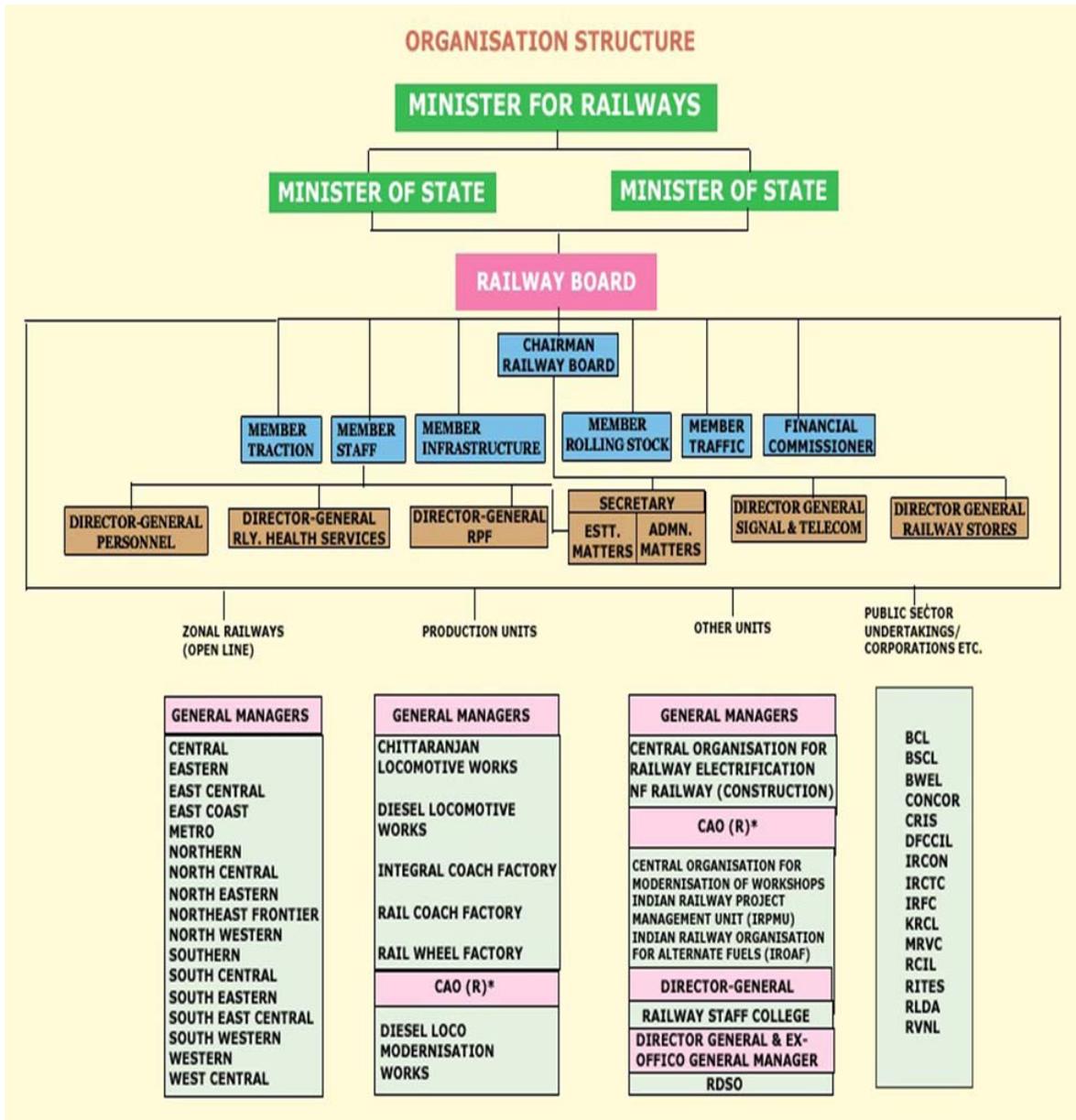
1.4 RECENT DEVELOPMENT IN RAIL TRANSPORT

1. There has been a remarkable development in its technology, safety, security, financial status, projects, and additionally its quality service to the passengers. Inventiveness like computer based reservation system, online ticket booking, Interactive voice response system, and smart cards introduction have upgrade the Indian railways significantly.
2. Today, Indian Railways arrange the principal means of transportation for passengers and freight in India. It is one amongst the largest networks with a

total of 63,221 km in the world and providing employment to 1.54 million people. Travelling by train has become one of the economical and appropriate ways of transportation for passengers of all sectors of the society.

3. In the recent years Indian Railways has seen major technological advancements which include: improvement of more effectual locomotive, electrification of more tracks, development in terms of passenger services including security, improved catering and toilet provision and Facilities like Internet access and satellite phone are in the pipeline.
4. Advanced safety features have been integrated to reduce accidents, while for certain trains modern coaches have been imported. Fastest trains like Shatabdi Express and Rajdhani Express have made long distance train journey a moderately fast and comfortable.
5. Railways have also been updated in terms of ticketing, technology, computerization and overall administration.

Figure 1.1
Organization Structure of Indian Railway



Source: http://www.indianrailways.gov.in/railwayboard/view_section.jsp?lang=0&id=0,1,304,305

1.5 ORGANISATIONAL STRUCTURE OF INDIAN RAILWAY

Indian railway headquarter is located in New Delhi. The Indian railway is a department of the Government responsible for rail transport in India and being maintained and operated by the government of India through the ministry of railways rather than a

private company. Headed by Minister of Railway. As of 2017, the railway ministry is currently headed by Shri Suresh Prabhakar Prabhu is the current Minister of Railways. The Union minister for railways supported by two minister of state for railways Shri Manoj Sinha and Shri Rajen Gohain. Railway Board is the apex policy making authority of Indian Railway, under the ministers The Indian railway is administered by the railway board, which consist of having one chairman, five members and one Finance commissioner,

For operational purpose railway has been divided in 17 zones. They are Northern, Western, Eastern, Southern, Central, South Central, West Central, North Central, East Central, South Eastern, North Eastern, North Western, South Western, Southeast Central, North East Frontier, East Coast and Metro Railway, Kolkata. Each and every zone is headed by a general manager who reports directly to the railway board. Each zone comprises of a number of railway division headed by Divisional Railway Managers. The relevant divisional officers of different branches like engineering, electrical mechanical, signal and telecommunication, personnel, accounts, operating, commercial or safety, report to the specific Divisional Manager and are in-charge of operation and Upkeep of assets. Additionally down the hierarchy tree the station Masters who is responsible for controlling of individual stations and the movement of trains through the track under their stations management. In addition, Railways have six production units, such as Chittranjan Locomotive works, Diesel locomotive works, Integral Coach Factory, Rail coach factory, Rail wheel factory and Diesel loco modernization works. The production units (Pus) are headed by a GM, who also reports directly to the railway board. There are eleven departments under the general manager headed by Manager/Officer namely, Chief Commercial Manager, Chief Operating Manager, Chief Vigilance Officer, Chief Engineer, Chief Mechanical Engineer, Chief Electrical Engineer, Chief Personnel Officer, Chief Signal and Telecom Engineer, and Divisions directly reported to the General Manager. Each and every division is headed by Divisional Railway Manager. Under DRM, one Additional Divisional Railway Manager, subordinated by various departments, like

1. Divisional Commercial Manager - Additional Commercial Manager and 4 Supervisors: Parcel Supervisor, Booking Supervisor, Chief Ticket Inspector, and Reservation Supervisor.
2. Divisional Operating Manager – Additional Operating Manager: Station Superintendent, Station Master.
3. Divisional Personnel Officer – Additional Personnel Officer Office Superintendent.
4. Divisional Signal and Telecom Engineer- Additional Signal and Telecom Engineer-Section Manager.
5. Divisional Mechanical Engineer- Additional Mechanical Engineer.
6. Divisional Electrical Engineer- Additional Electrical Engineer Section Engineer-Foremen.
7. Medical Superintendent- Divisional Medical Officers
8. Commandant-Railway Protection Force-Asst. Commandant Inspector of RPF.

Additionally, the Central Organization for Railway Electrification (CORE), construction organization of North Frontier Railway and Metro Railway Kolkata are also controlled by General Manager. CORE is located at Allahabad. This organization carries out Indian railway electrification projects and observes the development of different electrification projects everywhere throughout the country

Aside from these zones or production units, various Public sector undertakings/corporation (PSU) are under the authoritative control of the Railways ministry. These PSU units are:

- Braithwaite & Co Limited (BCL)
- Burn Standard Company Limited (BSCL)
- Bharat Wagon Engineering Limited (BWEL)
- Container Corporation of India Ltd (CONCOR)

- Centre for Railway Information Systems (CRIS)
- Dedicated Freight Corridor Corporation of India (DFCCIL)
- Indian Railway's construction company (IRCON)
- Indian Railway Catering and Tourism Corporation (IRCTC)
- Indian Railway Finance Corporation (IRFC)
- Konkan Railway Corporation Ltd (KRCL)
- Mumbai Rail Vikas Corporation (MRVC)
- Railtel Corporation of India – Telecommunication Networks (RCIL)
- Railway Infrastructure Technical & Economic Services (RITES)
- Rail Land Development Authority (RLDA)
- Rail Vikas Nigam Limited (RVNL)

1.6 ZONE-WISE OVERVIEW OF INDIAN RAILWAYS

Indian Railways is divided into different zones, which are further sub-divided into divisions. In 1951 the number of zones in Indian Railways increased from six to eight, in 1952 from eight to nine zones and in 2003 from nine to sixteen zones. Kolkata Metro was given the status of the 17th zone of Indian Railways in 2010.

Moreover, Konkan Railway has the administrative status of an Indian Railways zone, however is not typically measured a zone for operational purposes. Each zones of Indian railway is comprised of a specific number of divisions, each division having a headquarters. There are overall seventy three divisions. Each of the sixteen zones is controlled by a general manager who reports straightforwardly to the Railway Board. The zones additionally separated into divisions under the control of Divisional Railway Managers. The divisional officers of accounts, personnel, engineering, electrical, mechanical, operating, commercial, safety and security branch, signal and telecommunication branches report to the relevant Divisional Manager and are responsible for operation and maintenance of assets. Additionally down the hierarchy

tree are the station masters who control separate stations and the movement of trains through the track territory under their stations' management.

Table 1.1
Zones of Indian Railway

S.NO	NAME OF RAILWAY ZONES	CODE	DATE OF ESTABLISHMENT	ROUTE KM	ZONAL HEADQUARTER	DIVISION
1.	Central Railway	CR	5-11-1951	3905	Mumbai	Mumbai, Bhusaval,Pune, Solapur,Nagpur
2.	East Central Railway	ECR	1-10-2001	3628	Hajipur	Danapur,Dhanbad,Mughalsarai, Samastipur,sonpur
3.	East Coast Railway	ECOR	1-4-2003	2572	Bhubneswar	Khurda Road, Sambalpur, Waltair (Visakhapatnam)
4.	Eastern Railway	ER	14-4-1952	2414	Kolkata	Howrah, Sealdah, Asansol, Malda
5.	North Central Railway	NCR	1-4-2003	3062	Allahabad	Allahabad, Agra,Jhansi
6.	North Eastern Railway	NER	1952	3667	Gorakhpur	Izzatnagar, Lucknow,Varanasi
7.	North Western Railway	NWR	1-10-2002	5459	Jaipur	Jaipur, Ajmer,Bikaner, Jodhpur
8.	Northeast Frontier Railway	NFR	15-01-1958	3907	Guwahati	Alipurduar, Katihar, Rangia, Lunding, Tinsukia

9.	Northern Railway	NR	14-4-1952	6968	Delhi	Delhi, Ambala, Firozpur, Lucknow, Moradabad
10.	South Central Railway	SCR	2-10-1966	5803	Secunderabad,	Secunderabad, Hyderabad, Guntakal, Guntur, Nanded, Vijayawada
11.	South East Central Railway	SECR	1-4-2003	2447	Bilaspur	Bilaspur, Raipur, Nagpur
12.	South Eastern Railway	SER	1955	2631	Kolkata	Adra, Chakradharpur, Kharagpur, Ranchi
13.	South Western Railway	SWR	1-4-2003	3177	Hubli	Hubli, Bangalore, Mysore
14.	Southern Railway	SR	14-4-1951	5098	Chennai,	Chennai, Trichy, Madurai, Palakkad, Salem, Thiruvananthapuram
15.	West Central Railway	WCR	1-4-2003	2965	Jabalpur	Jabalpur, Bhopal, Kota
16.	Western Railway	WR	5-11-1951	6182	Mumbai	Mumbai Central, Ratlam, Ahmedabad, Rajkot, Bhavnagar, Vadodara
17.	Kolkata Metro Railway	KMR	31-12-2010	26	Kolkata	Kolkata

Source: Indian Railway (Maps of India) rrbportal.com/indian-railways/zones-map

Figure 1.2

Railway Zonal Map of India



Source: maps of India

1.7 AN INTRODUCTION TO NORTH CENTRAL RAILWAY ZONE (NCR)

The North Central Zone is one among the 17 railway zones in India with 202 main line stations and 221 branch line station. The total area covered under this zone is 3062 route kms spread over parts of U.P, Haryana, Rajasthan and Madhya Pradesh. It spread out from Ghaziabad in the North to Mughalsarai in the east on New Delhi Howrah Trunk Route and from Palwal to Bina on New Delhi, Mumbai/ Chennai corridor. In its present form, North Central zone of Indian Railway established on April 1, 2003, and encompasses the modernized Allahabad division of northern railway, the Jhansi division of central railway, and the new Agra division. Its headquarter is located at Allahabad, and its network covers over a large area of north central part of India, cover the states of Madhya Pradesh, Uttar Pradesh, Rajasthan and Haryana.

Allahabad Junction is the headquarters of the North Central Railway Zone which is located on the Howrah-Delhi main line and Howrah-Allahabad-Mumbai line. It is situated in Allahabad district of Uttar Pradesh. It serves Allahabad and the neighboring regions. Numerous imperative trains go through this station. All trains from the east going to southward go through this station. In the mid-19th century East Indian Railway Company started efforts to develop a railway line between Howrah to Delhi. Note with standing when the line to Mughalsarai was being developed and just the lines near Howrah were placed in operation, in 1859 the first train runs from Allahabad to Kanpur. In 1864 for the first train from Howrah to Delhi, coaches were transported by boats over the Yamuna at Allahabad. Between 1899 to 1913 the Varanasi-Allahabad City line was built as a metre gauge line by the Bengal and North Western Railway. It was transformed to broad gauge in 1993-94. Allahabad Junction is an 'A' grade railway station. There are 9 double-bedded non-AC retiring rooms, 3 double-bedded AC retiring rooms, and a 20-bedded dormitory at Allahabad railway station and it is Wi-Fi enabled. Allahabad junction is substantial for three reasons; mainly it is the headquarter of the north central railway, all trains covered under NCR passes through Allahabad junction, along with large number of trains of central railway, north eastern railway and other zones and third it is an entry point for Sangam (Confluence of three rivers),

Varanasi, Vindhyachal and National Parks of M.P. and Adjoining regions. And all these places have carved out a place for themselves in the heart of international tourist.

Agra Cantonment is one of the major railway stations in the Agra city of India. It located on the main Delhi-Chennai and one of the Delhi-Mumbai lines. In 1874 wide meter gauge 1,000 mm Delhi-Bandikui and Bandikui-Agra lines of Rajputana State Railway were opened. In 2005 Agra-Jaipur line was changed to wide broad gauge 1,676 mm. In 1904 broad gauge was opened between Agra-Delhi in 1982 to 1985 Faridabad-Mathura-Agra section was electrified, Tundla-Yamuna Bridge in 1988-1989 and between 1990-1991 Yamuna Bridge-Agra.

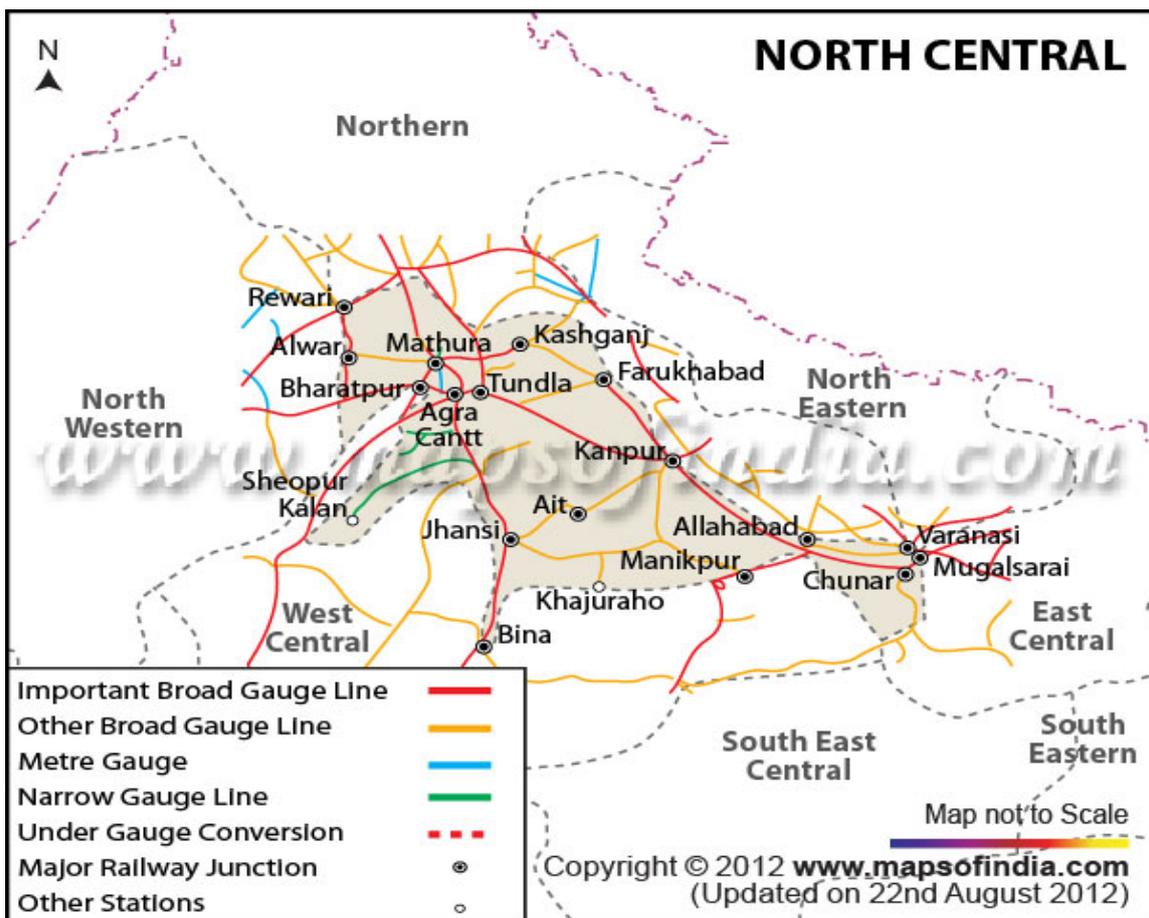
Agra Cantt railway station has 6 platforms with length as follows:- Platform 1 = 540 meters, Platform 2 = 598 meters, Platform 3 = 573 meters, Platform 4 = 735 meters, Platform 5 = 631 meters and Platform 6 = 320 meters. The fastest train of India, Gatimaan Express, Originates/Terminate at this station. Agra Cantt. railway station has retiring room, waiting room, tourist information counter, computerized reservation counters, facility of Indrail pass, refreshment counters, book stalls water coolers, water vending machines and book stall etc. Agra junction is the major entry point for international tourist it provides an opportunity to visit world renowned monuments like Taj Mahal, Red Fort, Akbar Tomb, Fatehpur Sikri and many more.

Jhansi Junction is one of the most important railway junction located in the Jhansi city of Uttar Pradesh. It is one of the largest and busiest stations in India. It is a noteworthy intercity hub and stoppage for many superfast trains in India. The station code is JHS. In late 1880s Britishers built the railway station of Jhansi. The current site location of the station was selected after a long examination of three places. The station has an enormous fort-like structure painted in maroon and off white. In the beginning the station had three platforms (Platform One is 2,525 feet (770 m) long making it fifth longest in India. It could without difficulty handle two trains at a same time (Same are the cases with platforms two and three). There are 7 platforms, 4 broad over-bridges at Jhansi junction. Because of overwhelming utilization, two new platforms are planned. Jhansi has its own division in the North Central Railway zone of Indian Railways. It lies on the main Delhi-Mumbai and Delhi-Chennai line. India first Shatabdi Express

runs between Jhansi and New Delhi. Jhansi Junction is connected with major cities of India by direct trains like New Delhi, Kanpur, Lucknow, Chennai, Bhopal, Mumbai, Bangalore, Hyderabad, Ahmedabad, Kolkata, Jammu, Agra, Bhubaneshwar, etc. Jhansi Junction is functioned by 4 broad gauge routes: Delhi – Mumbai, Delhi-Chennai, Jhansi - Kanpur Central, Bina – Bhopal and Khajuraho - Manikpur. There is a current survey for constructing a new line between Jhansi Junction and Shivpuri in Madhya Pradesh which would be additionally linked to Sawai Madhopur and Jaipur. Jhansi junction is the main hub for east, west, north and south bound trains. It is also an entry point to visit western M.P which encompasses Orcha, Shivpuri, Khajuraho, Panna and many more. These places are amalgam of culture, history and ecology which is more significant in international market.

Figure 1.3

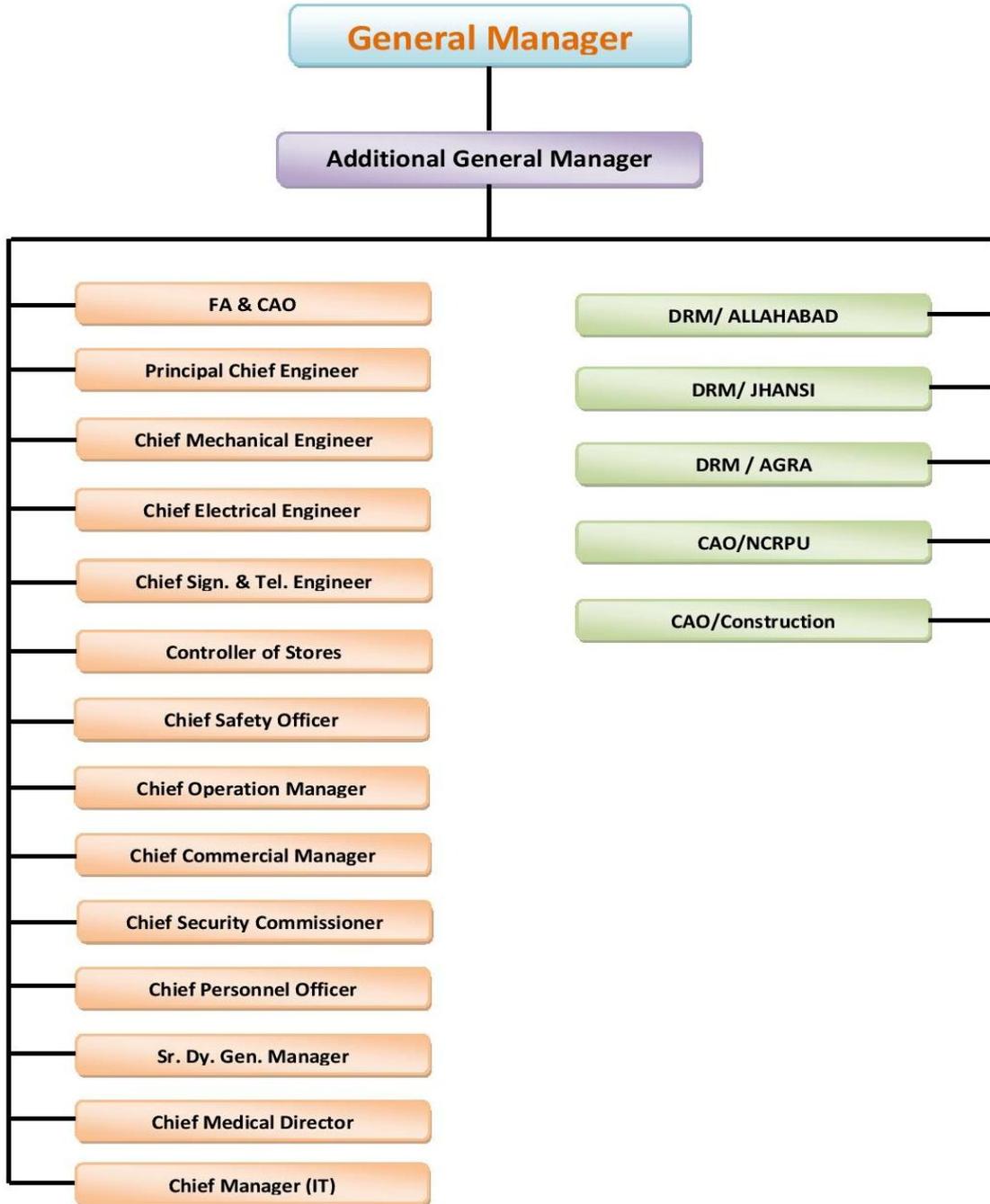
Map of North Central Railway Zone



Source: <http://www.mapsofindia.com/railways/north-central.html>

Figure 1.4

Organization Structure of North Central Railway Zone



Source: <http://www.ncr.indianrailways.gov.in>

1.8 PASSENGER SERVICES (AMENITIES)

Providing passenger amenities is one of the vital aims of the Indian Railways both as a business ethics as well as a social responsibility. Railways has issued a Citizens' Charter on Passenger services in which, it has been vowed to confirm satisfactory passenger services and facilities at railway stations and in trains.

1.8.1 CATEGORISATION OF STATIONS

- Indian Railway Stations are classified into seven categories namely A1, A, B, C, D, E & F depending on the earnings which is an indicator of the passenger movement.
- After every five year categorization shall be reviewed.
- For the purpose of categorization of stations, the simple parameter is the passenger earnings of each station, from both reserved and unreserved passengers. The earnings are to be computed on the premises of the number of passengers boarding at a specific station, regardless of the area from where the ticket has been issued. The information of passenger earning ought to be gathered from PRS, SPTM, UTS and JTBS etc.

Table 1.2

Categories of Stations for Provision of Passenger Amenities

S.NO	CATEGORY	CRITERIA
1.	A1	Non-Suburban stations with an annual passenger earning of more than Rs. 60 crores.
2.	A	Non-suburban stations with an annual passenger earnings of Rs. 8 crores and upto Rs 60 crores.
3.	B	I. Non suburban stations with annual passenger earnings between Rs. 4 crores to Rs. 8 crores. II. Stations of tourist importance or an important junction station (to be decided by G.M.).
4.	C	All suburban stations*
5.	D	Non suburban stations with passenger earnings between Rs. 60 lakhs and Rs. 4 crores.
6.	E	Non suburban stations with passenger earnings less than Rs. 60 Lakhs
7.	F	Halts

Source:[http://www.indianrailways.gov.in/railwayboard/uploads/directorate/land_amen/PASSNG_AMENT_\(2\)/PA_Circular_110912.PDF](http://www.indianrailways.gov.in/railwayboard/uploads/directorate/land_amen/PASSNG_AMENT_(2)/PA_Circular_110912.PDF)

*For station handle with suburban / non-suburban movement of passengers, the Railway may take a view in regards to up-gradation of classification rely upon station revenue, quantum of non-suburban movement and so on.

1.8.2. CATEGORIZATION OF AMENITIES (SERVICES)

1.8.2.1 MINIMUM ESSENTIAL AMENITIES (MEA)

At the point when station is created, certain minimum essential amenities are necessary to be given to the passengers at each category of station. These were prior named as basic amenities/infrastructural services and will now be known as Minimum Essential Amenities (MEA).it includes booking facility, waiting hall, drinking water, seating arrangement, urinals, fans, lightings, platforms shelters/ shady trees, time table display, foot over bridges, water cooler, parking area with lights, public address system/ computer based announcement, public phone booth, signage etc.

1. **Waiting hall/ Rooms:** Waiting hall is known as the space accommodated the passengers who are waiting for their train. Waiting halls are located at railway station in India which is utilized by the passengers. These can be utilized free of cost on creation of journey tickets for a couple of hours till the connecting train arrives. Usually they are for passengers waiting for their outbound train. Waiting Rooms are generally situated near to the Railway platforms and available for first and second class ticket holder's passengers. Mainly these waiting halls offer limited seating facility for passengers waiting for their train. There is no need of reservations and availability of seats is on first come first served. Most of the waiting halls are not equipped with air-conditioned. Usually toilet facilities are provided in most waiting rooms but there is no facility to take a shower. While waiting rooms are available at most of the stations but there is no assurance that passenger will discover them at all railway stations. Waiting hall is available in A1, A, B, D, E and F category stations.
2. **Seating arrangement:** Seating arrangement is made in the platforms for the passengers who are waiting for their train in the platform. Seating arrangement is provided in A1, A, B, C, D and E category stations.

3. Booking facility/ Reservation counters: booking facility is available at A1, A, B, C, D, E and F category stations. Indian railways offer several ways of booking tickets; passengers can book tickets at a reservation counter at station or by online such as IRCTC. In recent times, Indian Railways also launched a new scheme of booking a ticket through SMS. Booking counter facilities are provided at the station for issue of tickets to the passenger via advance reservation window or Current Booking Window. Indian railways offer the facility of advance reservation for the passengers to book railway tickets from anywhere to anywhere. The working hours are clearly displayed at the counters. Opening time of reservation counters are from 8 am to 8 pm from Monday to Saturday, with a fifteen minute break at 2 pm and on Sundays, opening time of the counter is from 8 am to 2 pm. Booking counters operates at A1, A, B, C, D category stations round the clock excluding the stations where there is no night working. The passengers can book their tickets sixty days in advance, excluding the date of journey at the train originating station. In a single ticket maximum of six berths can be reserved by a passenger.
4. Drinking water: Availability of reasonably priced drinking water of approved standard to passengers is a basic amenity. Drinking water facility is offered to the passengers at all A1, A, B, C, D, E and F category stations. There are many type of drinking water facility provided to the passengers like piped drinking water, hand pump drinking water, water cooler, or water vending machines. Facility of water cooler is existing at A1, A, B, C and D categories stations. With a view to additionally enhance the availability of potable drinking water for passengers; Ministry of Railways has framed a comprehensive policy for fixing of Water Vending Machines at railway stations all over the country. The main purpose of this policy is to set down rules to make potable drinking water supplied through Water Vending Machines at stations. Currently drinking water at stations is normally provided through water cooler/water booths. On some major stations, R.O. drinking water units have also been given. Those stations which fall under water scarcity areas or where source of water dries in summer, as well as at halt stations drinking water facility are provided at every platform

by Matkas/Piaos/ syntax tanks/ CANS / etc. as prescribed by General Manager of Indian Railways. At E and F category stations, one water supply source at suitable location to passengers is provided. At every platform on alternate water booths there is one drinking water tap available for disabled persons. At E category stations where supply of piped water is not feasible because of the local conditions, arrangement of portable water at each platform is provided with the approval of general manager of the related zonal railway. The following table show no of water vending machines installed at platforms.

Table 1.3

No of Water Vending Machines Installed at Platforms

Category	A1	A	B	C	D	E	F
Water vending Machine	1WVM(located in the middle of the platforms) and 2WVMs (located at ends of the platforms)	1WVM(located in the middle of the platforms) and 2WVMs (located at ends of the platforms)	1WVM(located in the middle of the platforms) and 2WVMs (located at ends of the platforms)	1WVM(located in the middle of the platforms) and 2WVMs (located at ends of the platforms)	Minimum 1WVM and maximum 2WVMs	Minimum 1WVM and maximum 2WVMs	_____

Source:http://www.indianrailways.gov.in/railwayboard/uploads/directorate/traffic_comm/Comm-Cir-2015/CC_36_20151.pdf

5. Platforms: This is an essential amenity available at all stations of Indian Railway. The length of the platform is suitable to accommodate the longest train expected at station. Surface of the platforms are constructed with those material which is mud free in rainy season and dust free in dry season. On the basis of category of station it may be of high level, medium level and rail level as shown in the table:

Table 1.4

Level of Platform Height as per the Station Category

Level	Broad gauge	Meter gauge	Category of stations
High level	760 mm above Rail level (840 mm above Rail Level in case of Suburban stations and stations in cutting)	405 mm above Rail Level	A1, A and C
Medium level	455 mm above Rail Level	305 mm above Rail Level	B and D
Rail level	At Rail Level	At Rail Level	E and F

Source:http://www.indianrailways.gov.in/railwayboard/uploads/codesmanual/IRWM/worksmanualCh4_data.htm

6. Platform shelter/Shady trees: shelters or shady trees are placed in the platforms to provide safety from rain and heat of sun and to provide shadow to the passengers. Platform shelters ought to be stretched out up to the landings of the foot-over bridges. Shelter are appropriately spaced confirming natural light and ventilation and cover areas from where passengers on board in the General Coach. Platform shelters are given in front of the station building at small stations. At areas where there is an uncovered space of platform between the shelter and the foot-over-bridge, as far as possible, a covered pathway is placed

to the foot-over-bridge. Platforms shelters are facilitated on the basis of no of passengers, climatic conditions and nature of traffic. Whole Platform are covered with shelter at significant stations such as suburban stations, important junctions, stations of those areas where more than 1 lakh population, stations of heavy rainfall areas etc. In case of shady trees the planting, maintenance and protection of the trees is the accountability of the Engineering Department and for watering of plants at wayside stations traffic department is responsible. The species and positioning of the trees are appropriately chosen. The trees planted in that area where they do not block the signals visibility or obscure the lights and signs and infringe the overhead electric wires. It is beneficial to offer appropriate raised masonry platforms round the fully grown trees as an added seating arrangement for the passengers. Platform shelter/ shady trees are facilitated as per the station category i.e. in A1, A, B, C, D and E Platform shelters and in F category stations shady trees are facilitated.

7. Foot over bridge: Railway is providing facility of foot over bridges at A1, A, B and C category stations to attach various platforms with each other and reach by passengers from one platform to another and to reduce the accidents. Construction of foot over bridge are influenced by various factors such as total number of passengers dealt with at the station, Blocking of the lines between platforms by freight trains, Interconnection between high level or low level platforms and Frequency of train services. At station category A1, A and C Foot over bridges would be at least 6m wide and foot over bridges at 'A1' and 'A' category should be suitable for setting up of escalators. It should be provided at all crossing stations during doubling and gauge conversion up to 'D' category stations.
8. Standard signage: Standard signage's are installed at A1, A and B category station. Signage's for direction of passenger are the first attention area of platform transformation. Railway stations are by far the busiest public utility places. The overcrowding on platforms, particularly on major, railway stations, is increasing day by day. Railway signage's set up an operational passenger

- interface for communication with our passengers guiding them towards the facilities and services they look for at railway stations.
9. Urinals and latrines: for the conveniences of the passengers these facilities are available at all stations. Number of latrines/urinals incorporates arrangement in waiting room/halls. 1/3rd of the toilet are reserved for ladies. Railway also reduced number of latrines/urinals in those areas where problem of water scarcity with the approval of GM. Additionally, functional Pay and use toilets are an essential public amenity available to the passengers in all categories of stations. It includes various facility such as disabled friendly, at least one European-style toilet, proper lighting, good quality ceramic flooring and sufficient number of wash basins with soaps, as basic necessary amenities. Urinal and Latrines are available at all category of stations such as A1, A, B, C, D, E except F category.
 10. Lightings: Lighting facility is available at night to give illumination to the passengers who travel during the twilight and hours of darkness. All the stations of Indian railway have adequate lighting facility. All stations may be electrified as per provision of Railway. Bd's Circular No. 95/Elec. (G)/109/1, dated 01/02/1995. Lighting facility is available at all category of stations such as A1, A, B,C,D,E and F. Lighting arrangement at halt stations is providing, if trains stop at night at that station. Indian Railways (IR) already had taken an initiative regarding energy saving at various railway stations all over the country. The initiatives taken by Indian railway include utilization of LED light fittings, LED based station name boards, separation of lighting circuits at railway platforms, use of 3 star labeled electrical products, automation of pumps, replacement of High Pressure Mercury Vapor (HPMV) lamps with energy efficient lamps. Lighting based on Solar energy are introduced to give emergency lighting at "D" and "E" Category stations, wherever possible or in non-electric traction areas.
 11. Fans: Electric Fans are available at all electrified stations. All category of stations facilitated Fans excluding F category stations. Fans are installed in the

platforms of Indian railway to avoid sizzling and air flow to the passenger. Sufficient number of fans and lights are installed as per the station category. For covered platforms having width of 6-9mts; one row of fans are installed @one fan in the center of supporting columns. For covered platforms with more than 9mts width, fans are installed in 2 rows.

12. Clock: all categories of Indian railway station installed clock for the purpose of display timings for the passengers. It is installed at the entrance of the station as well as on each platform.
13. Time table display: display of Time table is essential in all A1, A, B, C, D, E, & F category stations. They are generally available at platforms and public utility locations. Time table and fare list are displayed on boards or cement plaques, with or without wire-netting which provides information regarding the trains, their arrival and departure time and platform no etc. it is operated locally at a particular station or can be from central station. All the stations of Indian railway have time table display board.
14. Electronic train indicator board: Electronic train indicator board is installed at A1 and A category stations for the purpose of providing information to the passengers. It is installed at station entry point /public space or Foot over bridge at landing location and on platform situated properly to guide passengers at each and every stage. This facility is essentially installed at A1 and A category stations.
15. Public address system/ computer based announcement: It is an electronic sound magnification and distribution system with a loudspeakers and microphone, amplifier utilized to allow a person to speak to a large public for announcements of train movements at railway station. The railway station is inadequate without the pre-recorded voice regarding information about trains that informs to passengers about the arrivals and departure of all trains. In Indian railway the coming of computerized announcement system meant that the diversity of voices blaring from loudspeakers in railway stations all over the country was replaced by those of a select few. There are different types of technologies used

in Indian Railways. Most advanced one is IPIS (integrated passenger information system). In this the standard voice is pre-recorded and just the blanks are filled with train number, expected arrival time, platforms, etc. There is an interface in which users inputs the data regarding train no, their expected times and platforms etc and have several options like display of train information, announcement and coach position. This system is installed at all stations of A1, A and B category.

16. Public phone booths: public phone booths are a facility located in the platforms of A1 and A category stations for the conveniences of the passengers who travel from trains.

17. Parking area with lights: The railway platform entry points are restricted for all types of vehicles. However parking facilities for the passengers and employees of Indian railway is available at A1 or A category stations. There are separate parking facilities for four wheeler, two wheeler and bicycle.

Table 1.5

Norms of Minimum Essential Amenities at Various Categories of Stations

S.no	Amenities	Station category						
		A1	A	B	C	D	E	F
1.	Waiting hall Sqm	250	125	75	0	30	15	10sqm booking office cum waiting hall
2.	Seating arrangement (No of seats)	150	125	100	10	50	10	-----

3.	Booking facility (No. counters)	15	10	6	4	2	2	1
4.	UTS as per norms	Yes	Yes	Yes	Yes	Yes	Yes	-----
5.	Drinking water Piped/Hand pump	20	20	20	6	8	2	Appropriate drinking water facility
6.	Water cooler	2 on each PF	2 on each PF	2 on each PF	2 on main PF	1 on main PF	----- -	-----
7.	Platforms	High Level	High Level	Medium level	High Level	Medium level	Rail level	Rail level
8.	Platform shelter (On each platform)	500sqm	400sqm	200sqm	200sqm	50sqm +	50sqm+	Shady trees
9.	Foot over bridges	1 with cover	1 with cover	1	1	-----	----- -	-----
10.	Signage (standardized)	Yes	Yes	Yes	-----	-----	----- -	-----
11.	Urinals	12	10	6	4	4	1	-----

12.	Latrines	12	10	6	2	4	1	-----
13.	Lighting (Lux level)	As per Board's letter No.2004/Elec(G)/ 109/ 1 dated 18.5.2007						
14.	Fans	Detail given on page no. 28-29 under the topic minimum essential amenities						
15.	Clock	Decided by Zonal railway						
16.	Time table Display	Detail given on page no. 29 under the topic minimum essential amenities						
17.	Electronic Train indicator board.	Detail given on page no. 29 under the topic minimum essential amenities						
18.	Public Address system/Comp uter based announcement	Detail given on page no.29-30 under the topic minimum essential amenities						
19.	Public phone booth	Detail given on page no. 30 under the topic minimum essential amenities						
20.	Parking-cum- circulatory area, with lights	Detail given on page no.30 under the topic minimum essential amenities						

Source:[http://www.indianrailways.gov.in/railwayboard/uploads/directorate/land_amen/PASSNG_AMENT_\(2\)/PA_Circular_110912.PDF](http://www.indianrailways.gov.in/railwayboard/uploads/directorate/land_amen/PASSNG_AMENT_(2)/PA_Circular_110912.PDF)

Note: (1) only one window is provided for booking facilities at stations where only one Assistant Station Master is posted. General Managers decides the significant amount of amenities depends on actual requirements in E category stations where the income is less than twenty lakh per annum.

(2) Scales of all the amenities given above is the bare minimum to be given at the proper category of stations. Amenities over and above the prescribed minimum scales will continue to be given as per norms for provision of amenities at "Recommended Level".

1.8.2.2 RECOMMENDED AMENITIES

Services and facilities existing at station according to the standards of "Minimum Essential Amenities" are not matched with real passenger movement distributed at the station. Consequently, the need of definite amenities formed on passenger movement according to the standards put down in table no 1.6 ought to be worked out and any expansion based on this, identifies as "Recommended Amenities".

Table 1.6

Norms for Recommended Level of Amenities at Various Categories of Stations

N_{max} = Maximum number of trains dealt with in any interval of half an hour at the station multiplied by the average number of passengers dealt per train at that station. The average number of passengers per train at a station shall be the average number of daily passengers dealt with at the station divided by the number of trains stopping at the station during 24 hours.

N_{db} = "Design figure for number of passenger for 'A' & 'B' stations to be calculated" as
 $N_{db} = 0.3 (N_{max})$ N_{ds} = Design figure for number of passenger for 'C', 'UWE' stations to be calculated as $N_{ds} = 0.45 (N_{max})$ ".

S.no	Amenities	Recommended scale for provision	
		Category A1, A and B	Other stations
1.	Waiting hall/shed	1.394 Ndb sqm	1.394 Nds sqm (Exclusive of C)
2.	Bathrooms	1/400 Ndb	1/400 Ndb at other junction 86 terminal stations only
3.	Seating arrangement (No of seats)	0.4Ndb	0.4Nds
4.	Booking facility (No. of counters)	1 window per 800 tickets per shift (shift with maximum number of tickets sold should be taken)	
5.	Platform level	To be decided by the Zonal Railway	
6.	Platform shelter (On each platform)	0.28Nmax	0.28Nmax
7.	Drinking water No. of taps	No. of taps= $N_{max}/25$. Taps should be distributed so that every alternate coach gets benefit of a tap	No. of taps= $N_{max}/25$.
8.	Water Coolers	To be provided if total number of passengers, internal and external is more than 1000 per day (As per Bd's letter no. 69/Elec(g)/730/8 Dt 30.3.71. To be decided by the Zonal Railways	
9.	Foot over bridge	To be decided by the Zonal Railways	
10.	Urinals (1/3 rd reserved for ladies)	Ndb/200	Nds/200

11.	Latrines reserved ladies) (1/3 rd for	Ndb/200	Nds/200
12.	Fans	<p>For covered platforms having width of 6-9 mts, one row of fans should be provided @one fan in the centre of supporting columns. For covered platforms with more than 9mts width, fans should be provided in 2 rows.</p> <p>(As per Board's letter no. 95/Elec(G)/ 138/5 dated 19.3.96.)</p>	
13.	Lighting	<p>(a) Emergency light: on each platform 10 light points at A1 and A category station from Auxiliary Transformer attached to traction supply. Excluding E and F category stations emergency light from DG set or solar supply on each platform at all stations where traction supply is not available.</p> <p>(b) As an emergency light minimum One light in Assistant Station Master Room, waiting hall each, Booking Window, three lights on each platform one light on each Foot Over Bridges at every 30 meter, and one light in circulating area is provided with appropriate back up power source like Solar/wind etc.</p> <p>As per Board's letter no. 95/Elec(G)/ 138/5 dated 19.3.96 Norms indicated in Note below.</p>	
14.	Clock	To be decided by the Zonal Railways	
15.	Time display table	To be decided by the Zonal Railways	

16.	Electronic train indicator board	To be decided by the Zonal Railways	
17.	Interactive Voice Response System	A - 48 lines (calls 72000) B - 24 lines (calls 5000-20000)	A central Interactive Voice Response System with suitable lines should be given to cover all suburban stations - Minimum 6 lines if Interactive Voice Response System is otherwise justified
18.	Public Address system/Computer based announcement	To be decided by the Zonal Railways	
19.	Parking-cum-circulatory area, with lights	To be decided by the Zonal Railways	
20.	Public phone booth	To be decided by the Zonal Railways	
21.	Parking-cum-circulatory area, with lights	To be decided by the Zonal Railways	
22.	Signage (Standardized)	To be decided by the Zonal Railways	

Table 1.7

**Norms For Recommended Level of Illumination at Different
Categories of Stations (Ref Bd's Circular No 2005/Elec(G)/150/1 Dt
28.2.06)**

S.No	Area	Proposed lux level for category I/ II/ III station
1.	Station circulating area	50/30/20
	Outdoor car parking	20/ 20/ 20
2.	Station concourse area	100/ 100/ 100
3.	Retiring rooms	100/100 /100
4.	Waiting halls/rooms	100/100 /100
5.	Booking office, reservation office, enquiry office	200(localized above counter)&100 in remaining areas for category I, II, III stations.
6.	Parcel & luggage	150/ 150/150
	office counter	150/150 /150
7.	Platform covered Open area	50/30/20
8.	Foot over bridge	50/30/20
9.	Restaurant & kitchen in general building area:	
	i) restaurant area:	150/150 /150
	ii) ii) Kitchen:	100/100/ 100
	iii) iii) Stores	100/100/ 100
10.	Other service buildings inside Railway station area	200 for SM's office for category I, II, III station

Category (I) – All A1 and A category Stations and stations on Zonal railway
Headquarters State capitals

Category (II) – All B category Stations or stations on Railways Divisional
Headquarters/State District Headquarters

(III) - All remaining Categories stations

1.8.2.3 DESIRABLE AMENITIES

Desirable amenities are defined as the amenities which are measured desirable to enhance customer satisfaction level and interface process at the station. The amount of such amenities would rely upon the categories of the station. It includes retiring room, waiting room with bathing facilities or separate for females, cloak room, enquiry counters, book stalls or stalls for essential goods, computer based announcement, water vending machines, escalators, foot over bridges, traveller, signage, modular catering stalls, automatic vending machines, pay & use toilets, provision of ATM, provision of cyber café, provision of at least one AC lounge for VIPs, CCTV camera and High level platforms etc.

Some of the desirable amenities are as follows:

1. Retiring Rooms: availability of Retiring rooms are only at major stations of Indian railway like Delhi, Mumbai, and Chennai, Allahabad, Jhansi etc. There is a payment charged for the utilization of retiring rooms. Those passengers expecting to utilize retiring rooms must have a valid Railways ticket either for a journey just finished or for an upcoming trip. Retiring rooms can be a suite, basic room, air-conditioned room and a dormitory. Though, all stations will not have facility of air-conditioned rooms. There is different charge for different kind of accommodation. In retiring room shower facilities are usually available. If the passengers want to stay in a dormitory, there is a lockable cabinet where passenger can lock some of their belongings. But the passengers take their own lock. There is a maximum duration of stay in retiring rooms is limited to about two days, here again the retiring room matron can recommend the passengers who want to extend their stay. Purpose of the Railway authorities' is to try and not dissatisfy long term stay in retiring rooms, so that all passengers can use these facilities. Most of the retiring rooms are available on the basis of first come first served for passengers holding departing or return railway ticket.
2. Cloak room: cloak rooms facilities are available in all major railway stations, in India. It is a facility where passengers can keep their luggage and belongings for a particular time period. Major stations have 24-hour operated facilities, on the

other hands at some stations cloak room facility operates only from early morning to evening. This kind of facility utilize by pilgrims or day traders coming from small towns to large as well as by the transit passengers who are waiting for a changeover to another train. Cloak rooms assist passengers to avoid carrying their luggage through the city while they conduct their business or tourism. Commercial Department of Indian Railways operated the facility of cloak rooms at all major railway stations; small railway stations may not have this facility. After verifying the ticket of passenger a clerk collects the luggage. The locked luggage bags are collected and a receipt is issued, mentioning the date and time the luggage was surrendered. Luggage are then stored on shelves in the cloak room. On return, passengers need to show their receipt, pay the basic charges to the clerk, and collect their belongings.

3. National Train Enquiry System [NTES]: National Train Enquiry System (NTES) is an important part of Integrated Coaching Management System created and kept up by CRIS (call related information system). National Train Enquiry System (NTES) gives information to the passengers regarding schedule of train, Arrival and Departure of trains at each stopping station, diverted trains information regarding cancelled trains etc. The primary objective of National Train Enquiry system is to give appropriate and reliable information to passengers via user friendly interfaces and PAN India availability has been accomplished to a large extent and the information is suitably and reliably presented to passengers throughout the country by different delivery channels i.e. mobile phone or landline, web browsing and furthermore face to face enquiry of passengers and displays at all Indian Railway stations. This system is available at A1 and A category stations of Indian railways.
4. Interactive Voice Response System: Interactive Voice Response is a computerized telephony system that interacts with callers, collects information and routes calls to the proper receiver. An Interactive Voice Response System takes an amalgamation of voice telephone input and touch-tone keypad selection and gives proper replies in the form of fax , voice, email, callback and with other media. This system enables enquiries like waitlisted ticket, current

- status of reservation against RAC and availability of accommodation. This interactive telephone enquiry facility is available at A1, A and B category stations of Indian railways. This is an addition with manual telephone enquiry already exist at a large stations. Interactive Voice Response System is available in English, Hindi and in local languages.
5. Refreshment room: A refreshment room is creations that are formerly common at Indian railway stations which offer a place for rest and nourishment of the passengers. Generally offer a range of hot drinks, soft drinks, bakery products, light meals and variety of Vegetarian and Non-Vegetarian food of every cuisine from Indian to chines to Mughlai to continental at certain stations where the passengers can get hygienic food at reasonable cost. These type of facilities available at A1, A and B category stations of Indian Railway.
 6. Escalators: An escalator is a moving set of steps which transports passengers between floors of a building. It comprises of a motor-driven chain of individually connected steps. Escalators have the ability to move a huge number of passengers, and they are set in the indistinguishable physical space as a staircase. They have no holding up interim excepting during very heavy traffic, they are utilized to guide individuals on the way to main exits or special exhibits, and they are weather proofed for outdoor use.
 7. Travellator: Basically a travellator is a conveyer transport device that used by passengers for moving slowly and safely in a short distances moreover along inclined distance or level ground, for examples between two floors of a building. Travellators are used for moving walkways to more rapidly move travellers with heavy luggage the increasingly long distances between concourses and the platform or platform to parking and railway stations.
 8. Pay and use toilets: the facilities of pay and use toilets are public toilet that needs the user to pay. Pay and use toilets are available at A1, A, B, C, D and E category stations of Indian Railway. Facilities of Deluxe Toilets are available in the A-1, A & B category of stations including value added services.

9. Cyber café: At Platforms of Indian railway facility of cybercafé offers Internet access to the passengers. The payment for utilizing the computer is generally charged as a time-based rate. The facilities of cyber café are offered by Indian railway with Rail Tel Corporation of India Limited at railway stations with the purpose of technical developments in the country. Rail Tel Corporation of India Limited has been made with a view to develop, update and make commercial use of telecom facilities on the Railways. The number of cyber café booths at which stations of Indian railway are decided by Rail Tel Corporation of India with the Zonal Railway.
10. ATM Facilities: An automated teller machine is an electronic banking outlet, which permits consumers to complete basic transactions without the aid of a branch representative or teller. Consumer with a debit card and credit card can access most ATMs. At Indian railway stations there is no restriction on the installation of the number of ATMs. Facilities of ATM are available at all category stations except F category.
11. Food plaza: food plaza facilities available at only A1 Category stations and they provide a wide variety of hygienic, healthy and disinfected food at railway platforms. Additionally they also provide the services of online booking of food. They also deliver the meal on the berth of train. Some of the common food plazas are Comesum and IRCTC Catering Outlets.
12. CCTV: It means Closed-circuit television and also identifies as video surveillance in use of video cameras to transfer a signal to a particular place, on a limited set of monitors. All the A1 category railway stations offer the facilities of CCTV cameras over for round-the-clock observation for the security of passengers by Railway Protection Force. The railway has turned out to be logically helpless against security dangers that comprise fire, theft, destruction, terrorism etc. Indian railway confronts a critical requirement to safeguard employees, passengers; infrastructure etc. installation of CCTV camera at railway stations plays a significant role in declining the crime rate on Indian railways. CCTV camera is used for many reasons but the major focus is always

on safety and security of the passengers. Additionally it is also used for investigation of incidents or accidents. Recently there has been an expansion in the utilization of CCTV camera to observe movements of passengers and congestion at railway stations. The CCTV camera are installed across the platforms, ticket counters, all the entry points and exit points, parking area, lobby area, and other places which are generally congested. As a desirable amenities CCTV camera are installed at all A1 category stations.

13. Coin operated ticket vending machine/ Automatic Ticket Vending Machines: At ticket counters to avoid heavy rush Indian Railways install Automatic Ticket Vending Machines in A1, A, B and C category stations. The main purpose of installation of Automatic Ticket Vending Machines is to reduce the crowd at ticket counter as well as provide ease of ticketing. All types of tickets including platform ticket are issued by these machines. Moreover it also provides the facilities of cashless transactions where passengers purchase unreserved tickets by use of smart card on which they also receive 5% bonus.
14. Pre- paid taxi services: services of prepaid taxi at railway stations are organized by the local authorities in collaborations with the Indian Railways. Railway Public Sector Undertakings, Indian Railway Catering and Tourism Corporation are accountable for these types of facilities or services. Pre- paid taxi services are available at A1 category stations.
15. High level platform: Platforms are provided at all stations. Platforms may be of High level, Medium level, and Rail level depending up on the categories of stations. As desirable amenities high level platforms are constructed at A1, A, B, C and D category stations. For D category stations high level platforms are constructed with the approval of General Manager.

Table 1.8

Norms of Desirable Amenities at Various Categories of Stations

S.no	Amenities	Station category						
		A1	A	B	C	D	E	F
1.	Retiring room	Yes'	Yes	Yes	-----	-----	-----	-----
2.	Clock room	Yes	Yes	Yes	-----	-----	-----	-----
3.	Waiting room (with bathing facilities)							
	Upper class	Yes1	Yes	-----	-----	-----	-----	-----
	2 nd class	Yes 1	Yes	Yes	-----	Yes	-----	-----
	Separate for ladies (combined upper and 2 nd class)	Yes1	Yes	-----	-----	-----	-----	-----
4.	Enquiry counter	Yes	Yes	Yes	-----	-----	-----	-----
5.	Refreshment room	Yes	Yes	Yes	-----	-----	-----	-----
6.	National Train Enquiry system	Yes	Yes	-----	-----	-----	-----	-----

7.	Interactive voice response system	Yes	Yes	Yes	-----	-----	-----	-----
8.	Travellator	Yes2	Yes2	-----	-----	-----	-----	-----
9.	Escalators	Yes3	Yes3	-----	Yes3	-----	-----	-----
10.	Public address system/ computer based announcement	Yes	Yes	Yes	Yes	Yes	-----	-----
11.	Pay & Use Toilets on end platforms & circulating area.	Yes	Yes	Yes	Yes	Yes	Yes	-----
12.	Book stalls/ other stalls of essential goods	Yes 4	Yes	Yes	Yes	Yes	-----	-----
13.	Parking/ Circulatory area with lights***	Yes	Yes	Yes	Yes	Yes	-----	-----
14.	Washable apron with jet cleaning#	Yes	Yes	Yes	-----	-----	-----	-----
15.	Provision of cyber cafes	Yes 2	-----	-----	-----	-----	-----	-----
16.	Electronic train indicator board	Yes	Yes	Yes	Yes	-----	-----	-----

17.	Touch screen enquiry system	Yes	Yes	Yes	-----	-----	-----	-----
18.	Provision of ATMs (preferably with ticketing facility)	Yes	Yes	Yes	Yes	Yes **	Yes **	-----
19.	Water vending machines	Yes	Yes**	Yes**	-----	-----	-----	-----
20.	Food plaza	Yes	-----	-----	-----	-----	-----	-----
21.	Foot over bridges	Yes	Yes	Yes	Yes	Yes®	-----	-----
22.	CCTV for announcement & security purpose	Yes	-----	-----	-----	-----	-----	-----
23.	Signage (standardized)	Yes	Yes	Yes	Yes	Yes	-----	-----
24.	Modular catering stalls*	Yes	Yes	Yes	Yes	Yes	-----	-----
25.	Automatic Vending Machines	Yes	Yes**	Yes**	Yes**	-----	-----	-----
26.	Coin operated Ticket Vending Machines	Yes	Yes	Yes	Yes	-----	-----	-----
27.	Provision of at least one AC	Yes	-----	-----	-----	-----	-----	-----

	VIP/Executive Lounge							
28.	Pre-paid Taxi service	Yes	-----	-----	-----	-----	-----	-----
29.	Train coach indication system	Yes	-----	-----	-----	-----	-----	-----
30.	High Level Platform	Yes	Yes	Yes	Yes	Yes6	-----	-----

Source:[http://www.indianrailways.gov.in/railwayboard/uploads/directorate/land_amen/PASSNG_AMENT_\(2\)/PA_Circular_110912.PDF](http://www.indianrailways.gov.in/railwayboard/uploads/directorate/land_amen/PASSNG_AMENT_(2)/PA_Circular_110912.PDF)

*** Consist of high mast lighting where possible.

at all platforms washable aprons along with water hydrant/jet system are provided where morning train stops for long time for the purpose of cleanliness and better upkeep.

® On double line sections.

* In end platforms, all stalls are preferably embedded in walls.

**Optional items vide Board's letter 1\16.94/LMB/2/175 dated 16.1.05.

Numbered subscripts:

1. Public- private partnership schemes are responsible for the up gradation. There is no need of providing retiring Rooms at 'D' category stations.
2. Subject to availability of space and possibility
3. Escalators at 'A1', 'A' and 'C' category stations of Tourist significance
4. Should arrange for minimum necessary medications.
5. With the General Manager approval

1.8.2.4 AMENITIES FOR PHYSICALLY HANDICAPPED PASSENGERS

Amenities for passengers with disability is divided into two categories: short term and long term facilities

A) Short term facilities comprising of following 7 items as given below:

- Standard ramp facility with railing for obstacle free entry.
- For disabled allocation of at least two parking areas.
- Providing a non-slippery walkway from parking area to building.
- Providing signage of suitable visibility.
- Facilities of at least one drinking water tap appropriate for use by a disabled person.
- Facility of at least one toilet on the ground floor.
- “May I help you” counter.

At all A1 and A category stations above facilities have already been provided, and are now being stretched to all B category stations. This has to be confirmed, followed by their progressive provision at other category stations.

B) Long term facilities consist of following two items:

- Facility for inter-platform transfer.
- Engraving on edges of platforms.

Above mentioned facilities are intended to be taken up after provision of short term facilities. Concerning inter-platform transfer, provision of 1 in 12 ramps/ subways / lifts to existing Foot Over Bridges may not be achievable as a general solution. This facility for handicapped passengers has to be primarily offered through pathways at the end of platforms, on wheelchairs, duly escorted by coolies, as per present practice. Consequently, pathways at platform ends, wherever not existing currently, should be provided in a time bound manner, beginning with A1 and A category stations.

Furthermore, these should be appropriately delivered with pre-cast cement concrete blocks at track crossings etc. and placed to correct level, to make sure a smooth ride for handicapped persons on wheel chairs, without need for lifting at any stage. The other long term facility, viz., engraved design on platform edges may also be taken up gradually commencing with A1 and A category stations.