

Transportation of e-Commerce Packages in Indian Railways

A pilot project was launched to study the feasibility of using Railways' parcel service for e-tail players under which Amazon India has been provided 2.5 tonnes space in the SLR/Break Van under Guard's charge for loading/unloading of consignments, in 12314/12313 New Delhi-Sealdah Rajdhani Express and 12952/12951 New Delhi-Mumbai Rajdhani Express trains. Detailed guidelines will be formulated based on the outcome of the Pilot Project. The amount targeted to be earned by Railways during the financial year (2019-20) through freight and

passenger travel are ₹1,43,000 crore and ₹56,000 crore respectively. Indian Railways continuously strives to improve passenger as well as freight traffic and earnings over its network.

Some of the initiatives taken to improve passenger traffic and earnings are augmentation of on-board capacity, rationalisation of Flexi fare scheme, extension of Alternate Train Accommodation VIKALP scheme, increase in number of RAC berths to provide additional accommodation, etc. Similarly, various schemes have been introduced to increase earnings from freight business, such as

Liberalised Automatic Freight Rebat scheme for traffic loaded in empty flow direction, Long Term Tariff Contracts (LTTTC) with key freight customers, Station to Station rates (STS), de-notification of large number of commodities to bring them under FAK rates, etc. Also, to enhance the freight performance of Indian Railways, steps such as increasing the axle load and length of freight train, use of extensive computerization, deployment of higher capacity wagons and locomotives, improvement in track and signaling, etc are being taken.

Redevelopment of Railway Stations

Ministry of Railways through various agencies is undertaking techno-economic feasibility studies of Railway stations.

Based on the outcome of these feasibility studies, stations are planned to be taken up for redevelopment in phases.

The cost of station redevelopment project is to be met by leveraging commercial development of land and air space in and around the stations.

Presently, work of redevelopment is in progress at Gandhinagar (Gujarat) and Habibganj (Bhopal) stations.

The facilities proposed in a

redeveloped station include congestion free non-conflicting entry/exit to the station premises, segregation of arrival/departure of passengers, adequate concourse without overcrowding, integration of both sides of the city wherever feasible, integration with other modes of transport systems e.g. Bus, Metro, etc., user friendly international signage, well illuminated circulating area and sufficient provision for drop off, pick up & parking etc.

Various developers have shown interest in redevelopment of stations on Indian Railways.

All major railway stations on

Indian Railways are planned to be taken up for redevelopment, especially the stations located in major cities, pilgrimage centres and



important tourist destination, including Sawai Madhopur station.

Railway Projects

At present 498 Railway projects including 188 New Lines, 55 Gauge Conversion and 255 Doubling Projects are in different stages of execution/planning/sanction. The total length of these projects is 49,069 km costing ₹6.75 Lakh Crore. The project wise details of projects are made available in public domain on Indian Railways website i.e. www.indianrailways.gov.in >Ministry of Railways >Railway Board >About Indian Railways >Railway Board Directorates >Finance (Budget).

The timely completion of any Railway project depends on various factors like quick land acquisition by State Government, forest clearance

by officials of forest department, shifting of infringing utilities (both underground and over ground), statutory clearances from various authorities, geological and topographical conditions of area, number of working months in a year for particular project site due to climatic considerations, earthquake, flooding, excessive rains, strikes of labour, orders of Courts, etc. All these factors vary from project to project and site and affect the completion time and cost of the project, which is finally worked out at the completion stage.

To ensure that projects are completed in time without cost overrun, lot of monitoring is done

in Railways at various levels (field level, divisional level, zonal level and Board level) and regular meetings are held with the officials of State Government and concerned authorities to resolve the pending issues that are obstructing the progress of projects. Railway has adopted the concept of incentives to the contractor in the form of bonus clause in contracts which will further enhance the pace of execution of projects. For capacity enhancement projects, etc. institutional financing has been done by arranging loan of ₹1.5 lakh crore, which has increased Railways' capacity for committed fund provision for essential projects.

World Class Railway Stations

Ministry of Railways have planned for redevelopment of railway stations through Indian Railway Stations Development Corporation Limited (IRSDC), Rail Land Development Authority (RLDA) and other Central Government agencies. All major stations on Indian Railways have been entrusted to these agencies for undertaking the techno-economic feasibility studies. Based on the outcome of the feasibility studies the stations are planned to be taken up for redevelopment, in phases. Redevelopment of stations is planned through leveraging commercial development of vacant land and air space in and around railway stations, i.e. station redevelopment projects shall generally be cost neutral to Railways.



Works for redevelopment of Habibganj (Bhopal) and Gandhinagar stations are in progress. Ministry of Railways is redeveloping Bhubaneswar Station in cooperation with Govt of Odisha. RLDA has also entered into an MoU with Massouri Dehradun Development Authority (MDDA) for redevelopment of Dehradun Railway Station. Rail Land Development Authority (RLDA) has signed an MoU with National Highway Authority of India in April-2019, for redevelopment of Ajni (Nagpur) station as a Multi-modal Hub. Station redevelopment program is first of its kind and complex in nature and requires detailed techno-financial feasibility studies and various statutory clearances from local bodies etc.

Installation of Solar Panels on Railway Stations

So far 95.67 Mega Watt (MW) of Rooftop Solar Power has been installed on various Railway buildings, including 835 Railway stations. The Zone-wise details of these Railway stations is as under:

Zonal Railway	No. of Stations provided with Solar Panels
Central	21
Eastern	39
East Central	105
East Coast	14
North Central	32
North Eastern	71
Northeast Frontier	42
Northern	51
North Western	104
South Central	49
South Eastern	13
Southeast Central	15
Southern	52
South Western	132
West Central	23
Western	69
Metro	3
Total	835

Indian Railways plans to install solar energy panels in other stations depending upon site availability and feasibility. So far, tenders for 248.46 MW capacity have been awarded by Railway Energy Management Company Ltd. (REMCL) and are under different stages of execution. This will cover the rooftops of Railway station platforms shelters and various other Railway buildings. The details of Zone-wise Solar

rooftop projects awarded by REMCL are as under:

Zonal Railways/ Production Units	Awarded Rooftop Solar Capacity (in MW)
CLW	7.64
Central Railway	20.85
DLW	6.83
Eastern Railway	19.79
East Coast Railway	14.83
East Central Railway	12.65
Integral Coach Factory	2
Metro Kolkata	5.54
North Central Railway	10
North Western Railway	11.68
NF Railway	1.88
Northern Railway	23.63
North Eastern Railway	13.92
Research Design and Standards Organization	1.08
Rail Coach Factory	0.9
Southern Railway	10.69
Southeast Central Railway	4.38
South Eastern Railway	24.94
South Central Railway	33.14
South Western Railway	2.46
West Central Railway	9.63
Western Railway	10
Total	248.46

Indian Railways has plans to provide 500 MW rooftop solar plants by 2021-22. Most of this work is being done in Public Private Partnership (PPP) mode (Developer mode) by private partners, in which Railways do not have to incur capital expenditure. Work of provision of Solar panels on trains is also being done by private partners.

Head on Generation (HOG) System in Indian Railways

Indian Railways has adopted an energy-efficient power supply system for coaches called Head On Generation (HOG) system wherein power supply is drawn from Over Head Equipment (OHE) through converters provided in electric locomotive (WAP-7/WAP-5) for coach AC, lighting, fans etc. This system is being provided in End On Generation trains, where power cars equipped with DG sets, are provided at both the ends. The system is considered to provide a cost effective, reliable and energy efficient supply system for coaches. This eliminates use of Diesel

Alternator set in power cars which creates noise & air pollution.

There is huge saving in diesel fuel consumption of power cars with introduction of HOG system in Linke Hofmann Busch (LHB) coaches. So far, 500 trains have been converted to HOG system resulting in approx. savings to the tune of ₹1182.22 crore per annum.

During 2019-20, it is planned to convert balance (200 trains) End On Generation (EOG) LHB rakes into HOG system. By conversion of such trains, Indian Railways is likely to save approx. ₹470 crore per annum.

500 MW Solar Panels

RAILWAYS IN PARLIAMENT (LOK SABHA)

Steps Taken by Railways for Safety and Security of Passengers

Policing on Railways being a State subject, prevention of crime, registration of cases, their investigation and maintenance of law & order in Railway premises as well as on running trains are the statutory responsibility of the State Governments, which they discharge through Government Railway Police (GRP)/ District Police. Cases of Indian Penal Code (IPC) crimes are registered and investigated by the concerned GRP. Railway Protection Force (RPF) supplements the efforts of GRP to provide better protection and security to passenger area & passengers and for matters connected therewith. The following steps are also being taken by the Railways for safety and security of passengers in trains and at stations:-

- On vulnerable and identified routes/ sections, 2200 trains (on an average) are escorted by Railway Protection Force daily in addition to 2200 trains escorted by Government Railway Police of different States daily.
- Surveillance is kept through CCTV cameras, provided at about 473 stations over Indian Railways, to ensure safety and security of passengers.

- Security Help Line number 182 is operational over Indian Railways for security related assistance to passengers in distress.
- Through various social media platforms viz. twitter, facebook etc., Railways are in regular touch with passengers to enhance security and address their security concerns.
- An Integrated Security System (ISS) consisting of surveillance of vulnerable stations through CCTV Camera Network, Access Control etc. has been sanctioned to improve surveillance mechanism over 202 railway stations.
- Anti sabotage checks are undertaken with sniffer dogs at all major stations as well as in trains. Further baggage scanners are being used at entry points of major stations for checking of luggage of passengers and use of Door Frame Metal Detectors (DFMD) & Hand Held Metal Detectors (HHMD) are ensured.
- Time to time mock bomb blast drills are conducted at some major & sensitive Railways stations over Indian Railways by the Railway authorities in full coordination with sister agencies to check prepa-

redness of the disaster management teams & equipments.

- Close liaison is made by the Railways with the State Police/GRP authorities, Central & State Intelligence agencies and Civil authorities at all levels for prevention of crime, registration of cases, their investigation and maintenance of law & order in Railway premises as well as on running trains.
- RPF Special Task Force teams, Crime Prevention and Detection Squads etc. are functioning to curb passengers' related offences. Surprise checks are conducted in night hours and staff are briefed to be extra vigilant & alert.



Steps Taken by Railways to Avoid Delay of Trains in Fog

A large number of trains are affected every year during foggy weather in the winter months in Northern parts of the country. The following steps have been taken to avoid delay of trains during the foggy weather:-

- To enhance the level of safety when the trains running in automatic block signaling sections, a modified automatic signaling system has been introduced in Northern Railway and North Central Railway which restricts the number of trains between two stations during foggy weather.
- Luminous paints/strips have been provided on the Signal Sighting Boards viz. Passenger and Goods warning boards, signals at stations/ interlocked Level Crossing Gates and Semaphore signal arms to enhance visibility of signal aspects to loco pilots.

- Inspection at Officer and supervisor level, including night inspections, are being carried out during foggy weather for spreading more awareness and alertness among the maintenance staff.
- To assist the Loco Pilots to run the train during foggy weather condition, Fog PASS Device, a Global Positioning System (GPS) based hand held portable device, which is not installed on a locomotive as such, is given to Loco Pilots in fog

affected sections. It serves as an aid for the crew during foggy weather through audio visual alarm, wherever any landmark comes within the Geo-fence range. Location of stations, warning boards, signals, level crossing gates and Whistle for Level crossing (W/L) boards in the section is fed in the equipment. It displays speed of the locomotive, distance and time to reach landmarks and is carried by the Loco Pilots.

Eco Smart Railway Stations

National Green Tribunal (NGT) has ordered to develop at least 5% of major stations as Eco-smart stations. Accordingly, 5% of 720 major stations were selected covering 2-3 stations from each of 16 Zonal Railways, which resulted in a total of 37 stations.

As per NGT's directions, list of 37 stations has also been uploaded on Indian Railways website on the following link:- http://www.indianrailways.gov.in/railwayboard/uploads/directorate/Environment_Management/2019/EnHM_Station_List_13082019.pdf.

outcome based subjt.

Rashtriya Rail Sanrakshan Kosh

Modernisation of Railway Stations

Modernisation/upgradation of Railway stations in Indian Railways is a continuous and ongoing process.

This has been undertaken from time to time under various modernization schemes such as Model Station Scheme, Modern Station Scheme and Adarsh Station Scheme.

The development of stations under 'Model Station Scheme' (June, 1999 to November, 2008) and 'Modern Station Scheme' (2006-07 and 2007-08) had since been completed.



Further, upgradation of stations under Adarsh Station Scheme was started from 2009-10. Selection of Railway stations under this Scheme is based on the identified need for upgradation of amenities. 1253 stations have been identified for development under Adarsh station Scheme out of which 1149 railway stations have been developed so far and the remaining stations are planned to be developed by 2019-20.

Presently, development of stations under 'Adarsh' Station Scheme including upgradation and maintenance of railway stations is undertaken through departmental means and outsourcing. The allocation/expenditure on works of modernization including development of stations under 'Adarsh' Station Scheme is generally funded under Plan Head - 'Passenger Amenities'.

The Rashtriya Rail Sanraksha Kosh (RRSK) has been created in the form of a Reserve Fund. The fund will receive a corpus of Rs1 lakh crore over a period of 5 years starting from 2017-18. Details of funds allocated under Rashtriya Rail Sanraksha Kosh (RRSK) during the financial years 2017-18, 2018-19 (Prov) and 2019-20 (BE) are shown in the following table:

(Rs in cr.)

Year	Allocation
2017-18	16090.75
2018-19 (Prov)	18015.33
2019-20 (BE)	20000.00

Minor-Head wise details of utilization of funds under RRSK in 2018-19 are shown below:

(Rs in cr.)

Minor Head	Actual 2018-19 (Prov)
16-Traffic Facilities	498.23
21-Rolling Stock	1637.28
29-Level Crossings	678.60
30-Road Over/Under Bridges	3488.82
31-Track Renewals	9697.31
32-Bridge Works	516.72
33-Signalling and Telecom Works	1461.29
36-Other Electrical Works	349.79
41-Machinery & Plant	179.82
42-Workshops incl PUs	202.67
53-Passengers Amenities	795.10
64-Other Specified Works	42.00
65-Training/HRD	48.01
Credits/recoveries	1580.31
Total	18015.33

Safety is accorded the highest priority by Indian Railways and all possible steps are undertaken on a continuous basis to prevent accidents and to enhance safety. These include timely replacement of over-aged assets, adoption of

suitable technologies for upgradation and maintenance of track, rolling stock, signalling and interlocking systems, safety drives, greater emphasis on training of officials and safety inspections at regular intervals to monitor and educate staff for observance of safe practices. Preventive and predictive maintenance of the Railway assets is undertaken to ensure safe train operation. Safety devices/systems being used to prevent accidents include Electronic Interlocking, track circuiting, provision of Block Proving Axle Counters, Colour Light LED Signals, Train Protection and Warning System, Vigilance Control Device, Fog Pass Device, usage of 52 kg/60 kg, 90 or higher UTS rails and pre-stressed Concrete Sleepers, use of Ultrasonic Flaw Detection of rails and welds at predefined periodicity to detect internal flaws in rails/welds. Electronic monitoring of track geometry is carried out to detect defects and plan maintenance. Steel Channel Sleepers on girder bridges are being used while carrying out primary track renewals. Further, it has been decided to lay Thick webs switches, Weldable Cast Manganese Steel crossings on identified routes. Progressive use of Linke Hofmann Busch Coaches, use of Centre Buffer Couplers with Integral Coach Factory Coaches, etc. Railway tracks are replaced on age-cum-condition basis through track renewal works which is an ongoing process.

Other measures include training of loco pilots and other safety category staff, improvement of their working conditions including proper rest and periodic medical examination etc. Besides, patrolling of tracks, footplate inspections and safety reviews at various levels, etc. are regularly conducted to continuously monitor and improve safety aspects of the Indian Railways. Due to these efforts, the number of consequential train accidents have reduced from 135 in 2014-15 to 59 in 2018-19.

Safety Deptt

Security Cameras in Trains

It has been decided to fit Closed Circuit Television cameras in trains / coaches of Indian Railways. Till date, CCTV cameras have been provided in more than 2,000 coaches in around 114 Mainline trains, 88 Electric Multiple Unit (EMU) rakes and 4 Mainline Electric Multiple Unit (MEMU) rakes.

Convenience Fee on Railways e-Tickets

Indian Railway Catering and Tourism Corporation (IRCTC) levies service charge as per market conditions since the introduction of online ticketing facility over Indian Railways in 2002. In order to incentivize digital payments, the aforesaid service charges were temporarily withdrawn in November, 2016.

However, IRCTC incurs substantial expenditure on providing online ticketing facility. Further, many initiatives like Alternate Train Accommodation Scheme 'VIKALP', Artificial Intelligence based Passenger Name Record (PNR) confirmation predictor etc. have been introduced on the IRCTC website to enhance passenger convenience and user-experience. In order to defray the cost incurred in maintenance, upgradation and expansion of ticketing infrastructure, a convenience fee of ₹15 + GST per ticket for Non-AC Classes and ₹30/- + GST per ticket for AC Classes is being levied by IRCTC w.e.f. 1 September, 2019.

The online ticket booking facility provided by IRCTC is one of the most passenger friendly initiative of Indian Railways. Even after the levying of the convenience fee, online ticketing through IRCTC has continued its upward trend and it presently constitutes about 72% of total reserved tickets booked on Indian Railways. At present, there is no proposal to reconsider the decision of introducing convenience fee on e-tickets.

Steps Taken by Indian Railways to Avoid Incidents of Derailment of Trains

Zone-wise and year-wise number of consequential train derailments during the last three years i.e. 2016-17 to 2018-19 and the current year (from 1st April to 31st October, 2019) are given below:-

Zonal Railway	2016-17	2017-18	2018-19	2019-20 (Upto 31 st October, 2019)
Central	7	8	4	5
Eastern	5	1	0	2
East Central	13	6	6	3
East Coast	6	4	2	0
North Central	4	3	0	3
North Eastern	1	4	4	0
Northeast Frontier	5	1	4	1
North Western	2	2	4	2
Northern	10	10	10	4
South Central	1	3	1	2
South Eastern	0	2	3	0
South East Central	5	1	0	0
South Western	1	1	1	0
Southern	7	3	4	1
West Central	2	0	1	3
Western	8	4	2	3
Konkan	1	1	0	0
Kolkata Metro	0	0	0	0
TOTAL	78	54	46	29

The following steps have been taken to avoid incidents of derailments and to improve safety of railway tracks:-

During 2018-19, 4181 km track renewal had been carried out. For the current year i.e. 2019-20, 2643 km track renewal has been carried out upto October, 2019.

In order to improve safety, modern track structure consisting of Prestressed Concrete Sleeper (PSC), 60kg, 90 or higher Ultimate Tensile Strength (UTS) rails, fanshaped layout turnout on PSC sleepers, Steel Channel Sleepers on girder bridges is used while carrying out primary track renewals.

Long rail panels of 260M/130M length are being manufactured at the steel plant to minimize number of Alumino Thermit joints in the track.

Provision of Thick Web Switches (TWS) is planned for all important routes of IR. To expedite provision of TWS, procurement of Thick Web Switches has been decentralized to zonal railways.

Cold weather patrolling of the railway tracks is done during the coldest part of the night in cold months of the year to look out for weld/rail fractures for ensuring safety.

Ultrasonic Flaw Detection (USFD) testing of rails to detect flaws and timely removal of defective rails. USFD Vehicular testing system has been introduced and implemented successfully on Northern Railway.

GPS trackers are being provided to keyman and patrolmen to monitor their movement and to report any unsafe condition noticed by them instantaneously.

Mechanization of track maintenance is being carried out to reduce human errors.

Track management system has been introduced on Indian Railways for development of database and decision support system and to decide/rationalize maintenance requirement and optimize inputs.

Safety drives and inspections at regular intervals are carried out to monitor and educate staff for observance of safe practices.

The total expenditure on Repairs & Maintenance of Permanent Way & Works during the last three years i.e. 2016-17 to 2018-19 and the current year (from 1st April to 31st October, 2019) are given below:-

Year	Total expenditure on Repairs & Maintenance of Permanent Way & Works (₹ in crores)
2016-17	12244.36
2017-18	13499.96
2018-19	14558.75
2019-20 (Upto 31 st October, 2019)	9768.25

Onboard Housekeeping Services in Running Trains

Cleanliness is a continuous process and every endeavour is made to keep the coaches including toilets in properly maintained and clean condition. Some of the major initiatives taken by Indian Railways towards improvement of cleanliness of trains are as follows:

- Cleaning of coaches including toilets of trains is done at both ends, including mechanized cleaning.
- Onboard Housekeeping Service (OBHS) has been provided in nearly 1090 pairs of trains including Rajdhani, Shatabdi and other important long distance Mail/Express trains for cleaning of coach toilets, doorways, aisles and passenger compart-

- ments during the run of the trains.
- 'Coach Mitra' service has been provided in around 1050 pairs of OBHS trains as a single window interface to register coach related requirements of passengers such as cleaning, disinfection, linen, train lighting, air conditioning and watering of coaches.
- Clean Train Station (CTS) scheme has also been prescribed for limited mechanized cleaning attention to identified trains including cleaning of toilets during their scheduled stoppages enroute at nominated stations.
- Pest and rodent control of coaches is being done on a regular

basis through authorised professional agencies. Fumigation is also done for pest control.

- Earlier, dustbins were provided in AC Coaches only. Now, provision of dustbin is also being done in Non-AC coaches.
- Indian Railways is proliferating bio-toilets on its coaching stock so that no human waste is discharged from coaches on to the track.
- Regular checks are conducted at officers / supervisors levels, and corrective action is taken wherever any deficiency is noticed.
- Cleanliness drives and awareness campaigns are also carried out from time to time.

Act East Policy and Rail Connectivity

At present, India is having transport connectivity with its neighbouring countries by rail/road/air/water routes as the case may be for a particular country. Improved rail connectivity is likely to further boost the trade & relationship. Railway Projects taken up between India and Bangladesh, Bhutan, Nepal and Myanmar are:

Nepal: There are two rail connectivity projects namely Joghani (India) to Biratnagar (Nepal) and Jayanagar (India) to Bardibas (Nepal), besides the existing link of Raxaul (India) - Birganj (Nepal).

Bangladesh: There are two rail connectivity projects between Agartala (India) to Akhuara (Bangladesh), Haldibari (India) to

Chilhati (Bangladesh) besides the existing four links, Gede (India)-Darshana(Bangladesh), Petrapole (India)-Benapole (Bangladesh) and Singhabad (India) -Rohanpur (Bangladesh) and Radhikapur (India) - Birol (Bangladesh).

Bhutan: No rail connectivity project is under construction.

Myanmar: No rail connectivity project is under construction.

The execution of rail connectivity projects with neighbouring countries depends on various factors such as land acquisition and forest clearance etc. in India. It also entails a large number of works to be done in the associated neighbouring countries. Hence, no precise time-frame for completion of projects can be indicated.

Recruitment of 2.3 Lakh people in Railways

Three Centralized Employment Notifications (CENs) for around 1.41 lakh vacancies for various Group 'C' posts (including Level-1) have been notified in 2018. Against 02 CENs, recruitment is completed and, as on 14 November, 2019, panels of around 73,500 candidates have already been supplied to Indenting Railways. Further, in 2019, another four CENs for around 1.43 lakh additional vacancies have also been notified. Recruitment for 01 CEN is completed and, as on 14 November, 2019, panels of 1519 candidates have been furnished to

Indenting Railways. Recruitment process for remaining CENs is in progress. Further, for around 10,000 vacancies of Sub-Inspectors and Constables in Railway Protection Force (RPF)/ Railway Protection Special Force (RPSF), three CENs have been issued in 2018 and recruitment for the same has been completed. A total of about 2.94 lakh vacancies for various Group 'C' posts (including Level-1) have been notified in years 2018 & 2019. Retirement (anticipated) is one of the parameters of vacancy assessment process.

Expediting Electrification of Railways

Ministry of Railways have prepared an Action Plan to electrify balance Broad Gauge (BG) Routes of Indian Railways. As on 1 November, 2019, 37,237 Route kms. of rail lines have been commissioned on electric traction, which is 57.91% of total Indian Railways' BG network. Trends of achievements are as under:

Year	Route km. Electrified
2009-10	421
2010-11	75
2011-12	595
2012-13	1337
2013-14	610
Total (2009-14)	3,038
2014-15	1176
2015-16	1502
2016-17	1646
2017-18	4087
2018-19	5276
Total (2014-19)	13,687
Increase in %age	351%

To expedite electrification of railway lines in the country, steps taken includes award of Engineering Procurement and Construction (EPC) contracts, better project monitoring mechanism, delegating more power to field units for award of contracts/sanction of estimates and close monitoring at highest level.

Adarsh Railway Stations

'Adarsh' Station Scheme has been started since 2009-10 and presently, upgradation of Railway stations are taken under 'Adarsh Station Scheme'. Since then, 1253 stations have been identified for development under 'Adarsh Station Scheme' out of which 1149 stations so far have been developed under 'Adarsh Station Scheme' and remaining stations are targeted to be developed by 2019-20.

Various passenger amenities which, inter-alia, include improvement to façade of the station building, retiring room, waiting room (with bathing facilities), separate waiting room for ladies, landscaping of circulating area, earmarked parking, signages, Pay & Use toilets, Foot Over Bridge, ramps at entry to station etc. are proposed to be provided at Railway stations which are identified for development under this scheme as per the respective category of the station and the works for which are funded under Plan Head 'Passenger Amenities'.

Upgradation / modernization of stations on Indian Railways is a continuous and on-going process. Works for improvement of passenger amenities are undertaken depending

upon need, volume of passenger traffic and inter-se priority, subject to availability of funds.

Zone-wise number of railway stations, which have been developed as Adarsh stations till date and number of railway stations to be developed are as under:

Zonal Railways	Identified	Developed (up to Oct 2019)	To be developed
Central Railway	72	69	3
Eastern Railway	278	276	
East Central Railway	58	48	10
East Coast Railway	52	39	13
Northern Railway	124	105	19
North Central Railway	42	35	7
North Eastern Railway	53	43	10
Northeast Frontier Railway	91	90	1
North Western Railway	41	36	5
Southern Railway	128	113	15
South Central Railway	68	68	0
South Eastern Railway	86	86	0
South East Central Railway	28	25	3
South Western Railway	45	36	9
Western Railway	62	59	3
West Central Railway	25	21	4
Total	1253	1149	104

canal

Privatisation of Railways

There is no proposal to privatise the operation of Railways. However, there is a proposal to outsource the commercial and on board services of a few trains and to permit private players to induct modern rakes to run trains on select routes with an objective to provide improved service delivery to passengers. The responsibility of train operations and safety certification rests with Indian Railways. Outsourcing of certain services like station cleaning, pay and use toilets, retiring rooms, parking and platforms maintenance etc. is being done on need based manner to improve cleanliness and other services.

Funds are not allocated separately for Adarsh Station Scheme and the works are carried out under various passenger amenities works under Plan Head-53 'Passenger Amenities'. The details of funds allocated under Budgetary Sources for this Plan Head-53, over Indian Railways during the last three years namely 2016-17, 2017-18 and 2018-19 and current year are as under:

Years	Allocation
2016-17	₹917.91 crs.
2017-18	₹1470.79 crs.
2018-19	₹2410.71 crs.
2019-20	₹3422.57 crs.

Reconstruction/Strengthening of Railway Bridges

As on 1 April, 2019, there are 1,50,746 Railway Bridges on Indian Railways' network.

There is a well-established system of inspection of railway bridges in Indian Railways.

All the bridges are inspected twice a year, one before the onset of monsoon and one detailed inspe-

ction after the monsoon by the designated officials.

Repair / strengthening / rehabilitation / rebuilding of railway bridges is a continuous process and is undertaken whenever so warranted by their physical condition as ascertained during these inspections.

As on 1 April, 2019, a total of 4168 Bridges are sanctioned for repair / strengthening / rehabilitation / rebuilding.

The data are maintained Zonal Railway wise and not area-wise.

The Zone-wise, including tribal area, total ₹ 809.05 crore are allocated as under:

Zonal Railways	Central	Eastern	East Central	East Coast	Northern	North entral	North Eastern	Northeast Frontier
Fund allocated (Rs. in crore)	83.50	70.70	71.06	40.22	67.51	31.55	24.67	69.04

Zonal Railways	North Western	Southern	South Central	South Eastern	South East Central	South Western	Western	West Central	Total
Fund allocated (Rs. in crore)	26.64	48.39	49.25	46.66	14.28	23.64	78.31	56.61	809.05

construction