GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS

LOK SABHA

UNSTARRED QUESTION NO.1818
TO BE ANSWERED ON 10.12.2025

SAFETY/EFFICIENCY/PASSENGER EXPERIENCE IN RAILWAYS

1818. SHRI NARESH GANPAT MHASKE:
DR. SHRIKANT EKNATH SHINDE:
SHRI SHRIRANG APPA CHANDU BARNE:
SHRI RAVINDRA DATTARAM WAIKAR:

Will the Minister of RAILWAYS be pleased to state:

(a) whether Railways has undertaken key reforms to enhance safety, efficiency and passenger experience and if so, the details thereof;

(b) the details of the progress made under the Amrit Bharat Station Scheme including the number of stations redeveloped and the amenities provided;

(c) the details of the status of implementation of the National Automatic Train Protection system 'Kavach' and its impact on train safety;

(d) the details of the measures taken/being taken by the Government to eliminate unmanned level crossings and replace manned level crossings with ROBs/RUBs in the Country particularly in Maharashtra; and

(e) the details of the steps taken/being taken by the Government to promote digital transactions, modern trains and reforms in freight transportation along with the impact of these initiatives on overall efficiency and customer satisfaction?

ANSWER

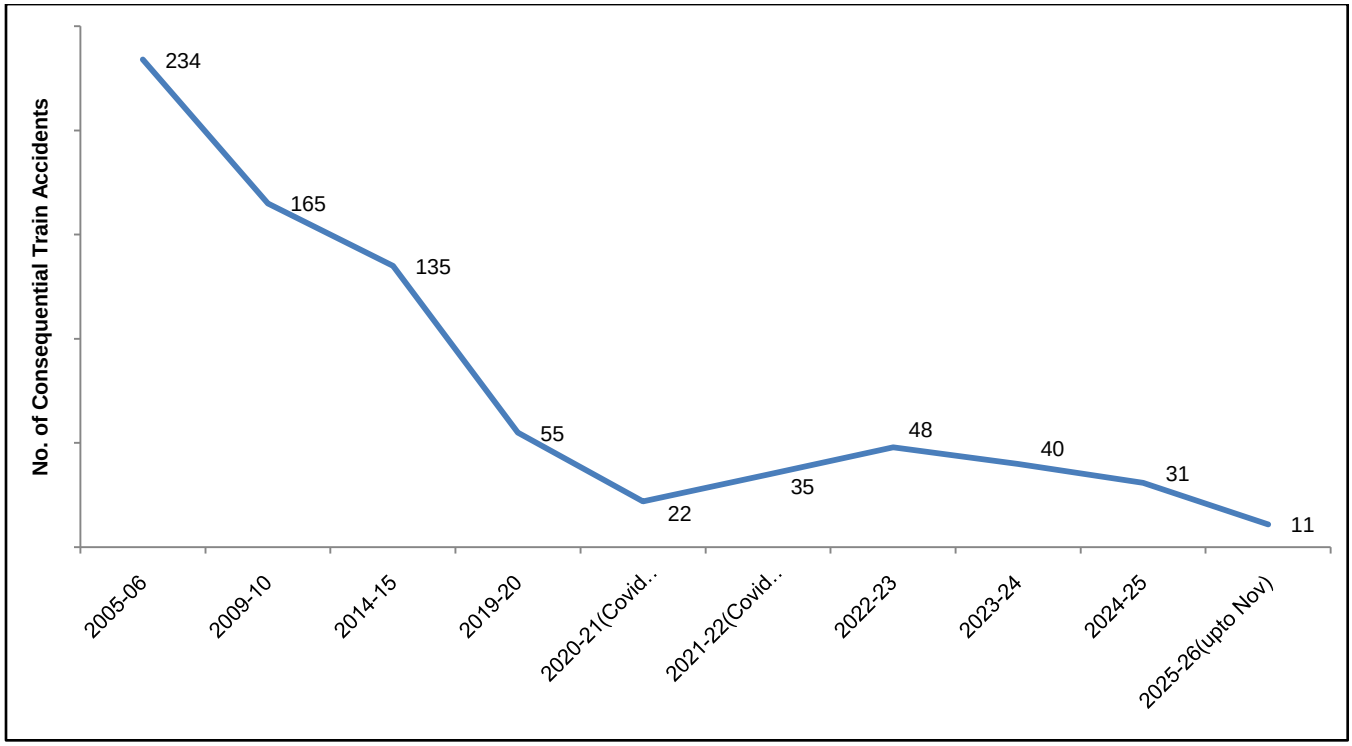
MINISTER OF RAILWAYS, INFORMATION & BROADCASTING AND ELECTRONICS & INFORMATION TECHNOLOGY

(SHRI ASHWINI VAISHNAW)

(a) to (e): Safety is accorded the highest priority on Indian Railways. As a consequence of various safety measures taken over the years, there has been a steep decline in the number of accidents. Consequential Train Accidents have reduced from 135 in 2014-15 to 31 in 2024-25 as shown in the graph below.

It may be noted that the Consequential Train Accidents during the period 2004-14 was 1711 (average 171 per annum), which has declined to 31 in 2024-25 and further to 11 in 2025-26 (uptoNovember, 2025).

Another important index showing improved safety in train operations is Accidents Per Million Train Kilometer (APMTKM) which has reduced from 0.11 in 2014-15 to 0.03 in 2024-25, indicating an improvement of approx. 73% during the said period.



The various safety measures taken to enhance safety in train operations are as under:-

1. On Indian Railways, the expenditure on Safety related activities has increased over the years as under:-

Expenditure/Budget on Safety related activities (Rs. in Cr.)				
2013-14 (Act.)	2022-23 (Act.)	2023-24 (Act.)	2024-25	2025-26
39,463	87,327	1,01,651	1,14,022	1,16,470

2. **Electrical/Electronic Interlocking Systems with centralized operation of points and signals have been provided at 6,656 stations up to 31.10.2025 to reduce accident due to human failure.**
3. **Interlocking of Level Crossing (LC) Gates has been provided at 10,098 Level Crossing Gates up to 31.10.2025 for enhancing safety at LC Gates.**
4. **Complete Track Circuiting of stations to enhance safety by verification of track occupancy by electrical means has been provided at 6,661 stations up to 31.10.2025.**
5. **Kavach is a highly technology intensive system, which requires safety certification of highest order. Kavach was adopted as a National ATP system in July 2020. Kavach is provided progressively in phased manner. Initially, Kavach Version 3.2 was deployed on 1465 RKm of South Central Railway and 80 RKm of North Central Railway. Kavach specification Version 4.0 was approved by RDSO on 16.07.2024. After extensive and elaborate trials, Kavach Version 4.0has been successfully commissioned on Palwal-Mathura-Kota-Nagda section (633Rkm) on Delhi-Mumbai route and on Howrah-Bardhaman section (105RKm) on Delhi-Howrah route. Kavach implementation has been taken up in balance sections of Delhi-Mumbai and Delhi-Howrah route. Further, Kavach implementation has been taken up on 15,512 RKm covering all GQ, GD, HDN and identified sections of Indian Railways.**
6. **Detailed instructions on issues related with safety of Signalling, e.g. mandatory correspondence check, alteration work protocol, preparation of completion drawing, etc. have been issued.**
7. **System of disconnection and reconnection for S&T equipment as per protocol has been re-emphasized.**
8. **All locomotives are equipped with Vigilance Control Devices (VCD) to improve alertness of Loco Pilots.**
9. **Retro-reflective sigma boards are provided on the mast which is located two OHE masts prior to the signals in electrified territories to alert the crew about the signal ahead when visibility is low due to foggy weather.**

10. A GPS based Fog Safety Device (FSD) is provided to loco pilots in fog affected areas which enables loco pilots to know the distance of the approaching landmarks like signals, level crossing gates, etc.
11. Modern track structure consisting of 60kg, 90 Ultimate Tensile Strength (UTS) rails, Prestressed Concrete Sleeper (PSC) Normal/Wide base sleepers with elastic fastening, fan shaped layout turnout on PSC sleepers, Steel Channel/H-beam Sleepers on girder bridges is used while carrying out primary track renewals.
12. Mechanisation of track laying activity through use of track machines like PQRS, TRT, T-28 etc. to reduce human errors.
13. Maximizing supply of 130m/260m long rail panels for increasing progress of rail renewal and avoiding welding of joints, thereby improving safety.
14. Ultrasonic Flaw Detection (USFD) testing of rails to detect flaws and timely removal of defective rails.
15. Laying of longer rails, minimizing the use of Alumino Thermic Welding and adoption of better welding technology for rails i.e., Flash Butt Welding.
16. Monitoring of track geometry by OMS (Oscillation Monitoring System) and TRC (Track Recording Cars).
17. Patrolling of railway tracks to look out for weld/rail fractures.
18. The use of Thick Web Switches and Weldable CMS Crossing in turnout renewal works.
19. Inspections at regular intervals are carried out to monitor and educate staff for observance of safe practices.
20. Web based online monitoring system of track assets viz. Track database and decision support system has been adopted to decide rationalized maintenance requirement and optimize inputs.
21. Detailed instructions on issues related with safety of Track, e.g. integrated block, corridor block, worksite safety, monsoon precautions, etc. have been issued.
22. Preventive maintenance of railway assets (Coaches & Wagons) is undertaken to ensure safe train operations.

23. Replacement of conventional ICF design coaches with LHB design coaches is being done.
24. All unmanned level crossings (UMLCs) on Broad Gauge (BG) route have been eliminated by January 2019.
25. Safety of Railway Bridges is ensured through regular inspection of Bridges. The requirement of repair/rehabilitation of Bridges is taken up based upon the conditions assessed during these inspections.
26. Indian Railways has displayed Statutory "Fire Notices" for widespread passenger information in all coaches. Fire posters are provided in every coach so as to educate and alert passengers regarding various Do's and Don'ts to prevent fire. These include messages regarding not carrying any inflammable material, explosives, prohibition of smoking inside the coaches, penalties etc.
27. Production Units are providing Fire detection and suppression system in newly manufactured Power Cars and Pantry Cars, Fire and Smoke detection system in newly manufactured coaches. Progressive fitment of the same in existing coaches is also underway by Zonal Railways in a phased manner.
28. Regular counselling and training of staff is undertaken.
29. Concept of Rolling Block introduced in Indian Railways (Open Lines) General Rules vide Gazette notification dated 30.11.2023, wherein work of integrated maintenance/ repair/replacement of assets is planned up to 52 weeks in advance on rolling basis and executed as per plan.

The details of the Safety related works related to better maintenance practices, Technological improvements, better infrastructure and rolling stock etc. undertaken by Railways are tabulated below:-

S.N.	Item	2004-05 to 2013-14	2014-15 to 2024-25	2014-25 Vs. 2004-14
	Technological Improvements			
1.	Use of high-quality rails (60 Kg) (Km)	57,450 Km	1.43 Lakh Km	More than 2 times
2.	Longer Rail Panels (260m) (Km)	9,917 Km	77,522 Km	Nearly 8 times

3.	Electronic Interlocking (Stations)	837 Stations	3,691 Stations	More than 4 times
4.	Fog Pass Safety Devices (Nos.)	As on 31.03.14: 90 Nos.	As on 31.03.25: 25,939 Nos.	288 times
5.	Thick Web Switches (Nos.)	Nil	28,301 Nos.	
	Better Maintenance Practices			
1.	Primary Rail Renewal (Track Km)	32,260 Km	49,941 Km	1.5 times
2.	USFD (Ultra Sonic Flaw detection) Testing of Welds (Nos.)	79.43 Lakh	2 Cr.	More than 2 times
3.	Weld failures (Nos.)	In 2013-14: 3699 Nos.	In 2024-25: 370 Nos.	90 % reduction
4.	Rail fractures (Nos.)	In 2013-14: 2548 Nos.	In 2024-25: 289 Nos.	More than 88% reduction
	Better Infrastructure and Rolling Stock			
1.	New Track KM added (Track Km)	14,985 Km	34,428 Km	More than 2 times
2.	Flyovers (RoBs)/ Underpasses (RUBs) (Nos.)	4,148 Nos.	13,808 Nos.	More than 3 times
3.	Unmanned Level crossings (Nos.) on BG	As on 31.03.14: 8,948	As on 31.03.24: Nil (All eliminated by 31.01.19)	Removed
4.	Manufacture of LHB Coaches (Nos.)	2,337 Nos.	42,677	More than 18 times

Implementation of Kavach

1. **Kavach is an indigenously developed Automatic Train Protection (ATP) system. Kavach is a highly technology intensive system, which requires safety certification of highest order (SIL-4).**
2. **Kavach aids the Loco Pilot in running of trains within specified speed limits by automatic application of brakes in case Loco Pilot fails to do so and also helps the trains to run safely during inclement weather.**
3. **The first field trials on the passenger trains were started in February 2016. Based on the experience gained and Independent Safety Assessment of the system by Independent Safety Assessor (ISA), three firms were approved in 2018-19, for supply of Kavach Ver 3.2.**

4. **Kavach was adopted as National ATP system in July 2020.**

5. **Implementation of Kavach System involves following Key Activities:-**

   a. **Installation of Station Kavach at each and every station, block section.**
   b. **Installation of RFID Tags throughout the track length.**
   c. **Installation of telecom Towers throughout the section.**
   d. **Laying of Optical Fibre Cable along the track.**
   e. **Provision of Loco Kavach on each and every Locomotive running on Indian Railways.**

6. **Based on deployment of Kavach version 3.2 on 1465 RKm on South Central Railway and experience gained, further improvements were made. Finally, Kavach specification version 4.0 was approved by RDSO on 16.07.2024.**

7. **Kavach version 4.0 covers all the major features required for the diverse railway network. This is a significant milestone in safety for Indian Railways. Within a short period, IR has developed, tested and started deploying Automatic Train Protection System.**

8. **Major improvement in Version 4.0 includes increased Location Accuracy, Improved Information of Signal Aspects in bigger yards, Station to Station Kavach interface on OFC and Direct Interface to existing Electronic Interlocking System. With these improvements, Kavach Ver.4.0. is planned for large scale deployment over Indian Railways.**

9. **After extensive and elaborate trials, Kavach Version 4.0 has been successfully commissioned on 738 Route km on Palwal – Mathura- Nagda section (633 Rkm) on Delhi – Mumbai route and Howrah–Bardhaman section (105 Rkm) Delhi – Howrah route. Kavach implementation has been taken up in balance sections of Delhi – Mumbai & Delhi – Howrah corridors.**

10. **Progress of key items of Kavach on High density routes including Delhi– Mumbai & Delhi– Howrah corridors are as under:-**

SN	Item	Progress
I.	Laying of Optical Fibre Cable	7,129 Km
II.	Installation of Telecom Towers	860 Nos
III.	Provision of Kavach at Stations	549 Nos
IV.	Installation of Track side equipment	2,674 RKm
V.	Provision of Kavach on Locos	4,154

11. **Further, track side Kavach implementation work has been taken up on 15,512 RKm covering all GQ, GD, HDN and identified sections of Indian Railways.**

12. **Bids have been invited for equipping another 9,069 locomotives with Kavach version 4.0. Kavach is being provided progressively in a phased manner in locomotives.**

13. **Specialized training programmes on Kavach are being conducted at centralized training institutes of Indian Railways to impart training to all concerned officials. By now more than 40,000 technicians, operators and engineers have been trained on Kavach technology. This includes 30,000 Loco Pilots & Assistant Loco Pilots. Courses have been designed in collaboration with IRISET.**

14. **The cost for provision of Track Side including Station equipment of Kavach is approximately Rs. 50 Lakhs/Km and cost for provision of Kavach equipment on locomotives is approximately Rs. 80 Lakh/Loco.**

15. **The fund utilized on Kavach works so far up to Oct'25 is Rs. 2,354.36 Crore. The allocation of funds during the year 2025-26 is Rs. 1673.19 Crores. Requisite funds are made available as per the progress of works.**

Introduction Of Upgraded & Modern Trains ToEnhance Passenger Experience

To enhance passengers' comfort and experience, Indian Railways have taken several measures during last few years, which include modernization and Improvement/up-gradation of Rolling Stock to enhance safety, speed, convenience

and comfort of passengers. It is a continuous and ongoing process on Indian Railways.

In its constant endeavour to provide faster service and better travel experience to the passengers, Indian Railways are introducing indigenously designed and manufactured Vande Bharat trains, Amrit Bharat trains, and Namo Rapid Rail service, which have modern coaches, enhanced safety features and better amenities. Presently, 164 Vande Bharat services, 30 Amrit Bharat services and 4 Namo Rapid Rail services are in operation on Indian Railways network.

The new Vande Bharat Trains have following features:-

I. **Fitted with KAVACH.**
II. **Jerk Free Semi-Permanent couplers.**
III. **Centrally controlled Automatic Plug Doors and Fully Sealed wider gangways.**
IV. **Emergency Alarm Push buttons and Talk Back Units on all Coaches.**
V. **Improved fire safety – Aerosol based fire detection and suppression system in electrical cabinets and lavatories.**
VI. **Higher acceleration with design/operating speed of 180/160 KMPH.**
VII. **Driver-Guard communication with voice recording facility & Crash hardened memory.**
VIII. **Air conditioning units with indigenously developed UV-C lamp based disinfection system.**
IX. **Better Ride Comfort.**
X. **CCTVs in all Coaches.**
XI. **For Divyangjan passengers special lavatory in the driving coaches on each end.**
XII. **Coach condition monitoring System (CCMS) display with remote monitoring.**

Railways have developed fully non-AC modern trainnamed as Amrit Bharat express.Presently, these modern trains comprise of 11 General Class coaches, 8 Sleeper Class coaches, 01 Pantry car and 02 Luggage cum Divyangjan coaches.

These trains have following enhanced features and amenities:-

I. **Better aesthetics of seat and berths with enhanced look & feel on the lines of Vande Bharat Sleeper.**
II. **Jerk Free Semi-Automatic Couplers.**
III. **Improved Crashworthiness in coaches by provision of crash tube.**
IV. **Provision of CCTV system in all coaches and Luggage room.**
V. **Improved designs of toilets.**
VI. **Improved design of Ladder for ease of climbing on to the berth.**
VII. **Improved LED Light fitting & Charging Sockets.**
VIII. **Provision of EP assisted braking system.**
IX. **Aerosol based fire suppression system in toilets and electrical cubicles.**
X. **USB Type-A and Type-C mobile charging sockets.**
XI. **Emergency Talk Back system for two-way communication between Passenger and Guard/Train Manager.**
XII. **Non-AC pantry with enhanced heating capacity.**
XIII. **Fully sealed gangways with quick release mechanism for easy attachment and detachment.**

Namo Bharat Rapid Rail has been introduced to enhance the travelling experience of suburban and regional commuters for inter-city short distance movement by harnessing the features of Vande Bharat Trains.

The prominent features of Namo Bharat Rapid Rail are as follows:-

I. **Centrally controlled Double Leaf Automatic Sliding Doors.**
II. **CCTVs for safety and passenger surveillance.**
III. **Modular interior with Cushioned Seats and Sealed Flexible Gangway.**
IV. **Emergency Talk System.**
V. **Continuous LED lighting with Energy Efficient Lighting system.**
VI. **FRP Modular Toilets with vacuum evacuation.**
VII. **Fully Air-Conditioned trains with Driver cab AC.**

Further, the work of replacement of earlier ICF coaches with safer and more modern LHB coaches has been taken up in a phased manner. Technologically superior LHB coaches have better riding, improved aesthetics and features like Lightweight design, Anti climbing features, Air suspension (Secondary) with failure indication system, stainless steel shell and disc brake system etc.

Production of LHB coaches during 2014-25 vis-à-vis 2004-14 is as under:-

Period	LHB coaches manufactured
2004-14	2,337 nos.
2014-25	42,677 nos. (more than 18 times)

Cleanliness

Cleanliness is a continuous process and every endeavour is made to keep the railway coaches and stations in properly maintained and clean condition. Some of the efforts being undertaken are enumerated below:-

I. **Cleaning of coaches including toilets of trains is done at both ends including mechanized cleaning.**
II. **On Board Housekeeping Service (OBHS) has been provided in long distance Mail/Express trains for cleaning of coach toilets, doorways, aisles and passenger compartments during the run of the trains.**
III. **Clean Train Station (CTS) are operational for limited mechanized cleaning attention to identified trains enroute.**
IV. **Pest and rodent control of coaches is being done on a regular basis through authorized professional agencies.**
V. **Dustbins are provided in AC and non-AC Coaches.**
VI. **Integrated housekeeping contracts at major stations,**
VII. **Mechanized cleaning and provision of two bin type dustbins at several locations for segregation of bio-degradable and non-biodegradable wastes.**
VIII. **Rag picking contracts and/or garbage disposal contracts are available at major stations.**

IX. **Prevention of falling of fecal matter on Railway tracksby fitting bio-toilets in all passenger coaches, thereby ensuring cleaner Railway Stations.**

X. **Installation of plastic bottle crushing machines at major stations.**

Redevelopment of stations

Ministry of Railways has launched 'Amrit Bharat Station Scheme'for redevelopment of stations with a long-term approach.

The scheme involves preparation of master plans and their implementation in phases to improve the stations. The master planning includes:-

- **Improvement of access to station and circulating areas.**
- **Integration of station with both sides of city.**
- **Improvement of station building.**
- **Improvement of waiting halls, toilets, sitting arrangement, water booths.**
- **Provision of wider foot over bridge/air concourse commensurate with passenger traffic.**
- **Provision of lift/escalators/ramp.**
- **Improvement/Provision of platform surface and cover over platforms.**
- **Provision of kiosks for local products through schemes like 'One Station One Product'.**
- **Parking areas, Multimodal integration.**
- **Amenities for Divyangjans.**
- **Better passenger information systems.**
- **Provision of executive lounges, nominated spaces for business meetings, landscaping, etc.,keeping in view the necessity at each station.**

The scheme also envisages sustainable and environment friendly solutions, provision of ballastless tracks etc. as per necessity, phasing and feasibility and creation of city centre at the station in the long term.

So far, 1337 stations have been identified for development under this scheme. Development works at railway stations under 'Amrit Bharat Station

Scheme' have been taken up at a good pace. Till now, works of 155 stations have been completed. Names of these stations are as following:-

Alnavar, Amb Andaura, Ambikapur, Amgaon, Anandpur Sahib, Anara, Ayodhya Dham, Badami, Bagalkot, Baijnath Paprola, Balrampur, Bantawala, Barabhum, Baramati, Bareilly City, Baripada, Barpali, Begumpet, Beohari, Bhanupratappur, Bhilai, Bijnor, Bimalgarh, Bommidi, Bundi, Chanda Fort, Changanassery, Chidambaram, Chinchpokli, Chirayinkeezh, Cuttack, Dakor, Derol, Deshnoke, Devlali, Dharwad, Dhule, Dongargarh, Fatehabad, Fatehpur, Fatehpur Shekhawati, Gadag, Godda, Gogameri, Gokak Road, Gola Gokarnath, Gomti Nagar, Govardhan, Govind Garh, Govindpuri, Govindpur Road, Haibargaon, Haldia, Hapa, Harpalpur, Hathras City, Hodal, Idgah Agra Jn., Izzatnagar, Jaisalmer, Jam Jodhpur, Jam Wanthali, Joychandi Pahar, Kakinada Town, Kalyani Ghoshpara, Kamakhyaguri, Kanalus Jn., Karaikkudi Jn., Karamsad, Karimnagar, Katni South, Kedgaon, Khairthal, Koppal, Kosamba Jn., Kulitturai, Kuttipuram, Lasalgaon, Limbdi, Lohardaga, Lonand Jn., Mahe, Mahuva, Mailani, Mandal Garh, MandawarMahwa Road, Madhupur, Manaparai, Mandi Dabwali, Mangalagiri, Mannargudi, Matunga, Mithapur, Morappur, Morbi, Muktsar, Munirabad, Murtizapur Jn., Nainpur Jn., Nandura, Narmadapuram (Hoshangabad), Netaji Subhash Chandra Bose Itwari Junction, Okha, Orchha, Palitana, Panagarh, Panki dham, Parel, Parlakhemundi, Pirpainti,Piska, Pokhrayan, Pollachi Jn., Polur, Porbandar, Rajgarh, Rajmahal, Rajula Jn., Ramghat Halt, Rayanpadu, Saharanpur Jn., Sahibzada Ajit Singh Mohali, Sahebgunj, Samakhiyali, Samalpatti, Sankarpur, Savda, Seoni, Shahad, Shajapur, Sholavandan, Shoranur Jn., Shridham, Siddharth Nagar, Sior Jn., Suiri, Sri Bala Brahmeswara Jogulamba, Srirangam, St.Thomas Mount, Sullurpeta, Suraimanpur, Swaminarayan Chappia, Tamluk,Thawe, Thiruvarur Jn., Tiruvannamalai, Tuni, Ujhani, Urkura, Utran, Vadakara, Vadala Road, Vriddhachalam Jn., Warangal.

The works at other stations have also been taken up at good pace and progress of some of the stations is as given below:-

- **Tirupati Station:The structural framework of new main entry station building on South side and 2 nos. air concourses have been completed. The finishing works ofnew main entry station building on South side and air concourses, structural work of station building on North side, platform shelter works, lift, escalators etc. have been taken up.**

- **Nellore Station:The structural frameworks, brickwork and plastering of station buildings on both East and West sides andstructural work of air concourse have been completed. The finishing works of station building on both East and West side and air concourse, extension work of subway, water tanks and sewage treatment plant have been taken up.**

- **Yesvantpur Station: The structural works of East side station building, civil works of East side sub-station, East side elevated road and Multi Level Car parking have been completed. The finishing works of East side station building, East side elevated road and Multi Level Car parking, sewage treatment plant, structural work of West side station building and air concourse have been taken up.**

- **Bangalore Cantt. Station: The works of 24m wide diversion road on the South side, training centre,hostel on North side and structural work of South side station building have been completed. The finishing work South side station building, structural work of North side station building and Foot Over Bridge have been taken up.**

- **Rameswaram Station:The structural works of East/North terminal building, departure forecourt, arrival forecourt, residential tower, sub-station building, desalination plant and sewage treatment plant have been completed. The masonry works of East terminal building, finishing works of North terminal building, departure forecourt, arrival forecourt, residential tower, platform upgradation including platform shelter and revamping of existing waiting hall have been taken up.**

- **Safdarjung Station:The work of signal building, station building, plumbing**

and firefighting, structural work of operational building up to terrace floor slab, air concourse foundation and pedestals have been completed. The station building electrical and low voltagework, platform refurbishing work, finishing work of operational building,overhead tank and air concourse have been taken up.

Further, development / redevelopment / upgradation / modernisation of stations on Indian Railways is a continuous and ongoing process and works in this regard are undertaken as per requirement, subject to inter-se priority and availability of funds. The priority for development / redevelopment / upgradation / modernisation of stations is accorded to higher category of station over lower category of station while sanctioning and executing the works.

Development / Upgradation of railway stations is complex in nature involving safety of passengers & trains and requires various statutory clearances such as fire clearance, heritage, tree cutting, airport clearance etc. The progress also gets affected due to brownfield related challenges such as shifting of utilities (involving water/sewage lines, optical fibre cables, gas pipe lines, power/signal cables, etc.), infringements, operation of trains without hindering passenger movement, speed restrictions due to works carried out in close proximity of tracks and high voltage power lines, etc. and these factors affect the completion time. Therefore, no time frame can be indicated at this stage.

Development / Upgradation / Modernisation of stations including under Amrit Bharat Station Scheme is generally funded under Plan Head-53 'Customer Amenities'. The details of allocation and expenditure under Plan Head-53 are maintained Zonal Railway-wise and not work-wise or station wise or state-wise. The fund allocation of ₹ 12,118 Crore has been made for the financial year 2025-26 under Plan Head–53 and expenditure (up to October, 2025) of ₹ 7,253 Crore has been incurred so far.

Elimination of Unmanned Level Crossings

All Unmanned Level Crossings (UMLCs) on running lines of Broad Gauge network of Indian Railway have been eliminated by 31.01.2019.

Elimination of level crossings (LCs) is a continuous and dynamic process of Indian Railway. Such works are taken up on the basis of its impact on safety in train operations, mobility of trains & impact for road users and feasibility etc.

MLCs are eliminated either by providing Road Over Bridges/Road Under Bridges (ROBs/ RUBs) in lieu of LCs or through direct closure (for low traffic LCs) or by diversion of road traffic to nearby ROB/RUB/LC depending upon the site conditions.

Sanctioning and execution of works of Road Over Bridges/ Road Under Bridges (ROBs/RUBs) is a continuous and ongoing process on Indian Railways. Such works are prioritized and taken up on the basis of its impact on safety and mobility in train operations and impact on road users.

Nos. of ROBs/ RUBs constructed on Indian Railways during the period 2004-14 vis a vis 2014-25 (Oct'25) is as under:-

Period	ROBs/ RUBs constructed
2004-14	4,148 Nos.
2014-25 (Oct'25)	13,653 Nos. (including 1,162 Nos. in the State of Maharashtra)

As on 01.11.2025, 4,689 No. ROBs/RUBs are sanctioned at cost of Rs. 1,11,583 Cr. on Indian Railways including 275 Nos. sanctioned works of Road Over Bridge(ROB)/Road Under Bridge (RUB) at cost of Rs. 5,506 Cr. in the state of Maharashtra which are at various stages of planning and execution.

Promotion of Digital Transaction

Steps taken to promote digital transactions by Indian Railways are as under:-

Miscellaneous E-Receipts System (MERS) portal has been developed by CRISto facilitate digital payments of inward Miscellaneous Receipts toRailways.Different types of payments (Security Deposit, License Fee, Wayleave charges, land license Fee, Wagon registration fee, PF contribution andGIS recoveries of employees on deputation and Foreign Service contributions)have been received through this application. This is in line with Governmentinitiative of encouraging digital payments.

Measures taken to increase in Freight Transportation

Indian Railways has taken several measures to enhance the freight loading and revenue which includes:

- **To increase the network capacity, rail network expansion has been taken up in a big way by construction of new lines, multi tracking of existing lines and gauge conversion of existing lines. The details of new tracks laid during the 10 years are as under:-**

Period	New Tracks Commissioned
2009-14	7,599 km
2014-25	34,428 km

Further as on 01.04.25, there are 431(154 New Line, 33 Guage Conversion and 244 Doubling) projects sanctioned. The summary of which is as under:-

Category	No. of Projects	Total Length (km)	Length completed till Mar'25 (Km)	Balance length (Km)	Cost (Cr.)
New lines	154	16,142	3,036	13,105	3,77,389
Gauge conversion	33	4,180	2,997	1,183	43,820
Doubling/Multi tracking	244	15 644	6,736	8,909	2,53,711
Total	431	35,966	12,769	23,197	6,74,920

- **Removing bottlenecks in operations by yard remodeling, construction of bypass/chord lines, rail flyovers etc.**
- **The construction of Eastern Dedicated Freight Corridor (EDFC) from Ludhiana to Sonnagar (1337 Km) and Western Dedicated Freight Corridor (WDFC) from Jawaharlal Nehru Port Terminal (JNPT) to Dadri (1506 Km) has been taken up. Out of total 2843 kms, 2741 route kms (96.4%) has been commissioned and operational.**
- **Indian Railways has taken up electrification of Railway lines in a mission mode. So far, about 99.1% of Broad Gauge (BG) network has been electrified. A comparison of electrification before and after 2014 is as follows:-**

Period	Route Kilometre
Before 2014	21,801
2014-25	46,900

- **Procurement of Wagons and Locomotives: To increase freight carrying capacity, large numbers of IR wagons have been procured and locomotives have been manufactured. During 2014 to 2025, about 2 lakh wagons have been procured and more than 10,000 locomotives have been added for increasing freight loading and mobility.**
- **Industry participation in investment in General Purpose Wagons, Special Purpose/High-Capacity wagons and Automobile carrier wagons for cement, oil, steel, fly-ash, automobile etc. So far, around 240 rakes of special purpose wagons, 374 rakes of general-purpose, wagons and 48 rakes of automobile wagons have been inducted.**
- **Under the 'Gati Shakti Multi-Modal Cargo Terminal (GCT)' policy so far, 118 new GCTs have been commissioned, with an estimated traffic capacity of 192 million tonnes per annum (MTPA). In addition, for improvement of freight and parcel terminals from the financial year 2023-24 onwards, an amount of ₹14,500 crore has been allocated.**

- **A "Bulk Cement Terminal Policy" for setting up terminals on Railway land has been launched recently as part of Railway reforms for facilitating Bulk Cement transportation.**
- **Ensuring increased availability of rakes/wagons against demand.**
- **Increasing the loadability for carrying additional traffic per wagon. Length of freight trains has also been increased to increase throughput per train**
- **Use of Information Technology in freight operations to improve monitoring and utilization of assets.**
- **Induction of higher horsepower locomotives.**
- **Improvement in maintenance practices of wagons and locomotives resulting in increased availability of loco and rolling stock for traffic use.**
- **Improvement in track and signaling standards to carry higher volume of traffic.**
- **Training of staff and officers to adopt the new technology and management practices.**

Because of the above measures, the freight loading has increased from 1,233 MT in 2020-21 to 1617 MT in 2024-25. During 2024-25, IR has transported 1617 MT thus becoming second largest freight carrying Railways in the world.

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