O.I.H.

GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS

RAJYA SABHA
UNSTARRED QUESTION NO. 770
ANSWERED ON 05.12.2025

ENHANCEMENT OF PASSENGER CONVENIENCE

770 # SHRI TEJVEER SINGH:

Will the Minister of RAILWAYS be pleased to state:

(a) the new policies or schemes implemented recently under the Railway Budget to enhance passenger convenience;

(b) whether Government is taking special steps to accelerate projects related to new Vande Bharat trains, Amrit Bharat stations and railway safety upgradation; and

(c) whether any new technology-based system is being implemented by the Ministry to reduce train delays, improve punctuality and provide better services to passengers?

ANSWER

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

(SHRI ASHWINI VAISHNAW)

(a) to (c) To enhance passengers' comfort and experience, Indian Railways have taken several measures during last few years which include:

Introduction of upgraded and modern trains

Modernization and Improvement/up-gradation of Rolling Stock to enhance safety, convenience and comfort of passengers is a continuous and ongoing process on Indian Railways.

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)

Further, with a view to improve travel experience of the passengers, Indian Railways has introduced indigenously designed and manufactured Vande Bharat trains with modern coaches, advanced safety features and passenger amenities. Presently, 164 Vande Bharat services are in operation on the Indian Railway network.

These 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 train named as Amrit Bharat express. Already 30 services are in operation. 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. Presently, 4 Namo Bharat Rapid Rail services are in operation on the Indian Railway network.

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.

Redevelopment of Stations

To improve Passenger amenities and comfort, 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:

I. Improvement of access to station and circulating areas.
II. Integration of station with both sides of city.
III. Improvement of station building.
IV. Improvement of waiting halls, toilets, sitting arrangement, water booths.
V. Provision of wider foot over bridge/air concourse commensurate with passenger traffic.
VI. Provision of lift/escalators/ramp.
VII. Improvement /Provision of platform surface and cover over platforms.
VIII. Provision of kiosks for local products through schemes like ‘One Station One Product’.
IX. Parking areas, Multimodal integration.
X. Amenities for Divyangjans.
XI. Better passenger information systems.
XII. 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. The works at other stations have also been taken up at good pace.

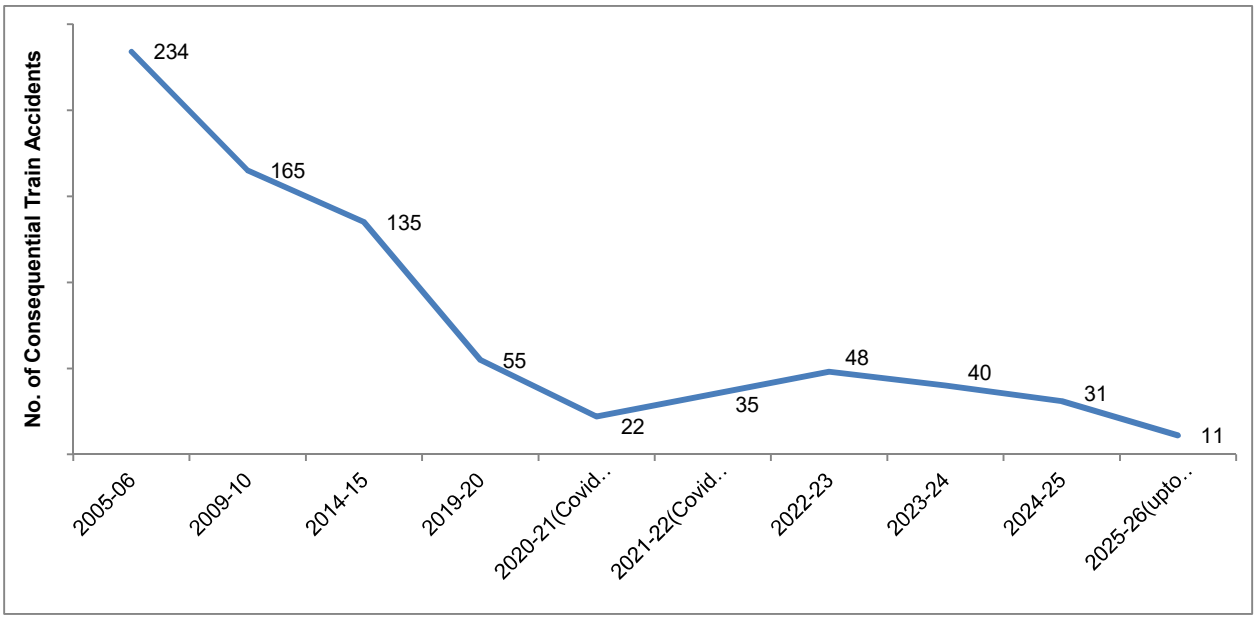
Safety in Train operations

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 (upto November, 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 number of consequential train accidents during the last ten years is depicted in the graph below:-



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

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

Expenditure 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**

II. 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 accidents due to human failure.

III. 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.

IV. 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.

V. 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 4.0 has 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.

VI. 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.

VII. System of disconnection and reconnection for S&T equipment as per protocol has been re-emphasized.

VIII. All locomotives are equipped with Vigilance Control Devices (VCD) to improve alertness of Loco Pilots.

IX. 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.

X. 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.

XI. 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.

XII. Mechanisation of track laying activity through use of track machines like PQRS, TRT, T-28 etc. to reduce human errors.

XIII. Maximizing supply of 130m/260m long rail panels for increasing progress of rail renewal and avoiding welding of joints, thereby improving safety.

XIV. Ultrasonic Flaw Detection (USFD) testing of rails to detect flaws and timely removal of defective rails.

XV. Laying of longer rails, minimizing the use of Alumino Thermic Welding and adoption of better welding technology for rails i.e., Flash Butt Welding.

XVI. Monitoring of track geometry by OMS (Oscillation Monitoring System) and TRC (Track Recording Cars).

XVII. Patrolling of railway tracks to look out for weld/rail fractures.

XVIII. The use of Thick Web Switches and Weldable CMS Crossing in turnout renewal works.

XIX. Inspections at regular intervals are carried out to monitor and educate staff for observance of safe practices.

XX. 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.

XXI. Detailed instructions on issues related with safety of Track, e.g. integrated block, corridor block, worksite safety, monsoon precautions, etc. have been issued.

XXII. Preventive maintenance of railway assets (Coaches & Wagons) is undertaken to ensure safe train operations.

XXIII. Replacement of conventional ICF design coaches with LHB design coaches is being done.

XXIV. All unmanned level crossings (UMLCs) on Broad Gauge (BG) route have been eliminated by January 2019.

XXV. 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.

XXVI. 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.

XXVII. 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.

XXVIII. Regular counseling and training of staff is undertaken.

XXIX. 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 Crore	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

Passenger reservation system and ticket booking:

I. Indian Railways has taken up upgradation of Passenger Reservation System (PRS) through Centre for Railway Information Systems (CRIS). This involves upgradation and replacement of hardware, software, network equipment, security infrastructure and functionalities on new technology with design capable of handling new features. The new system is designed for more than 4 times its present capacity.

II. Railways has also recently launched RailOne App. This App enables passengers to book reserved as well as unreserved tickets on mobile phone. This, in effect, brings the PRS facility to passenger's palm.

III. With effect from 01-07-2025, tickets under Tatkal Scheme can be booked through the website of Indian Railway Catering and Tourism Corporation (IRCTC)/its app only by Aadhaar authenticated users.

IV. With a view to ensure that the benefits of reservation system reach the common end user and are not misused by unscrupulous elements, it has been decided that with effect from 28.10.2025, during the first two hours of opening of general reservation i.e. 0800-1000 hours, reserved general tickets can be booked through the website of Indian Railway Catering and Tourism Corporation (IRCTC)/its app only by Aadhaar authenticated users.

Indian Railways makes all possible efforts to run trains on time. However, several factors affect punctual running of trains which include foggy weather, path constraints, asset maintenance, alarm chain pulling, agitations, cattle run over and other unforeseen circumstances. Overall punctuality of Mail/Express trains on Indian Railways during 2024-25 was 77.12% and during 2025-26 (April-October) was about 80%.

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