GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS

LOK SABHA
UNSTARRED QUESTION NO. 643
TO BE ANSWERED ON 23.07.2025

PASSENGER SAFETY AND FREIGHT NETWORK EXPANSION

643. SHRI RAJMOHAN UNNITHAN:

Will the Minister of RAILWAYS be pleased to state:

(a) whether major modernisation initiatives are planned to upgrade passenger safety measures, including signalling systems and station infrastructure, if so, the details thereof;

(b) whether the Government is enhancing dedicated freight corridor capacity to meet growing industry demands and reduce congestion on passenger lines, if so, the details thereof; and

(c) whether new express or semi-high-speed trains are being introduced on high-demand routes to improve connectivity and travel efficiency and if so, the details thereof?

ANSWER

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

(SHRI ASHWINI VAISHNAW)

(a) to (c) : Safety is accorded the highest priority on Indian Railways. 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 on Safety related activities (Rs. in Cr.)					
	2013-14 (Act)	2022-23 (Act)	2023-24 (Act)	RE 2024-25	BE 2025-26
Maintenance of Permanent Way & Works	9172	18,115	20,322	21,800	23,316
Maintenance of Motive Power and Rolling Stock	14796	27,086	30,864	31,540	30,666
Maintenance of Machines	5406	9,828	10,772	12,112	12,880
Road Safety LCs and ROBs/ RUBs	1986	5,347	6,662	8,184	7,706
Track Renewals	4985	16,326	17,850	22,669	22,800
Bridge Works	390	1,050	1,907	2,130	2,169
Signal & Telecom Works	905	2,456	3,751	6,006	6,800
Workshops Incl. PUs and Misc. expenditure on Safety	1823	7,119	9,523	9,581	10,134
Total	39463	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 6,635 stations up to 30.06.2025 to eliminate accident due to human failure.
3. Interlocking of Level Crossing (LC) Gates has been provided at 11,096 level Crossing Gates up to 30.06.2025 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 6,640 stations up to 30.06.2025.
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. Kavach has already been deployed on 1548 RKm

on South Central Railway and North Central Railway. Presently, the work is in progress on Delhi-Mumbai and Delhi-Howrah corridors (approximately 3000 RKm). Track side works on these routes have been completed on about 2200 RKm as on 30.06.2025. Regular trials are being done on these sections.

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 counseling 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:-

SN	Item	2004-05 to 2013-14	2014-15 to 2024-25 (till Mar 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 31.01.25: 25,939	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 nos.**	**34,428 km**	**More than 2 times**
2	**Flyovers (RoBs)/ Underpasses (RUBs) (Nos.)**	**4,148 nos.**	**12,771 nos.**	**More than 3 times**
3	**Unmanned Level crossings (nos.) on BG**	**As on 31.03.14: 8948**	**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**

Moreover, as regard the station infrastructure, to enhance the safety of passengers at stations, following steps are being taken by railways:

1. Creation of permanent holding areas at 73 identified stations:

i. During the festival season of 2024, holding areas were created outside stations. These waiting areas were able to hold large crowds at Surat, Udhna, Patna and New Delhi. Passengers were allowed only when the train came to the platform.

ii. Similar arrangements were made during Mahakumbh at nine stations of Prayag area.

iii. Based on the experience of these stations, it has been decided to create permanent waiting areas outside stations at 73 stations across the country which periodically faces heavy crowds. Crowd build up will be controlled within the waiting area. Passengers will

be allowed to go to platforms only when the trains arrive at the platform. This will decongest the platforms.

iv. Pilot projects have been started at New Delhi, Anand Vihar, Varanasi, Ayodhya, and Ghaziabad stations.

2. Access control:

i. Complete access control will be initiated at the 73 identified stations.

ii. Passengers with confirmed reserve tickets will be given direct access to the platforms.

iii. Passengers without a ticket or with a waiting list ticket will wait in the outside waiting area.

iv. All unauthorized entry points will be sealed.

3. Wider foot-over-bridges (FOB):

Two new designs of 12 meter wide (40 feet) and 6 meter wide (20 feet) standard FOB have been developed. These wide FOBs with ramps were very effective in crowd management during Mahakumbh. These new standard wide FOBs will be installed in all the stations.

4. Cameras:

Cameras helped crowd management in a big way during Mahakumbh. CCTV cameras at Railway Stations and adjoining areas will aid close monitoring and management of crowd at Railway Station.

5. War rooms:

War rooms at large stations will be developed. Officers of all departments will work in the war room during crowd situations.

6. New generation communication equipment:

Latest design digital communication equipment like walkie-talkies, announcement systems, calling systems will be installed on all heavy crowd stations.

Ministry of Railways has taken up construction of two Dedicated Freight Corridors (DFC) viz. Eastern Dedicated Freight Corridor (EDFC) from Ludhiana to Sonnagar (1337 Km) and the Western Dedicated Freight Corridor (WDFC) from Jawaharlal Nehru Port Terminal (JNPT) to Dadri (1506 Km). Out of total 2843 Km, 2741 Route kilometers (96.4%) have been commissioned and operational, which - carried 130116 freight trains during FY 2024-25. Indian Railways is working on increasing the capacity of its network through Corridors approach. Corridors like HDN (High Traffic Density), Energy, Minerals and Cement are being implemented on priority.

Indian Railways (IR) constantly endeavors to improve connectivity to facilitate passengers inter alia by introducing new train services, including Passenger trains services/Express services and also by operating Semi-high Speed train services like Vande Bharat, Amrit Bharat, Namo Bharat Rapid Rail services. This is an ongoing process on Indian Railways subject to traffic justification, operational feasibility, resource availability etc. Accordingly, during 2024-25 and 2025-26 (up to 15 July 2025), 182 New train services including 42 Vande Bharat, 02 Amrit Bharat, 04 Namo Bharat Rapid Rail services have been introduced on the IR network.

*****