GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS

RAJYA SABHA
STARRED QUESTION NO.62
ANSWERED ON 05.12.2025

OPERATIONAL LAPSES, MAINTENANCE DELAYS, AND TRANSPARENCY IN RAILWAYS

*62 SMT. JEBI MATHER HISHAM:

Will the Minister of RAILWAYS be pleased to state:

(a) the current status of region-wise punctuality loss data for the last three years arising from diesel locomotive and Over Head Electrification (OHE) failures and reason for not sharing/disclosing this information fully;

(b) the reasons for deep screening—an essential track maintenance process—was allowed to remain overdue for up to 20 years and the steps taken to clear this backlog;

(c) updated data on delays caused by signal failures track damage, congestion and rolling-stock issues zone-wise and division-wise; and

(d) the details of accountability measures in place to address these persistent lapses?

ANSWER

MINISTER OF RAILWAYS, INFORMATION & BROADCASTING AND ELECTRONICS & INFORMATION TECHNOLOGY
(SHRI ASHWINI VAISHNAW)

(a) to (d) : A Statement is laid on the Table of the House.

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STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (d) OF STARRED QUESTION NO. 62 BY SMT. JEBI MATHER HISHAM ANSWERED IN RAJYA SABHA ON 05.12.2025 REGARDING OPERATIONAL LAPSES, MAINTENANCE DELAYS, AND TRANSPARENCY IN RAILWAYS

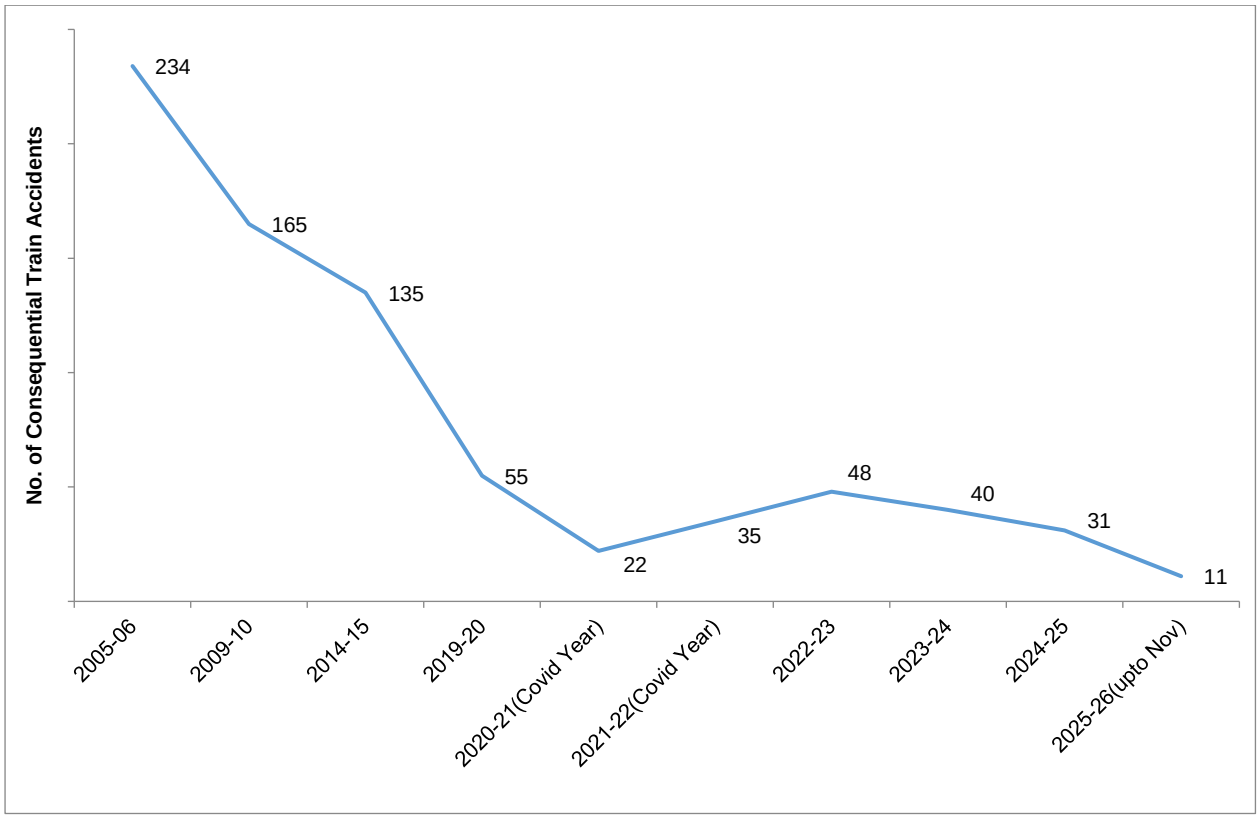
(a) to (d): Indian Railways have taken several measures during the last eleven years to improve asset reliability, safety and punctuality of trains.

As a consequence of various asset reliability and 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 measures taken to improve safety and asset reliability of track, signalling , Rolling stock and hence 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.)**	**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 in place of old mechanical signalling 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. Axle counters for automatic clearance of Block Section, BPAC (Block Proving Axle Counter) are provided to ensure complete arrival of train without manual intervention before granting line clear to receive next train and to reduce human element. These systems have been provided on 6142 Block Sections up to 31.10.2025.
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. Kavach was adopted as a National ATP system in July 2020. Kavach is a highly technology intensive system, which requires safety certification of highest order. 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 (633 Rkm) on Delhi- Mumbai route and on Howrah-Bardhaman section (105 RKm)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.

9. All locomotives are equipped with Vigilance Control Devices (VCD) to improve alertness of Loco Pilots.
10. 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.
11. 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.
12. 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.
13. Mechanisation of track laying activity through use of track machines like PQRS, TRT, T-28 etc. to reduce human errors.
14. Maximizing supply of 130m/260m long rail panels for increasing progress of rail renewal and avoiding welding of joints, thereby improving safety.
15. Ultrasonic Flaw Detection (USFD) testing of rails to detect flaws and timely removal of defective rails.
16. Laying of longer rails, minimizing the use of Alumino Thermic Welding and adoption of better welding technology for rails i.e., Flash Butt Welding.
17. Monitoring of track geometry by OMS (Oscillation Monitoring System) and TRC (Track Recording Cars).
18. Patrolling of railway tracks to look out for weld/rail fractures.
19. The use of Thick Web Switches and Weldable CMS Crossing in turnout renewal works.
20. Inspections at regular intervals are carried out to monitor and educate staff for observance of safe practices.

21. 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.
22. Detailed instructions on issues related with safety of Track, e.g. integrated block, corridor block, worksite safety, monsoon precautions, etc. have been issued.
23. Preventive maintenance of railway assets (Coaches & Wagons) is undertaken to ensure safe train operations.
24. Replacement of conventional ICF design coaches with LHB design coaches is being done.
25. All unmanned level crossings (UMLCs) on Broad Gauge (BG) route have been eliminated by January 2019.
26. 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.
27. 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.
28. 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.
29. Regular counselling and training of staff is undertaken.
30. 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

Indian Railways punctuality is affected due to several factors which include foggy weather, path constraints, asset maintenance and other issues, alarm chain pulling, agitations, cattle run over and other unforeseen circumstances.

To improve the punctuality of trains, several steps have been taken by Indian Railways . These include rigorous monitoring of running of passenger carrying trains at divisional, zonal and Railway Board levels, introduction of rolling block system for maintenance of assets to increase their reliability, removal of infrastructure bottlenecks in a planned manner and rationalization of Time Table in a scientific manner.

Further, to ensure real time and realistic reporting of arrival/departure of passenger trains, data loggers are being used.

The sustained focus on improvement has helped in improvement of asset reliability and better punctuality performance as below:

Year	**Punctuality**
2023-24	73.62 %
2024-25	77.12 %
2025-26 (Up to Nov)	79.26 %

Indian Railways operate about 25,000 trains daily and the asset failure incidences are only about 2 % including those of Locos/OHEs. The unusual incidences are analysed, and suitable corrective measures are taken accordingly.

Regular inspection and maintenance of all railway assets including Track, rolling stock, OHE, signalling etc is carried out as per laid down norms to ensure safe operation of trains. These are regularly monitored through designated officials in divisions/depots & workshops etc across zonal railways. Preventive maintenance is also undertaken to ensure safe train operations. Staff are regularly counselled and trained to improve these parameters.

Indian railways have identified and implemented long-term and short-term measures for improving the asset reliability. Further, Railways have initiated various measures such as launching of special punctuality drives and sensitizing staff involved in train operations.

The punctuality loss incidences on account of maintenance of assets such as diesel locomotives, over head equipment (OHE) failures, signal failures, track, congestion, and

rolling stock issues are monitored and analysis is done promptly to identify the root causes and the corrective and improvement actions.

A number of improvement measures have been taken for improving the reliability of Diesel Locomotives and OHE as under:

Diesel Locomotives: Diesel Locomotives are crucial to crisis management plan of Indian Railways. Quality focus is being given for maintenance of this important asset for maintaining and improving the reliability by way of actions such as:

- Provision of Remote monitoring and Management of Locomotives and Trains (REMMLOT) in diesel locomotives.
- Deployment of Prompt Response Team across India for quick resolution of problems in WDG4G/6G locomotives.
- Improvement of maintenance periodicity of components such as Computer controlled Brake system for better reliability.

Over Head Equipment (OHE): OHE is crucial for reliable train operations. This makes OHE maintenance, aggregation and adoption of standard prescribed maintenance practices very important. Several good practices have been adopted such as:

- Survey for identification of trees along the track, which could be potential for OHE failure and their trimming/cutting.
- Frequent cleaning of insulators in polluted areas.
- To minimise the impact of changes in weather, ensuring free movement and adjustment of parameters of Auto Tensioning Devices (ATD) in every season.
- Special drive to check crossover and turnouts, OHE parameters and its adjustment.
- Cross audits of maintenance depots by other depots for identification of deficiencies and gaps with reference to standard practices.
- Regular training for maintenance personnel.
- Timely replacement of old assets and replacement on condition basis of catenary and contact wire.
- Identification of broken and flashed insulators and their replacement in special drive.

Deep screening of ballast is undertaken as a key mechanised maintenance activity to enhance track resilience, stability and drainage. The work is executed using Ballast Cleaning Machines (BCMs), including High Output Ballast Cleaning Machines (HOBCMs) ensuring efficient and uniform cleaning of the ballast bed with minimal manual intervention.

Deep screening of ballast is carried out based on based on thickness of clean cushion available and not based on age.Accordingly, deep screening of main-line track is scheduled when the clean ballast cushion reduces below 200 mm.

Mechanised capacity has also been significantly strengthened with the induction of 65 BCMs, including HOBCMs during the last five years which has enhanced the overall capacity of Indian Railways for deep screening.

To support uniform implementation and quality control, detailed guidelines and Standard Operating Procedures (SOP) have been issued to enhance the efficiency and quality of deep screening. Improvements in operational planning, including advance arrangement of ballast, tools, equipment, and trained manpower along with better sequencing and scheduling have led to faster execution and better utilisation of resources. Special priority has also been accorded to points and crossings, considering their operational sensitivity.

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