GOVERNMENT OF INDIA MINISTRY OF RAILWAYS

RAJYA SABHA STARRED QUESTION NO. 46 ANSWERED ON 29.11.2024

INCIDENTS OF ACCIDENTS/DERAILMENTS/FIRE IN TRAIN

*46. DR. KANIMOZHI NVN SOMU:

Will the Minister of RAILWAYS be pleased to state:

- (a) the number of accidents/derailments/fire in trains, including goods trains that occurred during the last one year, month-wise, along with reasons therefor;
- (b) the number of persons killed/injured and value of Government property damaged;
- (c) the number of Committees appointed to inquire into the causes of such accidents;
- (d) the findings of the Inquiry Committees and the action taken thereon;
- (e) the amount of compensation paid by Government to the victims; and
- (f) the steps taken by Government to check accidents in future?

ANSWER

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

(SHRI ASHWINI VAISHNAW)

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

STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (f) OF STARRED QUESTION NO. 46 BY DR. KANIMOZHI NVN SOMU ANSWERED IN RAJYA SABHA ON 29.11.2024 REGARDING INCIDENTS OF ACCIDENTS/DERAILMENTS/FIRE IN TRAIN

(a) to (f): 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 40 in 2023-24 as shown in the graph below. The number of consequential train accidents during the period April to October 2024 is 25 as compared to 67 during the same period in 2013. The causes of these accidents broadly include track defects, loco/coach defects, equipment failures, human errors etc. An accident might cause damage to the railway property that includes track, rolling stock, OHE equipment, signaling gears etc.

It may be noted that the consequential train accidents during the period 2004-14 was 1711 (average 171 per annum), which has declined to 678 during the period 2014-24 (average 68 per annum) i.e. a reduction of 60%.

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 2023-24, indicating an improvement of approx.73% during the said period.



Consequential Train Accidents on Indian Railways and casualties therein:-

Period	No. of Consequential Train Accidents	No. of Deaths	No. of Injuries
2004-05 to 2013-14	1711	904	3155
2014-15 to 2023-24	678	748	2087

Total cost of damages to railway property such as Rolling Stock/Tracks etc., in consequential train accidents during the past five years (from April 2019 to March 2024) have been assessed as Rs. 313 Cr.

Inquiries into the rail accidents are carried out by the statutory body, the Commissioner of Railway Safety under Ministry of Civil Aviation and department Inquiry Committees as per laid down norms.

The agencies, after due deliberations, submit their findings and recommendations in various accidents. As per the inquiries, these accidents occurred due to equipment failure, environmental factors, human errors, sabotage; etc.

Month wise details of accidents in current financial year 2024-25 (up to 26/11/2024) are as under:

S. No.	Date & time of accident	Accident	Death	Injury	Inquiry committee	Reasons
1	06/04/2024 - 23:45	Car dashed with passenger train	1	1	Departmental	Over speeding of car by car driver who lost control (due to alcoholic consumption) and after damaging the gate barrier collided with running train.
2	29/04/2024 - 11:30	Derailment of passenger train at Chhatrapati Shivaji Terminus Mumbai station	0	0	Departmental	Profile of newly laid Right hand Tongue rail of point number 101A (1in12) inserted on 28.04.2024 beyond specs.
3	01/05/2024 - 05:17	Derailment of passenger train at Praygraj Sangam station	0	0	Departmental	Deficiencies in maintenance of Track parameters beyond specs.
4	28/05/2024 - 11:15	Derailment of passenger train between Malkajgiri and Sitaphalmandi stations	0	0	Departmental	Deficiencies in maintenance of Track parameters beyond specs.
5	28/05/2024 - 17:07	Derailment of goods train at Palghar station	0	0	Departmental	Due to uneven loading & improper securing of Load (Steel Coils).

S. No.	Date & time of accident	Accident	Death	Injury	Inquiry committee	Reasons
6	30/05/2024 - 08:18	Derailment of passenger train at Jammu Tawi station	0	0	Departmental	Deficiencies in Wheel parameters.
7	03/06/2024 - 16:20	Fire in passenger train between Okhla and Tughlakabad stations	0	0	Departmental	Cause could not be ascertained. Investigation still going on.
8	06/06/2024 - 17:25	Fire in passenger train at Kiul station	0	0	Departmental	Fire occurred due to M-3 cable in its lug.
9	07/06/2024 - 04:24	Fire in passenger train between betweenKhatipur and GetorJagatpura stations	0	0	Departmental	The probable cause of fire incident is Electrical Short circuit in 110VDC supply to FSDS.
10	07/06/2024 - 09:37	Derailment of passenger train at Ghaziabad station	0	0	Departmental	Due to defect in Wheel profile (less route radius of L-1 and L-2) of derailed trolley wheel of coach no 226752 LWACCN
11	17/06/2024 - 08:55	Collision: Goods train collided with passenger train from rear between Rangapani and Chatter Hat stations	10	43	Chief Commissioner of Railway Safety	Error in Train working
12	18/07/2024 - 14:37	Derailment of passenger train between Motiganj and Jhilahi stations	4	12	Commissioner of Railway Safety	Inquiry under progress.
13	20/07/2024 - 19:00	Derailment of goods train at Amroha station	0	0	Departmental	Improper loading pattern and combination of causes.
14	30/07/2024 - 03:37	Side Collision of passenger train with derailed Goods train at Barabamboo station	2	15	Commissioner of Railway Safety	Inquiry under progress.

15	09/08/2024 - 09:30	Derailment of goods train between Sonalium and Dudh Sagar stations	0	0	Departmental	Sudden sinkage of formation and settlement of track due to the effect of continuous heavy rainfall in the section.
16	12/08/2024 - 18:17	Derailment of passenger train at Itarsi station	0	0	Departmental	 Initiation of Root Radius on wheel. Lateral Bump Stop Clearances out of prescribed tolerance.
17	14/08/2024 - 17:23	Derailment of goods train between Aslana - Patharia	0	0	Departmental	Due to defect in Wheel profile (hollow tyre, root radius and wheel diadifference) of Axle of culprit wagon

S. No.	Date & time of accident	Accident	Death	Injury	Inquiry committee	Reasons
18	17/08/2024 - 02:30	Derailment of passenger train between Govindpuri and Bhimsen stations	0	1	Departmental	Derailment of the locomotive of the train took place due to the entanglement of an external heavy metal object, available near the right hand side rail of track.
19	07/09/2024 - 05:50	Derailment of passenger train at Jabalpur station	0	0	Departmental	Entanglement of left side (LS) side buffers.
20	18/09/2024 - 19:55	Derailment of goods train at Vrindaban Road station	0	0	Departmental	Due to the defect in tyre with flange defect in the first left hand side wheel of first wagon of the train.
21	11/10/2024 - 20:30	Collision: passenger train collided with Goods train from rear at Kavaraippettai station	0	9	Commissioner of Railway Safety	Inquiry under progress.
22	17/10/2024 - 15:55	Derailment of passenger train at Dibalong station	0	0	Departmental	Inquiry under progress.
23	18/10/2024 - 21:02	Derailment of passenger train at Kalyan station	0	0	Departmental	Defects in Wheel Parameters & track.
24	22/10/2024 - 13:54	Derailment of passenger train at Kalumna station	0	0	Departmental	Improper maintenance of track and coach defects which resulted in buffer entanglement in VPH 1 & VPH 2 which in turn caused VPH 3 to derail.
25	31/10/2024 - 15:58	Derailment of goods train between Dihakho and Mupa stations	0	0	Departmental	Inquiry under progress.
26	09/11/2024 - 05:31	Derailment of passenger train at Nalpur station	0	0	Departmental	Inquiry under progress.
27	12/11/2024 - 20:41	Derailment of passenger train at Raghavapuram station	0	0	Departmental	Inquiry under progress.
28	21/11/2024 - 00:05	Derailment of passenger train at Harinagar station	0	0	Departmental	Inquiry under progress.
29	26/11/2024 - 11:20	Derailment of goods train at Bhanwar Tonk station	0	0	Departmental	Inquiry under progress.
	Total	accidents: 29	17	71		

Compensation for death/injury of railway passengers in train accidents and untoward incidents as defined under Section 124 & 124A (read with Section 123) of the Railways Act, 1989, is decided by Railway Claims Tribunal (RCT) on the basis of a claim application filed by the victims/their dependents before RCT, either nearest to their place of residence or the place of incident/accident, within one year from the date of happening of the incident/accident. Railway Administration pays compensation only when a decree is awarded by Hon'ble RCT in favour of the claimant and Railways decide to implement the decree.

The amount of compensation paid by the Railways to victims in train accidents/derailments/fire in trains including Goods train during the last one year is Rs. 26,22,41,268/-. However, the compensation paid in a year need not necessarily relate to the accidents/ casualties in that year alone, the amount paid in a year depends upon the number of cases finalized by Railway Claims Tribunals (RCTs) or other Courts of Law in a particular year irrespective of the year(s) in which the accident they pertain to, have occurred.

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 activity	ties (Rs.		
	2022-23 (Act)	2023-24(Act)	BE 2024-25
Maintenance of Permanent Way &	18,115	20,322	21,386
Works			
Maintenance of Motive Power and	27,086	30,864	31,494
Rolling Stock			
Maintenance of Machines	9,828	10,772	11,864
Road Safety LCs and ROBs/ RUBs	5,347	6,662	9,980
Track Renewals	16,326	17,850	17,652
Bridge Works	1,050	1,907	2,137
Signal & Telecom Works	2,456	3,751	4,647
Workshops Incl. PUs and Misc.	7,119	9,523	9,615
expenditure on Safety			
Total	87,327	1,01,651	1,08,776

- 2. Electrical/Electronic Interlocking Systems with centralized operation of points and signals have been provided at 6,608 stations up to 31.10.2024 to eliminate accident due to human failure.
- 3. Interlocking of Level Crossing (LC) Gates has been provided at 11,053 level Crossing Gates up to 31.10.2024 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 6,619 stations up to 31.10.2024.
- 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 Route Km). Track side works on these routes have been completed on about 1081 RKm(705RKm on

Delhi-Mumbai section and 376 RKm on Delhi-Howrah section). 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.
- System of disconnection and reconnection for S&T equipment as per protocol has been reemphasized.
- 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.
- 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, fanshaped layout turnout on PSC sleepers, Steel Channel/H-beam Sleepers on girder bridges is used while carrying out primary track renewals.
- 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.
- 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.

SN	Item	2004-05 to 2013- 14	2014-15 to 2023-24	2014-24 Vs. 2004-14
	Track Maintenance			
1.	Expenditure on Track Renewal (Rs. in Cr.)	47,038	1,09,577	2.33 times
2.	Rail Renewal Primary (Track Km)	32,260	43,335	1.34 times
3.	Use of high-quality rails (60 Kg) (Km)	57,450	1,23,717	2.15 times
4.	Longer Rail Panels (260m) (Km)	9,917	68,233	6.88 times
5.	USFD (Ultra Sonic Flaw detection) Testing of Rails (Track km)	20,19,630	26,52,291	1.31 times

The details of the Safety related works undertaken by Railways are tabulated below:-

6.	USFD (Ultra Sonic Flaw detection)	79,43,940	1,73,06,046	2.17 times
	Testing of Welds (Nos.)			
7.	New Track KM added (Track km)	14,985	31,180	2.08 times
8.	Weld failures (Nos.)	In 2013-14: 3699	In 2023-24: 481	87%
				reduction
9.	Rail fractures (Nos.)	In 2013-14: 2548	In 2023-24: 383	85%
				reduction
10.	Thick Web Switches (Nos.)	Nil	21,127	
11.	Track Machines (Nos.)	As on 31.03.14 =	As on 31.03.24 =	122%
		748	1,661	increase
	Level Crossing Gate Elimination			
1.	Elimination of Unmanned Level	As on 31.03.14:	As on 31.03.24:	100%
	Crossing Gates (Nos.)	8948	Nil	reduction
			(All eliminated by	
			31.01.19)	
2.	Elimination of Manned Level	1,137	7,075	6.21 Times
	Crossing Gates (Nos.)			
3.	Road over Bridges (RoBs)/ Road	4,148	11,945	2.88 Times
	under Bridges (RUBs) (Nos.)			
4.	Expenditure on LC Elimination	8,825	41,957	4.75 Times
	(LC+ROB+RUB)			
	Bridge Rehabilitation			
1.	Expenditure on Bridge	3,924	8,255	2.10 Times
	Rehabilitation (Rs. in Cr.)	, 	· ·	

SN	Item	2004-05 to 2013- 14	2014-15 to 2023- 24	2014-24 Vs. 2004-14
	Signalling Works			
1.	Electronic Interlocking (Stations)	837	2,964	3.52 times
2.	Automatic Block Signaling (Km)	1,486	2,497	1.67 times
3.	Fog Pass Safety Devices (Nos.)	As on 31.03.14: 90	As on 31.03.24: 19,742	219 times
	Rolling Stock			
1.	Manufacture of LHB Coaches (Nos.)	2,337	36,933	15.80 times
2.	Provision of Fire and Smoke Detection System in AC coaches (Nos. of Coaches)	0	19,271	
3.	Provision of Fire Detection and Suppression System in Pantry and Power Cars (Nos. of Coaches)	0	2,991	
4.	Provision of Fire Extinguishers in Non –AC coaches (Nos. of Coaches)	0	66,840	