GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS

LOK SABHA
UNSTARRED QUESTION NO. 3141
TO BE ANSWERED ON 19.03.2025

MANPOWER SHORTAGE IN SAFETY CATEGORY POSTS

3141. SHRI RAHUL GANDHI:

Will the Minister of RAILWAYS be pleased to state:

(a) whether there is manpower shortage in safety category posts, especially track maintainers;

(b) if so, the details of the sanctioned posts, vacancies and track-maintainers deputed for non-core functions, zone-wise;

(c) the details of manpower requirement of track maintainers in accordance with the Modified (Manpower and Cost Norms for Track Maintainers) Formulae, 2024, zone-wise;

(d) whether shortage of track maintainers has adversely impacted track maintenance and inspection work;

(e) if so, the details thereof including the backlog of inspections, zone-wise; and

(f) the details of accidents, derailments and safety incidents that have occurred due to lapses in track maintenance, zone-wise?

ANSWER

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

(SHRI ASHWINI VAISHNAW)

(a) to (f): Occurrence and filling up of vacancies are continuous processes on Indian Railways considering its size, spatial

distribution and criticality of operation. Adequate and suitable manpower is provided to cater to the regular operations, changes in technology, mechanisations and innovative practices. The vacancies are filled up primarily by placement of indents by Railways with Recruitment agencies as per operational and technological requirements.

After easing of restrictions imposed on account of COVID 19, two major examinations involving more than 2.37 crore candidates have been conducted successfully.

Exam	Candidates	Cities	Centres	Days	Shifts
L2 - L6	1.26 cr	211	726	68	133
L1	1.1 cr	191	551	33	99

Based on these exams, 1,30,581 candidates have been recruited in Railways. This includes more than 40,000 Track Maintainers.

Recruitment done in Indian Railways during 2004-2005 to 2013-2014 vis-à-vis during 2014-2015 to 2023-2024 is given as under: -

Period	Recruitments
2004-2005 to 2013-2014	4.11 lakhs
2014-2015 to 2023-2024	5.02 lakhs

Further, as a system improvement, the Ministry of Railways has introduced a system of publishing annual calendar from 2024 for recruitment to various categories of Group 'C' posts. The

introduction of annual calendar will benefit the aspirants in the following manner:

- **More opportunities for candidates;**
- **Opportunities to those becoming eligible every year;**
- **Certainty of exams;**
- **Faster Recruitment process, Training and Appointments**

Accordingly, ten Centralized Employment Notifications (CENs) for 92,116 vacancies have been notified during January to December 2024 for filling up of posts of Assistant Loco Pilots, Technicians, Sub-Inspectors, Constables in Railway Protection Force (RPF), Junior Engineers (JEs)/ Depot Material Superintendent (DMS)/ Chemical & Metallurgical Assistant (CMA), Paramedical Categories, Non-Technical Popular Categories (Graduate), Non-Technical Popular Categories (Under-Graduate), Ministerial & Isolated Categories and Level-1 posts including 13,187 vacancies of Track Maintainers. First stage Computer Based Test for 41,500 posts has been completed from 25.11.2024 to 30.12.2024.

Details are as under:-

Exam	Candidates	Cities	Centres	Days	Shifts
ALP CEN No. 01/2024 (18,799 vacancies)	18,40,347	156	346	5	15
Technician CEN No. 02/2024 (14,298 vacancies)	26,99,892	139	312	9	27
JE/DMS/CMA CEN No. 03/2024 (7,951 vacancies)	11,01,266	146	323	3	9
RPF (SI) CEN No. 01/2024 (452 vacancies)	15,35,635	143	306	5	15

In addition, Computer Based Test for RPF CEN No. 02/2024 (4,208 vacancies) for the post of Constable has started from 02.03.2025 onwards. 2nd Stage Computer Based Test (CBT-II) for CEN No. 01/2024, for the post of Assistant Loco Pilot is scheduled on 19.03.2025 and 20.03.2025.

Regular review of manpower requirement of safety categories including Track Maintainers are carried out based on technological upgradation in operation and maintenance practices.

On Indian Railway network, majority of regular track maintenance activities are done by Track machines owned by Railways and operated by permanent staff of Railway. These are supplemented by Railway's Track Maintainers who carry out works of immediate attention, urgent repairs, patrolling and sundry maintenance activities. Limited work of track maintenance not directly related with safety of track is outsourced to balance the workload of working employees as per extant provisions, till the vacancies are filled up.

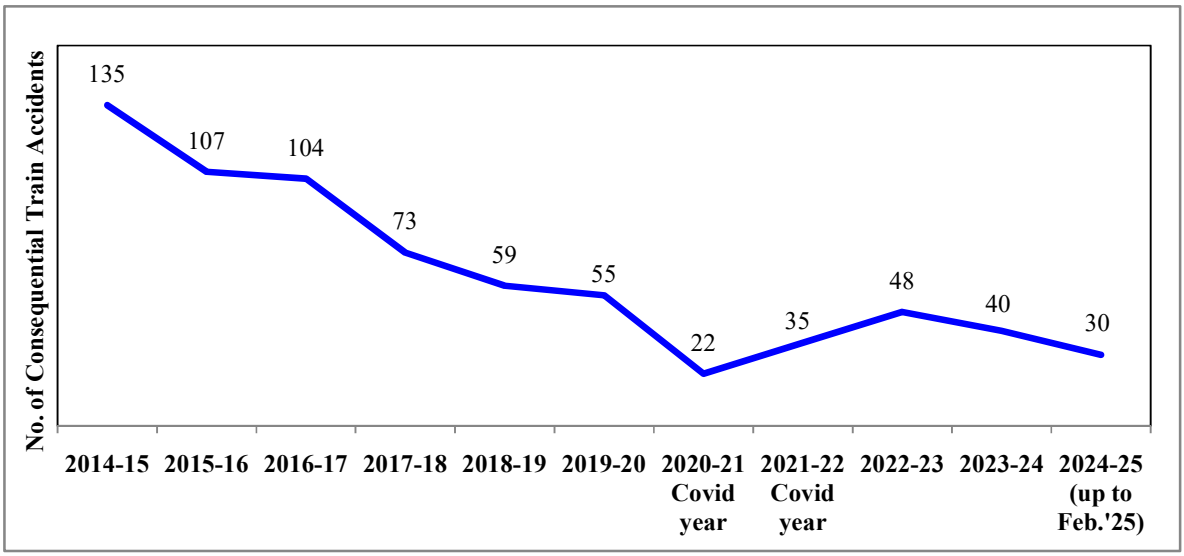
Inspection and maintenance of track is accorded utmost priority in Indian Railways and there are well laid inspection and monitoring schedules and guidelines stipulated in Indian Railways Manuals for it. These are strictly adhered and recorded in an online Portal which is un-editable and checked by designated authorities. Inspection and its monitoring as prescribed in manuals are integral part of duties and responsibilities of P. Way engineers. There is provision of getting an exception report in the system for giving alerts in case of

delays/ deviation from stipulated schedules which are monitored regularly.

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 40 in 2023-24 as shown in the graph below. The causes of these accidents broadly include track defects, loco/coach defects, equipment failures, human errors 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.



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)	2024-25 (RE)	2025-26 (BE)
Maintenance of Permanent Way & Works	9172	18,115	20,322	21,800	23,316
Maintenance of Motive Power and Rolling Stock	14,796	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	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 6,617**

stations up to 31.01.2025 to eliminate accident due to human failure.

3. **Interlocking of Level Crossing (LC) Gates has been provided at 11,083 level Crossing Gates up to 31.01.2025 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 6,625 stations up to 31.01.2025.**
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 1,548 RKm on South Central Railway and North Central Railway. Presently, the work is in progress on Delhi-Mumbai and Delhi-Howrah corridors (approximately 3,000 Route Km). Track side works on these routes have been completed on about 1,969 RKm. 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 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 undertaken by Railways are tabulated below:-

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

6.	USFD (Ultra Sonic Flaw detection) Testing of Welds (Nos.)	79,43,940	1,73,06,046	2.17 times
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 = 748	As on 31.03.24 = 1,661	122% increase
Level Crossing Gate Elimination				
1.	Elimination of Unmanned Level Crossing Gates (Nos.)	As on 31.03.14: 8948	As on 31.03.24: Nil (All eliminated by 31.01.19)	100% reduction
2.	Elimination of Manned Level Crossing Gates (Nos.)	1,137	7,075	6.21 Times
3.	Road over Bridges (RoBs)/ Road under Bridges (RUBs) (Nos.)	4,148	11,945	2.88 Times
4.	Expenditure on LC Elimination (LC+ROB+RUB)	8,825	41,957	4.75 Times
Bridge Rehabilitation				
1.	Expenditure on Bridge Rehabilitation (Rs. in Cr.)	3,924	8,255	2.10 Times

Signalling Works				
1.	**Electronic Interlocking (Stations)**	**837**	**2,964**	**3.52 times**
2.	**Automatic Block Signalling (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**	

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