

GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS

RAJYA SABHA
UNSTARRED QUESTION NO.2687
ANSWERED ON 11.08.2023

MODERNISATION OF RAILWAY INFRASTRUCTURE

2687 DR. L. HANUMANTHAI AH:
DR. AMEE YAJNIK:

Will the Minister of RAILWAYS be pleased to state:

- (a) whether Government intends to modernize current railway infrastructure including railway tracks, signaling systems, electrical systems, etc., if so, the details thereof;
- (b) whether Government is cognizant of the large number of vacancies in the Indian Railways, especially at lower-level functionaries, if so, the details thereof and if not, the reasons therefor; and
- (c) whether Government is aware that 794 officials dealing with track maintenance were not given training as per the CAG report of 2022?

ANSWER

MINISTER OF RAILWAYS, COMMUNICATIONS AND
ELECTRONICS & INFORMATION TECHNOLOGY

(SHRI ASHWINI VAISHNAW)

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

.*****

STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (c) OF UNSTARRED QUESTION NO. 2687 BY DR. L. HANUMANTHAI AH AND DR. AMEE YAJNIK ANSWERED IN RAJYA SABHA ON 11.08.2023 REGARDING MODERNISATION OF RAILWAY INFRASTRUCTURE

(a) Modernisation of current railway infrastructure is a need based ongoing process subject to operational requirement, technical feasibility, commercial viability, resource availability etc. A number of works have been sanctioned/under execution to modernize railway infrastructure. Some of them are as under:

1. Rashtriya Rail Sanraksha Kosh (RRSK) has been introduced in 2017-18 for replacement/renewal/upgradation of critical safety assets, with a corpus of ₹ 1 lakh crore for five years. From 2017-18 till 2021-22 a gross expenditure of ₹ 1.08 lakh crore was incurred on RRSK works.
2. Electrical/Electronic Interlocking Systems with centralized operation of points and signals have been provided at 6427 stations upto 31.05.2023 to eliminate accident due to human failure.
3. Interlocking of Level Crossing (LC) Gates has been provided at 11093 level Crossing Gates up to 31.05.2023 for enhancing safety at LC gates.
4. Complete Track Circuiting of stations to enhance safety for verification of track occupancy by electrical means has been provided at 6377 stations upto 31.05.2023.
5. All locomotives are equipped with Vigilance Control Devices (VCD) to ensure alertness of Loco Pilots.
6. Retro-reflective sigma boards are provided on the mast which is located two OHE masts prior to the signals in electrified territories to warn the crew about the signal ahead when visibility is low due to foggy weather.
7. 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.
8. 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.
9. Mechanisation of track laying activity through use of track machines like PQRS, TRT, T-28 etc to reduce human errors.
10. Maximizing supply of 130m/260m long rail panels for increasing progress of rail renewal and avoiding welding of joints, thereby ensuring safety.
11. Laying of longer rails, minimizing the use of Alumino Thermic Welding and adoption of better welding technology for rails i.e. Flash Butt Welding.

12. Monitoring of track geometry by OMS (Oscillation Monitoring System) and TRC (Track Recording Cars).
 13. The use of Thick Web Switches and Weldable CMS Crossing in turnout renewal works.
 14. 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.
 15. Preventive maintenance of railway assets (Coaches & Wagons) is undertaken to ensure safe train operations and to keep a check on rail accidents across the country.
 16. Replacement of conventional ICF design coaches with LHB design coaches is being done.
 17. All unmanned level crossings (UMLCs) on Broad Gauge (BG) route have been eliminated by January 2019.
 18. Production Units are providing fire detection and suppression system in newly manufactured power cars and pantry cars and 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.
 19. Concept of Rolling Block system introduced wherein work of maintenance/repair/replacement is planned for 2 weeks in advance on rolling basis and executed as per plan.
 20. Indigenously developed automatic train protection system “KAVACH” has been deployed on 1465 route km and 121 locomotives. Further, the work is in progress on about 3000 route km and preparation of DPR has been taken up on about 6000 route km.
- (b) & (c) Occurrence and filling up of vacancies are continuous process on Indian Railways considering its size, spatial distribution and criticality of operations. While 4,11,624 candidates were empaneled during the period 2004-2014 for appointment in Indian Railways, 4,86,031(Provisional) candidates have been empaneled in the 9 years period from 01.04.2014 to 30.06.2023. A massive recruitment exercise has been completed recently for empaneling 1,39,050 candidates by conducting Computer Based Test (CBT) of approximately 2.37 crore candidates. As on 01.07.2023, the total vacancies on Indian Railways are 2,61,233. During 2017-18 to 2020-21, 1,87,375 number of track maintenance officials have been imparted trainings across all zonal railways. However, during this period, training of a fraction of the track maintenance officials got deferred due to various reasons like Covid-19 situation, working requirements, personal reasons, etc. Further, such cases are dealt on priority and sent for training at the earliest opportunity.
