GOVERNMENT OF INDIA MINISTRY OF RAILWAYS

LOK SABHA UNSTARRED QUESTION NO. 1702 TO BE ANSWERED ON 13.12.2023

RAIL ACCIDENT

1702. SHRI RITESH PANDEY: MS. S. JOTHIMANI:

Will the Minister of RAILWAYS be pleased to state:

- (a) whether the Government is aware of the findings of a 2022 report on derailments and other safety concerns of Railways by the Comptroller and Auditor General of India (CAG);
- (b) if so, the details of steps that the Government has taken to ensure timely accident inquiries, enhance safety measures in the railway network, deployment of RRSK funds and develop a strong monitoring mechanism to ensure timely implementation of maintenance activities;
- (c) whether the Government has outlined any comprehensive action plan or roadmap to prevent future derailments and improve safety measures within the railway network, in view of the recent tragic accident in Balasore; and
- (d) if so, the details thereof and if not, the reasons therefor?

ANSWER

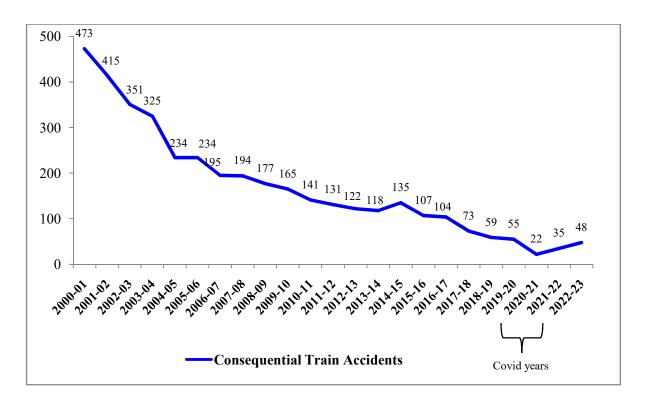
MINISTER OF RAILWAYS, COMMUNICATIONS AND ELECTRONICS & INFORMATION TECHNOLOGY

(SHRI ASHWINI VAISHNAW)

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

STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (d) OF UNSTARRED QUESTION NO 1702 BY SHRI RITESH PANDEY AND MS. S. JOTHIMANI TO BE ANSWERED IN LOK SABHA ON 13.12.2023 REGARDING RAIL ACCIDENT

(a) to (d): Consequential train accidents have declined over the years, as shown by the graph below:-



The average number of consequential train accidents during the period, 2004-14 was 171 per annum, while the average number of consequential train accidents during the period, 2014-23 has declined to 71 per annum.

The following steps have been taken by the Government to enhance safety and to prevent train accidents:

- 1. Rashtriya Rail Sanraksha Kosh (RRSK) has been introduced in 2017-18 for replacement/renewal/upgradation of critical safety assets, with a corpus of Rs. 1 lakh crore for five years. From 2017-18 till 2021-22, a Gross expenditure of Rs. 1.08 lakh crore was incurred on RRSK works. In 2022-23, the Govt. extended the currency of RRSK for another period of five years with Gross Budgetary Support (GBS) of Rs. 45,000 crores.
- Electrical/Electronic Interlocking Systems with centralized operation of points and signals have been provided at 6498 stations upto 31.10.2023 to eliminate accident due to human failure.
- Interlocking of Level Crossing (LC) Gates has been provided at 11137 level Crossing Gates up to 31.10.2023 for enhancing safety at LC gates.
- Complete Track Circuiting of stations to enhance safety for verification of track occupancy by electrical means has been provided at 6548 stations upto 31.10.2023.
- 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.
- 6. System of disconnection and reconnection for S&T equipment as per protocol has been re-emphasized.
- 7. All locomotives are equipped with Vigilance Control Devices (VCD) to ensure alertness of Loco Pilots.

- 8. 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.
- 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.
- 10. 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.
- 11. Mechanisation of track laying activity through use of track machines like PQRS, TRT, T-28 etc to reduce human errors.
- 12. Maximizing supply of 130m/260m long rail panels for increasing progress of rail renewal and avoiding welding of joints, thereby ensuring safety.
- 13. Laying of longer rails, minimizing the use of Alumino Thermic Welding and adoption of better welding technology for rails i.e. Flash Butt Welding.
- 14. Monitoring of track geometry by OMS (Oscillation Monitoring System) and TRC (Track Recording Cars).
- 15. Patrolling of railway tracks to look out for weld/rail fractures.

- 16. The use of Thick Web Switches and Weldable CMS Crossing in turnout renewal works.
- 17. Inspections at regular intervals are carried out to monitor and educate staff for observance of safe practices.
- 18. 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.
- 19. Detailed instructions on issues related with safety of Track e.g. integrated block, corridor block, worksite safety, monsoon precautions etc. have been issued.
- 20. 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.
- 21. Replacement of conventional ICF design coaches with LHB design coaches is being done.
- 22. All unmanned level crossings (UMLCs) on Broad Gauge (BG) route have been eliminated by January 2019.
- 23. 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.
- 24. Indian Railways has displayed Statutory "Fire Notices" for widespread passenger information in all coaches. Fire posters are provided in every coach so as to inform 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.
- 25. 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.
- 26. Regular counselling and training of staff is undertaken.
- 27. Concept of Rolling Block introduced in Indian Railways (Open Lines) General Rules vide Gazette notification dated 30.11.2023, wherein work of maintenance/repair/replacement is planned for 52 weeks in advance on rolling basis and executed as per plan.

Investigations in train accidents are carried out in stipulated time line.

The progress of investigation is monitored closely for expeditious finalization of accident inquiries.
