GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS

LOK SABHA
UNSTARRED QUESTION NO. 579
TO BE ANSWERED ON 06.02.2019

R-UPGRADATION OF SAFETY NORMS

+579.SHRI UDAY PRATAP SINGH:

Will the Minister of RAILWAYS be pleased to state:

(a) the details of the special steps taken by the Government to upgrade the various safety norms of Indian Railways during the last three years;

(b) whether the Government has set any mechanism or taken any steps to ensure passenger safety and to check the recurrence of accidents keeping in view the accidents occurred in the past years; and

(c) if so, the details thereof?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF RAILWAYS

(SHRI RAJEN GOHAIN)

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

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STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (c) OF UNSTARRED QUESTION NO. 579 BY SHRI UDAY PRATAP SINGH TO BE ANSWERED IN LOK SABHA ON 06.02.2019 REGARDING R-UPGRADATION OF SAFETY NORMS

(a) to (c) : Safety is accorded the highest priority by Indian Railways and all possible steps are undertaken on a continual basis to prevent accidents and to enhance safety of passengers. Following steps/measures have been taken to prevent accidents in the past years:-

1. **To prevent accidents due to human error, all electric locomotives are equipped with Vigilance Control Device (VCD) to ensure alertness of Loco Pilots.**
2. **Simulator based training for improving the driving skills and the reaction time of Loco Pilots.**
3. **Special drives to check the alertness of Loco Pilots and other safety parameters.**
4. **Retro-reflective sigma boards on the mast which is located two OHE masts prior to the signals in electrified territories to warn the crew about signal ahead when visibility is low due to foggy weather.**
5. **Provision of GPS based Fog Pass device to loco pilots in fog affected areas which enables loco pilots to know the exact distance of the approaching landmarks like signals, level crossing gates etc.**
6. **Indian Railways has already adopted the technological upgradation in safety aspects of coaches and wagons by way of introducing Modified Centre Buffer couplers, Bogie Mounted Air Brake System (BMBS), improved suspension design and provision of Automatic fire & smoke detection system in coaches.**

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7. Use of Long Rail panels on track to minimize welded joints.

8. Ultrasonic Flaw Detection (USFD) testing of rails to detect flaws and timely removal of defective rails.

9. Procurement of Thick Web Switches and Weldable CMS Crossing for use on track.

10. Mechanization of track maintenance to reduce human errors.

11. Security Helpline 182 has been provided to help passengers especially women passengers travelling the train passengers can contact the concerned Security Control to register any complaint.

12. Emergency phones have been provided along railway track at a span of one Km. each for emergency communication by Driver with Railway control, in case of any emergency.

13. Provision of Electrical/Electronic Interlocking System with centralized operation of points and signals to eliminate human failure and to replace old mechanical systems. These systems have been provided at 5866 stations upto 31.12.2018.

14. Track Circuiting of stations to enhance safety for verification of track occupancy by electrical means instead of human element has been completed at about 6046 stations upto 31.12.2018.

15. Axle Counter for Automatic clearance of Block Section (BPAC) to ensure complete arrival of train without manual intervention before granting line clear to the next train and to reduce human element have been provided on 5318 block sections upto 31.12.2018.

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16. Interlocking of Level Crossing (LC) Gates to protect L.C Gate with signals to avoid accidents has been done at 11245 gates upto 31.12.2018.

17. Train Protection and Warning System (TPWS) based on European Technology ETCS Level-1, a proven Automatic Train Protection (ATP) System to avoid train accident/collision on account of human error of Signal Passing at Danger (SPAD) or over speeding, has been provided on Noapara-Kavi Subhash section of Kolkata Metro (28 RKMs), Chennai-Gumidipundi suburban section of Southern Railway (50 RKMs), Basin Bridge – Arrakkonam section of Southern Railway (67 RKMs) and Hazrat Nizamuddin-Agra section of Northern/North Central Railway (200 RKMs)

18. Auxiliary Warning System (AWS) is presently functional on 413 RKMs in the Mumbai suburban section of Central Railway (289 RKMs) and Western Railway (124 RKMs)

19. Train Collision Avoidance System (TCAS): It is an Automatic Train Protection (ATP) System being developed in association with 3 Indian manufacturers. The system has been installed on Lingampalli-Vikarabad-Wadi, Vikarabad-Bidar section (250 RKMs) on South Central Railway.

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