

**GOVERNMENT OF INDIA  
RAILWAYS  
LOK SABHA**

UNSTARRED QUESTION NO:3866  
ANSWERED ON:09.08.2017  
Safety Measures to Avoid Accidents  
Choubey Shri Ashwini Kumar;Rao Shri Rayapati Sambasiva

**Will the Minister of RAILWAYS be pleased to state:**

- (a) whether there is any proposal for use of state-of-the-art technology to bring in more safety measures to avert accidents in the near future;
- (b) if so, the details thereof and if not, the reasons therefor;
- (c) the details of mechanism in place to ensure proper maintenance of safety and security systems by the Railways; and
- (d) the success rate of the Ministry of Railways when it comes to ensure safety and security of the trains and averting accidents in the last one year?

**Answer**

MINISTER OF STATE IN THE MINISTRY OF RAILWAYS

(SHRI RAJEN GOHAIN)

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

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STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (d) OF UNSTARRED QUESTION NO. 3866 BY SHRI RAYAPATI SAMBASIVA RAO AND SHRI ASHWINI KUMAR CHOUBEY TO BE ANSWERED IN LOK SABHA ON 09.08.2017 REGARDING SAFETY MEASURES TO AVOID ACCIDENTS

(a) to (c): Safety is accorded the highest priority by Indian Railways. All possible steps including induction of latest technology are undertaken on a continual basis to prevent accidents and enhance safety. Technologies which have been adopted or are currently under induction into the railway system include provision of track circuiting at stations, provision of Axle Counters for Block Section Clearance (BPAC), Electronic Interlocking systems, Interlocking of Level crossing gates, Auxiliary Warning System (AWS), Vigilance Control Device (VCD) in locomotives, LED based colour light signals, Train Protection and Warning System (TPWS), Train Collision Avoidance System (TCAS), Fog Safe Device (FSD), TRINETRA for better visibility in foggy/inclement weather conditions, use of 60 Kg rails and Pre-stressed Concrete Sleepers (PSC), long welded rail panels (LWR), Thick Web Switches in turnouts, Digital Ultrasonic Flaw Detection machines for detection of rail defects, electronic monitoring of tracks using Track Recording Cars (PRC). ICF coaches are being gradually phased out and new design light weight modern technology LHB coaches are being introduced in a phased manner during the next five years. Technological upgradation in safety aspect of coaches and wagons by way of introducing CBC couplers, Bogie Mounted Air Brake System (BMBS), improved suspension design are also being carried out which would eventually lead to enhanced safety standards. Apart from these components, Indian Railways is also installing Wheel Impact Load Detectors (WILD), on-line Centralised Bearing Monitoring System (CBMS) etc. in a phased manner to improve safety of coaches and wagons. IR is gradually moving towards automated monitoring condition of rolling assets in coaches and wagons. On the Traction side Remote Monitoring/Remote Diagnostic System and management of locos (REMLOT/RDS) is being provided to monitor performance and safety characteristics of locomotives. In order to continuously update the driving skills of loco pilots, simulator based training is being imparted to all the locomotive pilots of Indian Railways. Similarly, special training is being imparted to staff handling the new technologies to keep their knowledge abreast with the latest developments.

(d) As a result of implementing the above mentioned continual upgradation and adoption of technologies, the number of consequential accidents has steadily fallen over Indian Railways.

Number of consequential train accidents have continuously declined from 135 in the year 2014-15, to 107 in the year 2015-16 and further down to 104 in the year 2016-17. In the current financial year upto 2nd August 2017, the number of consequential train accidents have further reduced by 51% (21 in 2017-18 versus 43 in 2016-17).

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