

**GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS**

**LOK SABHA
UNSTARRED QUESTION NO. 4040
TO BE ANSWERED ON 18.03.2020**

TRAIN ACCIDENTS

**4040. SHRI SUDHEER GUPTA:
SHRI SHRIRANG APPA BARNE:
SHRI GAJANAN KIRTIKAR:
SHRI SANJAY SADASHIV RAO MANDLIK:
SHRI BIDYUT BARAN MAHATO:**

Will the Minister of RAILWAYS be pleased to state:

- (a) whether there has been a decline in the number of train accidents;**
- (b) if so, the details of the accidents during each of the last three years and the current year;**
- (c) whether it is also a fact that there has been rapid decrease in the number of deceased and injured persons due to train accidents and if so, the details thereof;**
- (d) whether the safety measures including speedy track renewal ultrasonic rail detection system, elimination of several unmanned level crossings, etc. are proposed to be taken on priority basis and if so, the details thereof; and**
- (e) the further measures being taken by the Government to increase rail safety in the country and avoid future train accidents?**

ANSWER

MINISTER OF RAILWAYS AND COMMERCE & INDUSTRY

(SHRI PIYUSH GOYAL)

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

STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (e) OF UNSTARRED QUESTION NO 4040 BY SHRI SUDHEER GUPTA, SHRI SHRIRANG APPA BARNE, SHRI GAJANAN KIRTIKAR, SHRI SANJAY SADASHIV RAO MANDLIK AND SHRI BIDYUT BARAN MAHATO TO BE ANSWERED IN LOK SABHA ON 18.03.2020 REGARDING TRAIN ACCIDENTS

(a) to (c): Yes, Sir. The details of number of consequential train accidents and persons deceased/injured during the last three years i.e. 2016-17 to 2018-19 and in the current year 2019-20 (from 1st April, 2019 to 13th March, 2020) are given as under:-

Year	Number of consequential Train Accidents	Casualties			
		Deceased		Injured	
		Railway Passengers	Others than Railway Passengers	Railway Passengers	Others than Railway Passengers
2016-17	104	195	43	346	23
2017-18	73	28	30	182	17
2018-19	59	16	21	90	22
2019-20# (upto 13 th March, 2020)	55	00	05	73	08

#There is no passenger fatality in any consequential train accident in the current financial year till date.)

(d) & (e): Yes, Sir. Track renewal works are planned every year and their execution is prioritized according to the condition of track. Railway tracks are replaced through track renewal works which is an ongoing process. Track renewal works are undertaken as and when a stretch of track becomes due for renewal on the basis of criteria laid down in Indian Railway Permanent Way Manual on age/condition basis viz. traffic carried in terms of gross million tones, incidence of rail

fracture/failure, wear of rails, corrosion of rails, maintainability of track as per standards etc.

All unmanned level crossings (UMLCs) on Broad Gauge (BG) have been eliminated on 31.01.2019.

Further, the following steps/measures have been taken to prevent accidents and to enhance safety of passengers on Indian Railways:-

- 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.**
- 2. Electrical/Electronic Interlocking Systems with centralized operation of points and signals are progressively provided to eliminate accident due to human failure and to replace old mechanical systems. These systems have been provided at 6,084 stations up to 29.02.2020.**
- 3. Axle Counter for Automatic clearance of Block Section 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 5,661 block sections up to 29.02.2020.**
- 4. Automatic Train Protection (ATP) System called Train Protection and Warning System (TPWS) based on European Train Control System Level-1 (ETCS L-1) Technology has been implemented on 345 Route Km (200 Route km Delhi-Agra Section, 117 Route Km Chennai Suburban section and 28 Route km of Metro Railway Kolkata).**
- 5. An earlier version of ATP system called Auxiliary Warning System (AWS) is presently functional on 413 RKMs in the Mumbai suburban section of Central Railway (289 Route KMs) and Western Railway (124 Route KMs).**

- 6. Train Collision Avoidance System (TCAS):** Train Collision Avoidance System is an indigenous Automatic Train protection (ATP) system developed in association with Indian manufacturers. The system has been installed on Lingampalli – Vikarabad – Wadi and Vikarabad – Bidar sections (250 Route km) on South Central Railway. Further, the system is under implementation on 1199 Route Km on South Central Railway.
- 7. 4 pilot projects of lengths totalling 640 Route km at total cost of ₹ 1609 crores on Golden Quadrilateral and Diagonal routes have been sanctioned for trials of Modern Train Control Systems on following sections:**

S. No.	Section	Railway
1	Nagpur-Badnera	Central Railway
2	Renigunta-Yerraguntala	South Central Railway
3	Vizianagaram-Palasa	East Coast Railway
4	Bina-Jhansi	North Central Railway

- 8. Interlocking of Level Crossing Gates with signals to avoid accidents has been done at 11,622 Level Crossing Gates up to 29.02.2020.**
- 9. Two works of raising of speed to 160 kmph on existing New Delhi-Howrah and New Delhi – Mumbai routes have been sanctioned including modernization of Signalling including Automatic Train protection System.**
- 10. All the diesel and electric locomotives on Indian Railways have now been provided with Vigilance Control Devices.**
- 11. A Global Positioning System (GPS) based Fog Pass Device is being provided as required to loco pilots in fog affected areas which**

enables loco pilots to know the exact distance of the approaching signals, Level Crossing Gate and other critical landmarks.

- 12. Simulator based training is being imparted to loco pilots to improve their driving skills and reaction time.**
- 13. During 2018-19, 4181 km (in Complete Track Renewal Units) track renewal had been carried out. For the current year i.e. 2019-20, 4278 km (in complete Track Renewal units) track renewal has been carried out upto February, 2020.**
- 14. In order to improve safety, modern track structure consisting of Prestressed Concrete Sleeper (PSC), 60kg, 90kg or higher Ultimate Tensile Strength (UTS) rails, fanshaped layout turnout on PSC sleepers, Steel Channel Sleepers on girder bridges is used while carrying out primary track renewals.**
- 15. Provision of Thick Web Switches (TWS) is planned for all important routes of Indian Railways. To expedite provision of TWS, procurement of Thick Web Switches has been decentralized to Zonal Railways.**
- 16. Long rail panels of 260 M/130M length are manufactured at the steel plant to minimize number of Alumino Thermit joints in the track.**
- 17. Cold weather patrolling of the railway tracks is done during the coldest part of the night in cold months of the year to look out for weld/rail fractures for ensuring safety.**
- 18. Ultrasonic Flaw Detection (USFD) testing of rails to detect flaws and timely removal of defective rails. USFD Vehicular testing system has been introduced and implemented successfully on Northern Railway.**
- 19. Global Positioning System (GPS) trackers are being progressively provided to keyman & patrolmen to monitor their movement & to report any unsafe condition noticed by them instantaneously.**

- 20. Mechanization of Track Maintenance is being progressively carried out to reduce human errors.**
- 21. Track management system has been introduced on Indian Railways for development of database and decision support system and to decide rationalize maintenance requirement and optimize inputs.**
- 22. Safety drives and inspections at regular intervals are carried out to monitor and educate staff for observance of safe practices.**
- 23. Linke Hofmann Busch (LHB) Type Coaches are of a superior design coaches that reduce the chances of derailment and the possibility of grievous injury or death in case of accidents. Indian Railways has completely switched over to the manufacture of LHB coaches from 2018-19 onwards.**
- 24. All UMLCs on Broad Gauge have already been eliminated through closure/merger/provision of Subway for safety measures.**
- 25. Dry chemical powder type fire extinguishers are being provided in all mainline coaches. These are portable fire extinguishers and are easy to use by on board staff or passengers in case of emergency.**
- 26. Use of improved materials for electrical fittings and fixtures such as Miniature Circuit Breakers (MCBs), light fittings, terminal boards and connectors.**
- 27. Intensive publicity campaigns to prevent the travelling public from carrying inflammable goods are regularly undertaken.**
