GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS

LOK SABHA
UNSTARRED QUESTION NO. 5074
TO BE ANSWERED ON 05.04.2017

RAILWAY ACCIDENTS DUE TO HUMAN ERRORS

†5074. SHRI GOPAL SHETTY:

Will the Minister of RAILWAYS be pleased to state:

(a) the number of rail accidents that took place due to human errors during the last three years;

(b) the details of loss of life and property suffered in these accidents;

(c) whether the Government has started using anti-collision devices to check such accidents;

(d) if so, the names of zones where it is being used and if not, the reasons therefor; and

(e) whether in spite of that the railways has not made any significant recruitment for railway security staff and if so, the reasons therefor?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF RAILWAYS

(SHRI RAJEN GOHAIN)

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

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STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (e) OF UNSTARRED QUESTION NO 5074 BY SHRI GOPAL SHETTY TO BE ANSWERED IN LOK SABHA ON 05.04.2017 REGARDING RAILWAY ACCIDENTS DUE TO HUMAN ERRORS

(a) & (b): Number of consequential train accidents on account of human negligence (including the accidents at unmanned level crossings caused due to negligence of road vehicle users) and fatalities therein from 2013-14 to 2015-16 and in the current year from 1st April, 2016 to 28th February, 2017 are as under:-

Years	Total consequential train Accidents	Accidents due to Human Negligence*	Total persons Killed	Persons killed on account of accidents due to Human error	Cost of Damage (in Crore)
2013-14	118	108	152	151	₹38.01
2014-15	135	118	292	250	₹72.07
2015-16	107	93	122	90	₹45.24
2016-17*	99	83	235	235	₹59.06

*** Provisional**

(c) & (d): Yes, Madam. Indian Railways have planned for Automatic Train Protection (ATP) Systems to avoid collision due to human error. The details of the ATP projects have been taken up on Indian Railways as under:-

(i) Train Protection and Warning System (TPWS): TPWS is based on proven European Train Control System (ETCS-L1) Technology for mitigating safety risk arising due to driver's error of Signal Passing at

Danger (SPAD) or over speeding, which may lead to collision. TPWS is functional on:-

- **Chennai to Gummidipundi (50 RKM) and Chennai (Basin Bridge) to Arakkonam (67 RKM) on Suburban section of Southern Railway.**
- **Non Suburban section of Delhi to Agra (200 RKM) of Northern Railway and on Kolkata Metro from Kavi Subhash to Dumdum (25 RKM) section.**
- **Further TPWS works have been sanctioned on 3330 RKM. In first phase, work on suburban sections (1244 RKM) on Eastern, South Eastern, Northern, Southern and South Central Railways have been taken up for implementation. In Phase II, implementation of the balance sanctioned works of TPWS on 2086 RKM on High Density Network (HDN)-1/HDN-2/HDN-3 Routes is also being taken up.**

(ii) Train Collision Avoidance System (TCAS): Research Design and Standards Organization (RDSO) in association with Indian Vendors has taken up a pilot project for indigenous development of a cost effective safety system called Train Collision Avoidance System (TCAS). TCAS deploys radio communication for transmission of movement authority from track side to the Locomotive. This system is aimed at providing capability of preventing train accidents caused due to Signal Passing at Danger (SPAD) or over speeding by train drivers. The system has a feature of reflecting signal aspect in the locomotive cab.

After successful Proof of Concept trials of TCAS, RDSO has taken up extended field trials of TCAS on a pilot section Lingamapalli – Vikarabad-Wadi-Bidar (250 Route km) section of South Central Railway. After completion of all field works, equipment deployment trials on seven

pairs of passenger trains have already commenced. Safety validation of the system has also been taken up by Independent Safety Assessor (ISA).

Further implementation of TCAS is planned after successful conclusion of the extended field trials and safety validation of system. During 2017-18, work of TCAS system at 1427 RKM has also been sanctioned.

(e): Recruitment in RPF is an ongoing process. As and when vacancies arise due to retirement, promotion, death, voluntary retirement, resignation etc., the same are filled through direct recruitment or promotions from time to time. 511 Sub-Inspectors and 16388 Constables in RPF/RPSF have been recruited on Indian Railways in the year 2013-14 and 2014-15 respectively.

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