GOVERNMENT OF INDIA
RAILWAYS
LOK SABHA

STARRED QUESTION NO:349
ANSWERED ON:21.03.2013
TRAIN PROTECTION WARNING SYSTEM
Swamygowda Shri N Cheluvaraya Swamy ;Tagore Shri Manicka

Will the Minister of RAILWAYS be pleased to state:

(a) whether the Railways have given sufficient emphasis on installing and implementing the Train Protection and Warning System (TPWS) on a large scale so as to prevent train accidents in the country;

(b) if so, the details thereof and the current status of its implementation;

(c) whether any perceptible improvement has taken place due to the steps taken by Railways in this regard;

(d) if so, the details thereof; and

(e) if not, the reasons therefor along with the other options/alternatives being explored in this direction?

Answer

MINISTER OF THE STATE IN THE MINISTRY OF RAILWAYS (SHRI PAWAN KUMAR BANSAL)

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

STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (e) OF STARRED QUESTION NO.349 BY SHRI N. CHALUVARAYA SWAMY AND SHRI MANICKA TAGORE TO BE ANSWERED IN LOK SABHA ON 21.03.2013 REGARDING TRAIN PROTECTION WARNING SYSTEM.

(a) Yes, Madam.

(b) Train Protection and Warning System (TPWS) has been approved for 3330 Route Kilometers

(RKms) covering Automatic Signaling Sections / High Density Network (HDN). In first phase, process to acquire TPWS (ETCS Level 1) on approx. 1870 Rkms of Automatic Signalling Suburban Sections where EMUs, MEMUs & DEMUs ply, has been initiated.

(c) to (e) Railways have been consistently taking steps for preventing train accidents in this regard. Details are as under:

1. Train Protection Warning System (TPWS): To prevent train accidents caused by human error like Signal Passing At Danger (SPAD) and Over Speeding, TPWS (ETCS Level-1) (European Train Control System) has been provided as pilot projects on suburban section of Southern Railway between Chennai Central & Gummidipundi (50 RKms) and the other on non-suburban Delhi-Agra section (200 RKms) of North/North Central Railway, where service trials are in progress with 35 locomotives on nominated trains. TPWS is also being provided on Dum Dum − Kavi Subhash section of Metro Railway Kolkata (25 Rkms).

Improvement in Safety shall be fully realized after successful deployment of TPWS on Indian Railways, which will be done in phases.

2. Train Collision Avoidance System (TCAS) being developed indigenously incorporates collision prevention as well as protection against Signal Passing At Danger (SPAD) by loco pilot. RDSO has finalized the specification of TCAS and proof of concept trial has been carried out during October/November, 2012. Extended trials on 200 Kms section on South Central Railway are to be conducted. Based on success of extended trials, further deployment on Indian Railways will be considered.

3. Vigilance Control Device (VCD): Vigilance Control Device (VCD) has been provided on electric as well as diesel locomotives to ensure safety, which monitors the alertness of the driver through all normal actions performed by him while driving, such as use of throttle handle, brake horn etc.

4. Fog Safe Device (FSD): Fog Safe Device (FSD) is a Global Positioning System (GPS) based device provided on locomotives working on high density, fog prone sections on Indian Railways on trial basis. It displays name of approaching signals and other critical landmarks in advance even during poor visibility condition. There are issues of reliability and effectiveness to be sorted before this device can be universally adopted for fog safety. The device is under extended trials, during which evaluation and improvements shall be done. It is expected to help reduce stress on Loco pilots while running in foggy weather.