

1	2	3	4	5	6
South East Central	2010	0	1	0	3
	2011	0	1	0	0
	2012	1	5	0	9
	2013*	0	1	0	1
South Western	2010	0	0	0	0
	2011	0	0	0	0
	2012	2	1	0	2
	2013*	0	0	0	0
Western	2010	0	4	0	6
	2011	0	3	2	5
	2012	0	3	0	3
	2013*	0	8	0	7
West Central	2010	0	7	0	9
	2011	0	11	0	7
	2012	2#	19	1	20
	2013*	0	1	1	2

\* Statics pertaining to the year 2013 is upto March.

# Out of 02 cases reported in 2012 over West Central Railway, 01 case was pertaining to 2009 but complaint lodged in 2012.

#### **Train protection and warning system**

3532. SHRI K.C. TYAGI:

SHRI AVTAR SINGH KARIMPURI:

Will the Minister of RAILWAYS be pleased to state:

(a) the details of installations of Train Protection and Warning System (TPWS) in trains to prevent accidents;

- (b) whether Government has assessed the utility and requirement of TPWS in trains *vis-a-vis* its cost;
- (c) if so, the details thereof;
- (d) if not, the reasons therefor; and
- (e) the other remedial measures available with Government to prevent frequent train accidents in the country?

THE MINISTER OF STATE IN THE MINISTRY OF RAILWAYS (SHRI ADHIR RANJAN CHOWDHURY): (a) Two pilot projects of Train Protection Warning System (TPWS) have been installed, one on Chennai Central-Gummiddipundi (50 RKms) sub-urban section of Southern Railway and other on Delhi-Agra section (200 RKms) of Northern/North Central Railway.

(b) Yes, Sir.

(c) TPWS eliminates accidents caused by human error like 'Signal Passing at Danger' (SPAD) and over speeding. RITES were awarded a consultancy for recommending a low cost Automatic Train Protection system for Indian Railways. Based on recommendations of RITES, Train Protection Warning System (TPWS), ETCS (Level 1) works have been approved for 3330 RKMs at a cost of Rs. 1740 crore covering Automatic Signalling Sections/High Density Network (HDN) of Indian Railways. In the first phase, process to acquire TPWS (ETCS Level 1) equipment, on Automatic Signalling Suburban Sections where EMUs, MEMUs, DEMUs and Main Line Locomotives ply on Eastern, South Eastern, Southern and North Central Railways has been initiated.

(d) Does not arise.

(e) Other measures available with Government to prevent frequent train accidents in the country include timely replacement of over-aged assets, adoption of suitable technologies for up gradation and maintenance of track, rolling stock, signalling and interlocking systems, safety drives, greater emphasis on training of officials and inspections at regular intervals to monitor and educate staff for observance of safe practices. In addition to TPWS, other safety devices/systems being introduced to prevent accidents include 'provision of Anti Collision device

(ACD)/Train Collision Avoidance System (TCAS), Vigilance Control Device, Electrical/Electronic Interlocking with Centralised operation of Points and Signals to replace old mechanical signalling systems, Complete Track Circuiting of Station Section, Block Proving Axle Counter (BPAC) and Auxiliary Warning System (AWS).

**Establishment of railway medical colleges**

3533. SHRI BHARATSINH PRABHATSINH PARMAR:

SHRI PARSHOTTAM KHODABHAI RUPALA:

SHRI MANSUKH L. MANDAVIYA:

Will the Minister of RAILWAYS be pleased to state:

- (a) how many medical colleges would be established by Railways during next five years;
- (b) the status of establishment of Railway Medical College at Ahmedabad, Gujarat;
- (c) whether Railways intend to set up Polytechnic colleges in various States; and
- (d) if so, State-wise details thereof and by when the proposed Educational Institutes would start functioning ?

THE MINISTER OF STATE IN THE MINISTRY OF RAILWAYS (SHRI ADHIR RANJAN CHOWDHURY): (a) and (b) In the Railway Budget 2009-10, 18 Medical Colleges were announced to be set up attached to existing Railway Hospitals on Public Private Partnership (PPP) mode. To begin with, five places *viz.* Chennai, Guwahati, Kharagpur, Lucknow and Secunderabad where Medical Council of India norms with respect to hospitals bed strength etc., are more or less being met, have been identified under Phase-I. For setting up of these 05 medical colleges, M/s RITES has been appointed as consultant for conducting feasibility study, preparing bid documents, financial model and selection of a private partner. The consultant is conducting feasibility study of these identified five locations. The other locations including Ahmedabad shall be considered based on the experience of Phase-I locations.