(iii) The Scheme is applicable to Goods Sheds, Sidings and Private Freight Terminals (PFTs).

(iv) The Scheme is applicable to wagons of BOXN group, BCN and BCNHL group, BRN and BOST group and CONCORD rakes.

(v) Coal and coke, minerals and ores, POL traffic etc., and commodities under Class LR2 and Class LR3 are not eligible under the Scheme.

Methods to prevent railway accidents

630. PROF. M.V. RAJEEV GOWDA: Will the Minister of RAILWAYS be pleased to state:

(a) whether there has been an increase in the number of accidents on account of collisions and derailments in last two years, if so, the details thereof;

(b) the status of implementation of more efficient anti-collision devices like TCAS and TPWS in the railway network; and

(c) whether the Ministry is considering other new methods like ultra sonic detection of rail fracture to prevent derailments?

THE MINISTER OF STATE IN THE MINISTRY OF RAILWAYS (SHRI MANOJ SINHA): (a) The number of consequential train accidents attributed to collisions and derailments on Indian Railways during the last two years, *i.e.* 2013-14, 2014-15 and the current year (up to June, 2015) are as under:

Year	2013-14	2014-15	2015-16 (upto June, 2015)
Collisions	04	05	00
Derailments	53	63	15

(b) The status of implementation of more efficient anti collision devices like TCAS and TPWS in the Indian Railways network is summarized below:

Train Collision Avoidance System (TCAS) being developed indigenously by Research Design and Standards Organization (RDSO), incorporates collision prevention as well as protection against Signal Passing at Danger (SPAD) by loco pilot. RDSO has finalized the specification of TCAS after successful proof of concept trials. A pilot project of conducting extended field trials on 250 Kms section of South Central Railway (Wadi-Vikarabad-Bidar-Lingampalli) has also been taken up and is in progress by RDSO in association with three Indian firms. Initial limited field trials have also been conducted in a sub-section (32 Kms) of the pilot section in which key safety features of TCAS were successfully demonstrated.

Train Protection and Warning System (TPWS) based on proven European Train Control System (ETCS) Level–I technology has been commissioned on 50 kms suburban section of Chennai-Gummindipundi of Southern Railway and 25 kms section from Dum-Dum to Kavi Subhash on Kolkata Metro Railway. Commercial trials with 35 locos fitted with TPWS equipment have also been completed on Hazrat Nizamuddin-Agra Cantt. Section (200 kms). TPWS work is in progress on Basin Bridge Junction-Arakkonam (Slow line) (67 kms) on Southern Railway.

(c) Yes, Sir. For increasing reliability in Ultra Sonic Flaw Detection (USFD) testing, digital machines are being used and analogue type machines are being phased out. Vehicle Borne USFD testing is also being planned.

The following measures are also being taken by Indian Railways to prevent derailments of trains:

- Upgradation of Track Structure consisting of Pre Stressed Concrete (PSC) sleepers, 52 kg/60 kg, high strength (90kg/mm^2 ultimate tensile strength) rails on concrete sleepers, fanshaped layout on PSC sleepers, Steel Channel sleepers on girder bridges adopted on most of the routes.
- Track structure is being standardized with 60 kg rails and PSC sleepers on all the broad gauge routes, especially on high density routes to reduce fatigue of rails under higher axle-load traffic.
- New construction and replacement is done with PSC sleepers only.
- Long rail panels of 260 Meters/130 Meters length are being manufactured at the steel plants to minimize number of welded joints.
- Reduction in Thermit welded joints on rails; use of Self Propelled Ultrasonic Rail Testing (SPURT) cars for rail flaw detection.
- All rails and welds are ultrasonically tested as per laid down periodicity.
- Progressively shifting to flash butt welding which is superior in quality compared to Alumino Thermit (AT) welding.
- Progressive use of modern track maintenance machines *viz.* Tie Tamping, Ballast Cleaning Machines, Track Recording Cars, Digital Ultrasonic Flaw Detectors, Self Propelled Ultrasonic Rail Testing Cars, etc.
- Electronic monitoring of track geometry is carried out to detect defects and plan maintenance.
- Modern Bridge inspection techniques for determining health of the bridges.
- Introduction of Wheel Impact Load Detector (WILD)
- Regular patrolling of railway tracks at vulnerable locations including night patrolling and intensifying patrolling during foggy weather.

- To minimize effects of accidents, coaches with Centre Buffer Couplers are being manufactured with anti-climbing features.

Reducing deaths on Mumbai suburban railway network

631. PROF. M.V. RAJEEV GOWDA: Will the Minister of RAILWAYS be pleased to state:

(a) whether the measures adopted under the 'Final Mile' Wadala experiment campaign by the Central Railway have been successful in reducing deaths on the Mumbai suburban railway network, if so, the details thereof; and

(b) whether these measures have been replicated in other parts of the country, if so, the details thereof?

THE MINISTER OF STATE IN THE MINISTRY OF RAILWAYS (SHRI MANOJ SINHA): (a) Yes, Sir. The campaign is successful in Mumbai Division of Central Railway. The details of the average/month number of persons killed/injured on Central Railway for the years 2013-14, 2014-15 and 2015-16 are as under:—

Year	2013-14	2014-15	2015-16
Average/Month number of killed/injured	166.3	141	123*

* for the first three months only.

(b) The suggestion of M/s Final Mile regarding additional posters were also tried at some level crossings on Jaipur Division of North Western Railway and at South Eastern Railway and South Western Railway on pure experimental basis.

Train between Jodhpur and Chennai

†632. SHRI RAM NARAIN DUDI: Will the Minister of RAILWAYS be pleased to state:

(a) the number of trains being run by the Ministry between Jodhpur and Chennai at present; and

(b) the load of passengers on this route and whether Government proposes to increase the frequency of trains between Jodhpur and Chennai, if so, by when?

THE MINISTER OF STATE IN THE MINISTRY OF RAILWAYS (SHRI MANOJ SINHA): (a) Presently, two pairs of train services *viz.* 16125/16126 Chennai Egmore-Jodhpur Express (weekly) and 16863/16864 Bhagat Ki Kothi-Mannargudi Express (weekly) connect Jodhpur to Chennai.

†Original notice of the question was received in Hindi.