

- (xx) Discount for loading of bagged consignment in open and flat wagons.
- (xxi) Rationalisation of Merry-Go-Round (MGR) scheme.
- (xxii) Permitting all covered wagons for booking of traffic to two-point/multi-point combinations, mini rake.

Recently, freight rate has been further rationalized with effect from 01.11.2018, having following features:—

- (i) Increase in freight rate of Coal, RMSP (Raw material for steel plants), Iron and Steel, Iron ore, Other goods @ 8.75%.
- (ii) Increase in haulage charge of Container trains @ 5% w.e.f. 01.12.2018.

Installation of anti-collision device

2344. SHRI NARENDRA KUMAR SWAIN: Will the Minister of RAILWAYS be pleased to state:

- (a) the present status of installation of anti-collision device to check railway accidents;
- (b) whether this device has been experimented;
- (c) if so, the details thereof and if not, the reasons therefor; and
- (d) whether any machine/device is also being used to identify the railway track flaws, apart from signal and information received from railway employees and if so, the details thereof?

THE MINISTER OF RAILWAYS (SHRI PIYUSH GOYAL): (a) to (c) Anti Collision Device (ACD) developed by Konkan Railway Corporation Limited (KRCL) was provided as a pilot project on 1736 Route Kilometres on Northeast Frontier Railway (NFR). Complex operational and technical problems were experienced during these trials which could not be fully resolved by KRCL due to design limitation of ACD. As such, proliferation of ACD has not been undertaken.

Presently following different Automatic Train Protection (ATP) Systems are existing on Indian Railways:—

- (i) Automatic Train Protection (ATP) System called Train Protection and Warning System and based on European Train Control System (ETCS-L1) Technology has been implemented on 345 RKMs (200 RKMs Delhi-Agra Section, 117 RKMs Chennai Suburban section and 28 RKMs of Metro Railway Kolkata).

- (ii) An older version of ATP called Auxiliary Warning System (AWS) is presently functional on 413 RKMs in the Mumbai suburban section of Central Railway (289 RKMs) and Western Railway (124 RKMs).
- (iii) Train Collision Avoidance System (TCAS) is an indigenous Automatic Train Protection (ATP) System being developed in association with 3 Indian manufacturers. The system has been installed on Lingampalli – Vikarabad – Wadi, Vikarabad – Bidar section (250 RKMs) on SCR. Extensive field trials and safety validation of the system to Safety Integrity Level 4 (SIL-4) by Independent Safety Assessors (ISA) has been completed. Product of all the 3 firms has been approved by RDSO for developmental orders for speeds up to 110 Kmph in Absolute Block Sections. Trials on Automatic Signalling System and for speed upto 160 Kmph is under progress.

The system is being further implemented on 1199 RKMs on South Central Railway for extended trials.

- (iv) Four works of Modern Train Control System on 640 RKMs is being implemented for extensive trials of ATP system based on European Train Control System (ETCS L-2) Technology on Nagpur – Badnera, Jhansi – Bina, Yerraguntalla – Renigunta and Vizianagram – Palasa sections, totally 640 RKMs on the busy Golden Quadrilateral and Diagonal routes on Indian Railways.
- (d) Single Rail Tester (STR)/Double Rail Tester (DRT)/Hand – Held Weld Tester are used for Ultrasonic Flaw Detection testing to identify the probable internal flaws in rails and Welds. For identification of any deterioration in track geometry, Track Recording Cars (TRC) and Oscillation Monitoring System (OMS) are run at pre defined periodicity. Results of these systems are used for planning maintenance input in the track.

Collision of trains on railway tracks

†2345. SHRI NARAYAN RANE: Will the Minister of RAILWAYS be pleased to state:

- (a) whether 50,000 people have been killed during last three years due to the collision of trains on railway tracks;
- (b) if so, the details thereof;
- (c) whether Government has identified the railway tracks where people are killed in large numbers;

†Original notice of the question was received in Hindi.