(e) if not, the reasons therefor?

THE MINISTER OF STATE IN THE MINISTRY OF RAILWAYS (SHRI MANOJ SINHA): (a) No, Sir. As per the revised refund rules which came into effect from 01.07.2013, unused waitlisted tickets can be cancelled upto three hours of the actual departure of the train and such refunds are granted from any Passenger reservation counter or designated current counters.

In the case of e-tickets, if all the passengers are waitlisted, refund of fare is automatically credited to the customer's account, immediately upon preparation of charts.

(b) The ticketing system of Indian Railways had undergone major changes during the last 15 years, which include: (i) Large scale proliferation of Computerized Passenger Reservation System and Computerized Unreserved Ticketing System; (ii) Expansion of Internet Based Ticketing System; and (iii) Availability of Integrated Train Enquiry System which facilitates instant information on train running and reservation status through telephone, SMS and internet.

The refund rules were revised in keeping with the above developments in the ticketing/enquiry systems.

- (c) No, Sir. Passengers can avail refund of waitlisted tickets in accordance with the revised Rules.
 - (d) At present, there is no such proposal.
- (e) The revision was carried out to meet the objectives of simplification, efficiency in processing refunds, discouraging last minute cancellations, checking bogus claims for refunds and reducing the misuse of refund process.

Anti-collision device project

- 484. SHRI BALWINDER SINGH BHUNDER: Will the Minister of RAILWAYS be pleased to state:
- (a) whether the project of developing Anti-Collision Device to provide much desired safety to trains has been dropped by Railways;
 - (b) if so, the reasons for dropping the project;
- (c) whether Railways intend to introduce some imported device or will introduce any indigenous one for the purpose; and

(d) if so, the details in this regard and by when alternative mechanism would be developed?

THE MINISTER OF STATE IN THE MINISTRY OF RAILWAYS (SHRI MANOJ SINHA): (a) and (b) Development and deployment of Anti-Collision Device (ACD) was taken up by Konkan Railway Corporation Limited (KRCL) as a pilot project on 1736 Route kilometers on Northeast Frontier Railway (NFR) and it was operationalised in 2006. Technical and operational problems have been experienced in the functioning of ACD on NFR. Major problem is of unwarranted brakings which has adverse impact on train running.

R&D and Engineering efforts in resolving these technical and operational problems have been undertaken since its deployment on NFR. KRCL developed improved version 1.1.2 of ACD which was validated by Electronic Test & Development Centre (ETDC), Chennai and the same has been implemented on all Divisions of NFR. However, unwarranted brakings still continue to exist.

To deploy the system on the main line sections having multiple lines / electrified routes, KRCL developed ACD version 2.0 with revised specifications and design configuration. Trials of ACD version 2.0 was conducted jointly by KRCL, RDSO and NFR on section Pattabiram - Arakkonam on Chennai Division of Southern Railway during 2010-11. A large number of complex operational and technical problems were experienced during the trials on Southern Railway which could not be fully resolved by KRCL due to design limitations of ACD and further development of ACD version 2.0 has been put on hold by KRCL and further proliferation of ACD on other Zonal Railways is not contemplated at present.

(c) and (d) To overcome major problems noticed in ACD due to its dependence on GPS for location, error in Deviation Count Theory and need for a number of mid-section repeaters which are prone to theft and vandalism, an alternative system termed as Train Collision Avoidance System (TCAS) is being developed indigenously by Research Design and Standard Organization (RDSO) in association with three Indian Vendors. TCAS has features of Automatic Train Protection and Anti-collision. Extended field trials with multi vendor, interoperability features are in progress by RDSO, on 250 Km section of Secunderabad Division, South Central Railway and are expected to be completed by March 2015.

Initial rounds of extended field trials were conducted by RDSO during 2013-14 in a sub section of the above identified section wherein Anti-Collision and Automatic Train Protection features of TCAS were successfully demonstrated.