

GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS

RAJYA SABHA
UNSTARRED QUESTION NO. 1085
ANSWERED ON 28.07.2023

TRAIN COLLISION AVOIDANCE SYSTEM - KAVACH

1085 SHRI RANDEEP SINGH SURJEWALA:

Will the Minister of RAILWAYS be pleased to state:

- (a) the list of Railways zones that have started implementing the Train Collision Avoidance System - Kavach;
- (b) the funds released for the implementation of Train Collision Avoidance System – Kavach, year-wise;
- (c) the distance in kilometres of that have been covered under the Train Collision Avoidance System-Kavach, till date, zone-wise; and
- (d) the steps taken by Government to implement the Train Collision Avoidance System on an urgent basis, post the Balasore Rail accident?

ANSWER

MINISTER OF RAILWAYS, COMMUNICATIONS AND
ELECTRONICS & INFORMATION TECHNOLOGY

(SHRI ASHWINI VAISHNAW)

- (a) Kavach has so far been deployed on 1465 Route km on South Central Railway. Further, Kavach works are under implementation on Northern, North Central, Eastern, East Central, Western & West Central Zones of Indian Railways.
- (b) The expenditure on implementation of Kavach during 2022-23 is Rs. 144.52 Crores and till date Rs.351.91 Crores has been spent on Kavach. Further, during 2023-24 budgetary allocation for Kavach is Rs.710.12 Crores.
- (c) Kavach has so far been deployed on 1465 Route km and 121 locomotives (including Electric Multiple Unit rakes) on South Central Railway.
- (d) 1. Balasore train accident is not linked with provision of Kavach.

2. Kavach is indigenously developed Automatic Train Protection (ATP) system. Kavach is a highly technology intensive system, which requires safety certification of highest order.
3. Kavach aids the loco pilot in train running within specified speed limits by automatic application of brakes in case Loco Pilot fails to do so and also help the train safely run during inclement weather.
4. The first field trials on the passenger trains were started in February 2016. Based on the experience so gained and Independent Safety Assessment of the system by a 3rd party (Independent Safety Assessor: ISA) three firms were approved in 2018-19, for supply of Kavach.
5. Subsequently Kavach was adopted as a National ATP system in July 2020.
6. Kavach has so far been deployed on 1465 Route km and 121 locomotives (including Electric Multiple Unit rakes) on South Central Railway.
7. Kavach tenders have been awarded for Delhi – Mumbai & Delhi – Howrah corridors (approximately 3000 Route km) and work is in progress on these routes.
8. Indian Railways is preparing Detailed Project Report (DPR) and detailed estimate for another 6000 Rkm.
9. Presently there are three Indian OEMs who are approved for Kavach. Efforts are being made to develop more vendors to enhance the capacity and scale up the implementation of Kavach.
