

GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS

RAJYA SABHA
UNSTARRED QUESTION NO. 1099
ANSWERED ON 28.07.2023

KAVACH SAFETY SYSTEM

1099. SHRI VAIKO:
SHRI M. SHANMUGAM:

Will the Minister of RAILWAYS be pleased to state:

- (a) number of sections in various railway zones that are covered by Kavach safety system, the details thereof;
- (b) effectiveness of Kavach system in stopping of accidents like head-on collision, rear-end collision on the same track;
- (c) the reasons for not covering all sections with Kavach safety;
- (d) whether all rakes like passenger coaches, AC and non-AC coaches have been fitted with Anti-collision devices, in each railway zone; and
- (e) if so, the details thereof?

ANSWER

MINISTER OF RAILWAYS, COMMUNICATIONS AND
ELECTRONICS & INFORMATION TECHNOLOGY

(SHRI ASHWINI VAISHNAW)

- (a) to (e): Regarding safety features and implementation of Kavach, details are as under :
 1. Kavach is indigenously developed Automatic Train Protection (ATP) system. Kavach is a highly technology intensive system, which requires safety certification of highest order.
 2. 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.

3. 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.
4. Subsequently Kavach was adopted as a National ATP system in July 2020.
5. Kavach has so far been deployed on 1465 Route Km on South Central Railway covering Sanatnagar-Vikarabad-Bidar, Vikarabad-Wadi, Secunderabad-Mudkhed-Nagarsol, Secunderabad-Dhone-Guntakal and Bidar-Parbhani section.
6. Kavach tenders have been awarded for Delhi – Mumbai & Delhi – Howrah corridors (approximately 3000 Route km) and work is in progress on these routes.
7. Indian Railways is preparing Detailed Project Report (DPR) and detailed estimate for another 6000 Rkm
8. 121 locomotives (including Electric Multiple Unit rakes) on South Central Railway have been equipped with Kavach system
