

**GOVERNMENT OF INDIA  
MINISTRY OF RAILWAYS**

**LOK SABHA  
UNSTARRED QUESTION NO. 1088  
TO BE ANSWERED ON 26.07.2023**

**AUTOMATIC BRAKE SYSTEM IN KAVACH**

**† 1088. SHRI GHANSHYAM SINGH LODHI:**

**Will the Minister of RAILWAYS be pleased to state:**

- (a) whether the KAVACH system is fully safe to prevent tragic train accidents;**
- (b) if so, the reasons for delay in using it in all the trains;**
- (c) the percentage of possibility of decrease in train accidents by use of KAVACH system through its automatic tracking system in case of two trains heading on the same track;**
- (d) whether automatic braking system will be upgraded in the KAVACH system in case of animals or people entering the tracks of trains; and**
- (e) if so, the effects of it on trains?**

**ANSWER**

**MINISTER OF RAILWAYS, COMMUNICATIONS AND  
ELECTRONICS & INFORMATION TECHNOLOGY**

**(SHRI ASHWINI VAISHNAW)**

**(a) to (e): Regarding safety features & implementation of Kavach system, 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 and 121 locomotives (including Electric Multiple Unit rakes) on South Central Railway.**
- 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. Kavach system is not related to braking in case of animals or people entering track.**

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