

**GOVERNMENT OF INDIA  
MINISTRY OF RAILWAYS**

**LOK SABHA  
UNSTARRED QUESTION NO. 429  
TO BE ANSWERED ON 24.07.2024**

**FUND ALLOCATION FOR KAVACH SYSTEM IN RAILWAY LINES**

**429. SMT. KANIMOZHI KARUNANIDHI:  
DR. RANI SRIKUMAR:**

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

- (a) the details regarding the funds allocated, utilised for installation of KAVACH system in the country;**
- (b) total distance of rail network in kilometres brought under KAVACH system after the Balasore train accident in June 2023;**
- (c) the reasons for the slow pace of installation of KAVACH system; and**
- (d) whether any estimated time has been fixed for the installation of KAVACH in all the trains and railway lines?**

**ANSWER**

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

**(SHRI ASHWINI VAISHNAW)**

**(a) to (d):**

- 1. Kavach is an 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 helps the train to run safely during inclement weather.

**3. Implementation of Kavach involves execution of many activities, such as:**

- a. Installation of Station Kavach at each and every station.**
- b. Installation of RFID tags throughout the track length.**
- c. Installation of Telecom Towers throughout the section.**
- d. Laying of optical Fibre cable along the track.**
- e. Provision of Loco Kavach on each and every Locomotive running on Indian Railways.**

**4. Kavach has so far been deployed on 1465 Route km and 144 locomotives on South Central Railway.**

**5. Presently, the progress of main items related to Kavach on Delhi–Mumbai & Delhi–Howrah corridors (approximately 3000 Route km) is as under :**

- (i) Laying of Optical Fibre Cable: 4275 Km**
- (ii) Installation of Telecom Towers: 364 Nos.**
- (iii) Provision of Station Equipment: 285 Nos.**
- (iv) Provision of equipment in Loco: 319 Locos**
- (v) Installation of Track side equipments: 1384 Route Km.**

**6. Indian Railways has also prepared Detailed Project Report (DPR) and Detailed Estimate on another 6000 RKm.**

**7. On 16.07.2024, Kavach 4.0 specification has been approved by RDSO. This version covers all the major features required for the diverse railway network. This is a significant milestone in safety for Indian Railways. Within a short period, IR has developed, tested and started deploying Automatic Train Protection System.**

- 8. Kavach is provided progressively in phased manner.**
- 9. To increase capacity and scale up implementation, trials and approval of more OEMs are at different stages.**
- 10. The funds utilized on Kavach works so far is ₹1216.77 Cr. The allocation of funds during the year 2024-25 is ₹1112.57 Cr.**

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