

**GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS**

**LOK SABHA
STARRED QUESTION NO. 154
TO BE ANSWERED ON 13.12.2023**

INCLUSION OF RAILWAY NETWORK UNDER KAVACH

***154. SHRI P.C. MOHAN:**

Will the Minister of RAILWAYS be pleased to state:

- (a) whether any stretch of the railway network in Karnataka is being considered to be included under the KAVACH system; and**
- (b) if so, the details and expected date of completion thereof?**

ANSWER

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

(SHRI ASHWINI VAISHNAW)

(a) & (b) : A Statement is laid on the Table of the House.

STATEMENT REFERRED TO IN REPLY TO PARTS (a) & (b) OF STARRED QUESTION NO.154 BY SHRI P. C. MOHAN TO BE ANSWERED IN LOK SABHA ON 13.12.2023 REGARDING INCLUSION OF RAILWAY NETWORK UNDER KAVACH.

(a) & (b): The details are as under:-

- 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 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 139 locomotives (including Electric Multiple Unit rakes) on South Central Railway, part of which passes through state of Karnataka.**
- 6. Presently Kavach tenders have been awarded for Delhi – Mumbai & Delhi – Howrah corridors (approximately 3000 Route km).**
- 7. Indian Railways has also taken up preparatory works including survey, Detailed Project Report (DPR) and preparation of detailed estimate on another 6000 Rkm, part of which passes through**

Karnataka state. Kavach is being provided on Indian Railway progressively.

8. Further the following stretches of the railway network in Karnataka are also presently identified for provision of Kavach system:

i. Central Railway: 86 Route Km

ii. South Western Railway: 1198 Route Km

9. Implementation of Kavach involves installation of Station Kavach at each and every station, installation of RFID tags throughout the track length and provision of Loco Kavach on each and every Locomotive running on Indian Railway, a communication backbone, requiring installation of Towers throughout the section, laying of optical Fiber throughout the section. Presently there are three Indian OEMs who are approved for Kavach. Efforts are being made to develop more OEMs to enhance the capacity and scale up the implementation of Kavach.
