

**GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS**

**LOK SABHA
UNSTARRED QUESTION NO. 815
TO BE ANSWERED ON 07.02.2024**

KAVACH SYSTEM IN TRAINS IN ANDHRA PRADESH

815. DR. BEESETTI VENKATA SATYAVATHI:

Will the Minister of RAILWAYS be pleased to state:

- (a) the details regarding the implementation of 'Kavach' on operating trains to and from Andhra Pradesh, as there have been repeated demands for its installation;**
- (b) the details of the funds allocated for the construction of Railway Over Bridges (ROBs) and Road Under Bridges (RUBs) to the State of Andhra Pradesh and the details of successful installation of these ROBs and RUBs in the State during the last three years; and**
- (c) whether the Government plans to fulfil the request made by Andhra Pradesh for introducing long-distance trains to major cities originating from Vijayawada as the strategic location of Vijayawada makes it a crucial link in the railway network and if so, the details thereof and if not, the reasons therefor?**

ANSWER

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

(SHRI ASHWINI VAISHNAW)

(a) :

- 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. 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.**
- 6. 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 around 130 Route Km passes through state of Andhra Pradesh.**
- 7. Presently Kavach tenders have been awarded for Delhi – Mumbai (including Ahmedabad-Vadodra Section) & Delhi – Howrah (including Lucknow-Kanpur Section) corridors**

(approximately 3000 Route km). The progress of main items related to Kavach is as under:

- (i) Laying of Optical Fibre Cable : 3040 Km**
- (ii) Installation of Telecom Towers : 269 Nos.**
- (iii) Provision of equipment at Stations : 186 Nos.**
- (iv) Provision of equipment in Loco : 170 Locos**
- (v) Installation of Track side equipments : 827 Route Km**

8. Indian Railways has also taken up preparatory works including survey, Detailed Project Report (DPR) and preparation of detailed estimate on another 6000 Rkm, Kavach is being provided on Indian Railway progressively.

(b) The allocation details are maintained Railway wise. Andhra Pradesh is covered by four Zonal railways viz. East Coast Railway, Southern Railway, South Central Railway and South Western Railway. Since 01.04.2020, Rs. 4124 crores have been allocated for the construction of Road Over Bridges (ROBs) & Road Under Bridges (RUBs) in these Railways. During the same period, 18 Nos. ROBs and 207 Nos. RUBs have been completed in the state of Andhra Pradesh.

(c) To cater to the needs of the passengers of Vijayawada, Indian Railways, since January, 2023 have introduced 4 pairs of trains including 2 pairs of Vande Bharat train viz. 20677/20678 MGR Chennai Central-Vijayawada Vande Bharat Express and 20833/20834 Visakhapatnam-Secunderabad Vande Bharat Express. Besides, introduction of new trains is an ongoing process on Indian Railways subject to traffic justification, operational feasibility and availability of resources etc.