

GOVERNMENT OF INDIA  
MINISTRY OF RAILWAYS

**RAJYA SABHA**  
**UNSTARRED QUESTION NO. 2046**  
**ANSWERED ON 23.12.2022**

**'KAVACH' SYSTEM IN TRAINS**

2046 # DR. KIRODI LAL MEENA:

Will the Minister of RAILWAYS be pleased to state:

- (a) whether the Railways has set a target of zero train accidents by developing indigenous equipment and if so, the details thereof;
- (b) by when the 'Kavach' system is likely to be installed in all trains;
- (c) the details of other benefits of this equipment thereof; and
- (d) whether the Railways is planning to export 'Kavach' technology to other countries to earn indigenous revenue, if so, the details thereof?

**ANSWER**

MINISTER OF RAILWAYS, COMMUNICATIONS AND  
ELECTRONICS & INFORMATION TECHNOLOGY

(SHRI ASHWINI VAISHNAW)

(a) to (d): A Statement is laid on the Table of the House.

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**STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (d) OF UNSTARRED QUESTION NO. 2046 BY DR. KIRODI LAL MEENA ANSWERED IN RAJYA SABHA ON 23.12.2022 REGARDING 'KAVACH' SYSTEM IN TRAINS**

(a): Safety is accorded the highest priority by Indian Railways and all possible steps, including development of indigenous equipments, are being undertaken on a continuous basis to prevent train accidents. Indian Railways has indigenously developed an automatic train protection system rechristened as 'Kavach' (Train Collision Avoidance System), to prevent accidents due to human error resulting in Signal Passing at danger and over-speeding.

(b): Keeping in view the complexities involved in implementation, which require all Rolling Stock, way side stations and track to be equipped with 'Kavach', it has been decided to implement 'Kavach' in a phased manner. So far, 'Kavach' has been deployed for 1,455 Route Kms on South Central Railway with 77 nos. of locomotives. Currently, 'Kavach' work is in progress on Delhi-Mumbai & Delhi –Howrah corridors (3000 route Kms).

(c): Other benefits of 'Kavach' include controlling speed of trains by automatic application of brakes on approach of turnouts, repeating of signal aspects in cab, which is useful for higher speeds & foggy weathers, and auto whistling at level crossing gates.

(d): At present 'Kavach' is being implemented on Indian Railways in a phased manner. Further, 'Kavach' does have export potential in future.

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