

**GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS**

**LOK SABHA
UNSTARRED QUESTION NO. 2234
TO BE ANSWERED ON 12.03.2025**

SLOWDOWN IN AVERAGE SPEED OF VANDE BHARAT EXPRESS

**2234. SHRI VE VAITHILINGAM:
DR. DHARAMVIRA GANDHI:
DR. KALYAN VAIJINATHRAO KALE:**

Will the Minister of RAILWAYS be pleased to state:

- (a) the reasons for the slowdown in the average speed of Vande Bharat trains over the years despite their design capability to operate at higher speeds;**
- (b) the details of Government's assessment of infrastructure-related challenges including track conditions and terrain that prevent the Vande Bharat trains from achieving their designed speed on most routes;**
- (c) the steps being taken to address issues such as ongoing track upgrades, difficult terrains and seasonal weather impacts to improve operational speeds across all Vande Bharat routes;**
- (d) the progress made in enhancing rail infrastructure under the Government's modernisation initiatives to support semi-high-speed and high-speed rail travel; and**
- (e) the details of the timeline and strategy for achieving optimal operational speeds for Vande Bharat Express on additional routes to fulfil its intended role as a semi-high-speed train service?**

ANSWER

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

(SHRI ASHWINI VAISHNAW)

(a) to (e) Vande Bharat coaches are designed to operate up to speed of 160 kmph. However, the speed of a train depends not only on type of rolling stock but also on track structure available along the route.

Upgradation and improvement of track infrastructure is a continuous and ongoing process over Indian Railways. In 2014, speed potential of only about 31,000 km of track was 110 kmph and above, which has significantly been improved to about 80,000 km at present. The following measures have been taken by Indian Railways to upgrade railway tracks:

- i. Modern track structure consisting of 60kg, 90 Ultimate Tensile Strength (UTS) rails, Pre-stressed Concrete Sleeper (PSC) Normal/Wide base sleepers with elastic fastening, fan-shaped layout turnout on PSC sleepers, Steel Channel/H-beam Sleepers on girder bridges have been used while carrying out primary track renewals.**
- ii. The Thick Web Switches and Weldable CMS Crossing have been used in turnout renewal works.**
- iii. Supply of 130m/260m long rail panels has been increased to avoid welding of joints, thereby improving safety.**
- iv. Adoption of better welding technology for rails i.e. Flash Butt Welding.**
- v. Adoption of mechanized system for track maintenance using high output plain tampers and points & crossing tampers for improved maintainability & reliability of track.**
- vi. Deployment of state-of-the-art modern machines including Rail Grinding machines manufactured in India on Railway network to further improve asset reliability.**
- vii. Mechanisation of track laying activity through use of track machines like PQRS, TRT, T-28 etc.**
- viii. Interlocking of Level Crossing (LC) Gates for enhancing safety at LC gates.**
- ix. Ultrasonic Flaw Detection (USFD) testing of rails to detect flaws and timely removal of defective rails.**
- x. Monitoring of track geometry by OMS (Oscillation Monitoring System) and TRC (Track Recording Cars).**
