GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS

LOK SABHA
UNSTARRED QUESTION NO. 5422
TO BE ANSWERED ON 25.03.2026

SPEED OF VANDE BHARAT TRAINS

†5422. DR. MANNA LAL RAWAT:

Will the Minister of RAILWAYS be pleased to state:

(a) the average operating speed of semi highspeed trains like Vande Bharat on various routes across the country at present;

(b) whether it is a fact that due to loop points, crossings, turns and speed restrictions, the actual speed of the above trains falls below their fixed or planned speed;

(c) if so, the details and main reasons therefor;

(d) whether it is also a fact that Vande Bharat trains are running at lesser speed than their planned speed even on newly constructed or upgraded railway sections;

(e) if so, the details of the present maximum speed and planned speed indicating such sections; and

(f) the details of the technical, structural or policy steps being taken by the Government to increase the average speed of trains like Vande Bharat?

ANSWER

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

(SHRI ASHWINI VAISHNAW)

(a) to (f) The Vande Bharat trains presently running over the Indian Railway network are Semi-High speed train services with design speed of 180 kmph and maximum operating speed of 160 kmph. The average speed of the train depends upon the geometry of the track, stoppages enroute, maintenance work in the section etc. The Vande Bharat train services have been charted at the Maximum Permissible Speed of the respective sections over which

the trains are being operated. Besides, speeding of trains is an on-going process on Indian Railways.

Strengthening, upgradation, modernisation and improvement of track infrastructure is a continuous and ongoing process over Indian Railways. The following measures are being taken by Indian Railways to upgrade railway tracks:

I. **Modern track structure consisting of 60kg, 90 Ultimate Tensile Strength (UTS) rails, Wider and heavier Pre-stressed Concrete Sleepers (PSC) with elastic fastening, fan-shaped layout turnout on PSC sleepers and H-beam Sleepers on girder bridges are being used while carrying out primary track renewals.**
II. **The Thick Web Switches and Weldable CMS Crossings are being used in turnout renewal works.**
III. **Supply of 260m long rail panels have been increased to avoid welding of joints, thereby improving safety and riding quality.**
IV. **Thick Web Switch Expansion Joints are being used in place of earlier Conventional/Improved SEJs.**
V. **Adoption of better welding technology for rails i.e. Flash Butt Welding.**
VI. **Adoption of mechanized system for track maintenance using high output plain tampers and points & crossing tampers for improved maintainability & reliability of track.**
VII. **Deployment of state-of-the-art modern machines including Rail Grinding Machines to further improve asset reliability.**
VIII. **Mechanisation of track laying activities through use of track machines like PQRS, TRT, T-28 etc.**
IX. **Interlocking of Level Crossing (LC) Gates for enhancing safety at LC gates.**

X. Use of advanced Phased Array technology of testing of rail and welds.

XI. Deployment of Integrated Track Monitoring Systems (ITMS) and Oscillation Monitoring System (OMS) for comprehensive health assessment to ascertain optimal maintenance requirements.

XII. Adoption of portable Track Measuring Trolley for continuous recording of track parameters in yards.

XIII. Using web enabled Track Management System (TMS) for integration and data analytics of the track inspection records received through various sources to enable precise maintenance inputs.

As a result of above measures, there has been significant increase in speed potential of the tracks. The details of speed potential of railway tracks during 2014 vis-a-vis 2026 are as under:

Sectional Speed (kmph)	2014		2026 (up to Feb'26)	
	Track Km	%	Track Km	%
130 & above	5,036	6.3	23,713	22.4
110 - 130	26,409	33.3	62,036	58.7
< 110	47,897	60.4	19,922	18.9
Total	79,342	100	1,05,671	100

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