

Indian Railways Renews 54,600 km of Tracks During 2014–26 to Ensure Safe Train Operations

Over 80% of Rail Network Now Capable of 110 kmph & Above Sectional Speed, Up from 40% in 2014; Tracks Clocking 130 kmph & Above See 3.5-Fold Jump from 6.3% to 22.4% During Same Period

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Upgradation and renewal of tracks is a continuous and ongoing process. The track renewal is carried out as per the laid down criteria based on age, traffic carried, condition etc.

Track Renewal Works are planned and executed duly prioritizing the condition of track and various other factors so as to ensure that track is safe for running of trains at permitted speed.

The details of track renewal carried out across the entire railway network during 2014-26 (up to Feb'26) are as under:

Track renewed	~ 54600 Km
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Safety of train operation is accorded top priority on Indian Railways (IR). There is a well-established system of inspection and maintenance of railway tracks as prescribed in Indian Railways Permanent Way Manual.

The tracks on IR are regularly inspected by designated officials as per the laid down schedule. This includes daily patrolling, on-foot inspection, trolley inspection and foot plate/rear window inspection by the concerned officials. Further, to assess the health of track geometry objectively, Track Recording Car (TRC) and Oscillation Monitoring System (OMS) runs are conducted at scheduled frequencies. The entire railway network of Indian Railways is covered through TRC and OMS runs. Based on various inspections, necessary action is taken in a time bound manner to ensure safety of track.

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	19,923	18.9
Total	79,342	100	1,05,672	100

This information was provided by the Union Minister for Railways, Information & Broadcasting and Electronics & Information Technology, Shri Ashwini Vaishnaw, in a reply to questions in Lok Sabha today.

Dharmendra Tewari/ Manik Sharma

