

Indian Railways Approves ₹1,364.45 Crore for Kavach Deployment and Signalling Modernisation Across Multiple Zones

Installation of Kavach Version 4.0 on 232 Southern Railway Locomotives with ₹208.81 Crore Allocation to Strengthen Train Collision Avoidance

Optical Fibre Communication Backbone to be Upgraded Across 3,200+ Route Kilometres in Northern Railway to Support Reliable Signalling worth ₹400.86 Crore

2×48 Fibre OFC Network Over 2,196 Route Kilometres in North Central Railway to Support Kavach Rollout with an Outlay of ₹176.76 Crore

Electronic Interlocking at 49 Stations on High-density Routes in South Central Railway worth ₹578.02 Crore to Reduce Manual Intervention and Improve Operational Safety

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Indian Railways has approved multiple projects worth ₹1,364.45 crore to strengthen safety, signalling and communication infrastructure across its network. The sanctioned works include provision of Kavach on locomotives, expansion of optical fibre cable network and replacement of panel interlocking with electronic interlocking systems across various railway zones.

Kavach equipment to be installed on 232 locomotives in Southern Railway

Indian Railways has sanctioned provision of on-board Kavach equipment for 232 locomotives in Southern Railway at a cost of ₹208.81 crore. The proposal forms part of the umbrella work titled “Provision of Kavach with communication backbone of Long-Term Evolution (LTE) on balance routes of Indian Railways (Umbrella Work 2024–25)” included in the Works Programme (Pink Book) 2024–25, with an overall cost of ₹27,693 crore under PH-33.

A sub-umbrella allocation of ₹2,950 crore has been earmarked for Southern Railway under this programme. The present work has been proposed within this sub-umbrella and covers installation of Kavach Version 4.0 equipment on locomotives.

Communication backbone to be strengthened in Northern Railway with 2×48 OFC network

Indian Railways has sanctioned three itemised works in Northern Railway at a total cost of ₹400.86 crore for strengthening of communication backbone infrastructure. These works are part of the umbrella project titled “Strengthening, repair & replacement of communication backbone over Indian Railways (Umbrella Work 2024–25)” approved at a cost of ₹4,871 crore under PH-33.

A sub-umbrella provision of ₹871 crore has been allocated for Northern Railway. Under this, three works have been approved: provision of 2×48 fibre cables along 926.05 route km in Ambala Division at a cost of ₹115.74 crore; provision of 2×48 fibre cables along 1,204 route km along with Optical Fiber Communication (OFC) rooms at stations in Delhi Division at a cost of ₹165.49 crore; and provision of 2×48 fibre cables along 1,074 route km in Lucknow Division at a cost of ₹119.63 crore.

The works aim to enhance the capacity and reliability of communication systems across divisions, which are critical for modern signalling and Kavach deployment.

OFC provision for Kavach over North Central Railway to cover 2,196 route kilometres

Indian Railways has sanctioned provision of 2×48 fibre OFC cables for Kavach over North Central Railway at a cost of ₹176.7699 crore. The work also falls under the umbrella project for strengthening, repair and replacement of communication backbone over Indian Railways.

A sub-umbrella allocation of ₹200 crore has been provided for North Central Railway. The present work has been proposed under this allocation and will cover 2,196 route kilometres, including 1,016 km in Prayagraj Division, 709 km in Jhansi Division and 471 km in Agra Division.

The project will support deployment of Kavach and improve communication infrastructure across high-density routes.

Electronic Interlocking works approved in South Central Railway

Indian Railways has sanctioned two itemised works in South Central Railway at a total cost of ₹578.02 crore for replacement of panel interlocking with electronic interlocking systems. The works fall under the umbrella project titled “Provision of Electronic Interlocking at balance stations on HDN/HUN routes where Kavach/ABS/CTC is sanctioned (Umbrella Work 2024–25)” approved at a cost of ₹15,164 crore under PH-33.

A sub-umbrella allocation of ₹1,857 crore has been earmarked for South Central Railway. Under this, two works have been approved: replacement of panel interlocking with electronic interlocking at 35 stations on HDN/HUN routes in Guntakal Division at a cost of ₹426.82 crore; and similar replacement at 14 stations on HDN/HUN routes in Nanded Division at a cost of ₹151.20 crore.

The works aim to enhance signalling reliability, reduce manual intervention and improve safety across high-density routes.

All the sanctioned projects are part of the broader effort to modernise Indian Railways with a focus on safety, reliability and capacity enhancement. The works will support deployment of Kavach, strengthen communication backbone and upgrade signalling systems across key routes. These interventions are expected to improve operational efficiency and ensure safer train operations across the network.

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