GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS

RAJYA SABHA
UNSTARRED QUESTION NO. 1556
ANSWERED ON 12.12.2025

MAJOR RAILWAY EXPANSION AND MODERNIZATION PROJECTS IN ODISHA

1556 DR. SASMIT PATRA:

Will the Minister of RAILWAYS be pleased to state:

(a) whether Government has undertaken major railway expansion and modernization projects in the State of Odisha, including track doubling, 100 percent electrification, new line construction and station redevelopment in key corridors such as Jharsuguda-Sambalpur-Angul and Bhubaneswar-Puri;

(b) if so, the details of progress on projects such as the Khurda Road – Bolangir and Talcher – Bimlagarh lines, including sanctioned cost, expenditure incurred, land acquisition status and revised completion timelines; and

(c) the steps taken to improve passenger amenities, safety and freight capacity in the State, including upgraded railway stations, additional freight sidings, modern signalling, automatic train protection and improved maintenance facilities?

ANSWER

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

(SHRI ASHWINI VAISHNAW)

(a) to (c): To improve connectivity in Jharsuguda-Sambalpur-Angul and Bhubaneswar-Puri regions, following projects have been sanctioned:

S. No.	Name of Project	Total Cost (In Crores of ₹)
1	Talcher-Bimlagarh New Line (150 Km)	1,928
2	Talcher - Angul New Line (14 Km)	495
3	Brundamal-Jharsuguda Flyover (7 Km)	297

S. No.	Name of Project	Total Cost (In Crores of ₹)
4	Jarapada- Budhapank 3rd & 4th Line with flyover at Talcher (101 Km)	810
5	Sarla-Sason 3rd & 4th line (16 Km)	252
6	Sason - Jharsuguda 3rd and 4th line (35 Km)	1,113
7	Sambalpur City - Sarla Flyover (5 Km)	273
8	Bagdehi-Jharsuguda 4th line (22 Km)	321
9	Jharsuguda-Bilaspur 4th line (206 Km)	2,596
10	Rail Flyover from Sambalpur to Sambalpur City (8 Km)	289
11	Sambalpur – Jarapada 3rd and 4th line (127 Km)	3,574
12	Puri - Konark New Line (32 Km)	492
13	Nergundi - Vizianagaram 3rd Line (385 Km)	4,963
14	Khurda Road Flyover (7 Km)	192

The work of Khurda Road – Bolangir (301 Km) new line is a sanctioned work. Cost of the project is ₹ 5,089 Cr. Expenditure of ₹ 4,311 Cr. have been incurred upto March, 2025. So far, out of total 3,274.41 Ha requisite land, 3,158.10 Ha land have been acquired. Till Nov'2025, total 226 Km (Khurda Road – Daspalla (106 Km) and Puruna Katak – Bolangir (120 Km)) have been commissioned. Works have been taken up on balance section.

The work of Talcher-Bimlagarh (150 Km) new line is a sanctioned work. Cost of the project is ₹1,928 Crore. Expenditure of ₹1,646 Crore have been incurred upto March, 2025. So far, out of total 858.64 Ha requisite land, 751.57 Ha land have been acquired. Till Nov'2025, total 34 Km (Talcher-Parabil) have been commissioned. Works have been taken up on balance section.

ODISHA:

Budget allocation in the recent years has increased significantly. Budget allocation for infrastructure projects and safety works, falling fully/partly in the State of Odisha is as under:

Period	Outlay
2009-14	₹ 838 Cr./year
2025-26	₹ 10,599 Cr. (Nearly 13 times)

The details of commissioning/laying of new track falling fully/partly in the State of Odisha during 2009-14 and 2014-25 is as under:

Period	New Track Commissioned	Average Commissioning of new tracks per year
2009-14	267 Km	53.4 Km
2014-25	2,150 Km	195.45 Km (More than 3.5 times)

As on 01.04.2025, 49 projects (19 New Lines and 30 Doubling), of a total length of 4,010 Km, costing ₹ 67,496 crore, falling fully/partly in Odisha, are sanctioned, out of which 1,429 Km length has been commissioned and an expenditure of ₹28,043 crore has been incurred upto March' 2025. The summary is as under:-

Category	No of sanctioned Projects	Total Length NL/GC/DL (in Km)	Length Commissioned till Mar'25 (in Km)	Total Exp. upto Mar'25 (₹ in Cr)
New Lines	19	1,544	256	6,270
Doubling/Multi-tracking	30	2,466	1,173	21,773
Total	**49**	**4,010**	**1,429**	**28,043**

Details of some of the recently completed projects falling fully/partly in Odisha are as under:

S.No.	Name of Project	Cost (In Crores of ₹)
1	Daitari-Banspani New Line and Jakhapura-Haridaspur 3rd Line (179 Km)	1,317
2	MCL siding from Jharsuguda - Sardega New Line (53 Km)	1,598
3	Haridaspur-Paradeep New Line (82 Km)	2,397
4	Angul-Sukinda New Line (104 Km)	2,834
5	Champa-Jharsuguda 3rd Line (152 Km)	1,227
6	Sambalpur-Titlagarh Doubling (182 Km)	2,262
7	Rourkela-Jharsuguda 3rd Line (101 Km)	1,313
8	Banspani-Daitari-Tomka-Jakhapura Doubling (164 Km)	1,827
9	Sambalpur-Talcher Doubling (174 Km)	1,539
10	Raipur - Titlagarh Doubling (203 Km)	1,171
11	Jharsuguda-Sardega Doubling (50 Km)	3,200

Further, some of the other main projects falling fully/partly in Odisha which have been taken up are as under:

S.No.	Name of Project	Total Cost (In Crores of ₹)
1	Junagarh-Nabarangpur New Line (116 Km)	2,865
2	Nabarangpur-Jeypore New Line (41 Km)	748
3	Jeypore-Malkangiri New Line (130 Km)	2,344
4	Malkangiri – Pandurangapuram New Line (174 Km)	3,592
5	Buramara-Chakulia New Line (60 Km)	1,459
6	Gunupur-Therubali New Line (74 Km)	1,166
7	Badampahar-Kendujhargarh New Line (82 Km)	1,876
8	Bangriposi-Gorumahisani New Line (86 Km)	2,269
9	Bargarh Road-Nawapara Road New Line (138 Km)	2,622
10	Vizianagram-Titlagarh 3rd Line (265 Km)	6,996
11	Budhapank- Salegaon via Rajatgarh 3rd & 4th Line (170 Km)	2,023
12	Kottavalasa-Koraput Doubling (189 Km)	2,500
13	Koraput-Singapur Road Doubling (165 Km)	2,362

S.No.	Name of Project	Total Cost (In Crores of ₹)
14	Jagdalpur-Koraput Doubling (107 Km)	1,547
15	Bondamunda-Ranchi Doubling (159 Km)	3,029
16	Narayangarh-Bhadrak 3rd line (153 Km)	2,136
17	Bhadrak-Nergundi 3rd Line (92 Km)	1,284

During last three years i.e. 2022-23, 2023-24, 2024-25 and current Financial Year i.e. 2025-26, total 76 Nos. of Surveys (30 New Line, 46 Doubling) falling fully/partly in the State of Odisha having a total length of 4,843 Km have been sanctioned.

Completion of Railway project/s depends on various factors which include the following:

- Land acquisition
- Forest clearance
- Shifting of infringing utilities
- Statutory clearances from various authorities
- Geological and topographical conditions of area
- Law and order situation in the area of project site
- Number of working months in a year for particular project site etc.

All these factors affect the completion time and cost of the project/s.

RAILWAY ELECTRIFICATION:

Electrification of railway network on Indian Railways has been taken up in mission mode. So far, about 99.2% of Broad Gauge (BG) network has been electrified. The electrification in remaining network has been taken up. Electrification carried out during 2014-25 and before 2014 is as under:

Period	Route Kilometer
Before 2014 (about 60 years)	21,801
2014-25	46,900

In Odisha, entire existing BG network including Jharsuguda-Sambalpur-Angul and Bhubaneswar-Puri has been electrified. Further, all new line / multitracking projects including Khurda Road-Bolangir and Talcher-Bimlagarh are being sanctioned and constructed with electrification.

GATI-SHAKTI MULTI MODAL CARGO TERMINAL (GCT):

To facilitate construction of new cargo terminals on Indian Railways network, which will bring additional cargo business to Railways, Gati-Shakti Multi Modal Cargo Terminal (GCT) policy was introduced in December' 2021.

So far, 120 GCTs locations have been commissioned and further 133 more locations are under various stages of construction (where Engineering scale plan approved) over Indian Railways. Out of these, 10 GCTs locations have been commissioned in Odisha and further Engineering Scale Plan (ESP) for 7 more locations have been approved over Odisha.

RAILWAY SAFETY:

Safety is accorded the highest priority on Indian Railways. The various safety measures taken on Indian Railways, that includes the state of Odisha, to enhance safety in train operations are as under:-

1. On Indian Railways, the expenditure on Safety related activities has increased over the years as under:-

Expenditure/Budget on Safety related activities (₹ in Cr.)				
2013-14 (Act.)	**2022-23 (Act.)**	**2023-24 (Act.)**	**2024-25**	**2025-26**
39,463	**87,327**	**1,01,651**	**1,14,022**	**1,16,470**

2. Electrical/Electronic Interlocking Systems with centralized operation of points and signals have been provided at 6,656 stations up to 31.10.2025 to reduce accident due to human failure.
3. Interlocking of Level Crossing (LC) Gates has been provided at 10,098 Level Crossing Gates up to 31.10.2025 for enhancing safety at LC Gates.
4. Complete Track Circuiting of stations to enhance safety by verification of track occupancy by electrical means has been provided at 6,661 stations up to 31.10.2025.
5. Kavach is a highly technology intensive system, which requires safety certification of highest order. Kavach was adopted as a National ATP system in July 2020. Kavach is provided progressively in phased manner. Initially, Kavach Version 3.2 was deployed on 1,465 RKm of South Central Railway and 80 RKm of North Central Railway. Kavach specification Version 4.0 was approved by RDSO on 16.07.2024. After extensive and elaborate trials, Kavach Version 4.0 has been successfully commissioned on Palwal-

Mathura-Kota-Nagda section (633 Rkm) on Delhi- Mumbai route and on Howrah-Bardhaman section (105 RKm) on Delhi-Howrah route. Kavach implementation has been taken up in balance sections of Delhi-Mumbai and Delhi-Howrah route. Further, Kavach implementation has been taken up on 15,512 RKm covering all GQ, GD, HDN and identified sections of Indian Railways.

6. Detailed instructions on issues related with safety of Signalling, e.g. mandatory correspondence check, alteration work protocol, preparation of completion drawing, etc. have been issued.
7. System of disconnection and reconnection for S&T equipment as per protocol has been re-emphasized.
8. All locomotives are equipped with Vigilance Control Devices (VCD) to improve alertness of Loco Pilots.
9. Retro-reflective sigma boards are provided on the mast which is located two OHE masts prior to the signals in electrified territories to alert the crew about the signal ahead when visibility is low due to foggy weather.
10. A GPS based Fog Safety Device (FSD) is provided to loco pilots in fog affected areas which enables loco pilots to know the distance of the approaching landmarks like signals, level crossing gates, etc.
11. Modern track structure consisting of 60kg, 90 Ultimate Tensile Strength (UTS) rails, Prestressed 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 is used while carrying out primary track renewals.
12. Mechanisation of track laying activity through use of track machines like PQRS, TRT, T-28 etc. to reduce human errors.
13. Maximizing supply of 130m/260m long rail panels for increasing progress of rail renewal and avoiding welding of joints, thereby improving safety.
14. Ultrasonic Flaw Detection (USFD) testing of rails to detect flaws and timely removal of defective rails.
15. Laying of longer rails, minimizing the use of Alumino Thermic Welding and adoption of better welding technology for rails i.e., Flash Butt Welding.
16. Monitoring of track geometry by OMS (Oscillation Monitoring System) and TRC (Track Recording Cars).
17. Patrolling of railway tracks to look out for weld/rail fractures.
18. The use of Thick Web Switches and Weldable CMS Crossing in turnout renewal works.
19. Inspections at regular intervals are carried out to monitor and educate staff for observance of safe practices.

20. Web based online monitoring system of track assets viz. Track database and decision support system has been adopted to decide rationalized maintenance requirement and optimize inputs.
21. Detailed instructions on issues related with safety of Track, e.g. integrated block, corridor block, worksite safety, monsoon precautions, etc. have been issued.
22. Preventive maintenance of railway assets (Coaches & Wagons) is undertaken to ensure safe train operations.
23. Replacement of conventional ICF design coaches with LHB design coaches is being done.
24. All unmanned level crossings (UMLCs) on Broad Gauge (BG) route have been eliminated by January 2019.
25. Safety of Railway Bridges is ensured through regular inspection of Bridges. The requirement of repair/rehabilitation of Bridges is taken up based upon the conditions assessed during these inspections.
26. Indian Railways has displayed Statutory "Fire Notices" for widespread passenger information in all coaches. Fire posters are provided in every coach so as to educate and alert passengers regarding various Do's and Don'ts to prevent fire. These include messages regarding not carrying any inflammable material, explosives, prohibition of smoking inside the coaches, penalties etc.
27. Production Units are providing Fire detection and suppression system in newly manufactured Power Cars and Pantry Cars, Fire and Smoke detection system in newly manufactured coaches. Progressive fitment of the same in existing coaches is also underway by Zonal Railways in a phased manner.
28. Regular counselling and training of staff is undertaken.
29. Concept of Rolling Block introduced in Indian Railways (Open Lines) General Rules vide Gazette notification dated 30.11.2023, wherein work of integrated maintenance/ repair/replacement of assets is planned up to 52 weeks in advance on rolling basis and executed as per plan.

The details of the Safety related works related to better maintenance practices, Technological improvements, better infrastructure and rolling stock etc. undertaken by Railways are tabulated below:-

S.N.	Item	2004-05 to 2013-14	2014-15 to 2024-25	2014-25 Vs. 2004-14
	Technological Improvements			
1.	Use of high-quality rails (60 Kg) (Km)	57,450 Km	1.43 Lakh Km	More than 2 times
2.	Longer Rail Panels (260m) (Km)	9,917 Km	77,522 Km	Nearly 8 times

S.N.	Item	2004-05 to 2013-14	2014-15 to 2024-25	2014-25 Vs. 2004-14
3.	Electronic Interlocking (Stations)	837 Stations	3,691 Stations	More than 4 times
4.	Fog Pass Safety Devices (Nos.)	As on 31.03.14: 90 Nos.	As on 31.03.25: 25,939 Nos.	288 times
5.	Thick Web Switches (Nos.)	Nil	28,301 Nos.	
	Better Maintenance Practices			
1.	Primary Rail Renewal (Track Km)	32,260 Km	49,941 Km	1.5 times
2.	USFD (Ultra Sonic Flaw detection) Testing of Welds (Nos.)	79.43 Lakh	2 Crore	More than 2 times
3.	Weld failures (Nos.)	In 2013-14: 3699 Nos.	In 2024-25: 370 Nos.	90 % reduction
4.	Rail fractures (Nos.)	In 2013-14: 2548 Nos.	In 2024-25: 289 Nos.	More than 88% reduction
	Better Infrastructure and Rolling Stock			
1.	New Track KM added (Track Km)	14,985 Km	34,428 Km	More than 2 times
2.	Flyovers (RoBs)/ Underpasses (RUBs) (Nos.)	4,148 Nos.	13,808 Nos.	More than 3 times
3.	Unmanned Level crossings (Nos.) on BG	As on 31.03.14: 8,948	As on 31.03.24: Nil (All eliminated by 31.01.19)	Removed
4.	Manufacture of LHB Coaches (Nos.)	2,337 Nos.	42,677	More than 18 times

IMPLEMENTATION OF KAVACH:

1. Kavach is an indigenously developed Automatic Train Protection (ATP) system. Kavach is a highly technology intensive system, which requires safety certification of highest order (SIL-4).
2. Kavach aids the Loco Pilot in running of trains within specified speed limits by automatic application of brakes in case Loco Pilot fails to do so and also helps the trains to run safely during inclement weather.
3. The first field trials on the passenger trains were started in February 2016. Based on the experience gained and Independent Safety Assessment of the system by Independent Safety Assessor (ISA), three firms were approved in 2018-19, for supply of Kavach Version 3.2.
4. Kavach was adopted as National ATP system in July 2020.
5. Implementation of Kavach System involves following Key Activities:
    a. Installation of Station Kavach at each and every station, block section.

b. Installation of RFID Tags throughout the track length.
c. Installation of telecom Towers throughout the section.
d. Laying of Optical Fibre Cable along the track.
e. Provision of Loco Kavach on each and every Locomotive running on Indian Railways.

6. Based on deployment of Kavach Version 3.2 on 1,465 RKm on South Central Railway and experience gained, further improvements were made. Finally, Kavach specification Version 4.0 was approved by RDSO on 16.07.2024.
7. Kavach Version 4.0 covers all the major features required for the diverse railway network. This is a significant milestone in safety for Indian Railways. Within a short period, IR has developed, tested and started deploying Automatic Train Protection System.
8. Major improvement in Version 4.0 includes increased Location Accuracy, Improved Information of Signal Aspects in bigger yards, Station to Station Kavach interface on OFC and Direct Interface to existing Electronic Interlocking System. With these improvements, Kavach Version 4.0. is planned for large scale deployment over Indian Railways.
9. After extensive and elaborate trials, Kavach Version 4.0 has been successfully commissioned on 738 Route Km on Palwal – Mathura- Nagda section (633 Rkm) on Delhi – Mumbai route and Howrah–Bardhaman section (105 Rkm) Delhi – Howrah route. Kavach implementation has been taken up in balance sections of Delhi – Mumbai & Delhi – Howrah corridors.
10. Progress of key items of Kavach on High density routes including Delhi– Mumbai & Delhi–Howrah corridors are as under:

SN	Item	Progress
i	Laying of Optical Fibre Cable	7,129 Km
ii	Installation of Telecom Towers	860 Nos
iii	Provision of Kavach at Stations	549 Nos
iv	Installation of Track side equipment	2,674 RKm
v	Provision of Kavach on Locos	4,154

11. Further, track side Kavach implementation work has been taken up on 15,512 RKm covering all GQ, GD, HDN and identified sections of Indian Railways.
12. Bids have been invited for equipping another 9,069 locomotives with Kavach Version 4.0. Kavach is being provided progressively in a phased manner in locomotives.
13. Specialized training programmes on Kavach are being conducted at centralized training institutes of Indian Railways to impart training to all concerned officials. By now more than 40,000 technicians, operators and engineers have been trained on Kavach technology. This includes 30,000 Loco Pilots & Assistant Loco Pilots. Courses have been designed in collaboration with IRISET.

14. The cost for provision of Track Side including Station equipment of Kavach is approximately ₹ 50 Lakhs/Km and cost for provision of Kavach equipment on locomotives is approximately ₹ 80 Lakh/Loco.
15. The funds utilized on Kavach works so far up to Oct'25 is ₹ 2,354.36 Crores. The allocation of funds during the year 2025-26 is ₹ 1,673.19 Crores. Requisite funds are made available as per the progress of works.

KAVACH and Automatic Block Signaling (ABS) works are sanctioned on 2,393 RKM and 575 Rkm respectively over the State of Odisha. Further, Electronic Interlocking works are sanctioned on 38 stations over the state of Odisha.

STATION REDEVELOPMENT:

Ministry of Railways has launched Amrit Bharat Station Scheme for redevelopment of stations with a long-term approach.

The scheme involves preparation of master plans and their implementation in phases to improve the stations. The master planning includes:

- Improvement of access to station and circulating areas
- Integration of station with both sides of city
- Improvement of station building
- Improvement of waiting halls, toilets, sitting arrangement, water booths
- Provision of wider foot over bridge/air concourse commensurate with passenger traffic
- Provision of lift/escalators/ramp
- Improvement /Provision of platform surface and cover over platforms
- Provision of kiosks for local products through schemes like ‘One Station One Product’
- Parking areas, Multimodal integration
- Amenities for Divyangjans
- Better passenger information systems
- Provision of executive lounges, nominated spaces for business meetings, landscaping, etc. keeping in view the necessity at each station.

The scheme also envisages sustainable and environment friendly solutions, provision of ballastless tracks etc. as per necessity, phasing and feasibility and creation of city centre at the station in the long term.

So far, 1337 stations have been identified for development under Amrit Bharat Station Scheme, out of which 59 stations including Jharsuguda Jn., Sambalpur, Angul, Bhubaneswar and Puri are located in Odisha. The names of stations identified for development under Amrit Bharat Station Scheme in Odisha are as following:

Angul, Badampahar, Balangir, Balasore, Balugaon, Barbil, Bargarh Road, Baripada, Barpali, Belpahar, Betnoti, Bhadrak, Bhawanipatna, Bhubaneswar, Bimlagarh, Brahmapur, Brajrajnagar, Chatrapur, Cuttack, Damanjodi, Dhenkanal, Gunupur, Harishanker Road, Himgir, Hirakud, Jajpur-Keonjhar road, Jaleswar, Jaroli, Jeypore, Jharsuguda, Jharsuguda Road, Kantabanji, Kendujhargarh, Kesinga, Khariar Road, Khurda road, Koraput, Lingaraj Temple Road, Mancheswar, Meramandali, Muniguda, New Bhubaneswar, Panposh, Paradeep, Parlakhemundi, Puri, Raghunathpur, Rairakhol, Rairangpur, Rajgangpur, Rayagada, Rourkela, Sakhi Gopal, Sambalpur, Sambalpur city, Soro, Talcher, Talcher Road, Titlagarh Jn.

Development works at railway stations under Amrit Bharat Station Scheme in Odisha have been taken up at a good pace. Till now, works of 05 stations (Cuttack (second entry), Barpali, Parlakhemundi, Bimalgarh, Baripada) have been completed. The works at other stations have also been taken up at good pace.

- **Jaleswar station**: The work of modern toilet has been completed. The works of improvement of station building, waiting hall, platform shelter, platform surfacing, circulating area, parking area, lighting, signage and 12 m Foot Over Bridge have been taken up.

- **Betnoti station**: The works of platform shelter and platform surfacing have been completed. The works of extension of station building, waiting hall, circulating area, parking area and subway have been taken up.

- **Baleshwar station** : The works of main station building and office complex have been taken up.

Further, development / redevelopment / upgradation / modernisation of stations on Indian Railways is a continuous and ongoing process and works in this regard are undertaken as per requirement, subject to inter-se priority and availability of funds. The priority for development / redevelopment / upgradation / modernisation of stations is accorded to higher category of station over lower category of station while sanctioning and executing the works.

Development / upgradation / modernisation of stations including under Amrit Bharat Station Scheme is generally funded under Plan Head-53 ‘Customer Amenities’. The details of

allocation and expenditure under Plan Head-53 are maintained Zonal Railway-wise and not work-wise, or station-wise or state-wise. Odisha is covered under the jurisdiction of three railway zones, namely, South Eastern Railway, South East Central Railway, and East Coast Railway. For these zones, an allocation of ₹ 1,287 crore has been made for the financial year 2025-26, out of which an expenditure (up to October, 2025) of ₹ 913 crore has been incurred so far.

Development / Upgradation of railway stations is complex in nature involving safety of passengers & trains and requires various statutory clearances such as fire clearance, heritage, tree cutting, airport clearance etc. The progress also gets affected due to brownfield related challenges such as shifting of utilities (involving water/sewage lines, optical fibre cables, gas pipe lines, power/signal cables, etc.), infringements, operation of trains without hindering passenger movement, speed restrictions due to works carried out in close proximity of tracks and high voltage power lines, etc. and these factors affect the completion time. Therefore, no time frame can be indicated at this stage.

*****