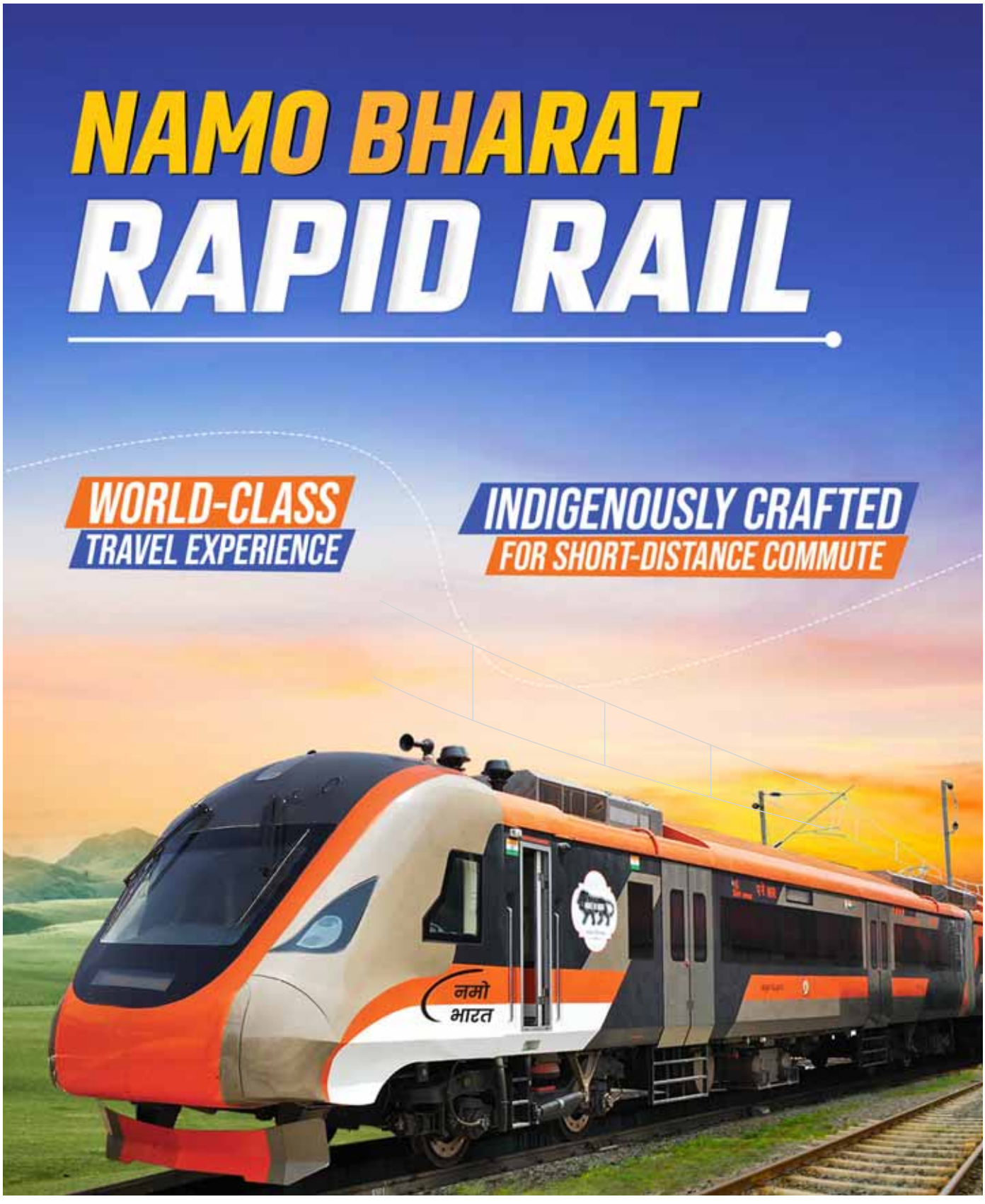
INDIAN RAILWAYS

OCTOBER 2024

PRICE ₹ 20





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5 **Hon'ble Prime Minister Laid the Foundation Stone and** Dedicated to the Nation Railway Projects worth more than ₹660 crore in Jharkhand

7 **Hon'ble PM Flagged Off Namo Bharat Rapid Rail and** 5 Vande Bharat Trains

9 **Hon'ble Prime Minister Laid the Foundation Stone and** Dedicated to the Nation Railway Projects in Odisha

10 **Indian Army and Air Force Sign MoU with Gati Shakti** Vishwavidyalaya for Enhanced Logistics Expertise

11 **Cabinet Approved 309 km Long New Line Project:** To Provide the Shortest Rail Connectivity between Two Major Commercial Hubs - Mumbai and Indore

13 **A New Chapter in Rail Travel Begins:** The Vande Bharat Sleeper Train

14 **Minister of Railways, MoSR and Chairman & CEO** Visited the Railway Training Institute in Bengaluru

15 **MR Dedicated the Gauge Conversion and Flagged Off** a New Train Service on Pilibhit-Mailani Railway Section

16 **MR Inspected Gandhinagar Jaipur Railway Station** and did Window trailing of Jaipur-Sawai Madhopur section

17 **Minister of Railways Successfully Conducted** Loco Trial of 'Kavach 4.0' from Sawai Madhopur to Indergarh Sumerganj Mandi

22 **Inaugurations Done by Different Ministers** of State and MPs

23 **Swachhata Hi Seva: Strengthen Voluntarism and** Collective Action for Swachhata

26 **Chairman & CEO Conducted Intensive Inspection of** Ahmedabad and Gandhinagar Capital Stations

27 **DG, RPF Paid Tribute to Police Martyrs at** Hot Springs Memorial, Ladakh

30 **Optimising Freight Loading Efficiency**

32 **Flash Butt Welding of Rails Started for** Mumbai-Ahmedabad Bullet Train Project in Gujarat

33 **Indian Railways-Wabtec JV's Marhowra Plant to** Begin Exporting Evolution Series Locomotives to Africa

34 **News of Zonal Railways and Production Units**

40 **Sports News**

42 **Progress Report**

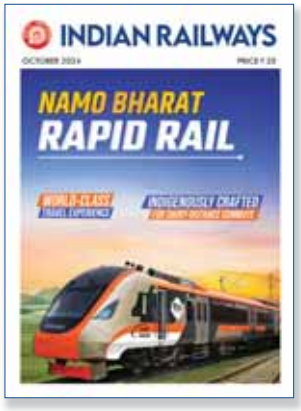
47 **Station Redevelopment Progress Report**

50 **Discover Scenic Treasures Aboard** Indian Railways on World Tourism Day

53 **Cyber Security – Implementation in** Traction SCADA System in Indian Railways

57 **Need for Digital Identity in IR** *Manoj Kumar*

59 **The Victory** *Mahabir Agrawal*



Editorial

Welcome to the October 2024 festive season edition.

A time when many people would commute across the country to rejoice and celebrate with their loved ones, Indian Railways (IR), feels proud to help, facilitate and connect people to share these moments of happiness. About 2.3 crore people travel in more than 20,000 trains daily over Indian Railways. The stakes are high and so is the concern for safety, security and a pleasant travel experience. Added to this is another milestone of keeping in pace with the expectation of the commuters - time and speed!

The semi-high speed Vande Bharat trains and Namo Bharat Rapid Rail have lived up to their expectations. Vande Bharat trains are connected to almost every important city of the country. Last month, on 15th and 16th September, 2024, hon'ble Prime Minister Shri Narender Modi flagged off 11 Vande Bharat trains, one Namo Bharat Rapid Rail and one 20-coach New Delhi-Varanasi Vande Bharat train.

Also, efforts have been directed to meet and surpass the standards of world-class railways. Railway stations with airport-like facilities are being built.

Safety of passengers along with pleasant journey has been the priority of Indian Railways. The state-of-the-art technology is being used to counter and minimize all untoward incidents. This has considerably checked and lowered the rate of train accidents. There has been a steep decline in the number of accidents from 473 in FY 2000-01 to 40 in FY 2023-24.

It may be noted that the train accidents during 2004-14 were 1711 (average 171 per annum). This has come down to 678 during 2014-24 (average 68 per annum). Another important index showing improved safety in train operations is Accidents Per Million Train Kilometer (APMTKM). This has reduced from 0.65 in FY 2000-01 to 0.03 in FY 2023-24, indicating an improvement of more than 95% during the said period.

The introduction of the highly developed rail protection system 'Kavach' has proved to be very effective in preventing accidents. As of now, Kavach has been fitted on 1455 Rkm and 144 locomotives of South Central Railway. The latest version of Kavach has been installed on the railway tracks between Sawai Madhopur-Kota. Minister of Railways, Shri Ashwini Vaishnaw travelled in the loco of the train from Sawai Madhopur to Sumerganj Mandi to inspect it. Indian Railways is working on the goal of installing Kavach across its network.

Unfortunately, some disruptive forces have been active to cause huge loss to human life and damage the railway property. Incidents of placing things like cylinders, stones, iron poles, etc. on the tracks and other attempts to derail and sabotage have been foiled by our personnel. Security agencies have been active in probing all such conspiracies. The Government has also expressed its intention to deal firmly with such anti-social elements. The MR has asserted that the entire railway administration will be alert to ensure safety of all rail operations. Strict action will be taken against those conspiring to cause railway accidents.

Please let us know how you like our issue.

Hon'ble Prime Minister Laid the Foundation Stone and Dedicated to the Nation Railway Projects worth more than ₹660 crore in Jharkhand

- ***Hon'ble PM flagged off 6 Vande Bharat trains which will enhance connectivity***
- ***'Expansion of rail connectivity in Eastern India will boost the economy of the entire region'***



The hon'ble Prime Minister, Shri Narendra Modi flagged off 6 Vande Bharat trains via video conferencing. Governor of Jharkhand, Shri Santosh Gangwar and Minister for Agriculture and Farmers' Welfare, Shri Shivraj Singh Chauhan were also present on the occasion in Tatanagar.

The hon'ble Prime Minister, Shri Narendra Modi laid the foundation stone and dedicated to the nation various Railway projects worth more than ₹660 crore in Tatanagar, Jharkhand on 15th September, 2024 through video conferencing. These projects include laying the foundation stone for Madhupur Bypass line in Deoghar district and Hazaribagh Town Coaching Depot in Hazaribagh district of Jharkhand. After completion, Madhupur Bypass line will facilitate in avoiding the detention of trains on Howrah-Delhi mainline and will also help in reducing the travel time between Giridih - Jasidih and Hazaribagh Town Coaching Depot will help in facilitating the maintenance of the coaching stocks at this station.

Hon'ble PM Flagged Off 6 Vande Bharat trains at Tatanagar Junction Railway Station via video conferencing

BHAGALPUR – HOWRAH
Vande Bharat Express

BRAHMAPUR – TATA NAGAR
Vande Bharat Express

TATA NAGAR – PATNA
Vande Bharat Express

GAYA – HOWRAH
Vande Bharat Express

DEOGHAR – VARANASI
Vande Bharat Express

ROURKELA – HOWRAH
Vande Bharat Express

The hon'ble Prime Minister dedicated to the nation Kurkura-Kanaroan doubling, a part of Bondamunda-Ranchi single line section and part of Rourkela-Gomoh route via Ranchi, Muri and Chandrapura stations. The project will help in the increased mobility of goods and passenger traffic considerably. Apart from this, 4 RUBs were also dedicated to the nation to enhance safety for common people.

The hon'ble Prime Minister said that today every city and every state wants a Vande Bharat train to boost connectivity. He recalled flagging off 3 new Vande Bharat trains for the states in the North and South of India and mentioned that 6 new Vande Bharat trains have already begun their journey. Shri Modi underscored that the expansion of rail connectivity in Eastern India will strengthen the economy of the region and hugely benefit businesses, professionals and students. Speaking about the boost in cultural activities as a result of the 6 new Vande Bharat trains, the hon'ble Prime Minister mentioned that a large number of pilgrims who visit Kashi from India and the world would now get a chance to visit Baba Baidyanath in Deoghar with the introduction of Varanasi-Deoghar Vande Bharat. He said that it would boost tourism in the region and also encourage the industrial development of Tatanagar, thereby creating new employment opportunities for the youth. 'Modern railway infrastructure is imperative to fast paced development,' Shri Modi said, drawing attention to the various development projects of today. He



Minister of Agriculture and Farmers' Welfare, Shri Shivraj Singh Chauhan alongwith Shri Satish Kumar, Chairman & CEO, Railway Board interacted with the children in the Tatanagar-Patna Vande Bharat Express



mentioned laying the foundation stone for Madhupur Bypass line in Deoghar district which will facilitate in avoiding detention of trains on Howrah-Delhi mainline and will also help in reducing travel time between Giridih and Jasidih. He also touched upon Hazaribagh Town Coaching Depot in Hazaribagh district which will help in facilitating the maintenance of coaching stocks at this station. He said the doubling of Kurkura-Kanaroan line will boost rail connectivity in Jharkhand and strengthen connectivity to the steel industries.

The hon'ble Prime Minister highlighted that the Centre had stepped up the investment as well as increased the pace of development works in Jharkhand to ensure its overall progress and development. Shri Modi added that more than ₹7,000 crore was granted to Jharkhand for strengthening the railway infrastructure of the state in this year's budget, which was 16 times more as compared to the budget allocated 10 years ago. He further pointed out to the people about the benefits of increasing the railway budget - be it development of new lines or electrification of the lines or doubling of the lines or development of new infrastructure in the stations, work is going on at a rapid pace. Shri Modi lauded Jharkhand for being amongst those states in which the railway lines are 100% electrified. Hon'ble PM highlighted that more than 50 railway stations in Jharkhand were being rejuvenated under the Amrit Bharat Railway Station scheme.

Hon'ble PM Flagged Off Namo Bharat Rapid Rail and 5 Vande Bharat Trains

- ***Laid the foundation stone of quadrupling of Gandhidham–Adipur Rail Line and Samakhiali–Gandhidham rail line***
- ***Hon'ble PM also flagged off 5 Vande Bharat trains and nation's first 20 coach Vande Bharat train between Varanasi-New Delhi***



Hon'ble Prime Minister, Shri Narendra Modi flagged off Vande Bharat trains from Ahmedabad. Shri Acharya Devvrat, Governor of Gujarat, Shri Bhupendra Patel, Chief Minister of Gujarat and Shri C.R. Patil, Minister of Jal Shakti were also present.

The hon'ble Prime Minister, Shri Narendra Modi flagged off Namo Bharat Rapid Rail between Bhuj and Ahmedabad and laid the foundation stone of quadrupling of Gandhidham–Adipur and Samakhiali–Gandhidham rail line on 16th September, 2024 through video conferencing from Ahmedabad.

Hon'ble PM also flagged off 5 new Vande Bharat Express trains

1. Nagpur–Secunderabad (577 km)
2. Agra Cantt–Banaras (573 km)
3. Durg–Visakhapatnam (565 km)
4. Pune–Hubballi (557 km)
5. Kolhapur–Pune (326 km)

- **First 20 coach Vande Bharat train between Varanasi and New Delhi (755 km)**

Shri Modi highlighted that Namo Bharat Rapid rail had begun its operations between Ahmedabad and Bhuj. He added that 'Namo Bharat Rapid Rail' would be very convenient to the middle class families who travel from one city to another in the country every day and would greatly benefit those involved in jobs, business and education.

'Expansion of the Vande Bharat network in these 100 days is unprecedented,' the hon'ble PM remarked, as he highlighted more than 15 new Vande Bharat train routes. He also spoke about the Delhi-Varanasi Vande Bharat train which now consists of 20 coaches. He informed that more than 125 Vande Bharat trains in the country are enabling better travel for thousands of people every day.

To welcome the inaugural run of Namo Bharat Rapid Rail, local functions were organised at enroute stations, i.e., Bhuj, Anjar, Gandhidham, Bhachau, Samakhiali, Halvad, Dhrangadhra, Viramgam, Chandlodiya, Sabarmati and Ahmedabad. The dignitaries present at these stations included MPs, MLAs and local public representatives.

Gandhidham–Adipur Quadrupling Project (10.69 km)

The Gandhidham-Adipur quadrupling project was sanctioned in February 2023 and the work is estimated to be completed at a cost of ₹152 crore. The section covers Kutch district and will have 12 major and minor bridges, alongwith an ROB. With the completion of this project, the line capacity of this extremely busy section will be increased. More trains can be run on this section which will improve the connectivity for Kutch.

The project will also enhance port connectivity and give impetus to import/export through ports in Kutch district.

Samakhiali–Gandhidham Quadrupling Project (53 km)

The Samakhiali-Gandhidham quadrupling project was sanctioned in August 2023 and is estimated to be carried out at a cost of ₹1430 crore. The section will have 75 major and minor bridges and 3 RoBs. The completion of the project will improve connectivity with Ahmedabad and Palanpur, while also helping in reducing congestion on this over-saturated section. With the increase in line capacity, train connectivity for the people of Kutch will get enhanced. The project will also enhance port connectivity and boost employment opportunities and tourism in Kutch region.

Namo Bharat Rapid Rail

The Namo Bharat Rapid Rail train offers a myriad of modern travelling experience. This indigenously developed train is equipped with 12 air-conditioned coaches with centrally controlled automatic sliding doors, modular interior, continuous LED lighting, toilets with vacuum evacuation, route map indicators, panoramic windows, CCTVs, phone charging facilities, etc.

It is provided with advanced and improved features which enables it in reaching the speed of 110 kmph. The train has fully sealed flexible gangway which will protect passengers from dust and water entry inside the gangway and provide a safe atmosphere. The seating and flooring are fire retardant. The train is also equipped with automatic smoke/fire detection with alarm system, along with Aerosol based fire suppression system.







Hon'ble Prime Minister Laid the Foundation Stone and Dedicated to the Nation Railway Projects in Odisha



The hon'ble Prime Minister, Shri Narendra Modi laid the foundation stone and dedicated to the nation Railway projects in Bhubaneswar, Odisha. Governor of Odisha, Shri Raghubar Das and Chief Minister of Odisha, Shri Mohan Charan Manjhi were also present.

The hon'ble Prime Minister, Shri Narendra Modi on 18th September, 2024 laid the foundation stone and dedicated to the nation Railway projects worth more than ₹2800 crore. These Railway projects will enhance Railway infrastructure in Odisha and improve regional growth and connectivity.

Speaking of the newly inaugurated rail and road related projects, Shri Modi said that he had the privilege of dedicating the Lanjigarh Road-Ambodala-Doikalu railway line, Lakshmipur Road-Singaram-Tikri Railway line, Dhenkanal-Sadashivpur-Hindol Road Railway line to the country. He added that work has also started to increase connectivity from Paradip port along with laying the foundation stone of the Jaipur-Nawarangpur new Railway line. Shri Modi remarked that the new infrastructure projects will create a large number of new employment opportunities for the youth of Odisha. He added that work on Puri to Konark Railway line and the high-tech 'Namo Bharat Rapid Rail' will also be started soon and the modern infrastructure will open new doors of possibilities for Odisha.■

Minister for Finance Presented the 'Change Maker Award 2024' to Integral Coach Factory



Integral Coach Factory, Chennai has been awarded with 'Change Maker Award 2024' by the Hindu Business Line. On 13th September, 2024, Smt. Nirmala Sitaraman, Minister for Finance presented the award to Shri U. Subba Rao, General Manager, ICF in New Delhi.

ICF has been chosen for the award for manufacturing Vande Bharat trains. ICF has rolled out its first coach in 1955 and 75,000th coach in the year 2024. ICF has come a long way, constantly innovating and leveraging technology every passing year. ICF kept upgrading the technology and is now bringing out several variants of Vande Bharat trains like Vande Sleeper–fully AC sleeper version rake, Vande Metro–for short distance inter-city travel, etc.■

Indian Army and Air Force Signed MoU with Gati Shakti Vishwavidyalaya for Enhanced Logistics Expertise



Shri Rajnath Singh, Defence Minister, Shri Ashwini Vaishnaw, Minister of Railways and Chief of Defence Staff, General Anil Chauhan alongwith Shri Satish Kumar, Chairman & CEO attended the MoU signing function between Indian Army and Indian Air Force with Gati Shakti Vishwavidyalaya.

The Indian Army and Indian Air Force have signed a Memorandum of Understanding (MoU) with Gati Shakti Vishwavidyalaya, Vadodara. The agreement was formalised in a ceremony held in New Delhi on 9th September, 2024, attended by Defence Minister, Shri Rajnath Singh, Minister of Railways, Shri Ashwini Vaishnaw and Chief of Defence Staff (CDS) General Anil Chauhan.

Shri Ashwini Vaishnaw, MR expressed confidence in the university's role in empowering the Armed Forces with advanced logistics education and research. He emphasised that the MoU would be instrumental in bridging the gap between theoretical knowledge and real-world application. He said, 'Gati Shakti Vishwavidyalaya is focussed on logistics as a domain. The entire theme by which this university is being developed is that every line of item of the course curriculum should be industry-focussed. So, the target which we have given to Gati Shakti Vishwavidyalaya is that students who pass out of this university must have at least two job offers by the time they are in 3rd year of the course and they should be deciding where to go for the employment or be self-employed.'

Senior officials from the Ministry of Defence, Ministry of Railways, Gati Shakti Vishwavidyalaya and the Armed Forces, including the Chiefs of the Army and Air Force and the Defence Secretary, were present at the event.■



Gati Shakti Vishwavidyalaya (GSV) on 17th September, 2024 signed a Memorandum of Understanding (MoU) with Monash University, Australia, in New Delhi. The agreement aims to facilitate collaboration in joint research, education, and executive training in railway engineering through the Monash Institute of Railway Technology (IRT). The MoU was signed between Professor Craig Jeffrey, Deputy Vice-Chancellor-International and Senior Vice-President, Monash University and Professor Manoj Choudhary, Vice-Chancellor, GSV. Dr Monica Kennedy, Minister Commercial and Head of Austrade South Asia, hosted the event at the Australian High Commission at New Delhi.

Senior officials from the Monash University Australia, Ministry of Railways, Gati Shakti Vishwavidyalaya, Austrade, DFCCIL, DMRC were present at the MOU signing event.■

Cabinet Approved 309 km Long New Line Project: To Provide the Shortest Rail Connectivity between Two Major Commercial Hubs - Mumbai and Indore

- ***The approved project apart from connecting commercial hubs Mumbai and Indore through the shortest rail route, will also connect the unconnected areas of Maharashtra and Madhya Pradesh passing through 2 Districts of Maharashtra and 4 Districts of Madhya Pradesh.***
- ***The total cost of project is ₹18,036 crore and will be completed by 2028-29.***
- ***The project will also generate direct employment for about 102 lakh man-days during construction.***



Minister of Railways, Shri Ashwini Vaishnaw addressed the Press about Mumbai-Indore new line project at Rail Bhawan.

The Cabinet Committee on Economic Affairs (CCEA), chaired by the hon'ble Prime Minister Shri Narendra Modi, has approved new railway line project under Ministry of Railways with total cost of ₹18,036 crore (approx.). The proposed new line between Indore and Manmad will provide direct connectivity and improve mobility, providing enhanced efficiency and service reliability for Indian Railways. The project is in line with hon'ble Prime Minister Shri Narendra Modiji's vision of a New India which will make people of the region 'Atmanirbhar' by way of comprehensive development in the area which will enhance their employment/self-employment opportunities. The project is a result of PM-Gati Shakti National Master Plan for multi-modal connectivity.

The project covers 6 Districts in 2 States i.e., Maharashtra and Madhya Pradesh will increase the existing network of Indian Railways by about 309 km. With this project, 30 new stations will be constructed, providing enhancing connectivity to aspirational District Barwani. New Line project will provide connectivity to approx. 1,000 villages and about 30 lakh population.

Project will promote tourism in the region by providing shorter route between Western/South-Western part of the country with Central India. This will increase the tourist footfall to various tourist/religious places of Ujjain–Indore region.

Project will provide direct connectivity to Pithampur Auto Cluster (houses 90 large units and 700 small and medium industries) from gateway port of JNPA and other state ports. Project will also provide direct connectivity to millet producing districts of Madhya Pradesh and onion producing districts of Maharashtra which further facilitates in the distribution of the same to northern and southern parts of the country.

This is an essential route for transportation of commodities such as agriculture products, fertilizer, containers, iron ore, etc. The capacity augmentation work will result in additional freight traffic of magnitude of about 26 MTPA (million tonnes per annum). The Railways being environment friendly and energy efficient mode of transportation, will help both in achieving climate goals and minimizing logistics cost of the country, reduce oil import (18 crore litres) and lower CO_2 emissions (138 crore kg) which is equivalent to plantation of 5.5 crore trees.

New Line
Manmad - Indore

• 309 km • ₹18,036 cr.



- Sri Mahakaleshwar Jyotirlinga Temple and religious places of Ujjain – Indore region
- Onion producing hubs of Northern Maharashtra: Nashik, Dhule and Nandurbar
- Millets (jowar, Corn) producing area
- Mumbai-Indore/Ujjain 4 hrs 30 minutes, 200 km reduction
- About 30 lakh people 1st time rail link

जनजातीय सशक्तिकरण - New and Improved connectivity

- Nashik and Dhule (Maharashtra)
- Barwani, Khargone, Dhar (Madhya Pradesh)

Connectivity to Pithampur Industrial area

- Mahindra, VE commercial vehicles Ltd. (JV Volvo and Eicher)
- Force Motors, Rathi steel industries with JNPA and Hazira Port
- Project Cost: ₹18,036 crore
- Employment: 102 lakh human-days.
- CO_2 emissions saved: 138 crore kg CO_2 equivalent to 5.5 crore trees

Employment Generating Infra Projects Approved in 85 days

S. No.	Cabinet Decision	Cost (₹ crore)	Employment
1	Development of Lal Bahadur Shastri International Airport, Varanasi	2,870	34 lakh human days
2	Gap funding for Offshore Wind Energy Projects	7,453	
3	Major Port at Vadhavan near Dahanu in Maharashtra	76,220	12 lakh jobs
4	8 National High Speed Road projects (936 km)	50,655	4.4 cr human days
5	11 Railway projects (967 km new line + 121 km multi track)	31,113	4.1 crore human days
6	2 corridors of Bangalore Metro Rail Projects (44.65 km), Thane Ring Metro Rail Project (29 km) and Pune Metro Phase-I (5.46 km)	30,766	1.5 crore human days
7	Development of civil enclaves at Bagdogra and Bihta airport	2,962	35 lakh human days
8	12 industrial smart cities	28,602	40 lakh jobs
9	Manmad - Indore New Line	18,036	102 lakh human days
	Total	**2,48,677**	

A New Chapter in Rail Travel Begins: The Vande Bharat Sleeper Train



Minister of Railways, Shri Ashwini Vaishnaw, MoSR, Shri V. Somanna, Chairman & CEO, Shri Satish Kumar and other officials introduced the production of Vande Bharat Sleeper Version train set at BEML Bengaluru.

Performance of Train	
Maximum operational speed during service	160 kmph
Maximum operational speed during testing	180 kmph

Passenger capacity: Type of Berth	No of coaches per train	Number of berths
AC 3 Tier Berths	11	611
AC 2 Tier Berths	4	188
First Class AC Berths	1	24
Total	**16**	**823**

The highly anticipated Vande Bharat sleeper train is an exciting expansion to the Vande Bharat portfolio. A first in India, this train set has been meticulously designed to combine aesthetic appeal with functional excellence. All materials and components used in the train set adhere to the highest fire safety standards. Crafted with world-class facilities and superior interiors, the Vande Bharat sleeper train set marks a significant leap forward in India's rail capabilities, offering a passenger experience on par with European standards. Set to revolutionise long-distance rail travel in India, this segment meets new benchmarks for comfort, safety, and efficiency. The Vande Bharat sleeper train is equipped with a range of world-class features

- Austenitic stainless steel train set.
- Crash worthy features in Train set for passenger safety.
- Best-in-class interiors with GFRP panels.
- Aerodynamic exterior looks.
- Modular pantry.
- Fire safety as per EN 45545, Hazard Level: 3.
- Special berths and toilets for differently abled.
- Automatic exterior passenger doors.
- Sensor based intercommunication doors.
- Remotely operated fire barrier doors at end wall.
- Ergonomically designed odour free toilet system.
- Toilet for driving crew.
- Shower with hot water in 1st AC car.
- Integrated reading light with USB charging provision.
- Public announcement and visual information system.
- Modern passenger amenities.
- Spacious luggage room.





Minister of Railways, MoSR and Chairman & CEO Visited the Railway Training Institute in Bengaluru



Minister of Railways, Shri Ashwini Vaishnaw alongwith Shri V. Somanna, MoSR and Shri Satish Kumar, Chairman & CEO seen in a group photo with the trainees symbolizing a new era of trust and cooperation at the Railway Training Institute in Bengaluru.

Shri Ashwini Vaishnaw, Minister of Railways, on 1st September, 2024 visited the Railway Training Institute in Bengaluru. Shri V. Somanna, Minister of State for Railways and Shri Satish Kumar, Chairman & CEO also accompanied the MR. This visit was marked by meaningful interactions with over 150 trainees, including drivers, assistant drivers and technical staff.

During the visit, Shri Vaishnaw engaged openly with the trainees, listening to their concerns and addressing their long-standing demand for the change of uniform. The trainees advocated for a more comfortable and modern uniform, to which the Minister agreed, recognizing the importance of practicality and modernization.

The visit also covered broader topics such as the training curriculum, infrastructure improvements, and career development. Shri Vaishnaw's approach was collaborative, seeking suggestions and demonstrating a commitment to inclusive decision-making. Shri V. Somanna, MoSR and Shri Satish Kumar, Chairman & CEO actively participated in these discussions, further emphasizing the leadership's dedication to addressing the trainees' needs.

In a gesture that broke protocol, the Minister, along with his colleagues, shared lunch with the trainees, fostering a sense of camaraderie and solidarity. This act resonated deeply with the staff, who felt heard and valued.



Minister of Railways, Shri Ashwini Vaishnaw, Shri V. Somanna, Minister of State for Railways and Shri Satish Kumar, Chairman & CEO laid the foundation stone for the New Hangar for Standard and Broad Gauge Rolling Stock Manufacturing Facility at BEML, Bengaluru, Karnataka on 1st September, 2024.

MR Dedicated the Gauge Conversion and Flagged Off a New Train Service on Pilibhit-Mailani Railway Section





Shri Ashwini Vaishnaw, Minister of Railways dedicated the gauge conversion of the Pilibhit-Mailani Railway section and flagged off a new train on that route via video conference on 1st September, 2024. Minister of State for Railways, Shri V Somanna and Shri Satish Kumar, Chairman & CEO were also present.

Shri Ashwini Vaishnaw, Minister of Railways dedicated Pilibhit-Shahgarh-Mailani gauge converted section to the nation and flagged off the new train service on this section through video conferencing on 1st September, 2024.

Shri Vaishnaw mentioned that under the Amrit Bharat Station scheme, redevelopment of stations like Aonla, Badaun, Baheri, Bareilly, Bareilly City, Dhampur, Izzatnagar, Moradabad, Pilibhit, Rampur, Nagina, Saharanpur etc. are being done. Total 157 railway stations in Uttar Pradesh are being redeveloped under this scheme.

Minister of Railways added that 4,900 km of new rail lines have been laid in Uttar Pradesh in the last 10 years which is equivalent to the total rail network of Switzerland. He said that the work done on Indian Railways in the last 10 years is a model of development.

On this occasion, Minister of State for Commerce and Industry, Shri Jitin Prasada said that Pilibhit station is being redeveloped at a cost of ₹17 crore to make it a world-class station, where facilities like lifts, escalators, advanced parking and foot over bridges would be provided. General Manager, North Eastern Railway, Ms. Saumya Mathur, welcomed the guests.

Length - 67.92 km

Cost - ₹672 crore (Approx.)

Benefits

- Ease of access for tourists to Pilibhit Tiger Reserve & Jim Corbett National Park
- Simplify journey for devotees travelling to Purnagiri Temple near Tanakpur
- Ease of convenience to daily commuters, students, farmers and traders
- Expedite socio-economic development in the region
- Provide an alternative route to people travelling to New Delhi from Luckow and East UP
- Facilitate operation of long distance trains
- Give fillip to overall development and boost tourism



MR Inspected Gandhinagar Jaipur Railway Station and did Window trailing of Jaipur-Sawai Madhopur section

Shri Ashwini Vaishnaw, Minister of Railways inspected the progress of redevelopment work of Gandhinagar Jaipur Railway Station on 24th September, 2024. While inspecting at Gandhinagar Jaipur Railway Station, Minister of Railways interacted with women and other employees to get information about their day to day works. He expressed happiness to see the progress of redevelopment works of Gandhinagar Jaipur station.

Shri Vaishnaw also visited the 'Rail Rakshak Dal' formed for the first time in Indian Railways for quick action at the time of rail accidents. The Rail Rakshak team will consist of RPF personnel and Mechanical (C&W) Department trained from NDRF, Vadodara, who have been provided equipment for disaster management and vehicles for travel.

Addressing the media on the occasion, MR said that the girder launching for the first time on Indian Railways at Gandhinagar Jaipur Railway Station for the 72X48 meter air concourse was an excellent example of civil engineering on Indian Railways and while appreciating this work, Minister of Railways inspected various works at Gandhinagar Jaipur station and gave directions to the officers to ensure quality and target.



Minister of Railways, Shri Ashwini Vaishnaw, inspected the progress of redevelopment work of Gandhinagar Jaipur Railway Station.

After inspection of Gandhinagar-Jaipur station, Minister of Railways, Shri Vaishnaw conducted window trailing inspection of Jaipur-Sawai Madhopur section and provided directions to the officers to strengthen safety and passenger amenities in train operations. During the inspection of Gandhinagar-Jaipur railway station and inspection of Jaipur-Sawai Madhopur section, Jaipur Lok Sabha MP, Smt. Manju Sharma, General Manager of North Western Railway Shri Amitabha and all PHODs were present.



Shri Ashwini Vaishnaw, Minister of Railways on 20th September, 2024 flagged off 'India Nepal Maitri Yatra' - Bharat Gaurav Deluxe AC tourist train from Hazrat Nizamuddin Railway Station. Also seen are Shri Satish Kumar, Chairman & CEO and Shri Shobhan Chaudhuri, General Manager, Northern Railway.

Minister of Railways Successfully Conducted Loco Trial of 'Kavach 4.0' from Sawai Madhopur to Indergarh Sumerganj Mandi



Minister of Railways, Shri Ashwini Vaishnaw conducted a loco trial run of the Kavach system from Sawai Madhopur to Indergarh Sumerganj Mandi station of Kota Division, WCR.

The use of new technology 'Kavach' under Mission Raftaar in Indian Railways is providing impetus to the safety, punctuality and operations of trains. Minister of Railways, Shri Ashwini Vaishnaw conducted a loco trial run of the Kavach system from Sawai Madhopur to Indergarh Sumerganj Mandi station of Kota Division, WCR on 24th September, 2024. During loco trial, the Minister of Railways interacted with the loco pilots and took all the information regarding Kavach 4.0. Smt. Shobhana Bandyopadhyaya, General Manager, WCR, Shri Amitabha, General Manager, NWR along with senior officers were also present during the trial run.

Under Mission Raftaar project, a total distance of 545 km between Nagda-Mathura section is being constructed at a cost of ₹2665.14 crore. In this project, Kavach has the most important role from the safety and operations point of view.

The Kavach provides an important reliable protective layer over the current rail operating system. After its implementation, we will get rid of the accidents due to safety lapses caused by human error by loco pilots. India's indigenous Automatic Train Protection (ATP) system Kavach version 4.0 has been first installed by Kota Division of West Central Railway on 16th September, 2024 on 108 km section of Kota-Sawai Madhopur in Kota division. Indian Railways has now set a new record by deploying Kavach version 4.0 on 108 km of rail track in the shortest possible time, setting new benchmarks for railway safety and operational efficiency. It is a matter of great pride for Indian Railways that the loco trial of newly installed Kavach 4.0 System was conducted by Minister of Railways, Shri Ashwini Vaishnaw.

The trial run of Kavach 4.0 system in Sawai Madhopur-Indargarh Sumerganj Mandi section (36 km) included auto whistling at LC gate no. 148, checking of Kavach protection layer functioning during loco over speeding in Sawai Madhopur-Kushtala block section, Signal Passing at Danger prevention test near Rawanjana Dungar station, monitoring of permanent speed restriction of 120 kmph near Amli station and loop line speed control test on approach to Indargarh station and continuous observation of all signals of the said section on Loco Kavach screen (Driver Machine Interface).

Features of the system: Kavach provides automatic train protection and train collision avoidance capability. It prevents signal passing at danger and implements automatic speed restrictions as needed. Further it automatically stops trains in the event of a head-on, rear-on and side-on collision. The availability of cab signalling to the loco pilot facilitates train operations during fog.

Speed Control by Kavach: If the speed of the train is more than that of the permissible limit by 2



km/h, the Over Speed Alarm will be issued by the Kavach system. If the speed of the train is more than the permissible limit by 5 km/h, then normal braking will take place. If the speed of the train is more than that of the permissible limit by 7 km/h, then the full braking will take place. If the speed of the train is more than the permissible limit by 9 km/h, then emergency braking will take place.

Loco Kavach Unit: The heart of the Kavach system in the loco is the Driver Machine Interface. The main functions of the driver machine interface are to display signaling information, show speed and braking status, prevent signal passing at danger and facilitate the sending of emergency messages.

Advantages of Kavach

- **Increase in safety:** Reduce the possibility of accidents by controlling the speed of trains.
- **Accuracy:** To ensure efficiency and punctuality in train operations.

Kavach has so far been deployed on 1465 Rkm and 144 locomotives (including Electric Multiple Unit rakes) on South Central Railway.

Presently, the progress of main items related to Kavach on Delhi–Mumbai and Delhi–Howrah corridors (approximately 3000 Rkm) is as under:

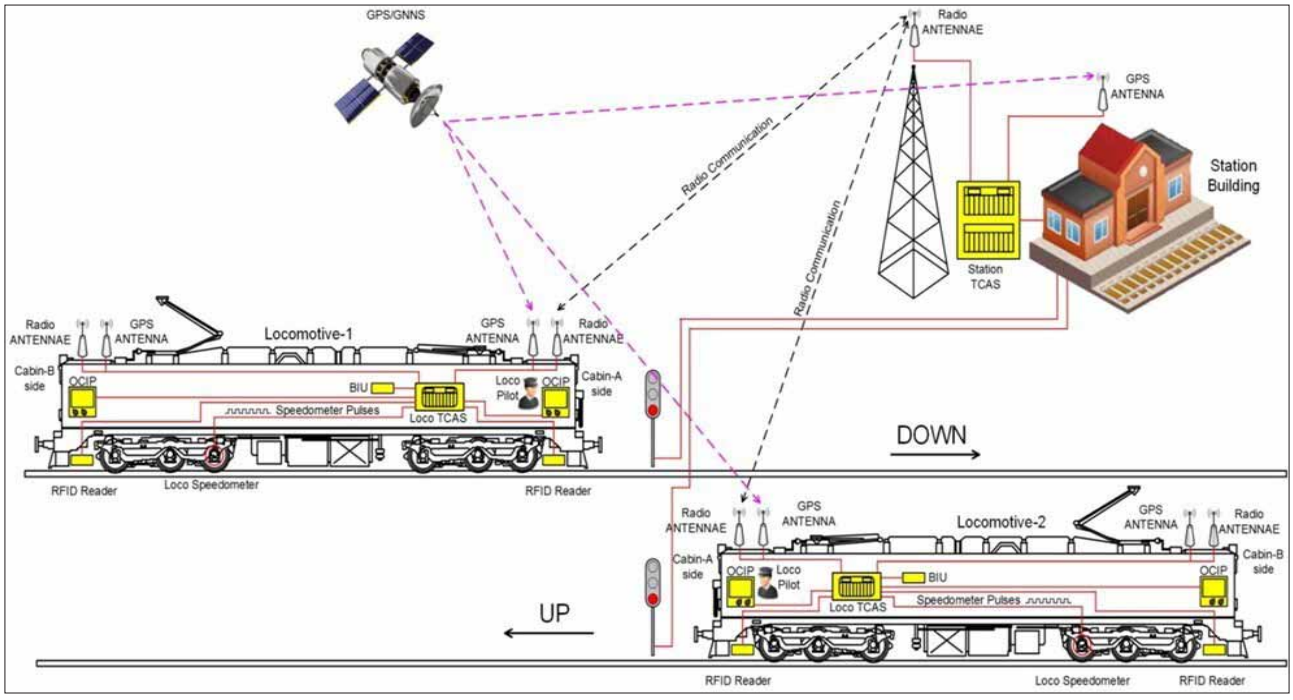
- Laying of Optical Fibre Cable: 4,275 km
- Installation of Telecom Towers: 364 nos.
- Provision of Kavach equipment at Stations: 285 nos.
- Provision of Kavach equipment in Locos: 319 Locos
- Installation of Kavach Track side equipments: 1384 Rkm.

Further, Detailed Project Report and Detailed Estimate on another 6,000 Rkm are approved on Indian Railways. To increase capacity and scale up implementation, trials of more OEMs are at different stages.

Kavach 4.0

On 16th July, 2024, Kavach 4.0 specification has been approved by RDSO. This version 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, Indian Railways has developed, tested and started deploying Automatic Train Protection System.

The funds utilized on Kavach works so far is ₹1,216.77 crore and the allocation of funds during the year 2024-25 stands at ₹1,112.57 crore. Funds sanctioned for Kavach are being used for Kavach only.





Minister of Railways, Shri Ashwini Vaishnaw on 1st September, 2024 interacted with the passengers onboard a local train to Ambernath in Maharashtra and also took a selfie with his railway family.

SCR and ICF Bagged Energy Efficiency Unit Awards from CII





South Central Railway has received 5 Energy Efficient Unit Awards from Confederation of Indian Industry (CII) at the 25th National Awards for Excellence in Energy Management - 2024. The awards were received by Shri Lokesh Vishnoi, DRM, Hyderabad Division along with his team and officials of Carriage Workshop, Lallaguda during the Energy Efficiency awards function held on 12th September, 2024 at Hyderabad International Convention Centre (HICC), Hyderabad.

The details of awards presented are : Rail Nilayam (SCR Headquarters Building), Secunderabad, Hyderabad Bhavan (Hyderabad Division Headquarters) at Secunderabad, Lekha Bhavan (SCR Accounts Building), Secunderabad, Zonal Railway Training Institute (ZRTI) at Moulali and Carriage Workshop, Lallaguda. Shri Arun Kumar Jain, General Manager, South Central Railway congratulated the staff and officers of SCR.

ICF has been awarded the Excellent Energy Efficient Unit at the 25th edition of the CII National Award for Excellence in Energy Management, Hyderabad. With 660 participants from 12 sectors, ICF has been recognized with this prestigious award for its outstanding contributions in the area of energy efficiency under the Automobile, Engineering and Railways Sector.

Shri Anil Siddhartha, Chief Electrical General Engineer and Shri V. M. Govindarajan, Deputy Chief Electrical Engineer received the award on behalf of ICF. Shri U. Subba Rao, General Manager, ICF congratulated the staff and officers of ICF for this excellent achievement.

MoSR Inspected Rail Wheel Factory and Reviewed Bengaluru Suburban Railway Project



Minister of State for Railways, Shri V. Somanna, on 9th September, 2024 inspected the Rail Wheel Factory (RWF) in Yelahanka and conducted a review meeting on the Bengaluru Suburban Railway Project. Shri M.B. Patil, Minister for Commerce & Industries Government of Karnataka, Shri Rajgopal, General Manager, RWF, and other senior officials were also present.

During his visit to RWF, Shri Somanna inspected key units, including the forging complex, axle machining unit and wheel casting unit. He interacted with the staff, addressing their suggestions and grievances. He highlighted the ongoing efforts to enhance production capacity, noting the commissioning of a third Axle Machining Line, which is expected to increase axle production by 40,000 units annually.

RWF has successfully exported wheels and axles to countries like Mozambique, Sudan and Malaysia, under the 'Make in India – Make for the World' initiative. The Minister praised RWF's 'zero defect' manufacturing process, which is largely driven by advanced industrial automation. He also commended RWF for surpassing the production targets set by the Railway Board for the year FY 2023-24.

Shri Somanna also reviewed the Bengaluru Suburban Railway Project, with a particular focus on the Circular Railway Project, which aims to provide double line railway connectivity around the periphery of Bengaluru. The project is expected to connect areas such as Doddaballapur, Devanahalli, Malur, Anekal, Hejjala, Solur, and Nidavanda.

At a separate review meeting held at the Vidhana Soudha, Shri Somanna, alongwith Shri M.B. Patil, announced that the Chikkabanavara-Baiyyappanahalli (Corridor-2, 25 km) and Heelalige-Rajanukunte (Corridor-4, 46.88 km) segments of the Bengaluru Suburban Railway Project will be completed and dedicated to the nation by December 2026.

Shri Somanna stressed the importance of coordination among Bengaluru Metro, the Suburban Rail Project and other relevant authorities. The review meeting was attended by senior officials including Shri Arvind Srivastava, GM/SWR, DRM, Bengaluru, MD, Bengaluru Metro Rail Corporation Limited (BMRCL) and other senior officers.■



MoSR inaugurated 57th Inter Railway Shooting Competition

The 57th Inter Railway Shooting Competition was organized at Jagatpura Shooting Range, Jaipur from 23rd to 27th September, 2024. The competition was inaugurated on 23rd September, 2024 by Minister of State for Railways, Shri Ravneet Singh. On this occasion, the Minister announced to construct an indoor stadium at Ganpati Nagar Railway Colony at a cost of ₹40.50 crore to promote sports.

Shri Ravneet Singh in his address said that the budget for purchase of sports equipment for sportspersons by Railways will be increased and they will be provided all kinds of facilities including training by high level coaches.

General Manager, NWR, Shri Amitabha welcomed the Minister of State for Railways and all the visiting players to Jaipur and told about the achievements made by the Railway players in the recently held Olympics in Paris, especially the outstanding performance in the shooting competition.■





Shri Ravneet Singh, Minister of State for Railways reviewed the ongoing redevelopment work at Secunderabad Railway Station on 24th August, 2024 under the Amrit Bharat Scheme. Also seen here Shri Arun Kumar Jain, General Manager, South Central Railway.■

Kind Attention

AUTHORS/WRITERS contributing articles for the magazine are requested to restrict their articles to a reasonable size. Ideally an article should not exceed 1000 WORDS.

In view of the space constraints of the magazine, sometimes it becomes difficult to include longer articles. All are requested to appreciate our problem and co-operate.

Inaugurations Done by Different Ministers of State and MPs



Minister of State, Prof. S. P. Singh Baghel inaugurated the experimental stoppage by flagging off Train No. 82502, New Delhi-Lucknow Tejas Express at Tundla Junction Railway Station on 18th August, 2024. MLA, Tundla, Shri Prempal Dhangar, Municipal Chairman, Tundla, Shri Bhanwar Singh, BJP District President Shri Uday Pratap Singh, and NRUCC member Shri S. K. Gautam were also present.■



Shri Eatala Rajender, MP of Malkajgiri dedicated the new Safilguda Railway station building to the nation on 18th September, 2024. Shri Marri Rajshekar Reddy, MLA, Malkajgiri and other Railway officials were present on the occasion.

Speaking on the occasion, Shri Eatala Rajender stated that Safilguda Railway station is one of the important stations in the twin cities serving a large number of people. He stated that the new station building will facilitate the passengers in the area.■



Shri Satish Gautam, MP, Aligarh flagged off the experimental halt at Aligarh Junction Railway Station of Anand Vihar-Ayodhya Cantt. Vande Bharat Express on 16th August, 2024. MP, Hathras, Shri Anup Pradhan Valmiki, Mayor, Aligarh, Shri Prashant Singhal, MLA, Shri Anil Parashar, MLC, Shri Manvendra Pratap Singh and District President, Shri Krishan Pal Singh were also present.■



On 5th September, 2024, Shri Praveen Patel, MP, Phulpur flagged off train number 14033, Shri Mata Vaishno Devi Katra-Delhi Junction Express extension up to Subedarganj. Shri Siddharth Nath Singh, MLA, Prayagraj West and Mayor, Municipal Corporation Prayagraj, Shri Ganesh Kesarwani and were also present.■

Swachhata Hi Seva

Strengthen Voluntarism and Collective Action for Swachhata



Shri Satish Kumar, Chairman & CEO administered Swachhata pledge to the railway employees in Rail Bhawan. Also seen are Ms. Roopa Srinivasan, Member, Finance, Shri Naveen Gulati, DG, HR, Shri Braj Mohan Agrawal, DG, Safety and other senior officers.

Shri Satish Kumar Chairman & CEO has instructed All Zonal Railways, Production Units and Public Sector undertakings of Railways should give top priority to Swachhata and focus on visible-remarkable improvement in cleanliness level, not only at the Railway stations, but also in trains, railway colonies and Production Units. In a meeting with senior officers of Railways and nodal offices, he said that 2nd October is observed as Swachh Bharat Diwas as a tribute to the Father of the Nation, on his Jayanti. A fortnight campaign of 'Swachhata Hi Seva' was observed since 2017. We should work to strengthen voluntarism and collective action for Swachhata.

He further said that during last year's 'Swachhata Hi Seva'–2023 campaign, Indian Railways got around 2.5 lakh people to participate in around 6823 railway stations in the campaign with more than 70,0000 man-hours of shramdan. Indian Railways organized various activities like massive plantation drive, creation of waste to selfie points, 'Swachhata Hi Seva' logo/banners posted on Railways' website, regular announcement for passenger awareness done regarding proper disposals of waste in trains/stations, Prabhat Pheris taken out with the slogan 'Swachh Rail Swachh Bharat' to raise awareness, Nukkad Nataks organized with the help of NGOs, religious bodies and school children at railway stations for awareness of passengers etc.

This year, to commemorate the milestone of the 10th anniversary of the launch of Swachh Bharat Mission, 'Swachhata Hi Seva' 2024 campaign was observed from 14th September (curtain raiser)/ 17th September (inauguration of campaign) to 1st October with the theme of 'Swabhav Swachhata - Sanskaar Swachhata' with Swachh Bharat Diwas celebration on 2nd October.

The theme for 'Swachhata Hi Seva' 2024, 'Swabhav Swachhata, Sanskar Swachhata' seeks to reignite the spirit of Indian Railways of collective action and citizen participation in cleanliness efforts across India. The pillars of 'Swachhata Hi Seva' have been identified which are:



During the 'Swachhata Hi Seva' 2024 campaign, Shri Satish Kumar, Chairman & CEO launched the 'Ek Ped Maa Ke Naam' campaign and planted a sapling at New Delhi Railway Station.

Swachhata Ki Bhaagidari: Focussing on behaviour change, public participation and mega cleanliness drives with people with focus on community assets like railway platforms, tracks etc.

Sampoorna Swachhata and Swachhata Lakshit Ekayi (CTU-Cleanliness target units): Swachhata Lakshit Ekayi/CTUs are areas which are generally neglected garbage points, difficult to clean as part of regular cleaning operations and pose environmental, health and hygiene risk. Identification of such CTU and its transformation to a clean site.

Safai Mitra Suraksha Shivirs: Organization of health camps for safai mitras, sensitization workshops for health and wellbeing of safai mitras.

As the Swachhata Hi Seva 2024 campaign rolled out from 17th September to 2nd October, culminating on Swachh Bharat Diwas, it presents an opportunity for all citizens, partners, and stakeholders to actively participate. Let us collectively renew our pledge to maintain cleanliness, honour the legacy of Mahatma Gandhi, and make Swachhata a way of life. This year also Indian Railways is ready for Swachhata Hi Seva campaign. 3857 Cleanliness Target Units (CTUs) have been identified and 4666 events have been created on 'Swachhata Hi Seva' portal so far. Targets have been given to have a massive plantation drive under the mission 'Ek Ped Maa Ke Naam.' A day-to-day activity programme for observing 'Swachhata Hi Seva'–2024 has also been provided to all Railway Field Units. Focus has been given on cleanliness of Railway tracks located in station adjacent areas and areas around tracks falling in urban/semi urban areas. Cleanliness of drains and toilets including pay and use toilets in



waiting rooms and in other station premises, colonies, Railway buildings/establishments, etc. was done.

Indian Railways would endeavour to carry this campaign in a 'Whole of Society Approach' with emphasis on people's participation making 'sanitation everyone's business.' More are being uploaded on 'Swachhata Hi Seva' portal on daily basis.

'Swachhata Hi Seva' is a joint initiative of Ministry of Housing & Urban Affairs and Department of Drinking Water & Sanitation (Ministry of Jal Shakti) under Swachh Bharat Mission. Indian Railways also shouldered 'Swachhata Hi Seva' celebrations this year also.



Employee cleaning the railway premises



Worker cleaning the pantry car



In line with the 'Swachhta Hi Seva' 2024 campaign, Indian Railways is dedicated for ensuring hygiene and sanitation at Railway premises. Join us in keeping our Railways premises clean



Safai Karmi on the job



Mass cleanliness drive for 'Swachhata Hi Seva' 2024. Working together for a cleaner and greener future.



Clean railway station



Neat and clean Abhor Junction



Scouts and Guides campaigned to raise awareness about cleanliness



Nukkad natak performance during 'Swachhata Hi Seva' 2024

Chairman & CEO Conducted Intensive Inspection of Ahmedabad and Gandhinagar Capital Stations



Shri Satish Kumar, Chairman & CEO on 16th September, 2024 conducted an intensive inspection of Ahmedabad and Gandhinagar stations. Shri Kumar also reviewed the progress of the ongoing redevelopment work at Ahmedabad Railway Station.

During his visit, Shri Kumar convened a meeting with senior officials of Ahmedabad Division as well as from RLDA to discuss the progress of various ongoing rail infrastructural projects in Gujarat, including the redevelopment of Ahmedabad station. At Gandhinagar Capital Station, he inspected the electronic interlocking system, points and crossings from safety perspective and interacted with local railway staff. He also interacted with railway workers such as Gangmen and Keymen and gathered their insights on important safety-related aspects.

Shri Kumar also visited the Wagon Maintenance Depot at Sabarmati Yard. He interacted with the running staff at Sabarmati's Running Room and took stock of the facilities being provided to them by the railway. During the course of inspection, Shri Kumar also visited the Operation Command Center of the Western Dedicated Freight Corridor located at Sabarmati and held discussions with Shri Manish Awasthi, CGM, DFCCIL.

Shri Kumar was accompanied by Shri Ashok Kumar Misra, General Manager, Western Railway and other senior officials from Division and Headquarters.■

International Seminar of the Institution of Permanent Way Engineers held

The two-day conference of the Institutions of Permanent Way Engineers (IPWE) 2024 was held on 30th and 31st August, 2024 at Gandhinagar, Gujarat. The Chief Guest of the event was Shri Anil Kumar Khandelwal, Member Infrastructure who is also Patron, IPWE.

Shri Ashwini Vaishnaw, Minister of Railways, in his congratulatory message delivered through video conferencing, wished the seminar all success and informed that the engineers of Indian Railways are among the best engineers in the world. Railways is the vehicle of the poor and middle class as well as the common people. In such a situation, how we bring new technology and new facilities and the innovations related to the track are very important.

Shri Brijesh Gupta, Chairman, IPWE and Additional Member (Civil Engineering), Railway Board, Shri S.



K. Jha, Director General, Western Railway, Shri Ravindra Goyal, Vice Chairman and Chief Executive Director (Bridges), Railway Board, Shri B. P. Singh, Secretary General and Principal Chief Engineer, Northern Railway, Shri Sudhir Kumar Sharma, Divisional Railway Manager, Ahmedabad Division and senior railway engineers from various Railways across the country and other officials of the organization were present in the seminar.■

DG, RPF Paid Tribute to Police Martyrs at Hot Springs Memorial, Ladakh



Shri Manoj Yadava, Director General, Railway Protection Force along with 28 member delegation paid homage to police martyrs at Hot Springs Memorial in Ladakh on 3rd September, 2024. This visit was in a show of solidarity, Gallant officers and men of ITBP, ITBF and Indian Army who are keeping a hawk like vigil at the LAC amidst highly challenging conditions.

Shri Yadava led a 28 member delegation of Police officers representing various State Police and Central Armed Police Forces (CAPFs), along with Shri. N. Prakash Reddy, DIG, Telangana Police was the Deputy Leader of the group. Shri Raja Banthia DCP/EOW represented Delhi Police as a member of the Police delegation.

The memorial has been a sacred site for the Indian Police Forces, where tributes are paid annually in memory of sacrifice of the ten CRPF officers/ personnels, who laid down their lives while defending the nation on 21st October, 1959. The ceremony, which began as a gesture of remembrance in 1960, continues to be a highly revered tradition for Police officers across the country, serving and retired. This site is located in rugged and inhospitable terrain near the Line of Actual Control (LAC) in Eastern Ladakh at an altitude of 15,400 feet above sea level.

The Police delegation had the honour of meeting Mr. Sonam Dorjey, an 86-year-old veteran and a living legend and member of the patrolling party who bravely stood against Chinese troops during the fateful 21st October, 1959, where he was captured. His resilience and courage remain an inspiring chapter of history.

This year's pilgrimage marked a significant milestone as Shri Manoj Yadava became the first DG of the Railway Protection Force to lead the delegation. His participation along with a team of Police officers from diverse Forces, reinforces the unity, strength and camaraderie shared among the various Police Forces in India.

While dedicating this pilgrimage to the 1011 brave personnel of Railway Protection Force who have laid down their lives in line of duty since the Force's inception in 1958, DG RPF reiterated the commitment of RPF to the spirit of duty, valour and sacrifice exemplified by the brave hearts of 1959, whose memories will forever be enshrined in the annals of Police history.

Shri Manoj Yadava's visit and his participation in this solemn event serve as a source of inspiration for all members of the law enforcement community. It is a poignant reminder of the sacrifices made by Police officers in the service of the nation and reinforces the enduring spirit of duty, valour and commitment that defines the Indian Police fraternity.

Western Railway HQ Visited by Director General, RPF



Director General, Railway Protection Force, Shri Manoj Yadava visited the Headquarters of Western Railway on 15th and 16th July, 2024. Shri Yadav met Shri Ashok Kumar Mishra, GM, WR and interacted with key heads of departments. Shri Yadav also inaugurated some major projects and also held a meeting with RPF officers and employees. Shri Yadava e-inaugurated the new RPF Barracks and RPF Office.■

D.G. Railway Health Services Visited SER Central Hospital

Dr. Man Singh, Director General, RHS visited South Eastern Railway Central Hospital on 12th August, 2024 and reviewed the performance of Central and Divisional Hospitals of SER. Shri Anil Kumar Mishra, GM, SER, senior officers and senior doctors were also present. Shri Singh inaugurated a Neonatal Intensive Care Unit (NICU) at the Central Hospital, Garden Reach which will provide round-the-clock best possible care to sick or preterm babies.■



BLW, RDSO and CLW Stalls were Visited by Additional Member, Production Unit



Banaras Locomotive Works, RDSO and Chittaranjan Locomotive Works participated in MET and HTS Exhibition held at Mumbai from 4th to 6th September, 2024. On 5th September, 2024, Additional Member Production Unit, Shri Sanjay Kumar Pankaj visited the BLW, RDSO and CLW stalls.

Shri Pankaj observed the running models of WAP-7 and WAG-9 and various export locomotive models displayed by BLW. The exhibition also appreciated the artefacts manufactured by BLW from scrap material, infographics related to current projects, export locomotives and electric locomotives.

RDSO presented a series of impressive exhibits, including control arms, wheel discs, Schaku couplers and the newly introduced semi-permanent coupler for Vande Bharat coaches. The display also featured detailed info-graphics and showcased the latest rolling stock innovations such as the Vande Metro, LHB Parcel Van with end openings, Vista Dome and Amrit Bharat coaches. Shri Pankaj appreciated the efforts of RDSO for the informative display of items and info-graphics.

Shri Pankaj observed various locomotive models displayed by CLW and appreciated the exhibits. Various types of infographics, models of electric locomotive WAP-5 push-pull enabled Amrit Bharat and WAG-9 was displayed in the pavilion.■

10 YEARS OF MAKE IN INDIA

A DECADE OF AMPLIFIED INDIGENOUS PRODUCTION



9,168

LOCOMOTIVES PRODUCED FROM 2014-24



54,826

COACHES PRODUCED FROM 2014-24



17,68,137

WHEELS PRODUCED FROM 2014-24





As the backbone of the nation's freight transportation, Indian Railways has been facilitating the movement of a vast array of goods across the country with an unwavering commitment to sustainability and efficiency. To meet the ambitious target of 3,000 million tonnes (MT) of freight loading by 2030, Indian Railways is expanding its network, upgrading its fleet and enhancing its operational efficiency as part of the National Rail Plan.

The freight loading statistics for August 2024 highlight the remarkable performance of Indian Railways. A total of 126.97 MT of freight was loaded in August alone, contributing to a cumulative total of 653.22 MT for the financial year 2024-25 up to August. This marks a significant increase from the 634.68 MT loaded during the same period in the previous financial year. The year 2023-24 saw a total of 1,591 MT of freight loaded, generating a substantial revenue of ₹1,68,276 crore.

Among all the commodities transported by Indian Railways, coal stands out as the most significant. As of August 2024, Indian Railways has transported 333.40 MT of coal, surpassing the 266.71 MT transported up to the same month in the previous financial year. The total coal loading for the year 2023-24 was 787.58 MT, an increase from 727.98 MT in 2022-23. Indian Railways is not limited to transporting coal and handles a diverse range of commodities essential for the Nation's economy.

The Railways transports around 48 types of coal and coke products, 54 types of minerals and ores, 37 types of food grains, flours and pulses and 23 types of cement and clinker products. Additionally, it moves 42 types of chemical manures, 75 types of iron and steel products, 39 types of petroleum products and gases and 4 types of automobiles products. There are also 2 types of container services, 51 types of sugar, salt, spices, oils and more, 13 types of pig, sponge, wrought iron and related products and 39 types of stone/bamboo chips, granite and more. Beyond these, Indian Railways also handles 219 types of other products, showcasing its vast capability in freight transportation.

Transporting materials through Indian Railways benefits the entire country. One of the most significant advantages being its contribution to environmental sustainability. Indian Railways' freight transportation efforts have proven to be a green and energy-efficient mode of transportation, saving 68 MT of carbon emissions since April 1, 2022 as trains generate up to 80% less CO_2 and consume 75-90% less energy for freight traffic compared to road transport.

With the recent infrastructural developments, we can say that the race to achieve 3,000 MT of freight loading is within sight but Indian Railways is not just focussed on hitting that numerical target by 2030. Instead, it is committed to meeting the Nation's overall demands. With initiatives like rolling stock augmentation and upgrades, Indian Railways is on track to transform into a more efficient, sustainable and future-ready transportation network.■





Flash Butt Welding of Rails Started for Mumbai-Ahmedabad Bullet Train Project in Gujarat

The process of track construction work is underway in Gujarat portion of Bullet Train project with setting up of Track construction base (TCB) near Surat and Anand. The flash butt welding of the rails to form 200 m long panels has started on the viaduct.

More than 35,000 MT of rails have been received and four sets of track construction machinery have been received for the project.

Mumbai-Ahmedabad Bullet Train project will have J-Slab on the Japanese Shinkansen track system. This is for the first time, the J-slab ballastless track system is being used in India.

The entire process of track installation is mechanized with cutting edge machinery especially designed and manufactured as per Japanese specifications. The fleet of machines include rail feeder car, track slab laying car, CAM laying car and flash butt welding machine, which will be used for track construction works.

To understand the methodology of Shinkansen track construction works extensive training and certification courses are being organised for the Indian engineers, work leaders and technicians on various activities. Japanese experts (through JARTS) in relevant fields are imparted these trainings.

Additional Information on Machines being Used for Track Related Works:

Flash Butt Welding Machine (FBWM)

The 25 m long 60 kg JIS rails are welded using Flash butt welding machine (FBWM) to form 200 m long panels at the TCB (track construction base) over the viaduct. Total 3 FBWM have been procured till now. The training for rail weld finishing and rail weld testing have been completed by the JARTS.





Track Slab Laying Car (TSLC)

Precast track slabs are lifted on to the viaduct, loaded on specially designed wagons and moved to the track laying location. By using TSLC, which can handle 5 slabs at a time, track slabs are laid in position on the RC track bed. As on date 4 TSLC have been arranged for slab laying work.

Rail Feeder Car (RFC)

200 m long panels are transported and spread over RC track bed using Rail Feeder Car and special wagons. RFC will push the rail pair over the RC bed and temporary track will be laid initially on RC track bed. Total 4 RFC have been procured till now.

Cement Asphalt Mortar Injection Car (CAM Car)

After placement of track slabs at proper place on the RC Bed, CAM car runs on the parallel track. This CAM car mixes the ingredients of CAM mix (in design proportion) and this CAM mix is injected (filled in specially prepared CAM bags) under the slab to achieve the required line and level of track. 3 CAM cars have been procured till now.

Indian Railways-Wabtec JV's Marhowra Plant to Begin Exporting Evolution Series Locomotives to Africa by 2025

Wabtec Locomotive Private Limited, a joint venture between Indian Railways and Wabtec, is expanding the capabilities of its plant to export locomotives to Africa. For the first time, the plant will manufacture locomotives for export to a global customer.

The plant will supply evolution series ES43ACmi locomotives to global customers. The ES43ACmi is a locomotive featuring a 4,500 HP Evolution Series engine, offering best-in-class fuel efficiency and proven performance in high-temperature environments. The Marhowra plant will begin exporting these locomotives in 2025.

This project is of strategic importance as it positions India as a global locomotive manufacturing hub and aligns with the 'Make in India' and 'Make for the World' initiatives under the 'Atmanirbhar Bharat' vision of the hon'ble Prime Minister. It will also enable the Marhowra plant to export standard-gauge locomotives globally, expanding the local supplier footprint and fostering long-term job creation, thereby benefitting the Indian economy.

The success of the public-private partnership between the Ministry of Railways and Wabtec has positioned the Marhowra plant as a world-class global manufacturing site, utilizing an extensive



local supplier base from across India. To date, around 650 locomotives have been manufactured and added to the Indian Railways locomotive fleet. The Ministry of Railways and Wabtec will continue to collaborate to enhance the plant's capability and competitiveness, positioning it for sustainable, long-term export production work.

The Marhowra plant, situated on 70 acres in Marhowra, Bihar, was established in 2018 to indigenously manufacture 1,000 state-of-the-art locomotives for Indian Railways. The plant provides employment to about 600 people and has been consistently delivering 100 locomotives annually to Indian Railways. It has also given a significant boost to industrial activities in the state.■

Western Railway's Initiatives to Harness Solar Energy



Western Railway is using solar energy for its power requirements and has taken various steps to increase the use of renewable energy. Till August 2024, solar panels of 13.08 MWp have been installed at 229 locations (136 stations and 93 service/office buildings/sheds/ workshops) in all 6 divisions of Western Railway. This includes 50 locations on Mumbai Central Division, 35 locations on Vadodara Division, 60 locations on Ratlam Division, 16 locations on Ahmedabad Division, 34 locations on Rajkot Division and 34 locations on Bhavnagar Division. This has also resulted into considerable saving of revenue. This is equivalent to carbon absorption capability of approx. 5.25 lakh trees. During current FY 2024-25 (till August), solar energy generation of 5.82 MU (million units) of electricity, which is equivalent to reducing carbon foot print of over 4655 tonnes and resulted in a total saving of ₹3.33 crore.■

Automatic Train Examination System: Another Step by NFR to Enhance Safety



Northeast Frontier Railway has installed a prototype Automatic Train Examination System (ATES) for the first time at its rolling in and rolling out examination point at New Jalpaiguri. ATES is an Artificial Intelligence based technology that involves capturing, processing and analysing visual data such as images and videos of rolling stocks.

The ATES unit is equipped with 4 cameras and 4 sensors, which are placed on both sides of the railway track. The moment the train passes through this stretch of railway tracks, all the cameras and sensors get activated and they monitor every movement of the train. Thus, the temperature of the axle box bearings of the train, as well as the wheel, is recorded by the sensors generating the alert messages by the system as soon as the temperature exceeds its threshold limit.■

GM, WR Inaugurated the state-of-the-art DSA Cath Lab at Jagjivan Ram Hospital



Shri Ashok Kumar Misra, General Manager, Western Railway inaugurated the state-of-the-art Digital Subtraction Angiography (DSA) Cath Lab at Western Railway's Jagjivan Ram Hospital (JRH) on 15th August, 2024. The new DSA Cath Lab machine will provide advanced cardiac care services to Railway employees and their beneficiaries. The Cardiology Department of JRH has been providing tertiary healthcare since 2012 and has successfully completed around 16,000 cardiac and non-cardiac procedures, achieving many milestones in the field of interventional cardiology.

Shri Misra felicitated 70 employees of JRH by presenting them with shields and certificates for their outstanding work during the National Accreditation Board for Hospitals (NABH) accreditation process.■

NFR Introduces Advanced Water Level Monitoring System on Trains



An advanced Water Level Monitoring System on trains was inaugurated on 16th August, 2024 in the Brahmaputra Mail Express train at Kamakhya Railway Station by the General Manager of N. F. Railway, Shri Chetan Kumar Shrivastava.

This innovative system marks a major step forward in water management on long-distance trains, designed to ensure continuous and reliable water availability for passengers. The system features programmable real-time data logging and storage, with data captured and transmitted through a Hydrostatic Pressure Sensor that measures water levels with an accuracy of 0.5% across a range of 1m to 5m, even in temperatures from 0°C to 70°C.■

NFR Enhanced Safety and Efficiency of Train Operation with Provision of Dual Gate Phones at LC Gates



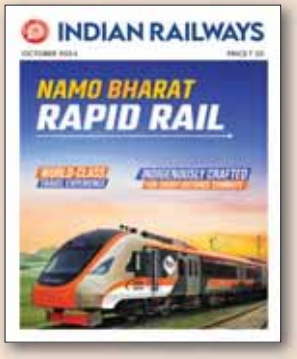
Northeast Frontier Railway is installing Dual Gate Phones at level crossing gates across its network in addition to the existing gate phones. This initiative aims to significantly reduce punctuality losses and enhance safety measures. The introduction of Dual Gate Phones facilitates seamless communication between gateman and station masters, ensuring timely coordination. Out of 1447 Level crossing gates in NFR, till date 1030 gates have been provided with Dual gate phone. Non-interlocked level crossing gates have also been provided with voice recording facilities. 40 LC gates in the Katihar division, 253 gates in Alipurduar Division, 290 gates in Rangiya Division, 163 gates in Lumding division and 284 gates in Tinsukia division have already been provided with dual gate phones.■

8 employees of BLW awarded by Home Ministry for outstanding work in Civil Defence Organization



8 members of Civil Defence Organization working in Banaras Locomotive Works S/Shri Santosh Kumar, S.Gururajan, S.K. Srivastava, Sudhir Kumar Dubey, Dinesh Dhar Dubey, Suresh Kumar, Pradeep Kumar Tiwari and Sanjay Kumar Rawat were awarded the Director General, Civil Defence Award-2023 by the Executive Director Civil Engineering/G, Railway Board in the award distribution ceremony held at Ministry of Railways, New Delhi on 28th August, 2024.■

OUTLET FOR PURCHASE/SUBSCRIPTION OF MAGAZINES PUBLISHED BY MINISTRY OF RAILWAYS



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'Rail Madad'-Railway Passenger's Helpline App.

Customer service and quality is the topmost priority of Railways. Indian Railways has released an app called 'Rail Madad', which includes all the helpline numbers issued earlier. Passengers also get help through 'Rail Madad' by calling helpline number 139. Some of the help sought by railway passengers on Rail Madad include, if a passenger needs essential medicines during the journey, someone needs milk for a child, someone has lost his luggage or a woman is travelling alone, many times passengers have to seek help from vendors. Railway passengers also seek help for complaints or anti-social activities in their surroundings.

Along with this, problems like cleanliness, fans not working, less or more cooling in AC, switch-sockets not working, bedrolls, running out of water in toilet etc. are being solved quickly. In South East Central Railway, with the aim of providing quick help to railway passengers in about 10 minutes, war rooms have been set up in the control rooms of all three railway divisions, Bilaspur, Raipur and Nagpur.

Where efforts are made to provide the help sought by railway passengers by railway personnel available 24x7 hours all the time, Railway personnel from all departments, including Railway Protection Force, have been deployed on duty in the war room. To complete the help sought by the passengers, the personnel of the relevant departments present in the war room immediately



contact the field staff, and help is provided to the passenger.

3,440 helps sought by passengers on the Rail Madad App has been 100% resolved from July 1 to July 21, 2024 in all three railway divisions including the headquarters in South East Central Railway. The feedback received from passengers after diagnosis has given an average rating of Excellent. Rail Madad App provides continuous information to passengers regarding the status of resolution of assistance requests received from them. After registration on this app, the passenger will get the help number requested by him immediately through SMS.■



In an effort to enhance the health and well-being of passengers arriving at railway stations, Indian Railways has conceptualized a policy framework for setting up 'Pradhan Mantri Bhartiya Janaushadhi Kendras' (PMBJKs) in circulating areas and concourses of stations, which will be operated by licensees. Under the first pilot project, 4 stations have been identified in SECR in which Jan Aushadhi Kendra facility has been started at Naila, Pendra Road, Nagbhid and Nainpur stations. Similarly, under the second pilot phase, work is in progress at 3 stations namely Bilaspur, Anuppur and Netaji Subhash Chandra Bose (Itwari) stations of South East Central Railway.■

General Manager Felicitates the Vigilant Security Guard



On 2nd August, 2024, 2 staff working in Raipur Division were felicitated by Ms. Neenu Itiera, General Manager, South East Central Railway for their excellent and commendable safety performance. Shri Aditya Kumar Das, Track Maintainer Grade-PP, Raipur Railway Division, Tilda, on 27th June, 2024, while working as gatekeeper at level crossing No. 395 (Km. 786/31-33), noticed a hot axle incident in a long-haul train moving in the up line which could have caused a possible accident. He immediately took action and informed the Station Master, Tilda, who carried out necessary rectification work. Due to Shri Das's alertness, safety in train operations was ensured.

Similarly, Shri Deenbandhu, Track Maintainer Grade-Pt/Balod, on 21st June 2024, while working as gatekeeper in level crossing No. DD-39 (Km-910/7-8), noticed hot axle in Train No. 243 going from Latabor to Gunderdehi, which could have caused a possible accident. Due to Shri Deenabandhu's alertness train accident was averted.■

The Facility of QR Code for Online Payment will be Available at all Ticket Counters

Indian Railways is taking innovative measures with the incorporation of digital technologies, including Mobile Ticketing System for booking reserved tickets and UTS on Mobile App for processing unreserved tickets. Online digital payment facility through QR code device has been initiated in reserved and unreserved ticket counters in South East Central Railway.

Under this, 500 QR code devices have been made available in South East Central Railway with an aim to provide easy travel tickets to the passengers buying tickets from the reserved and unreserved ticket counters in a short time and to get rid of the problem of confusion and to further promote the facility of digital payment. These QR code devices will be installed at 205 ticket counters under Bilaspur railway division, 95 ticket counters under Raipur railway division and 200 ticket counters under Nagpur railway division. All these QR code devices will be installed in all these reserved and unreserved ticket counters of South East Central Railway by September 2024 and passengers will start getting the benefit of this facility. However, at



present, the facility of QR code in unreserved ticket counters at some stations of SECR has been given in DDIS (Dual Display Information System). All the facilities like QR code, UPI, ATVM and UTS on Mobile App have been introduced to provide quick travel tickets to the railway passengers without long queues as well as easy digital payment facilities including change, etc. All passengers are requested to make the most of this facility and make their journey smooth and easy.■



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Sports News





The 89th All India Rail Athletic Championship-2024 was held from 9th to 11th August 2024 at Modern Rail Coach Factory. A total of 48 events were held i.e. discus throw, javelin throw, hammer throw, triple jump, run, long jump, high jump, walk, shot put, pole vault, etc. The Best Female Athlete award went to Lily Das of Eastern Railway while the Best Male Athlete award went to Tejas Shirse of Central Railway. Eastern Railway won the Women's Team Championship and Southern Railway was the runner-up. South Western Railway won the Men's Team Championship and Central Railway was the runner-up.

North Central Railway won a total of 6 medals. In the event, Ajit Kumar finished second in the 5,000 m Race. Ramandeep Kaur finished second in the 35 km Walk. Dhirender Yadav jumped 4-50 m to finish third in Pole Vault. Bhupinder Singh finished third in the High Jump. Aijaz Ahmed finished third in the Hammer Throw with a throw of 54-25 metres.

Shri Prashant Kumar Mishra, General Manager, MCF, gave away the prizes to the winners. Munita Prajapati won the Gold medal in 20 km Women's Walk, Somnath won the Gold medal in 800 m, Payal won the Gold medal in 35 km Walk, Nanhi won the Silver medal in 400 m Hurdles and Ardika won the Gold medal in 4x400 m mixed relay race.

South Western Railway has emerged as the top performer at the All India Inter Railway Athletics Championship. With a tally of 136 points, SWR clinched the championship title, surpassing Southern Railway who finished as runners-up with 110 points, and Western Railway who secured the second runner-up position with 101 points. In addition to the overall championship, SWR also excelled in individual categories. SWR also won the Men's Team Championship, while the Women's team earned the 2nd Runner-Up trophy. SWR has secured a total of 20 medals which includes 2 Gold Medals, 6 Silver Medals and 12 Bronze Medals.■





Shri Rohit Yadav, BLW won the Silver medal by throwing the javelin 76.20 meters, while Shri Ajay Kumar Bind of BLW won the Bronze medal by completing the 1500 meter race in 3:46:65 time. About 600 players from 24 teams including 15 railway zones, 6 production units, RPF, RDSO and Railway Board participated.

In the 63rd National Open Athletic Championship held in Bangalore from 30th August to 2nd September 2024, Shri Rohit Yadav of BLW won the Bronze medal by throwing the javelin 79.31 meters. The players were congratulated by General Manager, Shri Abhay Bakre, General Manager, BLW.■



The 20th Men's and 14th Women's All India Inter Railway Power Lifting Championship 2024 was held from 5th to 9th July, 2024 at Mahalaxmi Sports Complex, Mumbai. The Power Lifting team of South East Central Railway won the runner-up title by scoring 46 points. The players of the team were congratulated by Ms. Neenu Itiera, General Manager, South East Central Railway.■



The 70th All India Inter Railway Table Tennis Championship 2024-25 (Men & Women), concluded on 16th August, 2024. General Manager, N.F. Railway, Shri Chetan Kumar Shrivastava felicitated the winners and presented the trophies and prizes.

South Eastern Railway among all the participated zones emerged victorious in both the Men's and Women's Team Championships. In the Women's Singles category, Anusha Kutumbale of Western Railway clinched the championship title. In the Men's Singles category, Ronit Bhanja of Eastern Railway became champion.■



Shri Yogesh Mohan, DRM, Bengaluru DIvision and President of Bengaluru Division Sports Association congratulated the members of SWR Badminton Team for their outstanding performance in the 71st All India Inter Railway Badminton Championship 2024 held at Gorakhpur.

The SWR badminton team comprising of Shankar, Prithvi, Daniel, Upender, Shri Girish, Ganesh, Siddarth and Nitin from Bengaluru Division won Silver medal in the team event. In Men's Doubles category Shankar Prasad, and Sai Pratheek emerged as winners, while Pruthvi Roy and Ganesh Vittalji won the Bronze medal.■



International Master Shri Neelash Saha won the Bronze medal at the 61st National Chess Championship 2024 held in Gurugram, Haryana.■

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Progress Report



All set to redefine the future of travel, a 1000th full-span girder was cast at the casting yard in Vadodara, Gujarat.

22nd September, 2024



Redefining quiet, high-speed Rail travel, over 1,75,000 noise barriers have been installed on the Mumbai-Ahmedabad Bullet Train Viaduct in Gujarat. For every 1 km stretch, 2,000 noise barriers are placed, with 87.5 km of the noise barriers already installed.

25th September, 2024

Ahmednagar-Beed-Parli New Rail Line Project (261.25 km)



5th September, 2024

Length commissioned: 132.92 km

Benefits

- Better connectivity in New Ashti, Ahmednagar, Beed and nearby areas.
- Boost socio-economic development of Marathwada region.

New Bongaigaon–Agthori via Rangiya Doubling Project (142.97 km)



12th September, 2024

Length commissioned: 108.68 km

Benefits:

- Ease commute for travellers from Barpeta, Nalbari, Rangia to Guwahati
- Boost local craftsmanship of Bongaigaon, Chirang, Barpeta, Nalbari, Baksa and Kamrup districts

Anuppur-Katni 3rd Rail Line Project (165.5 km)



101 Km Rail Line Commissioned

Upon completion

- Boost coal transportation from Chhattisgarh via Katni
- Ease traffic flow between Chattisgarh and MP
- Drive tourism to Bandhavgarh National Park

7th September, 2024

Bhairabi-Hortoki Rail Section (16.725 km)



Commissioned {Part of Bhairabi-Sairang Rail Line Project (51.38 km)} after CRS inspection

Benefits

- Enhance connectivity
- Boost tourism in Mizoram
- Fillip to small-scale industries

11th September, 2024

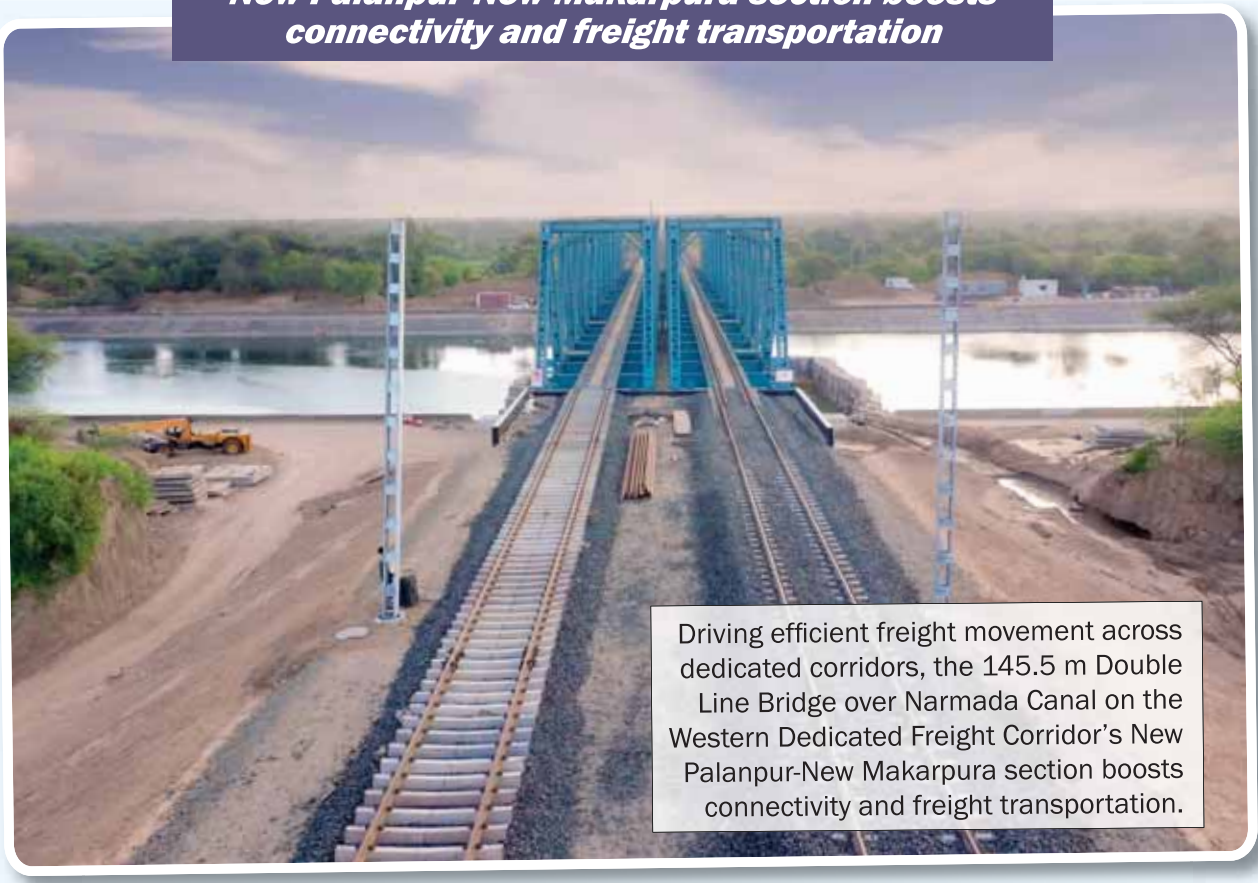
Steel Bridge over River Tapi in the Surat-Vadodara Section



Steel bridge over River Tapi in the Surat-Vadodara Section of the Western Dedicated Freight Corridor showcases Indian Railways' commitment to connectivity and progress.

28th August, 2024

New Palanpur-New Makarpura section boosts connectivity and freight transportation



Driving efficient freight movement across dedicated corridors, the 145.5 m Double Line Bridge over Narmada Canal on the Western Dedicated Freight Corridor's New Palanpur-New Makarpura section boosts connectivity and freight transportation.

13th September, 2024

Rishikesh-Karnaprayag New BG Rail Line Project (125.20 km)



19th September, 2024

Work in Progress:

- Construction of 11 stations
- Tunnel work: 176 km/213 km

Benefits:

- Enrich connectivity to Char Dham
- Boost Rail connectivity in 5 districts

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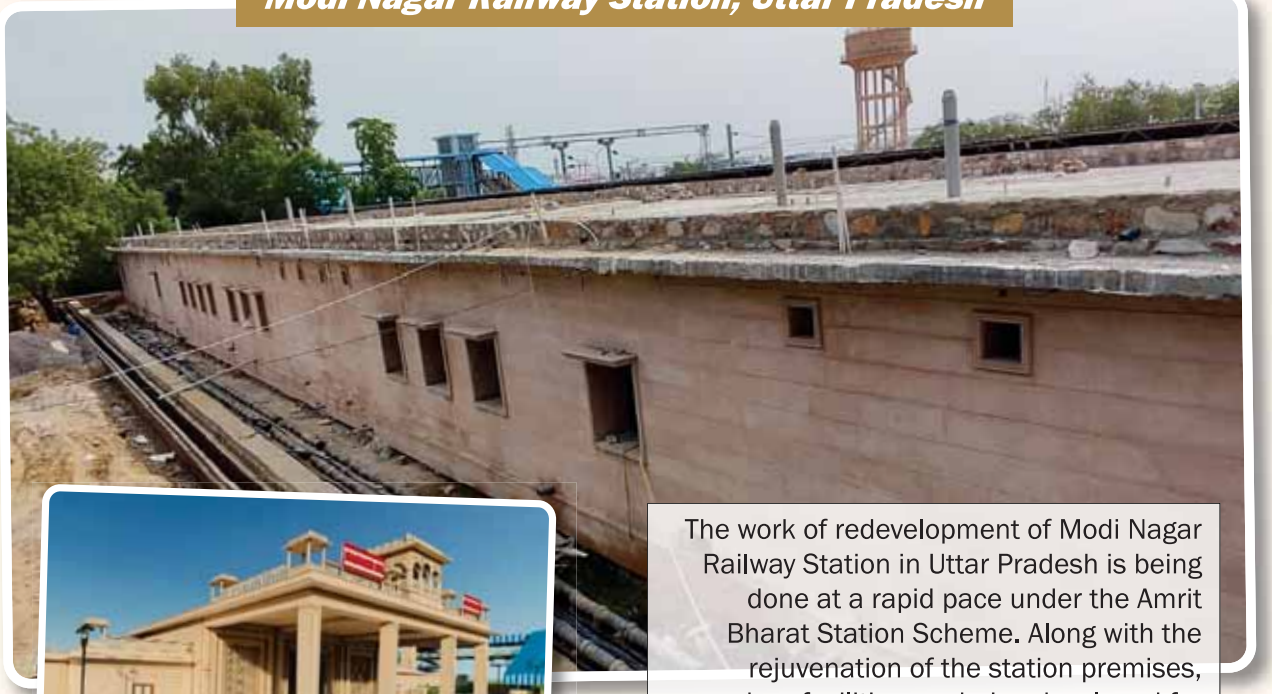
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Station Redevelopment Progress Report

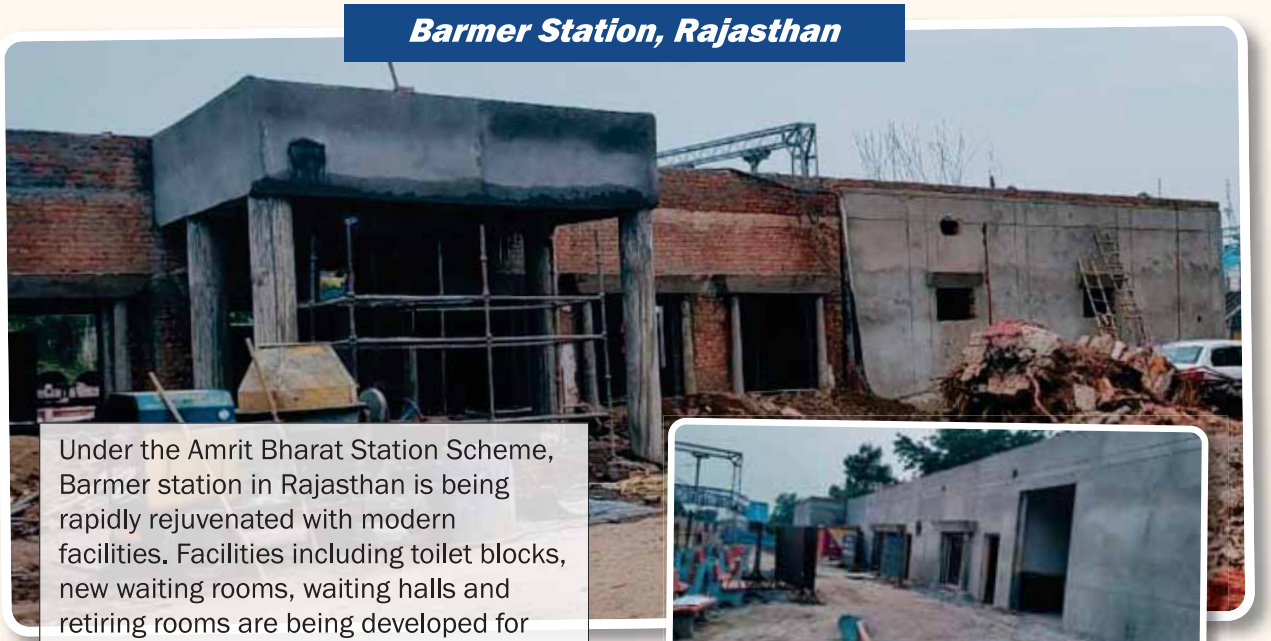
Modi Nagar Railway Station, Uttar Pradesh



24th August, 2024

The work of redevelopment of Modi Nagar Railway Station in Uttar Pradesh is being done at a rapid pace under the Amrit Bharat Station Scheme. Along with the rejuvenation of the station premises, modern facilities are being developed for the Divyangjan and other passengers.

Barmer Station, Rajasthan



Under the Amrit Bharat Station Scheme, Barmer station in Rajasthan is being rapidly rejuvenated with modern facilities. Facilities including toilet blocks, new waiting rooms, waiting halls and retiring rooms are being developed for the convenience of Divyangjan and other passengers.

4th September, 2024

Saharsa Railway Station, Bihar



The Saharsa station in Bihar is being redeveloped at a rapid pace under the Amrit Bharat Station Scheme. During this period, modern facilities are being developed at the station for senior citizens, Divyangjans and common passengers.

6th September, 2024

Jhunjhunu Railway Station, Rajasthan



14th September, 2024

Set to bring enhanced facilities for all passengers

Work In Progress:

- Redevelopment of Railway premises
- Separate parking spaces for Divyangjan
- New waiting and VIP rooms
- Separate entry and exit gates
- 12 m wide FOB

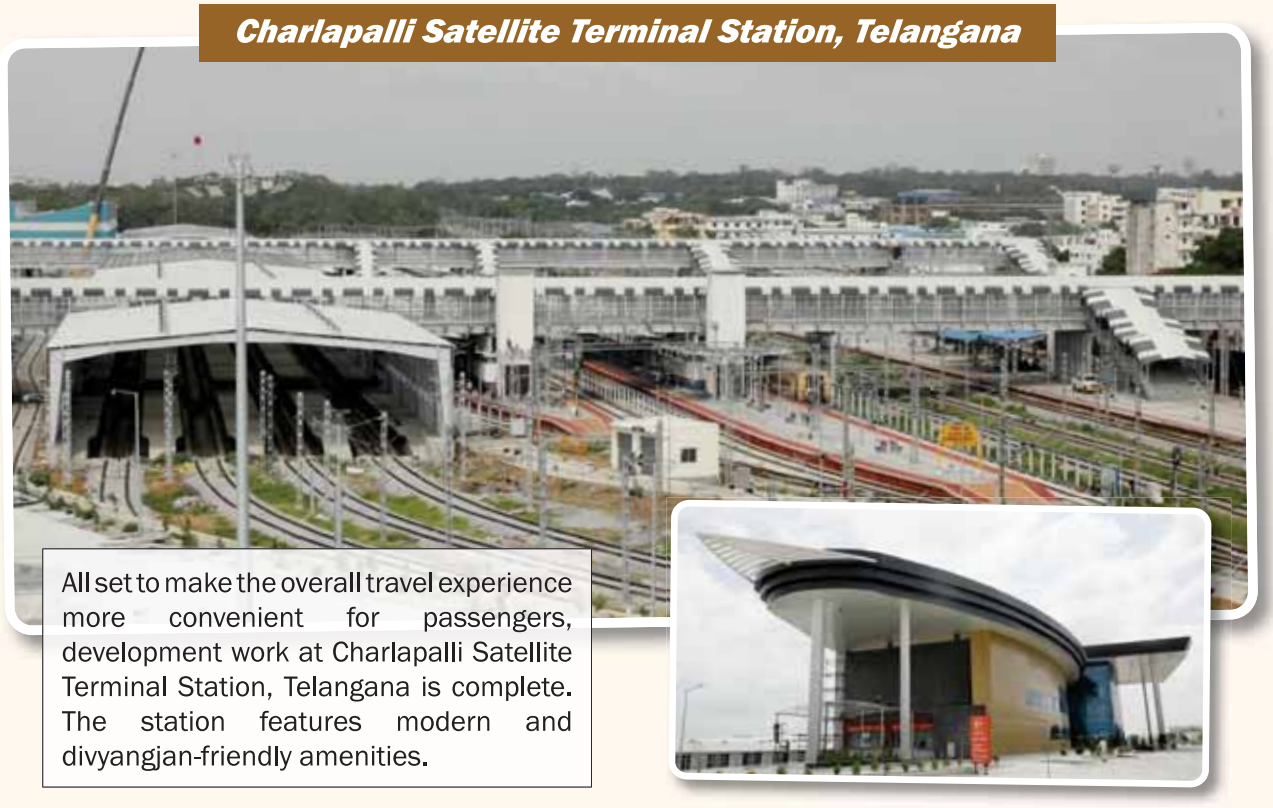
Prayag Junction, Uttar Pradesh



21st September, 2024

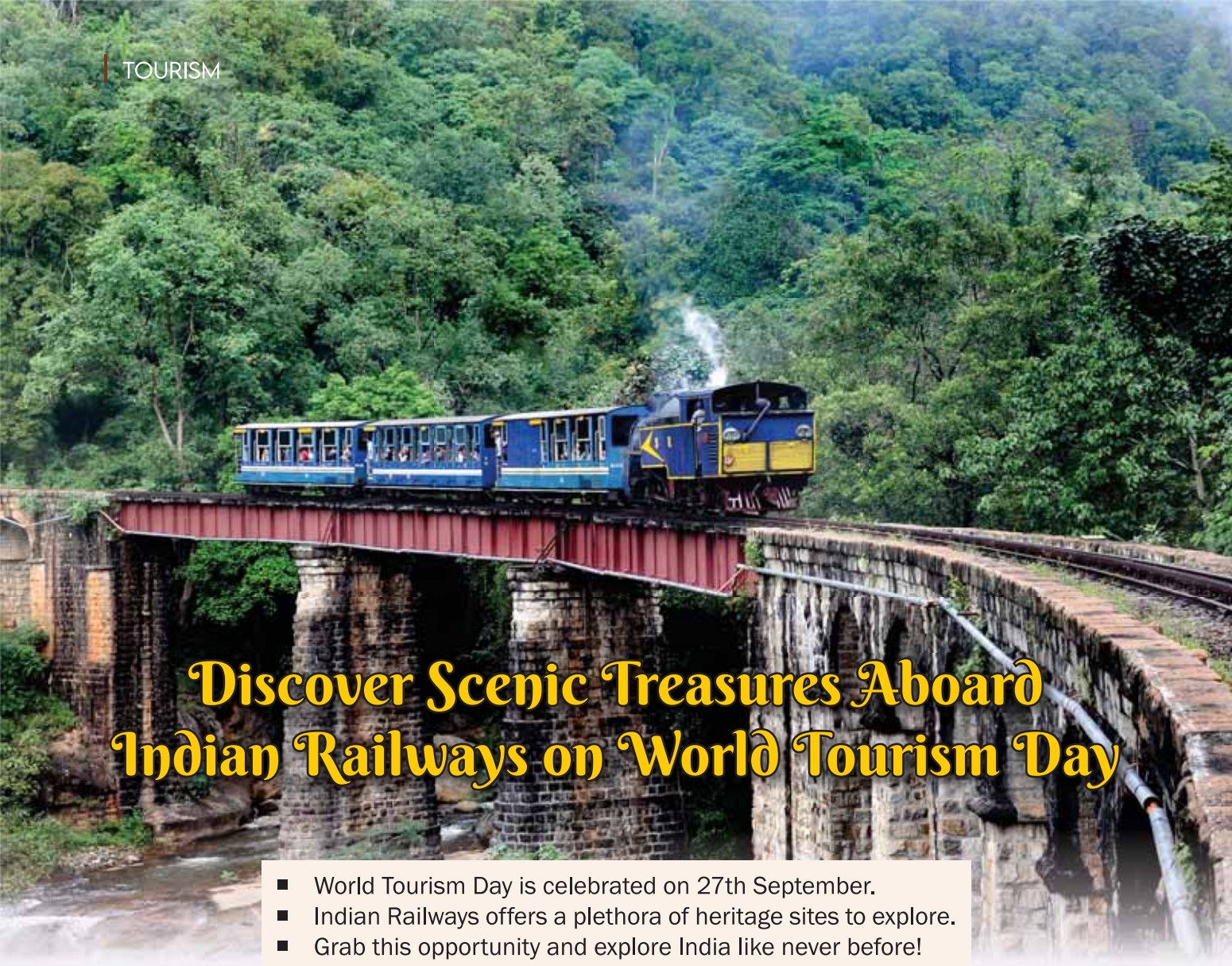
Under the Amrit Bharat Station Scheme, the Prayag Junction Railway Station of Uttar Pradesh is being redevelopped at a rapid pace. The station building is being given a grand look and modern passenger facilities are being developed in accordance with the future requirements.

Charlapalli Satellite Terminal Station, Telangana



All set to make the overall travel experience more convenient for passengers, development work at Charlapalli Satellite Terminal Station, Telangana is complete. The station features modern and divyangjan-friendly amenities.

23rd September, 2024



Discover Scenic Treasures Aboard Indian Railways on World Tourism Day

- World Tourism Day is celebrated on 27th September.
- Indian Railways offers a plethora of heritage sites to explore.
- Grab this opportunity and explore India like never before!

As the world celebrates World Tourism Day on 27th September, what better time than this, to explore the rich heritage and bountiful scapes of India. Passing through numerous breathtaking vistas, Indian Railways offers a plethora of heritage trains. From UNESCO recognised trains and Railway stations to scenic spots across train journeys, Indian Railways offers a wide variety of touristic journeys with its extensive network. Indian Railways plays a crucial role in boosting the Indian travel industry, providing travellers with a unique way to experience the country's diverse beauty and cultural wealth. Rail journeys not only link well-known attractions but also promote lesser-explored locations.

A multitude of Indian Railways museums depict the history and legacy of this widespread network across the Nation. From old engines that played a crucial part in running the Railways to old but gold photo galleries, Railway museums for sure take you on a journey through time. Rail museums give an insight into what goes on behind running a train. Notable museums include the one at Ghum Railway Station, the DHR Archive Museum at Kurseong, and the photo gallery at Sukna Railway Station in West Bengal, all of which house rare historical artefacts and archives, offering passengers a scenic trip through India's rich Rail heritage.

Darjeeling Himalayan Railway (DHR)

Inscribed as a UNESCO World Heritage site in 1999, the Darjeeling Himalayan Railway, or 'Toy Train,' offers a scenic journey through the Himalayan foothills, connecting New Jalpaiguri with Darjeeling. Travellers enjoy breathtaking views of tea gardens, misty mountains and deep valleys.



Darjeeling Himalayan Railway

Nilgiri Mountain Railway (NMR)

Recognised in 2005, the Nilgiri Mountain Railway climbs from Mettupalayam to Ooty using a unique rack and pinion system. Covering 46 km, the route passes through lush landscapes, tunnels, and picturesque hill stations like Coonoor, offering stunning views of the Nilgiri hills.



Nilgiri Mountain Railway

Kalka-Shimla Railway (KSR)

Added to the UNESCO list in 2008, the Kalka-Shimla Railway is renowned for its engineering marvels, including steep gradients, 103 tunnels, and 800 bridges. It offers a charming journey through the Shivalik hills, with panoramic views of forests, valleys, and mountains.



Kalka-Shimla Railway

Neral-Matheran Railway

A heritage narrow-gauge Railway, the Neral-Matheran line takes passengers through the Western Ghats to the hill station of Matheran. The 21 km route, known for its scenic beauty, winds through dense forests and sharp curves, offering a peaceful retreat from urban life.



Neral-Matheran Toy Train



Kalka - Shimla Train



Chhatrapati Shivaji Maharaj Terminus, Mumbai

Vistadome coaches, introduced by Indian Railways, offer passengers a panoramic travel experience with wide windows, glass rooftops, and rotating seats. These coaches allow travellers to immerse themselves in the scenic beauty of India's landscapes, from lush forests to rolling hills. Popular on routes like Mumbai-Goa and the Araku Valley, Vistadome coaches have significantly enhanced Rail tourism. By offering such unique travel experiences, Indian Railways is boosting tourism, attracting both domestic and international tourists to explore India's natural wonders.



Vistadome Coach

Bharat Gaurav trains, introduced by Indian Railways, are special theme-based trains designed to showcase India's rich cultural and spiritual heritage. These trains offer curated journeys to important pilgrimage destinations, such as Varanasi, Ayodhya, and Rameshwaram, with onboard facilities and immersive experiences reflecting India's traditions. By promoting seamless travel to revered sites, Bharat Gaurav trains are boosting spiritual tourism, attracting pilgrims and tourists alike to explore India's profound spiritual legacy, while enhancing connectivity and comfort for religious journeys.

The building of the Chhatrapati Shivaji Maharaj Terminus, Mumbai (CSMT), inscribed in 2004 is an outstanding example of late 19th-century Railway architecture characterised by Victoria Gothic Revival and traditional Indian features as well as its advanced structural and technical features.

Other mountain Railways that offer scenic views are the Patalpani-Kalakund Heritage Train, Matheran Light Railway and Kangra Valley Heritage Train. While travelling on an Indian Railways train, one can't miss out on beautiful views of Dudhsagar Falls, Thal Ghat, Bhor Ghat and Pal Ghat on the Maharashtra-Goa route.

In celebration of World Tourism Day, exploring India's heritage trains offers a unique blend of scenic beauty and cultural richness. Indian Railways not only showcases stunning landscapes but also preserves the Nation's Railway history, inviting travellers to embark on unforgettable journeys through time and nature. Hence, Indian Railways boosts the travel industry by offering unique journeys through India's diverse landscapes and rich cultural heritage.■

Cyber Security – Implementation in Traction SCADA System in Indian Railways

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Abstract: Cyber security is a critical aspect of protecting railway systems from emerging threats. As the trend of cyber-attacks continues to rise globally, railway networks face significant risks to public safety, operational disruptions, and data breaches. Indian Railways, being a vital part of the country's transportation infrastructure, relies heavily on the Supervisory Control and Data Acquisition (SCADA) system for smooth and efficient operation. Recently, the SCADA System of Indian Railways was designated as Critical Information Infrastructure by the National Security Council Secretariat, Govt. of India. To safeguard this critical infrastructure, robust cybersecurity measures are essential. These include network isolation, implementing DMZ (Demilitarized Zone), using unidirectional gateways, firewalls, intrusion prevention systems (IPS), intrusion detection systems (IDS), encrypted communication, strong alphanumeric passwords, asset management, and vulnerability assessments. Additionally, leveraging emerging technologies like artificial intelligence (AI) and machine learning can enhance active scanning of network traffic for detection of anomalies and vulnerabilities. Overall, staying vigilant and continuously learning about evolving cyber security threats is crucial in this ever-changing landscape.

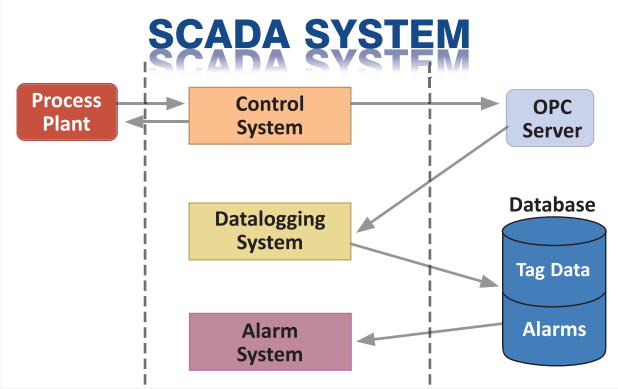
Introduction: Cyber security is gaining popularity given the current Covid-19 scenario and the entire world becoming virtual. According to a research study by Deep Instinct, ransom ware increased by 435% in 2022 compared with 2021. These numbers show that this is likely to increase in 2023 and in the future. This shows how crucial it is to have cyber security. Recently, SCADA (Supervisory Control and Data Acquisition) has been declared as a Critical Information Infrastructure (CII). As per IT Act 2000, CII are those 'Computer Resources', the incapacitation or destruction of which, shall have debilitating impact on National Security, Economy, Public Health or Safety. Therefore, Cyber Security in SCADA System becomes more than ever important today.

2. SCADA: A Brief Overview

SCADA which stands for Supervisory Control and Data Acquisition is a computer-based system for gathering and analyzing real-time data to monitor and control equipment that deals with the critical and time-sensitive materials or events. SCADA systems include hardware and software components. The hardware gathers and feeds data into field controller systems, which forward the data to other systems that process and present it to a human-machine interface (HMI) in a timely manner. SCADA systems also record and log all events for reporting process status and issues. SCADA applications warn when conditions become hazardous by sounding alarms. In railways, data is acquired from the field devices like Circuit Breakers ON/ OFF status, relays, alarms etc. by the Remote Terminal Unit (RTU).

The RTU is an electronic device utilizing a microprocessor, which links objects in the physical world with an automation system. This is accomplished by transmitting telemetry data to the system and/or changing the physical state of connected objects based on control messages received from the automation system. Data from RTU is sent over to the SCADA present in the Remote Control Centre (RCC) via proper communication channels like RS 485 Cable or OFC Cable. The controlling of the field devices is

done through command sent by SCADA via RTU to field devices.The communication protocol for the communication between field devices and RTU is on IEC 60870-5-103, IEC 61850 or MODBUS and the communication between RTU and SCADA is on IEC 60870-5-104 protocol.



A Typical SCADA System

3. What is Cyber Security?

Cyber security refers to protecting systems connected to the internet from threats in cyberspace, some of them business critical. It involves protecting an organization's software, data, and hardware and helps prevent cybercriminals from gaining access to devices or their networks. It is the art of protecting our networks and devices from unauthorized access. Unauthorized access here refers to a small or big cyber-attack or a cyber-threat.



3.1 Various forms of Cyber Threats

There are various types of cyber-attacks that we can fall prey to, the most common ones being the following:

a) **Phishing:** It is the practice of sending fraudulent communications that appear to come from a reputable source. It is usually done through email. The goal is to steal sensitive data like credit card and login information, or to install malware on the victim's machine.

b) **Man in the middle attack:** This type of attack involves the cybercriminal intercepting conversations or data transmissions between multiple people. An example would be a cyber attack using an unsecured Wi-Fi network to intercept the data that the victim sends from their computer to the network.

c) **Malware Attack:** Malware attacks are any type of malicious software designed to cause harm or damage to a computer, server, client or computer network and infrastructure without any end-user knowledge. It is mostly used to steal personal, financial or business information.

d) **Ransomware:** Ransomware infects machines, encrypts files and holds the needed decryption key for ransom until the victim pays. Ransomware attacks targeting enterprises and government entities are on the rise, recent attack being on AIIMS Public Healthcare Institute in which the critical files have been encrypted and an undisclosed amount has been sought in cryptocurrency for the decrypt key. Examples: Wanna Cry, Petya and Loki etc.

e) **DDOS Attack:** Distributed Denial of Service attack involves multiple connected online devices, collectively botnet, which are used to overwhelm a target website with fake traffic.

f) **Password Attack:** These attacks are malicious ways hackers attempt to gain access to an account. Examples of password attacks are brute-force attack, credential stuffing and password spraying.

4. Why Cyber Security is Important for SCADA?

The importance of Cyber security comes down to the need and requirement to keep information, data and devices secure. In today's world, people store vast quantities of data on computers, servers and other connected devices. Much of this is sensitive and it can cause havoc if a cybercriminal gains access to it. They can share sensitive information, use passwords to steal funds, or even change data so that it benefits them. In case of SCADA without

proper security from the Cyber threats, it can severely affect daily services of Railways causing a debilitating impact on national security, economy, public health and safety.

At any point, the CIA, which stands for Confidentiality, Integrity, and Availability are being implemented in any organization to ensure that the information is secure. There is a great demand for professionals like Ethical Hackers, CISOs, and many more cyber security experts who can implement Cyber Security and safeguard an organization's data.

There can be many intentions for cyber-attacks. Some of them are:

a) **Financial Gain:** Many phishing attacks are conducted by hackers to collect the bank details of individuals like card numbers, account login details, passwords, etc. This is then used by them to transfer money to their own account. They also use attacks like Ransomware on the entire organization for money.

b) **Recognition and Popularity:** In general, every human feels happy when everyone recognizes them. This kind of act is done by hacking social media accounts and increasing their followers or likes.

c) **Data exfiltration and Injection:** This includes stealing of sensitive data from an organization and tampering with it. They could sell those data or just submit incorrect data to a system without detection, causing trouble to the organization.

Another very common type of attack is the Hardware Attack. These are attacks that are launched on hardware which exposes its vulnerability. It is classified into 2 types: Invasive and Non-Invasive.

Invasive Hardware attacks are where the physical properties of the electronic chips in the hardware board are irreversibly modified. One of the most well-known invasive attacks is called Micro probing. In this attack, microscopic needles are attached to the internal wiring of the chips. The purpose of this attack can be to either read out internal secrets that are not intended to leave the chip, or it can be used for fault attacks. While the equipment required for Micro probing may sound expensive, the second-hand market makes all attack equipment available even for individuals.

This makes it important to research on low-cost protection mechanisms. For invasive attacks, it is vital to remove the upper packaging of the chip. This is done by the process of manual decapsulation which usually starts with milling a hole in the package and pouring nitric acid on it so that it only affects the desired area above the chip dye.

Non Invasive Hardware Attacks are any hardware attacks that happen on the system PCB hardware which does not damage any chip packages directly. The procedure for such attacks is:

- Attacker opens the physical covering of the system.
- Attacker can either tap the wires to the device, or plug it into a test circuit for the analysis.
- No tamper evidence is left after they are applied.
- Once found, these attacks could be easily replicated and does not involve very much cost.

Mostly, attacks that happen on the FDUs are Non Invasive attacks.

To save them from these cyber threats, a person must follow some basic protocols:

- Never share their personal information like bank details, One Time Passwords (OTP), ATM pin, etc. with anyone.
- Do not open suspicious websites while surfing on the internet.
- Do not click on any links received on any social media by anonymous people.

5. Implementation of Cyber Security in SCADA

Cyber security is directly linked to the Cyber Physical System which consists of 2 types – IT and OT. IT or Information Technology are systems of hardware or software that can capture, process, exchange, store, and present information using electrical, magnetic, or electromagnetic energy. OT or Operation Technology collects information and causes changes in the physical world through the

direct monitoring and control of physical devices. SCADA is an example of Operational Technology.

A few ways to implement cyber security in SCADA are:

a) **Defining clear boundaries and configuring the Demilitarized Zone (DMZ):** A demilitarized zone network, or DMZ, is a subnet that creates an extra layer of protection from external attack. It is a physical or logical subnetwork that contains and exposes an organization's external-facing services to an untrusted network, usually a larger network such as the Internet.

b) **Using network security control devices like Firewall:** A firewall is a network security system that monitors and controls incoming and outgoing network traffic based on predetermined security rules. A firewall typically establishes a barrier between a trusted internal network and untrusted external network, such as the Internet.

c) **Configuring IPS/IDS:** An intrusion prevention system (IPS) is a network security tool (which can be a hardware device or software) that continuously monitors a network for malicious activity and takes action to prevent it, including reporting, blocking, or dropping it, when it does occur.

d) **Using Unidirectional Security Gateway:** Unidirectional Security Gateways are a combination of hardware and software. The hardware permits data to flow from one network to another, but is physically unable to send any information at all back into the source network. In case of SCADA, since Energy Management Server (EMS) is connected to Web Server, therefore, unidirectional gateway will be between EMS and SCADA Network so as to allow the flow of data from SCADA network towards EMS only.

e) **Using communication protocol based on IEC 62443 and IEC 62351:** The IEC 62443 series of standards define requirements and processes for implementing and maintaining electronically secure industrial automation and control systems (IACS). These standards set best practices for security and provide a way to assess the level of security performance. IEC 62351 series also defines the cyber security requirements for implementing security technologies in the operational environment, including objects for network and system management (e.g. with SNMP), role-based access control (RBAC), cryptographic key management, and security event logging.

f) **Carrying out security testing:** Timely carrying out the Cyber security testing in the SCADA System will help address the vulnerabilities present in the system.

g) Periodical changing of passwords with alphanumeric combinations, white listing of authorized applications, encryption methods and using proper biometric identification.

6. Conclusion

Cyber security is a very important and complex topic for the protection of SCADA System. A properly secured system will save the system from various types of Cyber Threats and vulnerabilities and will make the system more reliant and efficient.■



Need for Digital Identity in IR

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Under the visionary leadership of hon'ble Prime Minister, Shri Narendra Modi, the G20 Digital Economy Working Group has identified Digital Public Infrastructure (DPI)/India Stack as a key priority. DPI's transformative impact on social, economic, digital, and sustainable development goals has established it as a pivotal element in advancing the digital economy and benefiting its stakeholders including government ministries, departments, private entities, various users and citizens.

Following the recent G20 summit, global leaders are increasingly recognizing the essential role of digital public infrastructure in diplomacy, statecraft, and development. In response, the Government of India is actively advocating for the adoption of the Digital Public Infrastructure-as-a-Service model to expedite the deployment of Digital Public Goods, particularly for citizen-centric services.

Aligned with this vision, the Ministry of Railways is working to establish a robust enterprise architecture standard and enhance the One-ICT framework through the Centre for Railway Information Systems (CRIS). A crucial component of this initiative is the development of Digital Identities for Indian Railways.

Few decades ago, when there was no business requirement to uniquely identify passengers across the Indian Railway ecosystem, individual IT applications were developed to create passenger identities based on the immediate and specific requirements set forth by the Commercial Department of Indian Railways. Over time, this approach led to the use of heterogeneous identities for the same passenger across different application services. Identifiers such as PNR, ticket numbers, mobile numbers, email IDs, Aadhaar numbers, or combinations thereof, were randomly used in PRS, UTS, PMS, Retiring Room, and Rail Madad applications, resulting in inconsistent identity data for passengers across the IT systems.

As a consequence, these varied data sets have hindered the evolution of passenger-centric IT applications of Indian Railways to effectively participate in the national logistics and travel ecosystems. From the perspective of the National Transportation Ecosystem, it is crucial to recognize that a unified and standardized approach to digital identities is essential for Indian Railways to enable seamless, secure, and integrated public service delivery. Beyond user identification, well-defined digital identities facilitate interoperability. The approach also enables users to control their own data and access a wide range of services without redundancy, thereby improving service delivery.

As various government platforms across transportation domains become digitized, there is

a growing tendency to create multiple IDs, each with its own ID card, ID management system, and efforts to ensure uniqueness. For the average citizen, particularly in the context of Indian Railway passengers, this proliferation of IDs complicates seamless data exchange. Given the diversity in education, awareness, and capabilities among the variety of Railway users, this can lead to increased complexity and potential exclusion scenarios, undermining the very purpose of empowering initiatives.

As the world becomes increasingly data-rich, it is crucial that various data about people, entities, geographies, resources, and assets are available in electronic registries with open APIs (Application Programming Interfaces). This would enable other IT systems in the ecosystem to seamlessly validate and use attested and authenticated data. Electronic validation through open APIs using such registries can significantly streamline processes for entities like the Indian Railways. This eliminates the need for paper-based validation, boosting trust and reducing operational costs. In this context, an 'Electronic Registry' refers to a trusted system that allows consented subjects (people, entities) to enroll, manage their records with the necessary levels of verification and access third-party services using its authentication and KYC services.

A well-defined electronic registry within the Indian Railways ecosystem would act as a centralized database that records all relevant identity information for passengers, employees and other stakeholders. This registry would be a critical component of the federated digital identity system, enabling seamless data access and management across the entire railway network.

Federated Digital Identity is a term that might sound complex, but at its core, it's about giving users more control over their identities while ensuring their privacy and security. Unlike traditional centralized systems, where a single entity manages all aspects of a user's identity, federated systems distribute this responsibility across multiple trusted entities. This means that no single organization has full control over a person's identity, reducing the risk of data breaches and misuse.

In a federated system, users can access multiple services using the same digital identity without the need to re-authenticate with each service. This seamless access is made possible through agreements and standards that ensure different systems can recognize and trust each other's identity verification processes. For example, if you've ever logged into a website using your google or facebook account, you've experienced a form of federated identity in action.

Examples of such registries include Aadhaar, which is a registry of the 'usual residents of India'; the PAN system, which is a registry of 'persons (individuals/entities) who are direct taxpayers'; and the PDS database, which is a registry of 'people (and families) who receive food subsidies.'

For Indian Railways, the adoption of a Federated Digital Identity system should not only be highly efficient, at the same time streamline operations internally but also align with the broader national goals of creating an electronic digital ecosystem. By participating in this framework, Indian Railways can meaningfully participate in the larger digital transformation objective of building a comprehensive Digital Public Infrastructure (India Stack), benefitting from shared resources, standardized processes, and enhanced security measures.

In a complex ecosystem like Indian Railways, collaboration between different departments and external stakeholders is essential for smooth operations. A robust electronic registry would facilitate this collaboration by ensuring that all relevant data is easily accessible and interoperable across different systems. This would enable seamless data exchange and coordination, improving efficiency and reducing the risk of errors.

Such partnerships can lead to advanced mobile apps, in-train entertainment, and enhanced ticketing platforms, providing passengers with greater convenience and improving service quality. These collaborations not only bring cutting-edge technologies and additional revenue streams to Indian Railways but also contribute to financial sustainability. By streamlining services, monetizing data and improving governance through digitization, Indian Railways can enhance efficiency, accountability, and resilience, ensuring reliable and transparent operations that build passenger trust and financial viability.

The Victory

Mahabir Agrawal



All of a sudden, a shrill scream rose from beneath his legs. Diwakarji stopped perplexed for a moment, then quickly bent his head only to find that straps of the left chappal had once again broken off. Ooff !!

He took a bird's eye view of the surroundings near and far. The day had just started business and he was standing at the busiest M. G. Road amidst the usual din and bustle of the pedestrians, peddlers, hawkers as well as the vehicles plying on the road.

He remembered, this chappal was bought more than a year ago from a roadside hawker. Since then till today, he carried on with the pair some way or other and nobody in the house ever took pains to offer him a fresh one. The plight of the chappals had now become totally pitiable. One fourth hind portions of both sides had vanished and the remainders too had adopted black holes all over. Both chappals had undergone several operations with nails and threads to keep the straps stuck with the soles. The overall look of the stuff at present was that even if worn, no feeling of having any armour on the feet was had.

It was disgusting to pick up the fractured chappal in hand and walk barefoot. He stared down at the chappals with burning eyes - 'Such a filthy joke with me.. how dare..!' The chappals too in return shrugged in fear begging pardon 'Sir, no fault of us..!' A cobbler had to be traced right now for an immediate surgery. But Diwakarji wondered how could a poor dalit be expected here around the busy streets? He held the chappals in the tight grip of his toes and limped slowly into a neighbouring bye-lane. Just a bit ahead he surprisingly saw a cobbler. An elderly man with grey hair, wrinkled face and thick glasses on the eyes! Napping leisurely! Diwakarji dropped the sick chappal before him. The old man minutely X-rayed the chappal and reacted sharply - 'What the hell stuff is this, saheb? Want a surgeon to operate a corpse? When will you people learn replacing worn out chappals! Like replacing old diaries and calendars... replacing old clothes and garments etc? Sorry!' The cobbler closed his eyes and sank back into napping meditation.

Diwakarji felt humiliated at this long irritating sermon. What a stupid! Either do the work or say no. Why such a ranting lecture? He limped ahead once again and to his joy, found another cobbler 100 yards away. This was a young guy with a dark but smiling face. Diwakarji showed his broken

chappals to him. The boy mended it nicely without a word.

'Your chappals have become a superb antique, sir. Why don't you donate these to the Kolkata Museum? These would become a global piece this way. No?'

"Oh yes!" Although a sarcasm but it was wrapped in decent language. Diwakarji drew a fine smile on the lips -'Why not? Whenever I decide making such a donation, I'll surely approach you for a letter of recommendation to the museum authorities. Okay?'

A long corridor was there outside the drawing-room. At the right end, a small wooden doorless rack with three shelves was placed. This rack was meant for keeping shoes, slippers, etc of the whole family. The rack always remained flooded with varieties of foot-wears.

After returning home in the evening, Diwakarji placed his chappals on the lower shelf of the rack. This rack was exclusively reserved for sons' footwears. The idea was that at office time next morning when sons came to the rack for their shoes, their eyes would fall on the wretched chappals. They would repent for a while at the scene and would immediately order wives to buy a new pair for him.

But things did not happen the way he expected. Both sons right at the time of going to office came hopping to the rack, quickly took their shoes and went away without taking any notice of his chappals, which lay just beside theirs.

Two days rolled off this way in wry wait. The middle shelf was reserved for the housewives. After due deliberation, Diwakarji put his chappals on that shelf. Wives did not have haste. They went out only for marketing or kitty parties. This time attention of the home towards his chappals was sure to be drawn. But alas! This trick also ended up in smoke. The wives looked at the chappals in hate and angrily dragged those out of the shelf, the same way as a GRP cop mercilessly pulled out a male passenger from a ladies' compartment of the train.

Now what to do? Further wait was not possible as the final countdown of the last breath of chappals had started. He was neither mentally prepared to verbally ask his sons for a new pair. On the fifth day, he finally put the chappals on the notty glowing white marbled floor itself. just a hand away from the rack. The whole scene looked like an African boy sitting in isolation from a group of British kids.

Next morning at office-time, Mayank, the elder son, came out of the drawing room and strode to the rack. His wife Priyanka followed him with his briefcase in hand. As Mayank came near the rack, his eyes suddenly fell on the chappals. Diwakarji was peeping out from behind the doors of the drawing room with a throbbing heart. No sooner had Mayank noticed the chappals lying on bare marble floor than he cried out - 'It is too much..! What the hell is wrong with Papa.? Made entire floor untidy Yaar!'

'Your father has gone mad. Yesterday, he put his dirty chappals right upon my new sandals, causing scratches,' - Priyanka added. Mayank shrugged angrily, hurled a flying kiss to Priyanka, took his briefcase and went away. Diwakarji stood speechless. So... the wretchedness of the chappals was already in the notice of the sons and their wives. He was making ridiculous attempts all the same to draw their attention by putting those here and there. Nay, the wretchedness did in no way prompt them to ponder how Papa was doing with such dead chappals.

Diwakarji came back to his room with weary steps. The only small room at the terrace was in his occupation as bedroom. He was breathing vastly as if walked a long distance. His mind was filled with deep log of humiliation. What had expected and what had actually turned out! Instead of sons coming out on their own with a fresh pair of slippers, they took the matter lightly and ended it in smoke.

He sat down on the bed, pondering what to do next. The only option now left was to file a plaint in the sons' court for a new slipper. His plaint would be taken up for hearing in the court's special session held every night at the dining table. He would be asked to give evidence in support of his claim. Writ of habeas corpus might be issued to produce old chappals in the court for physical verification. Ultimately, the verdict might be something like - 'Papa, chappals are not as worn out as you want us to suppose. You can easily do with these for some more months yet. Please don't put undesirable expenses on us in these days of soaring inflation.'

He failed to understand what the hell type of change in today's youths' attitude was this. Losing all kinds of emotions, sentiments, feelings and attachment day by day! Was this the impact of Western culture? Why shouldn't sons, of their own, realise a father's basic needs and necessities and give him some lump sum money to meet those? Should he stretch his hands before the sons every now and then for such needs? Furnish explanations also for every rupee so spent? Wouldn't it be a type of begging so to say? Begging to the sons whom he taught walking holding their fingers! Whom he gave the best of education and culture going beyond his capacity and in this course, socrificed his own passions, comforts and desires! Not that there was any monetary crisis at home. Both sons were on lucrative jobs. One in the UCO Bank and the other at the LIC. They were not showing any eagerness to appreciate the troubles and hardships of their father all the same.

Diwakarji remembered, the house property that all were presently residing in, stood in his name. He was competent enough to punish the sons and their wives by ordering them to evacuate this place outright. He could do so if, of course, he desired. But... but he could not go to that extent. His conscience would never allow him to do so come what may. He was a father and all fathers on the earth are destined to forgive their sons out of 'Dhritrashtra Love..! Perhaps sons too were all aware of this weak point of their fathers.

Anyway, in spite of this weakness, he wouldn't lay down his prestige at the feet of sons. They, of their own, would have to take notice of such obvious needs and requirements of Father. If they didn't, let them do so. He was not going to bow and beg. Never!

He returned to the dressing table with a heavy sigh. As he stood before the mirror, his ghost hastened to incarnate within it. He X-rayed the ghost with sharp eyes. What bloody changes had occurred in his body that the boys were ignoring his very entity? Only a few wrinkles on the face...! Some greyness in the hair! An imitation denture of teeth.!

So what?

'Have you any idea of your age, sir?' The ghost giggled.

'yes, I have. Around 65..!' Diwakarji murmured.

'People at 65 obviously get exhausted.' A sarcastic remark!

'Don't forget, even at this age of so called exhaustion, I carry out important morning work of house. Like bringing milk from the booth. Bringing vegetables and groceries from market, taking kids to the bus-stand, etc..etc.'

'But sir, you have to take three halts while doing these..isn't so?' The Ghost again burst into laughter.

'Osteo-pain in the knees! But what of that? I'm still well enough to do any work of whatever kind, Stupid...!' He cried out and returned to the bed. A wild struggle of thoughts was blowing within his mind. He felt restless. His eye lids dropped off and he sank into a short nap. When he woke up after sometime he felt immensely calm and comfortable.

There was an old trunk at the right corner of the room. He slowly opened it. Heaps of clothes, both his and his wife's lay inside. He pulled those out one by one. At the neath a pair of white kurta and pyjamas made of khadi lay.

He had to give up studies after matriculation. His father had died just before the results were to come out and the entire responsibilities of the family were thrown on his shoulders. He was made to go to find a job immediately. During his schooldays, he had a close friend named Satish Jain. Satish was son of a business magnate, owning a big wholesale garment shop, an English-medium high school and also an ice-cream factory.

During those days of calamities, Satish came with a helping hand and offered him a teacher's job in the school. He started wearing white kurta-pyjamas as a mark of respect to this noble profession. But in course of time, this dress code became his identity as well as symbol of his devotion to work. He continued wearing kurta-pyjama till the last day of job. Once retired, he could not venture to wear this dress any more.

'No, darling,' he used to say to his wife. 'Kurta-pyjamas are not only pieces of clothing for me. These are identity of my active life and I used to get inspiration and moral support from them throughout my days of struggle. How can I degrade

this dress by wearing it at this stage of inactiveness?'

Tears rolled out of his eyes. He took out the kurta-pyjamas from the trunk and softly caressed these with his palm. A healing touch roamed up through his spine. He peeled off his pants and shirt and wore the kurta-pyjamas. The dress filled him with vigour and enthusiasm. He came before the dressing table and this time, not the ghost but he himself with a unique gloss of confidence peered from behind the mirror.

He moved downstairs, slipped his feet into the wretched chappals and walked out of the house. He entered a PCO and dialled the number of Satish Jain.

'Is this Satish Babu? Diwakar this side...!'

'Diwakar who?'

'Diwakar Jaiswal. Your classmate as well as ex employee. 'His voice shivered with thrill.

'Oh, Maassaheb ? How are you? Called me after a long interval! Everything okay?' Jain Babu exclaimed. While as a teacher in school, he was called Maassaheb by all, high and low. This nickname had so stuck to his personality that people continued calling him Maassaheb even after retirement as well.

'No Maassaheb please. For you, I'm Diwakar only. Remember... our friendship was compared sarcastically with that of Raja Bhoj and Gangu Telli in schooldays ?' Diwakarji smiled.

'Oh yes, I do,' Satish Babu too giggled.

'Satish Babu, I've urgent work with you. Where can I meet you right now?'

'Do come to the ice-cream factory. I'm waiting here for you.'

Diwakarji cast a fond glance at the kurta- pyjamas and took a bus to reach ice factory. It was a journey of fifteen minutes. The osteo-pain had bitten at the knee while boardering the bus. But the conductor offered helping hand to support him. It was a journey of fifteen minutes.

Satish Jain was there sitting in his AC chamber.

'Satish Babu,' Diwakarji came straight to the point, 'I want to have ₹500-600 today. As my own earning. No loan, no credit please.! Would you kindly manage some job? Of whatever kind...!

'What.?' Satish Babu said in utter surprise. 'I still remember, both your sons are well placed in lucrative jobs. No.?'

'Right. But this story later on. I've come to you with great hope. ₹500-600 at any cost. This day itself.' Satish Babu stared directly into his friend's eyes. He realised the serious concern Diwakarji was beset with. He closed his eyes in thought. How to suddenly manage a job which could yield ₹500 by the day. A few moments passed and Diwakarji's anxious excitement increased all the more. Then in a nano second, Satish Babu jumped in his chair, 'An idea has crept in my mind. Please come.'

He held Diwakarji's arm and came outside in the open yard. In the left corner, a newly-made and decoratively painted ice-cream cart was standing. A four-by-three box on four wheels with an overturned boat like roof on it.

'See this ice-cream cart Maassaheb. Just arrived. It has capacity to contain 800 pieces of ice-cream candies. Commission one rupee per piece. The work demands labour, but be sure, the entire stock is bound to be sold out by the day..!' Jain Babu bubbled with joy.

'Oh friend, Oh..! So nice of you. Never forget this favour in life,' Diwakarji held Jain's palm with joy.

Then Diwakarji came out of the factory.

He thought for a moment and then decided to go to the bus stand which was 2 km away. Bus stand remained crowded with passengers all the time and he was likely to get ample customers there. The ice-cream cart initially seemed light enough to roll on with slight push, but after some distance, it seemed gaining weight. Diwakarji felt problem to keep it moving. He had to apply his entire force to kick the cart. Soon he began to pant. His whole body perspired. His breathing increased tremendously and legs trembled due to pain in the knees. He saw a banyan tree at the roadside and stopped there. A water tap was there near the tree. He washed his hands and splashed water on the face. A bit of relief came on. He was feeling tired. He reluctantly sat under the tree for a rest, although he knew each moment was precious for him. He had to finish off the entire stick by dawn.

After some time, he gathered strength and started pushing on the cart. He had to take three more halts before he reached the bus stand. At the bus stand, din and bustle of the passengers, vendors and the vehicles was floating in the atmosphere as usual. He parked his trolley near a cemented bench. Customers started pouring in and by 2 pm half the stock went off. He too became completely tired and exhausted by then. His whole body was aching. He felt giddy. Felt hungry too. Crusts crept on to the lips. He bought a handful of sprouted grams, ate these with green chilly and onion and drank water to his fill. But after a short while, rattling sounds started growing within his stomach which stopped only after severe vomiting. After vomiting, he felt relieved. He lay flat on the bench like a broken tree and soon went into deep slumber.

After about two hours' napping he was woken up by the thundering sound of horns of a bus. He startedly first looked out for the cart. It was standing there like a shy cow. A tabby dog was sitting beside its wheel as if keeping sharp watch on it. In a second, a story named 'Poos Ki Raat' written by Munshi Prem Chand flashed in his mind. Halku, a farmer in the story had a pet dog 'Jabara' to look after his crop. Diwakarji at this sight drew a soft smile on lips. Hahaha.. so Munshi ji had sent his Jabara here to keep a watch on his cart. Wonderful! He affectionately thanked the dog for this favour. Then stood up with fresh strength and moved on towards DAV Primary School. The school time was about to end and he must reach there before 3.30. After having five rests and halts en route, he somehow reached the school gate just before the closing bell rang off. Crowds of kids came hopping to the cart, enveloped it all over like humming birds and within few moments, the entire stock to the last piece was sold out.

In the evening after depositing the cart at the factory, when Diwakarji boarded the bus for his return journey, his pocket had a cash capital of ₹780. More than what was required! His heart was throbbing with a unique gloss of victory and self-pride, although he was exhausted and tired so much so that it was difficult for him to even stand erect. His legs were trembling with weakness and pain. But he cared not a fig for all these. He went to a leading shoe shop, picked a new pair of chappals of his choice, wore them on feet at the shop itself and got the old one packed in the carton. He cast a fond glance simultaneously at both... at the new chappals as well as at the kurta-pyjamas he was wearing.

He entered home and with plenty of self confidence, took off the chappals on the natty, white-marbled floor near the drawing room. Sons, wives and kids together were busy gossiping on the sofas inside. Their collective eyes in a nano-second fell on the new chappals. They remained stunned with utter surprise. But the gloss of the chappals was so enchanting that none of them could gather courage to come ahead and push the chappals off to the shoe rack.■

Reader's Letter

Dear Editor,

I am an interested reader and subscriber of the Indian Railways magazine for the last many year and enjoy reading the various updates and progress made by our Indian Railways. Over the years Indian Railways has made tremendous progress in terms of modernization and expansion of the rolling stock, systems and network. Railway electrification, line doubling / tripling, guage conversion and new lines have changed the face of Indian Rail network in recent years.

It would be nice if Indian Railways magazine published a map of the rail network showing BG single lines, BG double lines, BG triple lines, BG electrified lines, Meter guage lines, Narrow guage lines, Guage conversion in progress and Lines under construction. This will help passengers and the general public become aware of the various locations connected by the IR network.

Sandip Merchant

If you want to send your feedback about the IR Magazine please email over email ID: editorindianrailways@gmail.com

Test Your Knowledge

1 Which two cities are connected by the first Namo Bharat Rapid Rail?

(a)	(b)	(c)	(d)
Nagpur-Pune	Vadodara-Surat	Bhuj-Ahmedabad	Jabalpur-Bhopal

2 On which route of the country's first 20-coach Vande Bharat train in running on?

(a)	(b)	(c)	(d)
Agra Cantt.-Banaras	Varanasi-New Delhi	Kolhapur-Pune	Nagpur-Secunderabad

3 What is the name of India's first Vande Bharat Metro train?

(a)	(b)	(c)	(d)
Namo Bharat Rapid Rail	Vande Bharat Metro	Atmanirbhar Bharat Metro	Ahmedabad-Gandhinagar Metro

4 Which railway line was approved by the Cabinet on 2nd September, 2024?

(a)	(b)	(c)	(d)
Bhopal-Ujjain	Ahmedabad-Mumbai	Pune-Kolhapur	Mumbai-Indore

5 Recently, Kavach 4.0 has been installed in which railway section of West Central Railway?

(a)	(b)	(c)	(d)
Ghatoli-Nayagaon railway section	Jabalpur-Katni	Kota-Sawai Madhopur section	Murwara-Bina railway section

6 Which Production Unit is located in Yelahanka?

(a)	(b)	(c)	(d)
RWF	RCF	MCF	ICF

7 Name the first Chief Executive Officer (CEO)of Railway Board?

(a)	(b)	(c)	(d)
Shri Satish Kumar	Shri Ashwani Lohani	Shri Sunit Sharma	Shri Vinod Kumar Yadav

8 In which city is the National Rail Museum located?

(a)	(b)	(c)	(d)
Prayagraj	Lucknow	New Delhi	Kolkata

9 How many days in advance can a person book a reserved train ticket?

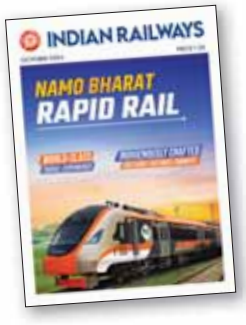
(a)	(b)	(c)	(d)
120 days	60 days	15 days	45 days

10 In which year was the English magazine 'Indian Railways' published by the Ministry of Railways?

(a)	(b)	(c)	(d)
2010	1956	2024	1853

Right Answers

1- (c)	2- (b)	3- (a)	4- (d)	5- (c)
6- (a)	7- (d)	8- (c)	9- (a)	10- (b)



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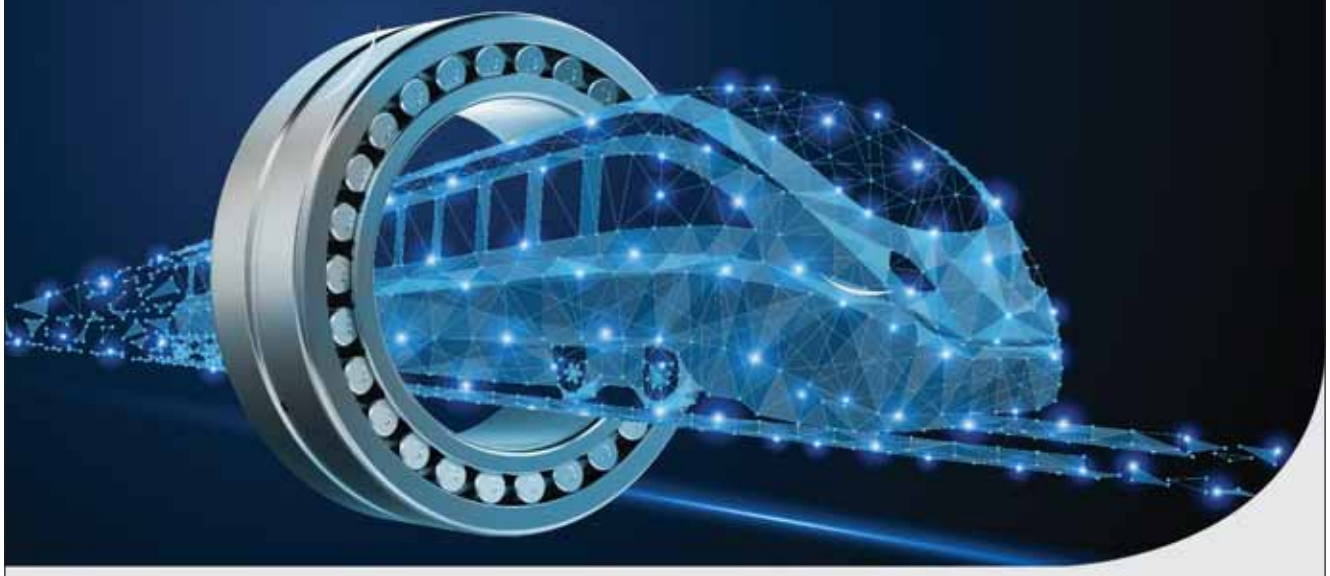
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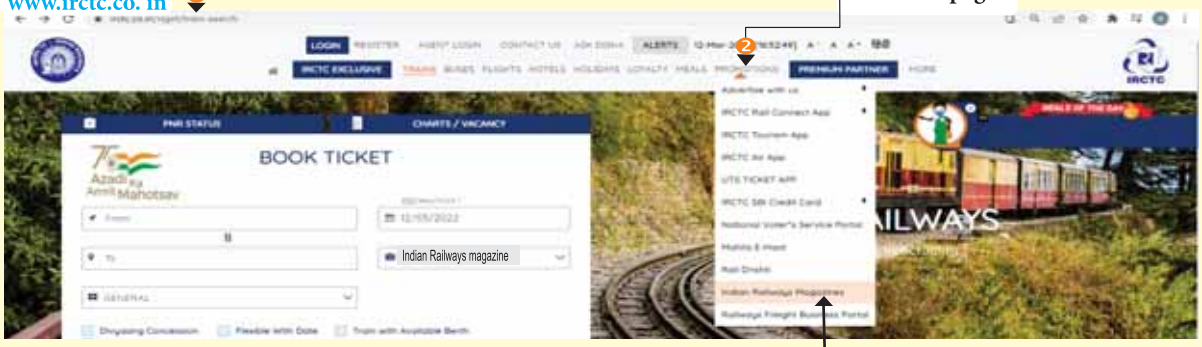
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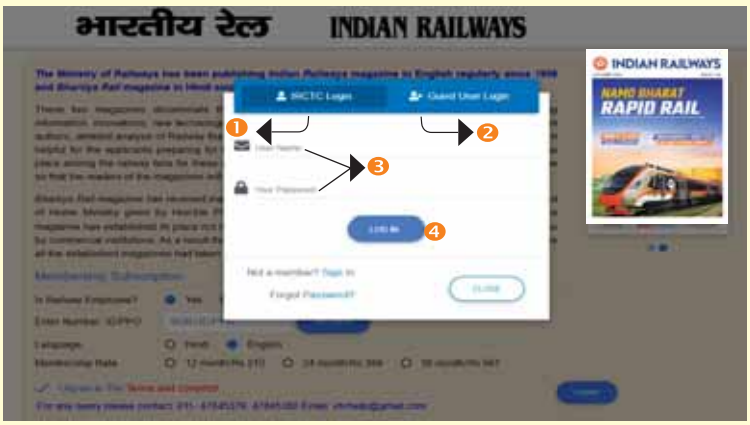
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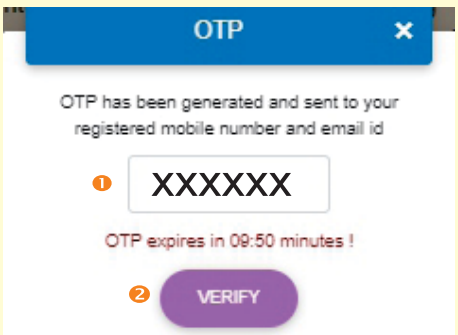


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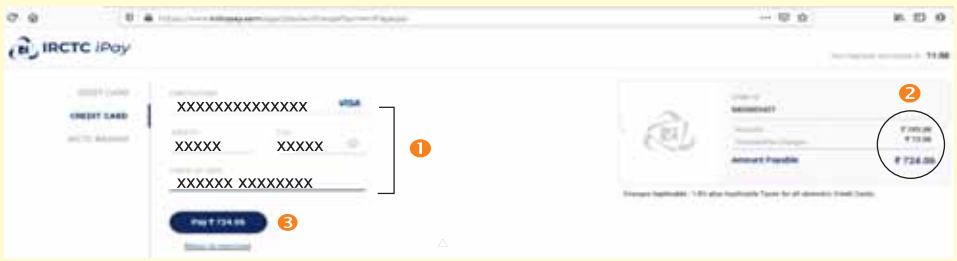
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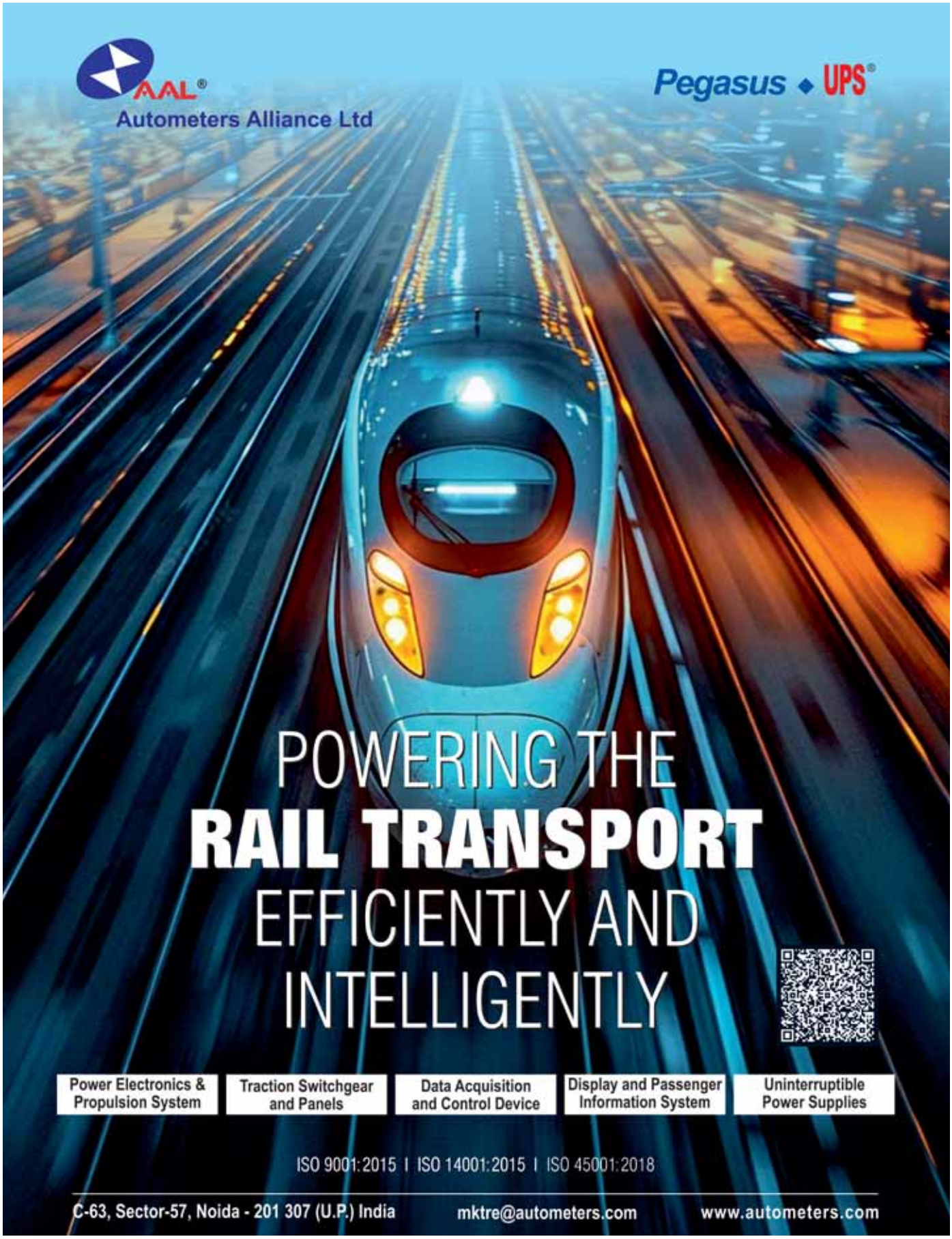
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