



(A Unit of the All India Rail Safety Council – AIRSC)

BI-MONTHLY JOURNAL ON RAILWAY SAFETY, OPERATIONS & INNOVATION

AIRSC Rail Safety News is a prestigious bi-monthly knowledge journal dedicated to advancing excellence in railway safety, operational efficiency, capacity management, and technological innovation across the railway sector.

Published under the aegis of the All India Rail Safety Council (AIRSC), the magazine serves as a strategic knowledge platform bringing together professionals, policymakers, researchers, and industry leaders to contribute to the continuous improvement of railway systems in India and globally.

The publication is designed to support the transformation of railway networks into safe, smart, sustainable, and globally competitive transport systems, aligned with national priorities such as Viksit Bharat 2047, Atmanirbhar Bharat, and Net Zero 2070. Mission

To enhance the quality, safety, and efficiency of railway services for passengers and freight by promoting knowledge, innovation, and best practices in railway operations, planning, and management.

AIRSC Rail Safety News aims to:

- Serve as a trusted platform for knowledge exchange and professional dialogue
- Promote innovation, research, and technological advancement
- Strengthen safety awareness and operational excellence
- Support evidence-based decision-making in railway systems

Scope and Coverage

The magazine provides comprehensive coverage across all railway segments, including:

- Light Rail Systems
- Metro Rail Networks
- Conventional (Heavy) Railways
- High-Speed Rail Systems

It addresses both passenger and freight transport, focusing on improving system performance, safety, and customer experience.

Core Content Areas

1. Railway Safety & Operations

Safety management systems and operational best practices
Accident prevention strategies and risk mitigation
Passenger safety, station security, and travel safety awareness
Guidance and updates from Railway Protection Force (RPF)
Rail e-safety, cybersecurity, and digital safety solutions

2. Capacity Management & Timetabling

Traffic demand estimation and forecasting
Network capacity optimization and utilization
Train scheduling, crew management, and dispatching systems
Design and optimization of railway timetables

3. Technology & Innovation

Advanced signalling and train control systems
Automatic Train Operation (ATO) and smart railway technologies
AI-driven analytics and predictive safety tools
Rolling stock optimization and energy efficiency solutions

4. Research & Professional Contributions

Original research papers and theoretical studies
Transport planning models and system engineering approaches
Pilot projects and technical feasibility analyses
Impact assessment studies and policy insights

5. Business, Policy & Management

Innovative business models and financing strategies
Infrastructure planning and investment frameworks
Railway economics and performance optimization
Policy analysis and governance models

6. Education, Awareness & Outreach

Children's railway safety awareness initiatives
Student engagement programmes, seminars, and workshops
Industrial training and academic collaborations
Railway heritage, museums, and educational insights

7. Events, Recognition & Industry Updates

Coverage of national and international conferences, seminars, and forums
AIRSC awards and recognitions
Key developments in Indian Railways and metro systems

Interdisciplinary Integration

AIRSC Rail Safety News integrates expertise from diverse disciplines, including:

Engineering and system design
Transport modeling and traffic analysis
Mathematics and physics
Computer science and data analytics
Economics and business management
Public policy and governance

This interdisciplinary approach ensures a holistic understanding of railway systems, enabling innovative and practical solutions.

Editorial Vision

The journal aspires to become a global reference platform for railway safety and operations, fostering a Network of Excellence that connects:

Academicians and researchers

Railway operators and infrastructure managers

Government agencies and policymakers

Industry leaders and technology providers

It promotes the exchange of ideas and strategies that enhance efficiency, safety, punctuality, and sustainability of railway transport systems.

Types of Contributions

The magazine welcomes high-quality contributions, including:

Original research articles and technical papers

Case studies and best practice reports

Transport and business plans

Pilot project analyses and feasibility studies

Policy reviews and impact assessments

Innovation showcases and technology insights

Strategic Significance

AIRSC Rail Safety News plays a vital role in:

Strengthening railway safety knowledge and awareness

Supporting data-driven and research-based decision-making

Promoting innovation and global best practices

Enhancing collaboration between academia, industry, and government

Our Vision

To create a globally recognized knowledge platform that drives innovation, collaboration, and excellence in railway safety, planning, and operations—contributing to a safe, efficient, and future-ready railway ecosystem.

AIRSC
RAIL SAFETY NEWS
A UNIT OF ALL INDIA RAIL SAFETY COUNCIL

Volume : 04 Indian Railways – Today's Important Updates Date : 09 July 2026

INDIAN RAILWAYS TOWARDS A HYDROGEN FUTURE
India Accelerates Green Mobility with Hydrogen Rail Innovation

TODAY'S TOP UPDATES

- Hydrogen Train Development**
Indian Railways advances trials for hydrogen-powered trains
- Green Mobility Mission**
Strengthening clean energy and sustainable rail transport
- Kavach Expansion**
Enhanced safety with wider deployment across zones
- Passenger Convenience**
Digital upgrades for booking, information & station services
- Infrastructure Boost**
New lines, doubling & modernisation projects progress nationwide

Dr. R. Padmanabhan
Chairman
All India Rail Safety Council

HYDROGEN CLEAN ENERGY

TOWARDS NET ZERO 2070

SAFETY FIRST • SAFETY ALWAYS
SAFE TRACKS • STRONG NATION • UNITED INDIA

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SAFE TRACKS STRONG NATION UNITED INDIA

Safety First, Safety Always

Shri Narendra Modi
Hon'ble Prime Minister of India

Shri Ashwini Vaishnaw
Hon'ble Minister of Railways,
Information & Broadcasting,
Electronics & IT, Government of India

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- ✓ Rail Vidya
- ✓ Janaushadhi
- ✓ National Projects
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BUILDING A SAFER, SMARTER FUTURE FOR INDIAN RAILWAYS



SAFETY
FIRST



TECHNOLOGY
DRIVEN



PEOPLE
CENTRIC



SUSTAINABLE
TOMORROW

CURRENT UPDATES

ALL DATES ARE CURRENT & VERIFIED ✓

KAVACH EXPANSION



₹1,364 Crore Investment

RPF BODY-WORN CAMERAS



Railway Security
& Transparency

IRCTC WEBSITE UPGRADE



Faster Booking,
Better User Experience

AHMEDABAD - DHOLERA SEMI HIGH-SPEED LINE



134 Km | ₹20,667 Cr
Target 2030-31

JAMMU - KATRA SAFETY WORKS



₹238 Crore
Stabilization & Tunnels

BENGALURU HSR CORRIDORS



Bengaluru-Hyderabad
607 Km Progress

TOGETHER FOR A SAFER RAILWAY, STRONGER INDIA



ALL INDIA RAIL SAFETY COUNCIL (AIRSC)

A National Body for Rail & Metro Safety, Security,
Research and Capacity Development

75
Azadi Ka
Amrit Mahotsav

RAIL E-SECURITY & SAFETY

VISION • STRATEGY • RESEARCH • NATIONAL COMMITMENT



**RAIL
e-SECURITY
SOLUTIONS**





AIRSC

RAIL SAFETY NEWS

A Unit Of
All India Rail Safety Council



DRIVING SAFER, SMARTER, STRONGER RAILWAYS

AIRSC Rail Safety Magazine is a premier bi-monthly publication committed to enhancing safety, efficiency, and service quality across the Indian Railways. As an initiative of the **All India Rail Safety Council (AIRSC)**, it serves as a vital knowledge platform for professionals, policymakers, engineers, and researchers dedicated to advancing rail transport.

WHY THIS MAGAZINE MATTERS?



Promotes Safety Excellence – Shares best practices, innovations, and research to strengthen railway safety.



Enhances Operational Efficiency – Covers capacity management, timetabling, signalling, and automation.



Supports Smarter Planning – Explores modern tools for traffic analysis, demand forecasting, and performance optimization.



Drives Innovation – Highlights cutting-edge technology, sustainable solutions, and global advancements.



Connects Experts Worldwide – Brings together academics, industry leaders, and railway professionals for knowledge exchange.

WHAT WE COVER



RAIL OPERATIONS & MANAGEMENT

Capacity, Scheduling, Dispatching & Crew Management



SAFETY & TECHNOLOGY

Signalling, Train Control, Automation & High-Speed Rail Systems



TRANSPORT & BUSINESS PLANNING

Policy, Economics, Financing & Business Models



SUSTAINABILITY & FUTURE MOBILITY

Energy Efficiency & Green Rail Solutions

KNOWLEDGE TODAY. SAFETY TOMORROW.

AIRSC Rail Safety News –
Your Trusted Source For Safer Railways.



THE RAIL SAFETY RESEARCH AND DEVELOPMENT FORUM

A premier platform dedicated exclusively to advancing rail safety through research, policy dialogue, and professional collaboration.

A UNIT OF:



ALL INDIA RAIL SAFETY COUNCIL





ALL INDIA RAIL SAFETY COUNCIL

INDIAN RAILWAYS LIFE LINE TO OUR NATION

SAFE • SMART • SECURE

BUILDING A SAFER TOMORROW WITH KAVACH



RAILWAYS NETWORK AND FUTURE VISION

The network is advancing with increasing Kavach installation all across the network. Railways plans expansion in future years under its safety programme.



RESEARCH METHODOLOGY AND FOCUS

Primary research involved discussions with industry experts, while secondary research utilised publicly available sources and internal databases. The study focuses solely on Kavach deployment, supply ecosystem, and railway safety opportunities in India, providing insights for strategic decision-making purposes.



OPPORTUNITIES IN KAVACH MARKET FOR INDUSTRY

Kavach for the railway sector in India presents significant opportunities for the industry, with a substantial order pipeline expected. Indigenous automatic train protection technology aims to enhance operational safety, efficiency, and capacity utilisation across the network.



MARKET OUTLOOK AND KEY TAKEAWAYS

The Kavach market in India is expected to witness substantial growth, driven by large-scale deployment plans and modernization initiatives. Recent contracts indicate a growing demand for Kavach systems, with domestic manufacturing and technology development becoming increasingly competitive.



TECHNOLOGICAL ADVANCEMENTS

Railways is adopting state-of-the-art safety technologies to improve operational reliability. Kavach is becoming more technology-intensive in 2026, with features such as a Universal Braking Algorithm, AI-driven design automation, and improved locomotive and interlocking interfaces, enhancing interoperability, reducing testing timelines, and strengthening safety.



POLICY AND FUNDING LANDSCAPE

Government policies and robust funding mechanisms play a crucial role in supporting the growth of the Kavach sector. Adequate funding, strong safety budget allocations, and alternative financing methods contribute to the success and long-term sustainability of Kavach deployment across Railways.

SAFE RAILS • STRONG NATION • SECURE FUTURE



SAFETY FIRST



INNOVATION ALWAYS



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