

# INTERNATIONAL IRSE CONVENTION AND EXHIBITION 2026

11<sup>TH</sup> -12<sup>TH</sup> JUNE 2026, BHARAT MANADAPAM, DELHI  
EXHIBITION STALL LAYOUT

## IRSE India' International Convention 2026 at New Delhi

### Sessions of Technical Talks/ Workshops/ Presentations

#### Session 1: AI powered Design, Development & Manufacturing

- Advanced Design, Manufacturing, Validation, Testing, Certification of Next Generation make in India Railway Signalling & Telecom Systems :and Installation:
- AI Innovations adoption, Competence Development & Assessment in Signalling Design, Installation and Testing processes.
- Development of Quantum Based Technology in various areas of Railways

#### Session 2: Smart Signalling for Future Ready Railways

- Next Generation Upgradation of Kavach in the age of AI, Quantum and OT-Cyber Security to Global Standards (KavachTMS) Vs ERTMS
- Seamless Fail Safe Train Operations through Automated Signalling (AI+CTC+Kavach/ATP+ABS+LTE)
- CBTC-Resignalling for Main Line Train Operations
- Self Thinking Trains
- Modern Signalling for creating MaaS (Mobility as a Service)
- High Speed Train Control and Command Signalling Systems
- Development of Quantum Based Technology in various areas of Railways

#### Session 3: Modern & Safe Train Operation and role of AI

- Smart & Safe Switching – Sensors for ensuring safe setting of point switching
- Sovereign AI powered Rail Enterprise
- Leveraging Data Analytics for Smart Maintenance Decision to make Safe Tracks
- Automated Passenger Train Operation using Digital Twin
- AI to enable Modern Signalling to Predict, Prevent & Perform

#### Session 4: Optimisation of Signalling Design, Train Operations & Safety using AI Algorithms

- Optimisation of freight train movements using IOT & AI
- Next Generation Kavach System for Train Management
- Track Patrolling using AI powered wearable technology

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- DAS/ FOS based continuous condition monitoring, predictive maintenance & resilient train operations
- Integrated Maintenance of Train Control and Train protection systems using AI algorithms

## Session 5: Cost Efficiency, ESG Compliance and OT Cybersecurity from Cyber Threats

- AI for cost efficiency to corridor resilience but with safety Assurance
- Leveraging AI technology to make Railway Signalling fail safe & resilient
- AI/ ML to enable life span of assets using Data Driven algorithms of Rail assets
- Digital Tools and how the next generation technology can be used to know carbon footprint of AI powered systems vs legacy systems
- for measuring Carbon Credits Way forward in implementing OT-SOCs for securing Safety and Operational Critical Rail Infrastructure, ( Legacy Systems & New OT-Technologies)

## Session 6: Passenger Comfort & Amenities

- AI for efficient handling of passenger flow from home to destination
- Leveraging AI, Robotics & Data Analytics to transfer rail maintenance
- Seamless Journey planning to ensure smooth passenger delight on railways
- Connected Journey – Enhancing Passenger Journey
- Transforming Metro and Regional Rail, its interoperability for operational convergence for passengers