



26-28 April 2022

## Safe. Connected. Without Frontiers.



# ACRONYMES

## **ERTMS 2022 CONFERENCE** Valenciennes | 26-28 April 2022

Cité des Congrès Valenciennes 1 Esplanade des Rives Créatives de l'Escaut 59410 Anzin







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- 3D: 3 Dimensional
- 4G: Fourth Generation Mobile Network
- 4RP: Fourth Railway Package
- 5G: 5th generation (data connection in mobile technology)
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- ADIF: Spanish Rail Infrastructure Manager (Administrador de Infraestructuras Ferroviarias)
- AE: Authorising entity
- AERRL: Association of European Rail Rolling Stock Lessors
- Agency: European Union Agency for Railways (also referred to as ERA)
- ALE: Autonomous Train Drivers' Union of Europe
- ALLRAIL: Alliance of Rail New Entrants
- Asset: Any resource or capability. The term assets include anything that could contribute
- to the delivery of a service
- ATO: Automatic Train Operation
- BCA: Baseline Compatibility Analysis
- BDK Thales: Bane Denmark Thales
- BG: Balise Group
- CAB: Conformity Assessment Body
- CAF: Spanish train manufacturer (Construcciones y Auxiliar de Ferrocarriles)
- CBI: Computer based Interlocking
- CCM: Change Control Management
- CCS: Control command and Signalling





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CCS-TSI : Control Command and Signalling – Technical Specification for Interoperability

- CEO: Chief Executive Officer
- CER: Community of European Railway and Infra Companies
- CTT: Conformity to Type
- DB: Deutsche Bahn
- DG MOVE: Directorate-General for Mobility and Transport (European Commission)
- DGNSS: Differential Global Navigation Satellite System
- DMI: Driver-Machine Interface
- DNS: Domain Name System
- DSD: Digitale Schiene Deutschland
- DSTW: Digital Interlocking
- EAL: ERTMS Accredited Laboratories
- EC: European Commission
- EDOR: ETCS Data Only Radio
- EECT: Extended Era Core Team
- EGNOS HA: EGNOS High Accuracy
- EGNOS: European Geostationary Navigation Overlay Service
- EIM: European Rail Infrastructure Managers
- ER JU: Europe's Rail Joint Undertaking
- ERA: European Union Agency for Railways (until 15 June 2016: European Railway Agency)
- ERTMS TA: ERTMS Trackside Approval
- ERTMS: European Rail Traffic Management System





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- ESC: ETCS System Compatibility
- ETCS: European Train Control System
- EU: European Union
- EUG: ERTMS Users Group
- EULYNX: European initiative by 13 Infrastructure Managers to standardize interfaces and
- elements of the signalling systems
- EU-Rail: Europe's Rail Joint Undertaking
- FRMCS: Future Railway Mobile Communication System
- GALILEO HAS: Galileo High Accuracy Service
- GBR: Guaranteed Bit Rate
- GNSS: Global Navigation Satellite Systems
- GoA: Grade of Automation
- GoA2: Grade of Automation 2
- GSM-R: Global System for Mobile Communications Railways
- HOP: Harmonisation of Operational Processes
- HTTP: Hypertext Transfer Protocol
- ID: Identification
- ILS: Integrated Logistic Support
- IM: Infrastructure Manager
- IMU: Inertia Measuring Unit
- IOD: Interoperability Directive, (EU) 2016/797 on the interoperability of the rail system within
- the European Union
- IP: Internet Protocol







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IXL: Interlocking

JKV: ATP-VR/RHK

KMC: Key Management Centre

KMS: Key Management System

LEU: Lineside Electronic Unit

LiDAR: Light Detection and Ranging

LTE/5G: Long term Evolution 5th Generation

LTE: Long Term Evolution (radio network)

MA: Movement Authority

MB: Lineside Marker Board

MITMA: Ministry of Transport, Mobility and Urban Agenda

MNO: Mobile Network Operator

MoU: Memorandum of Understanding. A non-contractual

understanding/arrangement/relationship

MS: Member State

N(T)R: National (Technical) Rules

Navtec CIR: NAvtec Compact Industrial RADAR

NB RAIL AISBL: Association of Notified Bodies for Directive 2008/57/EC on Railway

Interoperability

NoBo: Notified Body

NSA: National Safety Authority

OBU: On-Board Unit

OPE TSI: Operation and traffic management Technical Specification for Interoperability





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OTIF: The Intergovernmental Organisation for International Carriage by Rail (Organisation

intergouvernementale pour les Transports Internationaux Ferroviaires)

PAD: Planning and Approvals Delivery Unit

PAVA: Practical Arrangement for Vehicle Authorisation (EU) 2018/545

PCI: Peripheral Component Interconnect

PKI: Public Key Infrastructure

PoE: Pool of Experts. A group of experts meeting the competency requirements,

nominated by the NSA or from independent experts, for assisting the Agency in

performing its tasks.

RADAR: Radio Detection and Ranging

RBC: Radio Block Centre

RF: Radio Frequency

RFF: French Infrastructure Manager (Réseau Ferré de France)

RfID: Radio-frequency Identification

RINF: Register of Infrastructure

RISC: Railway Interoperability and Safety Committee of the European Commission

RoE: Return of Experience

RSRP: Reference Signal Received Power

RSRQ: Reference Signal Received Quality

RSSI: Received Signal Strength Indicator

RST: Rolling Stock

RTK-GNSS: Real Time Kinematic – Global Navigation Satellite System

RTT: Round-trip time

RU: Railway Undertaking





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S2R – Shift2Rail: previous rail research and innovation Joint Undertaking

SBB: Swiss Federal Railways (Schweizerische Bundesbahnen)

SERA: Single European Railway Area

SIM: Subscriber Identity Module

SINR: Signal to Interference Noise Ratio

SNMP: Communication protocol

TA: Trackside Approval

TCP: Transmission Control Protocol

TEN-T: Trans-European Transport Network

TMS: Traffic Management System

TSI: Technical Specification for Interoperability

TSR: Temporary Speed Restriction

UIC: International Union of Railways (Union Internationale des Chemins de fer)

UIRR: International Union of Combined Road-Rail transport Companies

UNIFE: Association of European Railway Industries

UNISIG: industrial consortium which was created to develop the ERTMS/ETCS technical specifications

UNITEL: a UNIFE committee that focuses on the development and implementation of the

future interoperable railway communication system (FRMCS/Next Generation)

VA: Vehicle Authorisation

Virve: Railway and authorities voice communication radio network used in Finland