

Karl Alexy, Federal Railroad Administration (FRA)

Associate Administrator for Railroad Safety & Chief Safety Officer

In July 2019, Mr. Alexy became the Associate Administrator for Railroad Safety and Chief Safety Officer of the Federal Railroad Administration (FRA). In this role, Mr. Alexy manages FRA's regulatory oversight of rail safety in the United States and oversees the development and enforcement of regulations and safety programs for the freight and passenger rail industry. Mr. Alexy previously served as FRA's Deputy Associate Administrator for Railroad Safety supervising the Office of Safety Analysis, the Office of Technical Oversight, and the Office of Regional Operations.

Mr. Alexy joined FRA in 2009 as a General Engineer in the Hazardous Materials Division. In that role, he collaborated with other Department of Transportation agencies and the freight rail industry on rulemakings, enforcement, research, and outreach activities. In 2012, Mr. Alexy became Staff Director of the FRA's Hazardous Materials Division and led efforts, in coordination with the Pipeline and Hazardous Materials Administration, to develop the regulation on Enhanced Tank Car Standards and Operational Controls for High-Hazard Flammable Trains.

In 2015 Mr. Alexy became Director of the Office of Safety Analysis, which is comprised of seven divisions; Economic and Regulatory Analysis, Passenger Rail, Human Performance, Data and Information Management, Risk Reduction, Security, and the Highway-Rail Grade Crossing and Trespasser Prevention Program.

Before joining FRA, Mr. Alexy worked for DuPont de Nemours in Wilmington, Delaware. At DuPont, he served as the Senior Engineer in DuPont's Logistics Group where he oversaw the design, construction, and modification of tank cars used to transport hazardous materials. He also was a Fleet Manager responsible for overseeing the maintenance of the owned and leased vehicles

Mr. Alexy earned degrees in Biology from Bloomsburg University in Bloomsburg, Pennsylvania, and Civil Engineering from Drexel University in Philadelphia. He graduated Summa Cum Laude and first in his class at Drexel. He earned a professional engineering license from the State of Maryland.

Source: fra.dot.gov

About Federal Railroad Administration (FRA)

The Federal Railroad Administration (FRA) was created by the Department of Transportation Act of 1966. It is one of ten agencies within the U.S. Department of Transportation concerned with intermodal transportation. The Federal Railroad Administration's mission is to enable the safe, reliable, and efficient movement of people and goods in America.

→ https://railroads.dot.gov



Helene Arfaoui-Kaynak, SNCF

Railway System & Technologies General Direction

Ms Arfaoui-Kaynak is ERTMS Director at SNCF since 2018 and an international expert in the fields of ERTMS, signalling, telecommunications and interoperability and CER speaker for the ERTMS Control Group, CCS working Party and Coordination on Radio Evolution.

She is an active member promoting the definition of a CCS system reference architecture.

She hold a PhD degree in Computer Science from Tokyo Institute of Technology and a MSc in Telecommunications from both Telecom Bretagne (IMT Atlantique, France) and Aston University (UK).

About SNCF

State-owned, public service company with the core mission of delivering passenger and freight transport services. SNCF Group consists of three EPICs and six business lines: SNCF Réseau, Long-distance mobility services, Commuter mobility services, SNCF Stations and Connections, SNCF Logistics and SNCF Immobilier. SNCF is a member of CER.

- → https://www.sncf.com/
- → http://www.cer.be/



Reiner Behnsch, DB Netz AG

Head of ETCS technology and asset management

Mr Behnsch holds a PhD in Physics, and has over 10 years of experience each in telecom and CCS. In the last 10 years, he has been in a leading position in specification, safety approval, planning and commissioning of ETCS implementations. He also holds a degree in Electronic Engineering.

About DB Netz AG

DB Netz AG is the railway infrastructure manager of Germany responsible for the approximately 33,300 kilometre long rail network, including all operationally necessary installations. DB Netz AG also manages investment in the existing network, modern command and control technology and plans the building of new lines to further development the rail network.

Deutsche Bahn AG (DB AG) is the parent company of DB Group. The group is divided into a large number of companies, including DB Fernverkehr (long-distance passenger), DB Regio (local passenger services) and DB Cargo (rail freight). DB is a member of CER and the EUG.

- ↑ https://ir.deutschebahn.com/en/db-group/at-a-glance/about-us/
- **↗** http://www.cer.be/
- ↑ https://ertms.be/



Rainer Beller, Dipl.-Ing. Mitsui Rail Capital Europe

Chief Technical Officer

Rainer Beller is Chief Technical Officer (CTO) of Mitsui Rail Capital Europe. As CTO he is responsible for all ECM related Services at MRCE and the Technical Asset Management of MRCE's fleet of more than 330 Locomotives, including ERTMS-Strategy, Life Cycle Cost Management and Management of the homologation and authorizations of MRCE's fleet.

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About Mitsui Rail Capital

Mitsui Rail Capital is a global railcar leasing company, operating one of the youngest fleets in the industry. Its main activities are the purchase and rental (or leasing) of railway freight cars and locomotives.

7 www.mrc-rail.com



Hans Bierlein, European Union Agency for Railways

ERTMS Project Officer, Railways System Unit

www.era.europa.eu



Jerry Borger, NL ERTMS Programme ERTMS and rolling stock Consultant

Jerry Borger is consultant at the Dutch ERTMS programme and is active the following areas: testing, certification and authorisation. He has been involved in the application of ERTMS on-boards of many locomotives and trainsets for the Netherlands since 2003 and is representing Ricardo Certification as NoBo in the NBRail subgroup CCS.

Programma ERTMS, Jaarbeursplein 22, 3521 AP Utrecht, The Netherlands

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About NL ERTMS Porgramme

The Ministry of Infrastructure and the Environment is therefore replacing the system with a new one, the ERTMS. The government has budgeted €2.5 billion for ERTMS installation and maintenance.

ERTMS will help enhance rail safety, improve the railways' interoperability and reliability, and increase their capacity and speed.

↗ https://www.government.nl/topics/mobility-public-transport-and-road-safety/rail-safety-ertms



Carlo Borghini, Shift2Rail Joint Undertaking

Executive Director

Mr Carlo Borghini is responsible for the overall management of the Shift2Rail Joint Undertaking activities since he took up the position of Executive Director in February 2016.

Prior to this posting, Mr Borghini held senior management positions in different domains in private and international organisations, at corporate level. He was the Deputy Executive Director for the SESAR Joint Undertaking (SJU) in Brussels from 2008 to 2014, and prior to this was Director and Chief Financial Officer (CFO) for the International Fund for Agricultural Development (IFAD), a specialised Agency of the United Nations based in Rome.

Mr Borghini holds a Master's Degree equivalent in Business Economics and speaks Italian, French and English. He is married with three children.

About Shift2Rail

The Shift2Rail Joint Undertaking (S2R JU) is a public-private partnership in the rail sector between the European Union, some rail equipment manufacturers and two infrastructure managers. The S2R JU pursues research and innovation activities in support of the achievement of the Single European Railway

Area and improves the attractiveness and competitiveness of the European rail system. The work of S2R is focused on cost-efficient and reliable trains, advanced traffic management & control systems; cost-efficient and reliable high capacity infrastructure; IT Solutions for Attractive Railway Services; Technologies for Sustainable & Attractive European Freight.

对 www.shift2rail.org



Rüdiger Brandt, Siemens Mobility GmbH

Vice president sales Mainline Rail Automation

2013 – now	Vice president sales Mainline Rail Automation, Chairman of the Unife ETCS Steering Committee
2009 – 2012	Head of Business Development Rail Automation Mainline
2003 – 2008	Director sales Siemens Rail Automation Mainline for China
2000 – 2003	Director Strategic Marketing
1996 – 1999	Various functions in the Siemens Mass Transit business
1994 – 1995	Development of sensor systems for rail infrastructures
1987 – 1993	Development and head of production of micro systems and semiconductors; Siemens AG

Doctor degree in natural sciences

Married, 2 daughters

Born in 1955

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About Siemens Mobility GmbH

Siemens is a global powerhouse focusing on the areas of electrification, automation and digitalization. Mobility combines all Siemens businesses in the area of passenger and freight transportation, including rail vehicles, rail automation systems, rail electrification systems, road traffic technology, digital solutions and related services. It also provides its customers with consulting, planning, financing, construction, service and operation of turnkey mobility systems. Moreover, Mobility offers integrated mobility solutions for networking of different types of traffic systems.

对 new.siemens.com



Thierry Breyne, European Union Agency for Railways

Head of Planning and Approval Delivery Unit

Mr Breyne is leading the new ERA unit responsible for issuing vehicle (type) authorisation, single safety certificates and ERTMS trackside approvals. From April 2015 until July 2018, Mr Breyne was the ERA programme manager in charge for preparing the Agency for its new tasks related to the 4th Railway Package.

Before this, Mr Breyne was the Director of the Belgian National Safety Authority.

オ www.era.europa.eu



Peter Brugts, Ministry of Infrastructure NI

ERTMS policy advisor

Peter Brugts represents the Dutch Ministry in the Committee of Railway Interoperability and Safety. He has been involved in ERTMS projects at the Betuweline and the Rhine-Alpine corridor. Actually he is participating in the Dutch ERTMS programme and the CEF projects to install Baseline 3 in rolling stock.

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Maria Bueno, European Union Agency for Railways

Team leader, Planning and Approvals Delivery Unit

7 www.era.europa.eu



Thomas Chatelet, European Union Agency for Railways

ERTMS Project Officer, Railways System Department

→ www.era.europa.eu



Ian Conlon, DG MOVE

ERTMS Deployment Manager

Mr Conlon is a member of the Rail Safety and Interoperability Unit in DG MOVE, responsible for ERTMS. He has over 15 years experience in the public and private sectors working on transport, rail, and infrastructure finance.

z ec.europa.eu/transport



Carlo De Grandis, DG MOVE

Directorate General for Mobility and Transport

Mr De Grandis is an ME (Engineer) from the Milan Polytechnic University.

His first achievements include works for the Territorial Plan for Verona Province; he was plant manager at Akzo Nobel between 1998-2000.

He was responsible for Organisation and Development at the Public Transport Company (AMT SpA) in Verona (2000-2005), and also representative in the national coordination body for public transport (ASSTRA).

He worked in DG REGIO (European Commission) between 2005-2009 as Transport Desk Officer.

Between 2009-2017 he has been Policy Coordinator in DG MOVE (European Commission), in charge of the TEN-T Guidelines, Corridor coordinators, Infrastructure funding and financing for the Trans European network.

Since 2017, he is working as Policy Officer in DG MOVE Rail Safety and Interoperability (European Commission) in charge of Rail Digitalisation, and part of the Deployment Management Team.

オ ec.europa.eu/transport



Danny Di Perna, Bombardier Transportation

President of Bombardier Transportation

Danny Di Perna is currently the President of Bombardier Transportation, and was appointed to this role in February 2019.

Mr. Di Perna joined Bombardier in 2018 as the President of Aerostructures and Engineering Services. In this role, he was responsible for leading the transformation and growth strategy for this business unit.

He has more than 30 years of aerospace and industrial experience. Before joining Bombardier, he served as Vice President, Global Sourcing at GE Power. In this role, he was in charge of strategic sourcing, procurement and supplier quality. Prior to that, he held a number of senior leadership positions within United Technologies Corporation (UTC), where he worked for 24 years. He was notably Senior Vice President, Operations of the Pratt & Whitney Division during the production readiness phase of the PurePower® family of engines and led the Auxiliary Power business for the Hamilton Sundstrand Division in San Diego, California.

In addition, Mr. Di Perna also served as Senior Vice President of Aircraft and Engine Maintenance from 2007-2009 for Air Canada Technical Services (ACTS). He began his career at Pratt & Whitney Canada, where he held positions of increasing responsibility within engineering, marketing, manufacturing, supply chain and operations.

Mr. Di Perna earned a Bachelor's Degree in Mechanical Engineering from Concordia University and a Masters of Business Administration from McGill University.

Source: bombardier.com

About Bombardier Transportation

With 63 production and engineering sites in 27 countries, Bombardier Transportation is a global mobility solution provider leading the way with the rail industry's broadest portfolio. They cover the full spectrum of rail solutions, ranging from trains to sub-systems and signalling to complete turnkey transport systems, e-mobility technology and data-driven maintenance services. Their installed base of rolling stock exceeds 100,000 rail cars and locomotives worldwide. The 40,650 employees continue a proud tradition of delivering ingenious rail transportation solutions, including:

- Urban (metros, trams and light rail vehicles, commuter trains, automated people mover, monorails, e-mobility),
- Mainline (high-speed trains, locomotives, regional and intercity trains),
- Equipment (equipment for urban vehicles, equipment for mainline vehicles),

Signalling and infrastructure (mass transit signalling, communications-based train control (CBTC), european rail traffic management system (ERMTS), industrial and mining signalling, rail control services solutions, mainline signalling)



Rob Dijkman, ERTMS Users Group (EUG)

Technical Director

Mr Dijkman is responsible for the coordination of all aspects related to the maintenance and evolution of the ERTMS specifications with the members of the ERTMS Users Group and with external organisations like CER, EIM, ERA, UNISIG.

About ERTMS Users Group

The ERTMS Users Group is a European Economic Interest Group (EEIG) formed by a group of several railway administration, and participates to the writing of the ERTMS specifications The mission of the ERTMS users group is to help the railway companies in applying ERTMS /ETCS in a harmonized and interoperable way, to enable the free flow of trains and a competitive railway. The ERTMS Users Group works closely together with the European Agency for Railways (ERA) and UNISIG, the international association of signaling companies in the railway industry. The ERTMS Users Group is dedicated to technical and operational matters and guidance on commercial implications and impacts.

对 www.ertms.be



Josef Doppelbauer, European Union Agency for Railways

Executive Director

Josef DOPPELBAUER joined the Agency in January 2015. His mission is to further consolidate the role and responsibilities of the European Union Agency for Railways to become a world leader in railway safety.

Before leading the Agency, Josef DOPPELBAUER held managerial positions at Bombardier Transportation. Since the early 1990's, he has been involved with the development of the European Rail Transport Management System (ERTMS). From 2012 to 2014, he was chairman of the European Rail Research Advisory Committee (ERRAC), the European technology platform of the rail sector. From 2011 to 2014, he was also the chairman of the Steering Committee of the Joint Technology Initiative Shift2Rail.

Josef DOPPELBAUER holds a degree and a doctorate, both in Physics. He started his career at the Alcatel Research Centre in Vienna, Austria, where in 1997 he became Technical Director. In 2001, he moved to Paris to become Chief Technical Officer for Alcatel Transport Automation Solutions.

Josef DOPPELBAUER joined Bombardier Transportation in December 2002, first working in the Rail Control Solutions division, where he held several positions in Engineering, Sales, and as President. In 2008, he moved on to the global headquarters of Bombardier Transportation in Berlin. From July 2008 to June 2012, he was appointed Vice President Project Management, and from July 2008 to December 2013, Chief Technical Officer responsible for leading the standardization of processes, tools and products, product safety and critical projects support. Between January 2014 and December 2014, Josef DOPPELBAUER held the position of Vice President Research and Technology at Bombardier Transportation.

Josef DOPPELBAUER has 25 years of experience in key aspects of railway technology, including signalling and control command systems.

对 <u>www.era.europa.eu</u>



Vincent Durepaire, ANFR

→ www.anfr.fr



Jean-Michel Evanghelou, International Union of Railways (UIC)

Deputy Director of Rail System and Head of Telecom, Signalling and Digital Applications

Mr Evanghelou is the Deputy Director of Rail System and Head of Telecom, Signalling and Digital Applications of UIC (International Union of Railways). He held previously various positions of Director within Orange Group and then joined Nortel Networks where he had different roles in the international business, serving as Vice-President for several telecom technologies and segments. He was more recently Director of the Railway Business Unit of Kapsch Group. Jean-Michel graduated as engineer from the Ecole Centrale of Paris.

About UIC (International Union of Railways)

Born in 1922 with the purpose of harmonising and improving conditions for railway constructions and operations, UIC gathers nowadays **200 Member railways from 95 countries.** It promotes rail transport at world level with the objective of optimally meeting current and future challenges of mobility and sustainable development. It develops and facilitates international cooperation among Members and facilitate the sharing of best practices (benchmarking). It proposes new ways to improve technical and environmental performance of rail transport, improve competitiveness, and reduce costs.

→ https://uic.org/



Johannes Flyvbjerg Jakobsen, Nordjyske Jernbaner (NJ)

Safety manager

Johannes has been responsible for implementing ERTMS L2 Baseline 3 into commercial operations in Denmark, as the first RU.

Background. 27 years experience from the railway industry. Locomotive driver, instructor, safety specialist. worked 6 years for the signalling program in Denmark (Training, Safety and Human Factor)

Nordjyske Jernbaner A/S

Nordjyske Jernbaner A/S (abbreviated NJ) is a Danish railway company operating in Vendsyssel. The company was formed in 2001 as a merger of Hjørring Privatbaner A/S (HP) and Skagensbanen A/S (SB). Headquartered in Hjørring, the company is responsible for running the former HP and SB lines, i.e., Hjørring—Hirtshals and Frederikshavn—Skagen, respectively.

https://nj.dk/



Ulrich Geier, Shift2Rail Joint Undertaking

Ulrich is leading the X2Rail project Adaptable Communication System within S2R and is responsible for certifications and approvals for GSM-R network and mobile components for Kontron Transportation Group which bought Kapsch CarrierCom recently.

Ulrich Geier has more than 20 years' experience in telecommunication for the Railways and holds a PhD in Electrical Engineering.

About Shift2Rail Joint Undertaking

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→ www.kontron.com



Doris Gradenegger, DG COMP

Head of Railway Systems Department

Ms. Gradenegger is case manager in DG Competition's unit dealing with State aid in the transport sector.

オ ec.europa.eu/competition



Pio Guido, European Agency for Railways

Head of Railway Systems Department

对 www.era.europa.eu



Hanspeter Hänni, Federal Office of Transport (FOT- NSA CH)

Senior system engineer, ERTMS specialist

Hanspeter Hänni is engineer in Electronics and Telecommunication (BSc) at Federal Office of Transport (FOT). He worked 15 years in the railway industry in development, system engineering and sales.

Since 1998 he works for FOT and is responsible for tasks in the field of ERTMS and representing Switzerland in European expert committees of the agency and in the committee of the national safety authorities of the rail freight corridor 1&3.

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About Federal Office of Transport (FOT - NSA CH)

The FOT is the authority that monitors railway safety. The FOT plans and supports further expansion and is also the licensing authority for new rail infrastructure and renovations. In addition, it regulates access to the rail network and monitors operations. It sets the amounts and components of train path prices, which railway undertakings must pay to infrastructure managers. The FOT also undertakes numerous other tasks on behalf of the railways



Monika Heiming, European Rail Infrastructure Managers (EIM)

Executive Director

Monika Heiming has been Executive Director of EIM since October 2011. Monika has been active in Brussels as a lobbyist and manager of international associations and groupings for a number of years. Mrs Heiming, a German citizen, studied languages at the University of Cologne, and holds a Master's degree in European Management from the University Faculties in Brussels and an Executive MBA from the Belgian Solvay Business School. Among her previous experiences, she has helped develop the association UNIFE in Brussels from 1993 to 1997. She also managed and marketed the engineering activities of European engineering group Europengineers EEIG from 1999 to 2004, before being made Secretary-General of ERFA in January 2005.

About European Rail Infrastructure Managers (EIM)

EIM is the European railway association representing exclusively rail infrastructure managers. EIM works with all other rail organisations within an established network of sector representatives and promotes ongoing self-improvement among its members by providing a forum for exchanging best practices, sharing knowledge and developing excellence at all levels, in particular in terms of performance. EIM also provides assistance in business activities such as asset management, knowledge sharing on operational challenges such as infrastructure resilience, and advice and cooperation on security issues such as metal theft.

→ https://eimrail.org/



Harald Heusner, RFC Rhine-Alpine

对 www.corridor-rhine-alpine.eu



Henrik Hololei, DG MOVE

Director-General for Mobility and Transport

Source: https://ec.europa.eu/info/persons/director-general-henrik-hololei en

对 <u>ec.europa.eu/transport</u>



Peter Høier Boll, Rambøll

Safety Manager Fjernbane West, Danish Signalling Programme

Peter Høier Boll has been working on the Danish signalling programme for the last 8 years with the safety approvals for the infrastructure projects. The main challenges have been to align the suppliers' deliverables to the Danish implementation of CSM-REA and ensuring that the signalling programme are compliant with the Banedanmark company standards.

Until now one line has been commissioned in level 2 with the new Thales signalling system and it is successfully operated in northern Jutland.

About Rambøll

Rambøll provides professional engineering, design and consultancy services for a range of rail systems - from long distance rail to urban transport systems, such as metros and light rail. They provide services across the life cycle of rail projects - including inception, evaluation and operation and provide their technical support to capacity analysis, electrification, safety, rolling stock, signaling systems and ERTMS. Their clients include from government departments, railway authorities, infrastructure and train operators, contractors and suppliers to private investors.

→ https://ramboll.com/services-and-sectors/transport/rail-systems



Juan Hernández Fernández, European Agency for Railways

ERTMS Project Officer, Railways Systems Department

→ www.era.europa.eu

⊠ Send e-mail



Jorge Iglesias, ERTMS Accredited Labs association

Director of CEDEX Rail Interoperability Laboratory

Ministry of Fomento, Spain

Mr Iglesias is Doctor Engineer by the Polytechnic University of Madrid. After working at this University, he joined CEDEX (Research and Studies Centre of Ministry of Fomento of Spain) in 1986 to work in the areas of Power Electronics, Electric Machines and Energy Systems. From 2000 to 2006 he managed the creation of the CEDEX Rail Interoperability Laboratory, which was the first European laboratory

accredited for testing ERTMS components and subsystems. In January 2007 he joined ADIF (Spanish Rail Infrastructure Manager) as Research and Development Director where he was strongly involved in the real deployment of ERTMS in Spanish High Speed lines as well as in many research projects in different fields of railways. In September 2013 he joined back CEDEX to be Director of the Rail Interoperability Lab with the main target of promote testing at lab the interoperability between real ETCS OBUs and real L1 and L2 (RBCs) lines. Dr. Iglesias represents the ERTMS Accredited Labs (EAL) association.

About CEDEX

Set up in 1957 and dependent to the Ministry of Public Works of Spain, CEDEX provides multidisciplinary support in civil engineering technologies, construction and associated environment as well as assistance to several administrations, public institutions and private sector.

This entity is composed of a number of technical specialized units organised in different Laboratories and Centers. One of them is the Railway Interoperability Laboratory, capable of making interoperability tests between all the ERTMS Interoperability Constituents and Subsystems. CEDEX is one of the ERTMS Accredited Laboratories.

↑ http://www.cedex.es/CEDEX/LANG CASTELLANO/ORGANISMO/CENTYLAB/LIF/



Patrick Jeantet, SNCF Réseau

Chairman and CEO, SNCF Réseau, and Deputy Chairman, SNCF Executive Board

In May 2016, Mr Jeantet was appointed Chairman and CEO of SNCF Réseau, and Deputy Chairman of the SNCF Executive Board.

A graduate of École Polytechnique and École Nationale des Ponts et Chaussées, he began his career in construction at Bouygues and Sogea, then worked in the water industry at Bechtel and International Water. In 2005 he moved into transport, working at SNCF Group subsidiary Keolis—first as Deputy CEO, International Affairs, then as CEO, France—before being appointed Chief Operating Officer of Groupe Aéroports de Paris in 2014.

About SNCF Réseau

SNCF Réseau manages, maintains and develops the French rail network and markets its services. It ensures line safety and performance, and provides its clients with transparent, non-discriminatory access to the network and rail service infrastructures. Its goal is to maximize infrastructure use by enabling more trains to run on a modernized network—particularly at key rail nodes and along major corridors—and to go beyond assigning train paths to offer a wealth of new, high value-added services. SNCF Réseau is a member of EIM and the EUG.

→ https://www.sncf-reseau.com/en

→ https://eimrail.org/

→ https://ertms.be/



Christian Klecha, European Union Agency for Railways

ERTMS Project Officer, Railways System Department

→ www.era.europa.eu



Libor Lochman, Community of European Railway and Infrastructure Companies (CER)

Executive Director

Mr Lochman has been Executive Director of the Community of European Railway and Infrastructure Companies (CER) since January 1st 2012.

Libor Lochman, born in 1963 in Czechoslovakia, graduated at the Transport University in Zilina and has a doctorate in electronics from the West-Bohemian University Plzen. He has a strong background in Control-Command and signalling systems.

Prior to his role as CER Deputy Executive Director and leader of technical affairs (2007-2011), he acted as director of the Railway Test Centre, a facility for testing European rolling stock, infrastructure and signalling components, in Prague (2000-2005).

About CER

The Community of European Railway and Infrastructure Companies (CER) brings together more than 70 railway undertakings, their national associations as well as infrastructure managers and vehicle leasing companies. The membership is made up of long-established bodies, new entrants and both private and public enterprises, representing 73% of the rail network length, 80% of the rail freight business and about 96% of rail passenger operations in EU, EFTA and EU accession countries. CER represents the interests of its members towards EU policy makers and transport stakeholders, advocating rail as the backbone of a competitive and sustainable transport system in Europe. For more information, visit www.cer.be or follow us via Twitter at @CER_railways.



Wouter Malfait, European Union Agency for Railways

→ www.era.europa.eu



Dan Mandoc, UIC (International Union of Railways)

UIC FRMCS Project Manager

Network Rail

Mr Mandoc in the Professional Head of Telecoms in Network Rail. He is also the Project Manager of UIC FRMCS.

→ www.networkrail.co.uk

About UIC (International Union of Railways)

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https://uic.org/



Patrick Marsch, (International Union of Railways)

UIC FRMCS Project Manager

Network Rail

Patrick Marsch is part of the Digital Rail organization in Deutsche Bahn AG / DB Netz AG and there responsible for the connectivity and Cloud infrastructure for future digitalized rail operations. Related to this role, he is currently also rapporteur of an ongoing ETSI study item on the Future Rail Mobile Communication System (FRMCS) system architecture. Patrick holds a Ph.D. from TU Dresden in Mobile Communications, which was rewarded with the Johann Philipp Reis Prize for pioneering work in the field of so-called "coordinated multi-point". Prior to joining Deutsche Bahn, Patrick was with Nokia, where he was heading research, standardization and product departments working on 3G, 4G and 5G radio access

and product architecture. Patrick was also the lead editor of the recently published book "5G System Design – Architectural and Functional Considerations and Long Term Research" (Wiley, May 2018).

About DB Netz AG

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- ↑ https://ir.deutschebahn.com/en/db-group/at-a-glance/about-us/
- **↗** http://www.cer.be/
- **↗** https://ertms.be/



Michael Mikulandra, UNITEL (UNIFE)

Kapsch CarrierCom

Mr Mikulandra is leading the Industry Appliance Next Generation team at Kapsch CarrierCom responsible for regulatory topics standardization including contribution at 3GPP and ETSI. He is acting as company representative in Shift2Rail IP2 projects as well as participating in the technical working groups with focus on the TD2.1 adaptable communication system. Mr. Mikulandra is also the chairman of UNITEL, the committee for telecommunication topics within UNIFE.

About Kaspch

Kapsch CarrierCom, is a member of UNIFE (UNITEL). Kapsch CarrierCom is about to be renamed "Kontron Transportation Austria AG".

- → https://www.kapsch.net/kcc
- **↑** http://www.unife.org/about-us/committees/134-unitel-committee.html



Christian Nänni, Swiss Federal Railways (SBB)

Telecommunication Architect, Smartrail 4.0

Christian Nänni joined SBB Telecom department in 2009 and held positions as mobile engineer, asset manager GSM-R, product manager for cab radios and shunting terminals (including evolution to 4G) and is now responsible for the telecom on-board architecture within SmartRail 4.0. Since 2019 Christian chairs the UIC working group "Telecom On-Board Architecture". Until 2002 he worked as radio network planning engineer at Nokia Networks and then joined Ascom where he had different roles in product management and pre-sales in the domain of mobile network testing. Christian graduated as engineer from the Zurich University of Applied Sciences.

About Swiss Federal Railways (SBB)

The SBB (Swiss Federal Railways) is the national railway undertaking of Switzerland, representing the backbone of the Swiss public transport system. SBB has been transporting people and freight for more than 100 years contributing to the quality of life and competitiveness in Switzerland. SBB transports over 1, 25 million passengers and 205 000 tonnes of freight to their destination every day. SBB is a member of CER and the EUG.

- **↗** https://www.sbb.ch/en/home.html
- → http://www.cer.be/
- → https://ertms.be/



George Nagel, NL ERTMS Programme

Project manager On Board

Beginning 2014 George Nagel joined the NL ERTMS programme as project manager for the retrofit and upgrade of all rolling stock in NL. At present he is the project manager for the CEF B3 upgrade projects of the international cargo fleet running in NL.

Before, he was the project manager for various CCS implementation projects such as: Roll out of the GSM-R network in NL, ETCS retrofit of cargo locs for operation on the Betuwe Route, development of the STM ATB, implementation of the CBTC system for the Amsterdam metro network.

Programma ERTMS, Jaarbeursplein 22, 3521 AP Utrecht, The Netherlands

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About NL ERTMS Porgramme

The Ministry of Infrastructure and the Environment is therefore replacing the system with a new one, the ERTMS. The government has budgeted €2.5 billion for ERTMS installation and maintenance.

ERTMS will help enhance rail safety, improve the railways' interoperability and reliability, and increase their capacity and speed.

→ https://www.government.nl/topics/mobility-public-transport-and-road-safety/rail-safety-ertms



Evangelos Ouzounis, European Network Information Security Agency (ENISA)

Head of Secure Infrastructure and Services Unit

Dr. Ouzounis is the head of ENISA's Secure Infrastructure and Services Unit.

His unit manages ENISA's contribution to the NIS Directive implementation and over the years has developed good practices for several Critical Information Infrastructures (e.g. telecoms, energy, aviation, health, finance and ICS SCADA).

Dr Evangelos Ouzounis manages within ENISA the area of IoT security and Smart Infrastructures. In that context, his team developed baseline security requirements for IoT and numerous good practices for smart cars, industry 4.0, smart airports and smart health.

Finally, Dr. Ouzounis has developed, together with all EU Telecom Regulators (NRAs), the first ever pan European incident reporting mechanism for the telecom sector (article 13 a). Since then his unit has published several annual reports on root causes of reported incidents affecting the telecom sector. His unit now develops a similar mechanism for the trust service providers in the context of eIDAS Regulation (article 19).

Prior to his position at ENISA, Dr. Ouzounis worked several years at the European Commission (DG Connect) and co-founded Electronic Commerce Centre of Competence (ECCO) at Fraunhofer FOKUS (Berlin, Germany). In that context he has managed more than 15 international R&D projects (e.g. 3G, intelligent networks), served for the EU Commission as evaluator of EU funded projects and chaired numerous international recognised academic conferences.

Dr. Ouzounis holds a Ph.D from the Technical University of Berlin on the Resilience and Security of Distributed systems and a Master in Computer Engineering from the Technical University of Patras, Greece.

About ENISA

The European Union Agency for Cybersecurity (ENISA) contributes actively to the European cybersecurity policy, providing support to Member States and European Union stakeholders when large-scale cyber incidents take place across borders and affect two or more EU Member States. This work also contributes to the proper functioning of the Digital Single Market. ENISA supports the development and implementation of the European Union's policy and law on matters relating to network and information

security (NIS) and assists Member States and European Union institutions, bodies and agencies in establishing and implementing vulnerability disclosure policies on a voluntary basis.

https://www.enisa.europa.eu/

Jaime Pereira, Administrador de Infraestructuras Ferroviarias (ADIF)

Rail signalling Engineer

Mr. Pereira holds a MSc in Automation & Robotics Industrial Engineering from the Technical University of Madrid (UPM). His training also includes postgraduate studies in the field of Signalling, GNSS, Ground Transportation and Project Management.

He has a strong background in Control, Command and Signalling: in 2005 he joined INECO as ERTMS engineer for interoperability certification processes and R&D projects. In 2011 he moved to ADIF to become CCS Project Manager participating in several ERTMS implementations in Spain. Currently he is the representative of ADIF for ERTMS at EIM and the Spanish NPM (National Program Manager) at ERTMS Users Group (EUG).

About ADIF

ADIF is a state-owned company responsible for the administration of most of the rail infrastructure (tracks, stations, freight terminals, etc), rail traffic management, and distribution of the capacity to rail operators, the collection of fees related to the use of the infrastructure, stations and freight terminals in Spain. ADIF aims to promote the Spanish railway system through the development and management of a safe, efficient and sustainable infrastructure to the highest quality standards in environmental terms. Since 31 December 2013, ADIF divided in two separate entities, the first one in charge of the high speed rail network and the second one in charge of the conventional rail network. ADIF is a member of EIM and the EUG.



Matthias Ruete

Coordinator for Transeuropean Transport Networks (digital rail – ERTMS)

Mr Ruete is the Coordinator for Transeuropean Transport Networks (digital rail – ERTMS).

In 2018 he was advisor in the Secretariat-General of the European Commission and for over 12 years director-general for energy and transport (2006 to 2010), for mobility and transport (2010 to 2014) and for migration and home affairs (2014 to 2018).

Previous jobs in the Commission were as director for competitiveness (2005), as director coordinating enlargement negotiations (2000 to 2004) and as director in international transport, Galileo and trans-European infrastructure networks (1998 to 2000). He also worked in internal market, industry, energy, media, education, innovation and research (1986 to 1997).

Matthias Ruete studied law and political sciences. He holds a Master in Law (London) and a doctorate in intellectual property law (Giessen) and both German state exams in law. Before joining the European Commission, Matthias Ruete lectured in Constitutional, European and International Public Law at Warwick, Giessen and Marburg university.



Michel Ruesen, ERTMS Users Group (EUG)

European Economic Interest Group for ERTMS

Mr. Ruesen is the Managing Director of the EUG. He leads the EEIG ERTMS Users Group, establishing a joint position by advising CER, EIM and ERFA towards the European institutions (DG-MOVE, ERA), on technical and operational level, in the field of ERTMS on behalf of its members: BaneNOR, Trafikverket, Banedanmark, Network Rail, ProRail, Deutsche Bahn, Infrabel, SNCF-Réseau, SBB, ADIF and RFI.

About ERTMS Users Group (EUG)

The ERTMS Users Group is a European Economic Interest Group (EEIG) formed by a group of several railway administration, and participates to the writing of the ERTMS specifications The mission of the ERTMS users group is to help the railway companies in applying ERTMS /ETCS in a harmonized and interoperable way, to enable the free flow of trains and a competitive railway. The ERTMS Users Group works closely together with the European Agency for Railways (ERA) and UNISIG, the international association of signaling companies in the railway industry. The ERTMS Users Group is dedicated to technical and operational matters and guidance on commercial implications and impacts.

对 www.ertms.be

Isabel Pardo de Vera Posada, Administrador de Infraestructuras Ferroviarias (ADIF)

President

Ms Pardo de Vera Posada is a Civil Engineer from the University of A Coruña (Spain). In addition to her university studies, she has completed her training in management in different Business Schools and centres for infrastructures management. After having worked in the private sector in railway and road infrastructure engineering and consulting projects, she joined ADIF in 2007 after having followed the corresponding public selection procedure. Until 2015, she held successive positions in the

Field Works Direction, as Infrastructure Manager and as Regional Infrastructure Manager in the construction of the Madrid-Galicia High Speed Line. At the end of that year, she requested a special leave from ADIF to become the Director of Mobility and Infrastructure of the local authority (Diputación) in Pontevedra. In June 2016, she re-joined the Spanish Infrastructure Manager, taking the position of General Director of Operation and Construction of ADIF together with that of General Director of ADIF High Speed. In June 2018, she was appointed as Chairwoman of ADIF and ADIF High Speed, the first woman occupying these roles in both companies.

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- ↑ http://www.adif.es/en_US/index.shtml
- https://eimrail.org/
- → https://ertms.be/



Yves Perreal, Thales

Director of advanced programs in the Strategy Department

Dr Yves Perreal is director of advanced projects in the Strategy department of Thales transportation, and chairman of the UNIFE Digital platform. He holds a PhD in Applied Mathematics, and started his career at the Thales Central research laboratory, before moving to the Avionics sector to manage large projects. In 2005 he was in charge of the (cyber) security aspects of the Galileo in orbit validation phase. Since 2009, he is working for Thales Transportation, and has been very active in the setup of the Shift2Rail initiative.

Alessandro Valentini, TRENITALIA



对 www.trenitalia.com



Robert Sarfati, Systra

Robert SARFATI, Fellow IRSE, is a graduate Engineer in Signalling and Telecommunications.

Today, as SYSTRA's, he is involved in projects implying Technologies and Services for Mobility in Europe and worldwide.

Robert Sarfati is the Chairman of the UIC ERTMS/GSM-R ERIG, the Railways Implementers Group high level strategic Group gathering Telecommunications Railways Managers.

Robert Sarfati is the Chairman of the ETSI Project Rail telecommunications in charge of railway telecommunications standardisation process.

He joined SYSTRA in 1996 as a senior consultant and has been involved in the Telecommunications activities for railway and public transportation projects.

From 1996 to 2000, he has been leading the MORANE European project aiming at standardising railway radio communications in Europe.



Steffen Schmidt, Swiss Railways (SBB)

Program Director Next Generatiopn CCS

Mr Schmidt, master of computer science IT specialist with diploma, worked as an independent technology, automation and process-reengineering consultant in the media, military and transportation sector. He joined SBB in 2001 and was member of the executive board of SBB infrastructure between 2004 and 2010. Since 2011 he focusses on specialized rapid innovation projects, especially since 2014 on the design of smartrail4.0, where he is the lead architect and responsible for the department that develops the next generation CCS.

About Swiss Federal Railways (SBB)

The SBB (Swiss Federal Railways) is the national railway undertaking of Switzerland, representing the backbone of the Swiss public transport system. SBB has been transporting people and freight for more than 100 years contributing to the quality of life and competitiveness in Switzerland. SBB transports over 1, 25 million passengers and 205 000 tonnes of freight to their destination every day. SBB is a member of CER and the EUG.

↑ https://www.sbb.ch/en/home.html

- → http://www.cer.be/
- ↑ https://ertms.be/



Fabio Senesi, Rete Ferroviaria Italiana (RFI)

Head of ERTMS National Program

Mr Senesi is the RFI Head of Control and Command System (developing and implementing ERTMS and SCMT in Italy). He was formerly the Head of Standard Technologies in Rfi, also the former President of the ERTMS User Group and the former responsible of the Inspectorate and Control of the Italian NSA.

He holds an MBA HEC Paris, a PhD in Electronic Engineering and a degree in Electronic Engineering.

About RFI

RFI (Rete Ferroviaria Italiana) is the manager of the national railway network in Italy. RFI has the right to operate as national rail infrastructure manager under public concession for 60 years and is responsible for 80% of the national rail infrastructure (track, stations and terminals). RFI launched the operation of the Italian High Speed Network in December 2005 with the first line Roma-Napoli. Today, it manages almost 1000 km of High Speed Lines, with 500 train per day running at 300 km/h operational speed. RFI is a member of the EUG.

- → http://www.rfi.it/rfi-en
- ↑ https://ertms.be/



Chiel Spaans, European Agency for Railways

ERTMS Project Officer, Railways System Department

Project Manager radio evolution

对 www.era.europa.eu

Pieter Van Eyndhoven, Infrabel

INFR/ABEL

About Infrabel

Responsible for managing the Belgian railway network. It ensures optimum performance of all components of the Belgian rail infrastructure: tracks, catenaries, switches, signals, crossings, etc. Its core missions are to allocate the infrastructure capacity available among all railway operators and to manage rail traffic on the Belgian territory in real time. Developing and maintaining a safe and high-quality railway network for the benefit of all current and future railway companies is the main objective.

对 infrabel.be



Michel Van Liefferinge, UNIFE

Union Industry of Signalling

UNIFE Mr. Van Liefferinge is the UNISIG General Manager.

UNISIG

UNISIG is an industrial consortium which was created to develop the ERTMS/ETCS technical specifications. As an Associated Member of UNIFE, a recognised stakeholder, UNISIG actively contributes to the activities of the European Railway Agency in the field of ERTMS/ETCS technical specifications.

About UNIFE (European Rail Supply Industry Association)

UNIFE is representing the the European Rail manufacturing industry in Brussels since 1992, gathering leading large and SME rail supply companies active in the design, manufacture, maintenance and refurbishment of rail transport systems, subsystems and related equipment. UNIFE also brings together 14 national rail industry associations of European countries. UNIFE members have an 84% market share in Europe and supply 46% of the worldwide production of rail equipment and services. UNIFE advocates its members' interests at both the European and International level—actively promoting EU rail equipment and standards within Europe and abroad.

- → http://www.unife.org/about-us/who-we-are.html
- ↑ http://www.ertms.net/ertms/about-unisig.aspx



Elisabeth Werner, DG MOVE

Director for Land Transport (rail and road)

オ ec.europa.eu/transport

Yves Werner, Infrabel

INFR/ABEL

About Infrabel

Responsible for managing the Belgian railway network. It ensures optimum performance of all components of the Belgian rail infrastructure: tracks, catenaries, switches, signals, crossings, etc. Its core missions are to allocate the infrastructure capacity available among all railway operators and to manage rail traffic on the Belgian territory in real time. Developing and maintaining a safe and high-quality railway network for the benefit of all current and future railway companies is the main objective.

→ https://infrabel.be/



Joanna Wisniewska, Rambøll

Safety Manager Onboard, Danish Signalling Programme

Experienced safety specialist working with safety management, interoperability and independent assessment on railway projects, with emphasis on Onboard. Joanna has experience with safety approval.

TSI verifikation and authority approval of both rolling stock and infrastructure in relation to Danish NSA: Joanna is very familiar with the Danish rules within safety management and how the European regulations for both common safety methods (CSM-RA) and interoperability (TSI) are implemented in Denmark.

Joanna's experience is gained through being responsible for both planning and executing a safety approval process and acting as either independent assessor or NoBo.

About Rambøll

Rambøll provides professional engineering, design and consultancy services for a range of rail systems - from long distance rail to urban transport systems, such as metros and light rail. They provide services across the life cycle of rail projects - including inception, evaluation and operation and provide their technical support to capacity analysis, electrification, safety, rolling stock, signaling systems and ERTMS. Their clients include from government departments, railway authorities, infrastructure and train operators, contractors and suppliers to private investors.

→ https://ramboll.com/services-and-sectors/transport/rail-systems



Peter Wilms, NL ERTMS Programme

ERTMS and rolling stock Advisor

Mr Wilms is advisor at the Dutch ERTMS programme. He is involved in the following areas: CEF cofunding, Freight RU's, leasing companies, ERTMS B3 upgrade and retrofit programmes for freight locomotives and passenger trains.

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↑ https://www.government.nl/topics/mobility-public-transport-and-road-safety/rail-safety-ertms



Marcin Wojcik, DG MOVE

Assistant to the European Coordinator for ERTMS Officer

Mr Wójcik graduated from the Faculty of Law and Administration at the Jagellonian University of Krakow (Poland). He also studied at the University of Mainz (Germany) and the College of Europe (Natolin Campus in Poland).

After graduation, he worked for several years in both private and public sector in Poland. Between 2005 and 2015, he dealt with the implementation of the Regional Policy at DG REGIO (European Commission). In this context, he was in charge of a number of programmes and projects related among others to transport, competitiveness and R+D. As a policy officer at DG MOVE, he was responsible for the main rail market committee, the revision of technical specifications for interoperability and transposition of the EU law in Member States. Since 2018, he has been working as assistant to the European Coordinator for ERTMS and in this capacity, he has been following the ERTMS deployment at EU level.

オ <u>ec.europa.eu/transport</u>



Jayne Yeo, European Union Agency for Railways

Human and Organisational Factors Project Officer in the Safety and Operations team, Railway Systems Department

对 <u>www.era.europa.eu</u>