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Signal

The ERTMS Newsletter

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Did you know? – ERTMS Conference

The 2024 ERTMS Conference, hosted in Valenciennes, France, marked a significant milestone in the evolution of European rail traffic management. From 23 to 25 April 2024, the Cité des Congrès Valenciennes became the hub for experts, decision-makers, and stakeholders in the rail industry, all gathered to advance the European Rail Traffic Management System (ERTMS) and explore the future of rail communication systems.

A Deep Dive into ERTMS and FRMCS

The focus of this year's conference was the deployment of ERTMS projects across Europe, offering a platform to share lessons learned from successful implementation in various Member States, assess the current state of ERTMS deployment, and discuss the future of ERTMS. The event also provided an in-depth look at the migration and implementation strategies for the Future Railway Mobile Communication System (FRMCS), as well as innovation and research projects contributing to the evolution of the Control Command and Signalling Technical Specifications for Interoperability (CCS TSI).



Workshops and Expert Sessions

A series of workshops were organised, each focusing on critical topics such as standardisation, TSI input plans, and the integration of Human and Organisational Factors (HOF) to enhance ERTMS performance. Discussions also revolved around operational harmonisation, cost optimisation for the ERTMS lifecycle, system compatibility checks, and the challenges of certification and authorization. The introduction of FRMCS on the EU network and vehicles, as well as CCS target and migration strategies, were also key points of focus.

Day 1 - 23 April 2024

The conference started with inaugural workshops. These sessions covered a broad spectrum of subjects. The Deployment Management Team organised for example workshops on how to optimise cost for the ERTMS Lifecycle for Trackside and On-board. There were also workshops on topics like the DAC (Digital Automatic Coupling) programme and its interaction with ERTMS and on certification and authorisation.

Day 2 - 24 April 2024

The second day began with a formal opening by Josef Doppelbauer from ERA and Kristian Schmidt from DG MOVE and a keynote speech by the European ERTMS coordinator Matthias Ruete. The agenda was packed with sessions on the status and outlook of ERTMS, its legal framework. Migration scenarios to FRMCS were also discussed by exploring technical challenges, deployment strategies, interoperability considerations, and the potential impact on ERTMS deployment. Moderated by industry experts, the sessions featured presentations from key figures in the ERTMS landscape. The day concluded with a networking cocktail evening.

Day 3 - 25 April 2024

The final day opened with a speech by Josef Doppelbauer, followed by sessions focused on implementation recommendations, good practices, and a look into the future of rail operations and opportunities, including discussions on cyber threats. The conference wrapped up with a summary session, closing remarks by Magda Kopczyńska from DG MOVE, and reflections on the lessons learned from the ERTMS 2024 conference.

Global Participation and Impact

Welcoming participants from around the globe, the conference facilitated a dynamic exchange of experiences and ideas, propelling the deployment of ERTMS across Europe and beyond. The event underscored the importance of collaboration and knowledge-sharing in achieving a more integrated and efficient European rail network.



The 2024 ERTMS Conference not only served as a testament to the progress made in rail traffic management but also laid the groundwork for future advancements, ensuring the continued growth and innovation of the European rail system.

For more details about the conference, you can visit the official website of the European Union Agency for Railways: [ERTMS 2024 Conference | European Union Agency for Railways \(europa.eu\)](https://www.eurailways.eu/ertms-2024-conference)

In the spotlight – Interview with Léa Paties – Europe’s Rail JU

Léa Paties has been a part of Europe’s Rail Joint Undertaking since March 2017, where she is responsible for leading initiatives in the areas of Network Management Planning & Control as well as Digital & Automated Processes and Autonomous Train Operations. Her journey in the rail sector began at UNIFE, where she managed projects and played a key role in UNISIG, a consortium of European ETCS suppliers, focusing on the promotion of ERTMS both in Europe and globally. Léa has a Master’s degree in European Affairs and EU Project Management, from the University of Strasbourg in France.



Can you please explain the role or contributions of Europe’s Rail to the development of ERTMS?

The unique contribution of Europe’s Rail to the ERTMS landscape is its collaborative framework, which unites the European Commission and the private sector under the same roof in the form of a joint undertaking. This partnership is characterised by a shared set of financial rules and a high level of commitment from both parties. Unlike the disjointed calls for proposals of 20 years ago, Europe’s Rail manages a comprehensive technical programme with clear objectives, merging resources from both the public and private sectors. This approach enables us to collectively pursue and achieve the goals we set out for the advancement of ERTMS.

What do you see as the main advantages of the Joint Undertaking (JU) structure?

Europe’s Rail structure has proven to be robust and effective. In terms of governance, project initiation, management, and implementation, the structure works well. Since its inception in 2016, Europe’s Rail has seen a significant enhancement with the expansion of its membership, bringing more operators and infrastructure managers into the fold. This broadening of participation has been instrumental in securing the technical requirements and ensuring the future successful deployment of technical solutions. One of the best examples of this is the ATO - GoA2 (Automatic Train Operation Grade of Automation 2) project. As it stands, I believe the structure is optimal, and I do not see a pressing need for further adjustments currently.

Can you elaborate on Europe’s Rail most important ERTMS projects?

At Europe’s Rail, we are currently building the main already identified game changers of ERTMS in flagship projects¹ and at the same time launching new ideas with Exploratory research projects. FP2-R2DATO is currently the main Flagship Project working on automation, digitalisation, and signalling. Our technical teams are diligently working on the Automatic Train Operation (ATO) Grade of Automation 3.4, which marks a significant stride towards achieving full automation for mainline railways. This effort builds on the previous inclusion of ATO in the Technical Specifications for

Interoperability (TSI), a major milestone achieved by the Shift2Rail program.

Of course, the major novelty in the EU-RAIL programme is the System Pillar which provides governance, resource, and outputs to support a coherent and coordinated approach to the evolution of the rail system and the development, most notably a formal functional system architecture. This includes the development of a European Rule book for ETCS L2 operations, and the associated evolution of the trackside control system (i.e. the functions covered by the current interlocking and radio block centre). This is a key building block, among others, in future-proofing the onboard, allowing the evolution of ERTMS.

These activities are not just about incremental improvements; they represent transformative steps in the evolution of railway signalling and management. By securing interoperable and tested specifications in the TSI, we pave the way for their deployment and set the stage for a future where rail transport is more automated, efficient, and harmonised across Europe.

What do you see as the key challenges currently faced in the deployment of ERTMS, and what is the role of Europe’s Rail in addressing them?

One of the primary challenges we face in the deployment of ERTMS is the harmonisation of operational rules across different countries. The diversity in railway operations across Europe necessitates a concerted effort to reconcile these differences and move towards a more unified system. This challenge is exacerbated by the need for technical evolution within the system to avoid incompatibility issues and the pitfalls of national solutions.

In this respect, Europe’s Rail System Pillar is pivotal in addressing these challenges, with the full support of the rail stakeholders. This is vital for gathering the necessary technical requirements and ensuring the successful uptake and deployment of ERTMS. We are also tackling various technical aspects, such as automation and train positioning, and are collaborating with agencies like the EU Agency for the Space Programme (EUSPA) and the European Space Agency (ESA) to develop solutions that can be integrated into ERTMS.

¹ You can read more about these flagship projects [here](#).

Regarding these harmonisation issues, we see that in the aviation sector, interoperability is treated completely differently. Do you see any learnings from other sectors, such as aviation?

The aviation sector's approach to interoperability and data sharing, particularly in Air Traffic Management (ATM), offers valuable insights for the rail sector. Despite the distinct differences between the two industries, there is to learn from another industry that has mastered the art of efficient operation. We are exploring this through a project jointly funded with SESAR 3 JU², which aims to find common ways to share data between airports and rail infrastructure managers. This project, which will be launched later this year, includes conducting large-scale demonstrations across Europe to test solutions for data sharing in scenarios such as train arrivals and airport disruptions.

While the rail sector has its unique challenges, particularly regarding the willingness of infrastructure managers to share data and power, the project represents a step in the right direction. It is an opportunity to learn from another industry that has mastered the art of efficient operation and to see if we can apply those lessons to improve rail traffic management, overall interoperability in rail transport and services to customers.

How can Europe's Rail make sure that its work on ERTMS is actually adopted by the industry and does not remain 'academic'?

Europe's Rail is committed to bridging the gap between academic research and practical industry applications. We have established a fully dedicated exploratory research activity that involves highly qualified professionals, including those with PhDs, working on cutting-edge topics like AI and traffic management. Exploratory research plays a crucial role in our innovation ecosystem. We actively consult with the sector, scientific committees, and various stakeholders to ensure that the research areas we focus on, such as AI, are applicable and beneficial to the rail industry. Moreover, by expanding our membership to include more operators and infrastructure managers, we are able to gather essential requirements for technical work and facilitate the uptake and deployment of research outcomes. This collaborative approach ensures that academic research does not remain theoretical but translates into tangible improvements within the rail sector.

What do you see as an example of a successful partnership project?

At Europe's Rail, we have seen a number of successful partnership projects that exemplify the synergy between industry and academic research. While it is still early days for our research projects, we can look back at Shift2Rail for instances where universities and research institutes have contributed significantly. For example, academic partners have supported the development of Traffic Management Systems (TMS) and Train Control and Monitoring Systems

(TCMS), providing fresh ideas and helping to implement physical layers for testing prototypes.

These collaborations have enriched our projects with new concepts, particularly in areas like moving block signalling. It is this kind of interdisciplinary collaborations that fuels innovation and ensures that academic research is grounded in real-world applications. As we move forward, we expect to see even more of these collaborative efforts materialise, demonstrating the benefits of aligning academic research with industry needs.

While the industry has its own objectives, Europe's Rail is tasked with making informed decisions that align with the sector's needs. This collaborative approach ensures that academic research is not overlooked but is integrated into our broader goals, contributing to the sector's innovation and progress.

What do you see as the key challenges currently faced in the deployment of ERTMS, and what is the role of Europe's Rail in addressing them?

The deployment of ERTMS is a complex endeavour that requires clear strategic and technical objectives from the outset. One of the key challenges is ensuring alignment among all stakeholders on the end goal. Investing significant resources without a clear direction can lead to issues down the line. It is crucial to have discussions early on, even if they lead to conflict, as this helps to resolve any misalignment and sets a solid foundation for achieving our goals. Europe's Rail plays a pivotal role in facilitating this alignment. We bring together the European Commission, the European Railway Agency (ERA), suppliers, operators, and infrastructure managers to the same table. This mix of political will and industry motivation is essential. Without consensus and cooperation from both sides, the deployment and evolution of ERTMS cannot succeed.

In order to agree on the direction these main parties need to be involved. It is a recipe for success that requires a bit of everything from everyone involved.

Looking back a decade, the approach to ERTMS deployment and evolution has significantly advanced. With the establishment of the system pillar and the innovation pillar, we have made strides in agreeing on jointly testing solutions and start working on operational harmonization. The progress is substantial, and while some may move faster than others, the general commitment to ERTMS deployment is no longer in question. The focus now is on managing its evolution effectively.

How can we avoid repeating the mistakes made during the ERTMS deployment, ensuring the FRMCS implementation remains cost-effective for the deployment group?

To avoid repeating the mistakes made during the ERTMS deployment with the upcoming FRMCS deployment, it is essential to start with clear strategic and technical objectives. The key is to have alignment among all stakeholders on the end goal from the beginning. This

² Working on the delivery of the Digital European Sky - <https://www.sesarju.eu/>

approach is crucial for avoiding issues later in the deployment process.

Europe's Rail, by bringing together the European Commission, suppliers, operators, infrastructure managers, and the ERA, plays a critical role in facilitating this alignment. The recently created EU-RAIL Deployment group will make recommendations addressing key aspects for an efficient and coordinated deployment of FRMCS, covering among other items, technical and operational migration considerations, synchronisation at European level, economic and business case analyses, purchasing strategies and industrial capacity as well as financing and funding aspects. It is a complex mix of political will and industry motivation that needs to be balanced. Without consensus and cooperation from all sides, the deployment and evolution of ERTMS, and by extension FRMCS, cannot succeed.

Unfortunately, we have encountered few women in transport for this newsletter issued so far. What is your take on the European initiative for women in transport?

It is a step in the right direction. If we are serious about bringing more women into the transport sector, especially in technical and engineering roles where they are underrepresented, we need to start at the educational level. We have got to get into schools and universities and show that rail is not an outdated industry but is actually evolving with new technologies. That is how we will make it appealing and start seeing more women in all areas and levels of transport. It is not a quick fix, you cannot change the gender balance in a year. But I believe that starting with education and changing perceptions is key. And in the meantime, initiatives like the Commission's all-female panel at the Connecting Europe Days are important too. It is about showing that women can talk about the same technical topics as men—it is quite refreshing and necessary for change.

Latest developments

Disclaimer

All articles included in this section were sourced from publicly available websites covering the period of March 2024-May 2024.

Authorship of all articles remains with the individual publishers; in case of quotations the original authors of the individual news items should be quoted as source.

The Deployment Management Team and the European Commission do not take any responsibility for the correctness of the information provided.

European Institutions - Application for funding from the CEF mechanism for the railway line Rio – Patras has been submitted

March 2024

An application for funding for the line from Rio – Patras and its connection to the new Port of Patras, through the "Connecting Europe Facility" 2021-2027, was submitted at the start of this year by the Ministry of Infrastructure and Transport.

In response to a parliamentary question, the responsible minister Christos Staikouras noted that its evaluation by the European Union's services is expected to be completed by the end of the first half of 2024.

More specifically, in answer to a question by SYRIZA – Progressive Alliance MP of Achaia, Andreas Panagiotopoulos, about the projects of the Aigio – Rio and Rio - Akti Dymeon Lines, the Minister emphasised that: "In the area from Aigio to Rio, the following projects are underway:

Electrification of the new double-track line in the Kiato - Aigio section, extending to the Rododafni area.

Construction of railway stops (buildings, platforms, shelters and surrounding area), superstructure, electrification, signalling - telecommand, ETCS and telecommunications for the new railway line in the Rododafni - Rio section.

Simultaneously, in the section from Pspathopyrgos to Rio, part of the infrastructure works, contracted but not completed, were dissolved by ERGOSE in August 2023".

During his second speech, the Minister of Infrastructure and Transport pointed out: "For the completion of the Rio to Patras line and its connection to the new Port of Patras, the contract for the 'design - construction' of "Completion of the new double-track line Kiato - Patras in the Rio - new Port of Patras section' is in the process of being tendered using the 'Competitive Dialogue', with an estimated budget of EUR 477 million.

The scope of the project is to build a new double-track line in the section Rio - New Port of Patras, with a 10.2 km length, around 5.2 km of which will be underground to pass through the city of Patras (from Kanellopoulou to Agios Andreas), including construction of eight stops, five of which in the underground section.

In December 2023, Stage B (Dialogue with participants) of the Tender was completed, and currently, the documents

for launching Stage B (Invitation to submit a financially binding offer) are being prepared.

Securing co-financing from EU funds is a precondition for concluding a contract.

An application for funding was submitted in January 2024 from the "Connecting Europe Facility" 2021-2027, and its evaluation by the European Union services is anticipated by the end of the first half of 2024.

Source: <https://septrainose.gr/article/18745>

Belgium - Third and fourth tracks (2 x 36 km) ready for train traffic between Aalter and Oostkamp

April 2024

Note: This is not the full article, please visit the below-mentioned link for full article

Infrabel and its engineering firm TUC RAIL are making steady progress with the construction of the third and fourth tracks between Ghent and Bruges (Line 50D). Expanding this strategic rail axis to four tracks is essential for both passenger traffic towards the coast and freight traffic to and from the ports of Zeebrugge and Ostend. Since April 13, trains have been able to use the new third track on the 16 km long section between Bellem and Oostkamp, which improves capacity and punctuality. By the end of 2027, the two new tracks between Ghent and Bruges will be fully completed, allowing for the renewal of the two existing tracks, scheduled for completion by the end of 2029.

The two new tracks between Ghent and Bruges will be located on either side of the existing tracks. A total of 76 km (2 x 38 km) of new tracks will be laid. **The process begins with the construction of a new track bed, followed by the installation of rail infrastructure, including tracks, overhead lines, and signalling (which includes the European safety system ETCS, European Train Control System).**

Georges Gilkinet, Deputy Prime Minister and Federal Minister for Mobility stated: 'As Minister for Mobility, my goal is to make train travel more attractive by offering better service and a more reliable experience for all passengers. To achieve this, we must invest in modernizing and expanding the rail network. We're able to do this thanks to the additional funds the federal government has allocated for the railways during this legislative term, including 1 billion euros in investments for Infrabel. The increased capacity between Ghent and Bruges will enable the transport of more passengers and freight on this strategic line, which is

one of the busiest in the country. Upgrading to four tracks will improve coordination between IC trains, local S trains, and freight trains, thereby enhancing punctuality. Additionally, I am pleased to announce the modernization and improved accessibility of seven stations along this line. This way, we ensure that no one is left stranded on the platform!

Source: <https://www.hetnieuwsvanwestvlaanderen.be/derde-en-vierde-spoor-2-x-36-km-klaar-voor-treinverkeer-tussen-aalter-en-oostkamp/>

Czechia - The implementation of ETCS is in full swing. From January 2025, the system will be in exclusive operation

March 2024

From 1 January 2025, the exclusive operation of the European Train Control System (ETCS) will commence on selected sections of the Czech railway. The system's fine-tuning is currently in progress and any issues that emerged during trial operation have been successfully resolved.

Real-world testing with multiple vehicles has also helped improve the system. These were the conclusions reached by the members of the coordination expert group, convened by the Minister of Transport, Martin Kupka.

Kupka stated that significant advancements have been made in their preparations for exclusive operation. There have been improvements on the Olomouc-Uničov line, and system testing continues on other lines. Additional locomotives equipped with the onboard component of ETCS have been released to carriers. These developments bring them closer to the exclusive operation of the European signalling system on selected sections of Corridors I and II and the connecting branch Přerov- Česká Třebová from 1 January 2025.

For the first half of 2024, the rollout plan includes:

- 1) Stress tests on the entire network for exclusive operation from 1 January 2025, to be conducted gradually until July 2024.
- 2) Improving the reliability of the GSM-R communication system and resolving areas with signal failures, including drone monitoring.
- 3) Diagnosing individual systems within the ERTMS.
- 4) Reducing ETCS closures.
- 5) Increasing the number of trains running under ETCS supervision in two stages.
- 6) Encouraging other carriers to ensure compatibility tests and participation in operation under ETCS supervision.

The deployment of ETCS is a key step to enhance safety, automate operations and digitalise railways across Europe. 1174 kilometres of Czech lines have already been fitted with this unified technology, with more installations ongoing. Currently, there are seven hundred vehicles equipped with the onboard part of the ETCS running on Czech rails, marking a significant advancement since the last meeting in November 2023.

Source: <https://www.zakazka.cz/zavadeni-etcs-bezi-naplno-od-ledna-2025-bude-system-ve-vyhradnim-provozu/>

Denmark - Danish ERTMS project delayed again

May 2024

DANISH infrastructure manager Banedanmark has confirmed that the rollout of ETCS on the eastern portion of its network will now not be completed until 2033, three years later than previously envisaged.

Banedanmark says it has agreed an alternative schedule for the delivery of works with Alstom, which is working under a contract originally worth €300m signed in December 2011 to equip around 800km of lines with ETCS Level 2 Baseline 3.

Issues with equipping Danish fleets with onboard ETCS equipment ultimately led to a rethink of the original schedule of the project, work on which started in 2012. In November 2017, the Danish government announced that it was pushing back completion from a previously revised deadline of 2023 to 2030.

Banedanmark says the project has faced challenges with progress in the east of the country, which has delayed rollout. In addition, major infrastructure projects launched since the start of work - the Fehmarn Belt tunnel, the new Vestfyn line from Odense to Middlefart and capacity expansion at Ringsted - have increased the overall scope of the ERTMS programme.

Source: <https://www.railjournal.com/signalling/danish-ertms-project-delayed-again/>

Estonia - The second stage of the Rail Baltica Control-Command and Signalling subsystem Design and Build procurement has been launched

April 2024

The Rail Baltica joint venture RB Rail AS has announced the next progress milestones of the Control-Command and Signalling (CCS) subsystem Design and Build procurement, which is one of the strategic procurements for the project implementation, as the second stage of the procedure has been opened.

Five candidates have qualified and confirmed to continue with the procurement: GTS Deutschland GmbH (Germany), Hitachi Rail STS S.P.A. (Italy), association of persons consisting of the companies Indra Sistemas, S.A, AŽD Praha S.R.O (Spain and Czech Republic), association of persons "SKGN Baltics" with the participation of Siemens Mobility OY Latvian Branch, Siemens Mobility GMBH, GRK Suomi OY, NRC Group Finland OY, Kontron Transportation GMBH (Latvia, Germany, Finland, Austria), and association of persons "ALSTOM – COBRA – FIMA" consisting of Alstom Transport SA, Alstom Baltics SIA, Cobra Instalaciones y Servicios S.A, PS "Fima KZA Krakow" (France, Latvia, Spain). Contract with the chosen partner is planned to be signed in the second half of 2025.

"Considering the scale of this procurement, the commission has spent significant time to ensure that all requirements and criteria are clearly defined and explained, thus ensuring maximum efficiency after signing the agreement. The procurement of CCS subsystem is a critical part of railway infrastructure as it guarantees the safety, interoperability, and efficiency of the railway network," said Aiga Benfelde,

Deputy Head of Procurement at RB Rail AS and Chairperson of the Procurement Commission.

“This achievement marks a significant project milestone worth acknowledging. The features encompassed within our CCS scope are not just remarkable but also hold historical significance for some. From a seamless CCS system spanning three countries to the latest European Train Control System (ETCS) baseline and innovative radio communication FRMCS, these advancements are shaping the future of rail technology. With contributions from Shift2Rail and practical implementations like EULYNX, our project embodies innovation and collaboration. We are proud of our flexible Traffic Management System (TMS) architecture, sustainable power solutions, and pioneering cableway designs. Moreover, our emphasis on security and cyber-security sets a new standard,” emphasized Jean Marc Bedmar, Head of Systems and Operations Department at RB Rail AS.

As informed before, the technical plan for deploying the Rail Baltica CCS subsystem covers various systems like ETCS, FRMCS, interlocking, traffic management, ICT, voice communication, monitoring, SCADA, station equipment, CCTV, master clock, ticketing, platform gates, power supply, cableway system, and technical buildings for CCS equipment. The design, construction, and activation of this subsystem will happen under a joint contract, including the time for addressing any defects. Currently, it is expected that this implementation along the Rail Baltica mainline will be completed by the end of 2030.

Source: https://www.baltictimes.com/the_second_stage_of_the_rail_baltica_control_command_and_signalling_subsystem_design_and_build_procurement_has_been_launched/

Finland - Siemens Mobility introduces modern ETCS Level 2 train control system in Finland for the first time

April 2024

Siemens Mobility has been awarded a contract to modernize the first section of the Finnish rail network as part of the Finnish government's Digirail project. The goal of Digirail is to modernize Finland's train control system. **This ground-breaking initiative includes the initial installation of the European Train Control System Level 2 (ETCS L2) with Hybrid Train Detection (HTD) on a 191-kilometre stretch between Lielähti and Rauma-Pori.**

Improving the capacity and safety of the network

The introduction of this new technology, based on Siemens Mobility's DS3 platform, which relies entirely on commercially available hardware (COTS), is expected to increase the capacity of the rail network, improve punctuality, minimize disruptions and vulnerabilities, and enhance operational safety. The first section of the project is scheduled to be commissioned by 2027.

Voices from the industry

Andre Rodenbeck, CEO of Rail Infrastructure at Siemens Mobility, expressed his confidence in the partnership:

‘We are very pleased that Fintraffic Railway and the Digirail programme have chosen us as the main partner for the implementation of Finland's first ETCS line. Together we will shape the future of rail transport.’

Sanna Järvenpää, CEO of Fintraffic Railway Ltd, emphasised the importance of the project for the transformation of the railway sector:

‘The Digirail project represents a crucial investment in maintaining service levels, increasing capacity and improving punctuality and safety’.

Digirail: The future of the Finnish train control system

The Digirail project, led by the Ministry of Transport and Communications, aims to transform Finland's train control system and introduce ETCS for improved interoperability. Collaboration with various stakeholders will drive the upgrade of existing lines and the development of future sections to revolutionise Finland's transport system.

Siemens Mobility drives ETCS testing forward.

Siemens Mobility has recently entered a partnership with Pääkaupunkiseudun Junakalusto Oy, the Finnish rail vehicle owner, to conduct the first tests of ETCS in Finland. By equipping multiple units with Trainguard OBU and Automated Train Operation (ATO) via ETCS, the aim is to improve the efficiency and cost-effectiveness of rail transport.

Source: <https://eisenbahn.blog/siemens-mobility-fuehrt-erstmalig-modernes-zugssicherungssystem-etcs-level-2-in-finnland-ein>

France - SNCF Réseau PACA unveils its map of major construction sites

March 2024

Note: This is not the full article, please visit the below-mentioned link for full article

In an event attended by Renaud Muselier, President of the Provence-Alpes-Côte d'Azur Region, Deputy President of the Regions of France, Karim Touati, Territorial Director SNCF Réseau Provence-Alpes-Côte d'Azur, and Agnès Moutet-Lamy, Regional Director SNCF Gares & Connexions Occitanie and South, SNCF Réseau revealed the map of construction sites for the year 2024 on March 15.

After a significant investment of EUR 270 million in 2023, 2024 is viewed as a key year with the introduction of SNCF Sud Azur and Transdev Rail Sud Inter-métropoles. These will operate the Nice star lines and Marseille - Nice intercity connections as part of the competitive regional transport market. This move will result in a denser transport offer with a train every 15 minutes in each direction all day between Cannes and Menton from December 15, 2024.

CCR, ERTMS, great ambitions for signalling

In parallel with this large-scale work, SNCF Réseau is pursuing an ambitious signalling modernisation programme in 2024. In the west of the country, the centralised control of the network (CCR) will take a first step this year in Provence-Alpes-Côte d'Azur with the remote control, in June, of the Pas-des-Lanciers signal box from Marseille. In 2024, work will also continue on the next phase, known as CCR Ouest-Provence stage 1, which provides for the remote

control of the Rognac, Berre, Les Roques, Miramas and St-Martin de Crau substations by 2028. To the east of Marseille, SNCF Réseau's second major programme, called "High Performance Marseille – Ventimiglia" (HPMV), is entering its second year of implementation. **A pilot project, supported by Europe, the State and the Southern Region, it aims to promote rail interoperability between France and Italy, optimize operating and maintenance costs, and increase robustness and regularity. It provides for the deployment of ERTMS.** It should be noted that SNCF Réseau has announced that this technology will be operational between Théoule-sur-Mer, Grasse and Menton by the end of 2027. 2024, will also be the year when the regional control tower (currently under construction) will be delivered. Located near Marseille's main signal box, this building will eventually house all the agents responsible for managing rail traffic on the region's main network as the remote controls of the substations are put into service, i.e.:

- The 26 current control installations of the network
- The 16 substations of the area Ouest Provence
- The 10 substations of the area Azur

Spread

over 5 departments and representing 500 km of track, the Fine Service Lines of the Territory (LDFT), are not to be outdone. Thus, in 2024, the Nice – Breil line will benefit from a major regeneration program. The work will include reinforcing the vault of two tunnels and securing twelve earthen structures against the risk of landslides, replacing a rail bridge and sections of the railway line. From September 2024 to mid-December 2025, the works will require the interruption of traffic between Drap and Breil and the substitution of road services. This 15-month break will make it possible to carry out these interventions, to scale them up and to reduce them over time. Carried out on an industrial scale, this large-scale project will contribute to the perpetuation of the emblematic line of the Train des Merveilles, which links the shores of the Mediterranean to the municipalities of the upper Roya valley, gives access to the Mercantour Park and, beyond that, constitutes a link with Italy.

Source: <https://www.constructioncayola.com/rail/article/2024/03/20/148200/sncf-reseau-paca-devoile-carte-des-grands-chantiers>

Germany - Siemens Mobility concludes framework agreement with Railpool

March 2024

Railpool and Siemens Mobility have signed a framework agreement for the delivery of up to 250 locomotives. Upon signing the contract, 70 Vectron locomotives were immediately ordered. The initial order comprises 24 multi-system locomotives for use in AC and DC networks, as well as 46 AC locomotives. With this order, Railpool's Vectron fleet will expand to a total of 228 locomotives. The framework agreement encompasses Vectron variants that can operate in up to 16 countries and on various European corridors, including both north-south and east-west routes.

The locomotives for Railpool have an output of 6.4 megawatts and can reach a maximum speed of up to 230 km/h, depending on the variant. **They are also equipped with the necessary national train control systems as well as the European Train Control System (ETCS).**

Source: <https://www.zevrail.de/news/siemens-mobility-schliesst-rahmenvertrag-mit-railpool>

Greece - Rail network: 15 interventions for reform and modernisation

April 2024

Note: This is not the full article, please visit the below-mentioned link for full article

Mr. Staikouras referred in detail to 15 interventions aimed at revitalizing the Greek railway.

On Friday, Minister of Infrastructure and Transport Christos Staikouras briefed the Parliament's Standing Committee on Production and Trade on actions taken to reform and modernize the railway sector. Mr. Staikouras provided detailed information about 15 interventions aimed at revitalizing the Greek railway sector.

(...)

2. Completed the delivery, in November 2023, of the contract for the installation of the automatic train protection system (ETCS - Level 1) on the line.

Specifically, the installation was implemented, within the schedule set by the political leadership, on the sections SKA (Acharnon Railway Junction) - Oinoi, Oinoi - Tithorea and Larissa - Platy.

With the completion of the above installation, the central axis, except for the section destroyed by the DANIEL disaster, is fully covered by the ETCS system.

3. The Contract between GAIOSE and Hitachi Rail for the reintroduction of ETCS on board trains was signed.

The Contract was signed on 14 March 2024, and work started on 19 March.

Between then and 22 April, testing has been completed on 17 ETCS units on board trains, which have been returned to proper condition.

(...)

The exceptional funding of the Agency to address the issue of ASIDs is part of the overall actions implemented by the Ministry of Infrastructure and Transport, with the aim of enhancing the level of safety on the country's rail network."

Source: <https://www.ant1news.gr/Politics/article/910257/sidirodromiko-diktyo-15-parembaseis-gia-ti-metarrythmisi-kai-ton-eksvaxronismo-toy>

Hungary - Advanced ETCS level 1 solution facilitates seamless cross-border rail connectivity between Hungary and Austria

May 2024

Thales Transport has achieved a successful upgrade of the European Train Control System (ETCS) Level 1 in Hungary, spanning from Győr to Hegyeshalom at the border with Austria. This technical advancement now allows trains to operate seamlessly from Budapest to Vienna without stopping at the border.

The upgraded ETCS solution elevates the entire railway line 1 to a high-speed corridor, enabling speeds of up to 160 km/h, surpassing previous constraints of 120 km/h on selected segments. This enhancement brings tangible benefits to both passengers and freight traffic, including increased capacity and improved punctuality along this crucial section of the main railway corridor between Budapest and Vienna, accommodating up to 300 trains per day.

The heightened driving speeds, coupled with maximum safety, are made possible by enhancing rail drivers' visual capabilities. This is achieved through the implementation of multi-section movement authority, facilitated by the coupling of Lineside Electronic Units (LEU). With this solution in place, the system gains predictive capabilities, granting movement authorities for up to three sections ahead.

ETCS Level 1 also contributes to safety in critical areas, such as level crossings. With approximately one level crossing every 1.5 kilometres, ensuring a safe yet efficient solution is paramount, especially when operating at high speeds. Through continuous surveillance of level crossings using the Thales train control system, train drivers can rely on closed barriers whenever trains are passing. In the event of any issues with the barrier system, train drivers receive timely notifications to reduce speed, ensuring safety is maintained.

The system's maintainability has seen significant enhancements, with the capability to manage LEU diagnosis remotely, allowing for the early resolution of issues and ensuring seamless operations.

The revitalization of the current ETCS Level 1 solution enables efficient interoperability with existing signalling installations on the line. The next step involves modernizing the section from Győr to Budapest with these enhanced ETCS Level 1 functionalities.

"We are proud to have collaborated closely with the Hungarian State Railways MÁV to improve rail traffic on this vital line connecting Hungary and Austria. Our contribution to enhancing the appeal of Hungary's railways is a crucial step in addressing today's environmental challenges and promoting sustainable mobility," said György Mikics, Managing Director of Transport at Thales in Hungary.

"Congratulations to the entire team. The joint efforts across all disciplines have been instrumental in achieving this milestone. This marks another important step in demonstrating the capabilities of our enhanced ETCS Level 1 portfolio, particularly with the introduction of the new LEU Management & Diagnosis solution in the field," said

Marcus Vana, Director Engineering of Transport at Thales in Austria.

Source: <https://www.thalesgroup.com/en/worldwide/transport/news/advanced-etcs-level-1-solution-facilitates-seamless-cross-border-rail>

Italy - Upgrading works on the railway line in Sicily begin

March 2024

Reti Ferroviarie Italiane has announced the commencement of work on the electrification of the line between Cinisi and Alcamo Diramazione, in conjunction with the installation of ERTMS: the same system used on high-speed lines. The project aims to provide increased reliability of the infrastructure and enhance the consistency and quality of service of the regional railway network. Substantial maintenance and renewal of the track between Cinisi and Partinico will take place to adhere to safety standards. In Trapani station, however, implementation work on the General Regulatory Plan will be conducted, while in Marsala the accessibility to the station will be improved thanks to the elevation of the first platform, the construction of the pedestrian underpass and the new second platform. Lastly, the removal of three level crossings between Trapani and Paceco and the development of an underpass near Trapani station are planned. The total investment amounts to approximately EUR 140 million, also funded with PNRR funds.

Source: <https://www.telesudweb.it/21-03-2024/al-via-i-lavori-di-adequamento-sulla-linea-ferroviaria-in-sicilia>

Netherlands - CAF to supply ten commuter trains in the Netherlands

April 2024

Qbuzz, a subsidiary of Italian Railways (FS Group), has selected CAF to supply ten commuter trains and a corresponding spare parts package, which are scheduled for delivery from 2028. The trains are part of CAF's Civity platform and will be equipped with CAF's ETCS. These trains will reach a speed of 160 km/h and each will consist of three cars with a total capacity of approximately 350 passengers along a 60-meter length. The trains will also feature areas designed to accommodate people with reduced mobility and spaces for bicycle transport.

The new train units will be used on the line running between the cities of Dordrecht and Geldermalsen, known as the 'MerwedeLinge line.' The operator was awarded this line in 2018. This new fleet will replace the existing units currently operating on the line, which are not equipped with the ERTMS signalling system. ERTMS is scheduled to be implemented on parts of the line by 2027.

Source: <https://www.spanishrailwaysnews.com/noticias.asp?not=9593&cs=home>

Norway - Strengthening of the railway for NOK 28 billion

March 2024

Note: This is not the full article, please visit the below-mentioned link for full article

More trains on the Dovre Line and between Bergen and Arna, replacing diesel with green electricity in Trøndelag, and implementing a new digital signalling system on the Gjøvik Line. These are some of the promises made by Bane NOR for 2024.

There is no idleness in the Norwegian railway system. This year, the state is investing NOK 28 billion in new facilities, operations, maintenance, and the renewal of old infrastructure.

Bane NOR has agreed with the Ministry of Transport and Communications that it will deliver this year:

(...)

New digital signalling system (ERTMS) on the Gjøvik Line - A new digital signalling system is scheduled to be in place this autumn. It will provide more trains on schedule and even better safety with remote control of train traffic.

Better punctuality in the long run

Chief executive Thor Gjermund Eriksen is pleased with the list of this year's initiatives. He points out that several of the projects will also contribute to fewer delays and cancelled departures.

"We have a lot of old infrastructure and some run-down facilities. This makes the work on punctuality complicated, time-consuming, and expensive. There are no simple solutions that provide quick results. We are working to improve train services in the long term, in collaboration with the train companies and our colleagues in the railway sector," says Eriksen.

Source: <https://finalcall.travel/no/styrker-jernbanen-for-28-milliarder/>

Poland - CARGOUNIT has ordered 90 Vectron MS and 10 Smartron locomotives

March 2024

CARGOUNIT has signed a framework agreement with Siemens Mobility for the purchase of 90 Vectron MS locomotives, with 30 units already ordered. Additionally, the Wrocław-based company has decided to acquire 10 more Smartron units. The first deliveries are scheduled for 2025.

The ordered Vectron MS locomotives feature an output power of 6.4 MW in AC and 6.0 MW in DC. **They will also be equipped with an ETCS system compliant with current specifications (Baseline 3).**

These new Vectron MS units will primarily operate in Poland, Germany, Austria, the Czech Republic, Slovakia, Hungary, the Netherlands, Romania, Slovenia, Croatia, Serbia, Italy, Bulgaria, and Belgium. Smartron locomotives, on the other hand, will be available for use in Germany, Bulgaria, Romania, and other countries.

Technologically advanced multi-system locomotives like the Vectron and Smartron are crucial for performing various freight tasks across Europe, supporting the dynamic growth of the intermodal segment. Vectrons are modern, versatile

locomotives available in the European market, characterized by a modular design that allows easy adaptation to the specific characteristics of different countries.

During the design process, the main focus was on efficiency and cost-effectiveness in performing traction tasks in both national and international passenger and freight traffic in Europe.

"The signing of the framework agreement with Siemens Mobility represents another milestone for CARGOUNIT in implementing our strategy to modernize our fleet of locomotives for freight and passenger traffic in Poland and the rest of Central and Eastern Europe. Over the last three years, we have significantly exceeded our original plans to purchase and deliver modern locomotives, including multi-system locomotives, to customers in Poland. We anticipate that the trend of replacing rolling stock with modern units will continue in the coming years, aligning perfectly with the sustainable development plans of both CARGOUNIT and railway operators seeking reliable, low-emission rolling stock. We are confident that CARGOUNIT will benefit from the shift toward modern rolling stock in the countries of Central and Eastern Europe," said Łukasz Boroń, CEO of CARGOUNIT.

Source: <https://polskijprzemysl.com.pl/wiadomosci/lokomotywy-wielosystemowe/>

Romania - Pesa has signed a contract for the purchase of 62 electric multiple units for Romanian railways.

April 2024

The manufacturer announced that Pesa has concluded a contract with the Romanian Railway Repair Agency (ARF) for the supply of 62 multiple electric units (EMUs) for three regions: Bucharest, Iași, and Cluj.

'The Reggio vehicles to be produced by Pesa for the Romanian Railway Repair Agency are 3-section multi-unit electric trains built on separate carriages. They are capable of speeds up to 160 km/h and feature 224 seats, designed to meet the needs of individuals with disabilities. **These units will be powered by a 25 kV AC traction network and equipped with both the Romanian PZB 90 safety system and the latest ETCS,' according to the press release.**

"We want to steadily increase our presence in Romania"

In December, Pesa signed a contract with the Romanian Railway Repair Agency (ARF) for the delivery of 20 vehicles (+9 optional) in the Inter-Regio class. Under both contracts, the Bydgoszcz-based manufacturer will also provide vehicle maintenance services to ARF for a period of 15 years. To facilitate this, Pesa and state railway company CFR Călători will establish local service centres. Pesa has already signed preliminary agreements with the state companies CFR Călători and CFR SA.

'We aim to steadily increase our presence in Romania. We will soon open an office in Bucharest, and we are beginning preparations for launching our service centers. We plan to create them in collaboration with local partners, so we have a lot of work ahead of us,' said Hana Vişniesca, Pesa's representative in Romania.

Previously, from 2012 to 2023, Pesa delivered trams to the Romanian market. There are currently 37 trams operating in Cluj, Iași, and Craiova.

Pesa Bydgoszcz is a Polish manufacturer of railway vehicles. The company also specializes in the modernization, repair, and overhaul of rolling stock.

Source: <https://www.gdo.ro/pesa-a-semnat-un-contract-pentru-achizitionarea-a-62-de-unitati-multiple-electrice-pentru-caile-ferate-romanesti/>

Slovakia - Participation of VÁHOSTAV-SK in the construction and modernisation of railway infrastructure in Slovakia and the Czech Republic

April 2024

Note: This is not the full article, please visit the below-mentioned link for full article

In line with the European Union's forward-looking objectives of increasing the safety of passenger and freight transport, shifting transport from road to rail, and achieving ecological benefits, projects to modernize and build new rail transport infrastructure are being prepared and implemented across its member states. The goal is to ensure fast, safe, and reliable transportation of people and goods on rail lines. In this article, we will present railway construction projects in which VÁHOSTAV-SK, a.s., Bratislava, is actively involved.

ŽSR, Modernization of the railway line Devínska Nová Ves - state border SR/ČR

The client for this construction project is the Railways of the Slovak Republic Bratislava (ŽSR). The contractor is a joint venture between ICM S.p.A Vicenza and VÁHOSTAV-SK, a.s., Bratislava, with ICM as the managing partner. The works contract is governed by the 'Design and Build' contract conditions according to the YELLOW FIDIC (first edition by the International Federation of Consulting Engineers, 1999). The project involves the modernization of line No. 126A Bratislava, hl. st. - Kúty - Lanžhot CZ, specifically in Construction A, titled 'ŽSR: Modernization of the railway line Devínska Nová Ves - state border of the Slovak Republic/Czech Republic.' This section comprises the railway stretch from Devínska Nová Ves to Malacky (24.286 km) and from Kúty to the border with the Czech Republic beyond the Morava River (6.81 km). **Under ŽSR Construction B, 'Implementation of ERTMS on the section Devínska Nová Ves - state border SR/Czech Republic,' a total section of 73.516 km will be implemented. However, for the line section B.2 Malacky (outside) - Kúty (km 25.670 - 68.090), the contractor will design and implement only the GSM-R system (without ETCS Level 2). This decision avoids any potential future conflicts with the upcoming line modernization and the implementation of ETCS Level 2 on the Malacky (outside) - ŽST Kúty railway section.** This project is highly complex due to the required engineering activities, property settlements, and communication with local authorities, affected third parties, and state administration bodies in both Slovakia and the Czech Republic.

Conclusion

Carrying out work on railway construction sites, whether on inter-station sections or at the railway stations themselves, presents challenges. Construction must be conducted according to clear rules, pre-approved with the railway manager in the form of authorized closures, and delays to the transport of people and goods must be minimized. This requires ongoing constructive communication between all parties involved, including the client as the investor and track manager, the contractor, the designer, public authorities, the affected municipalities, utility owners and operators, and the public. This coordination is especially crucial when contracts are executed under 'design and build' conditions. A responsible contractor must navigate these realities. While challenges may arise, they are being addressed and resolved to the reasonable satisfaction of all parties involved.

Source: <https://www.asb.sk/stavebnictvo/inzinierske-stavby/ucast-spolocnosti-vahostav-sk-na-vystavbe-a-modernizacii-zeleznicnej-infrastruktury-na-slovensku-a-v-ceskej-republike>

Slovenia - Slovenske železnice invites tenders for four electric locomotives and five train sets

March 2024

Note: This is not the full article, please visit the below-mentioned link for full article

Slovenske železnice - Potniški promet has invited tenders in the Official Journal of the European Union for the purchase of 4 (four) electric locomotives (149567-2024) and the procurement of 5 train sets with 4 new passenger coaches each (150454-2024).

Electric locomotives

In order to make viable decisions for future procurements, ETCS Level 2 safety devices with TSI interface, including national safety devices, must be installed for operation in countries where an operating licence is required, and manufacturers must guarantee a rapid supply of spare parts and qualified support.

The new locomotives must have features that enable the following:

- **ETCS for short-term availability: Level 1, version 2. 3.0d,**
- **ETCS for use in the transition period: Level 2, Baseline 3,**

Operating licences must also be obtained for Slovenia (up to the transfer stations) and (in Slovenian alphabetical order) Austria, Croatia, the Czech Republic, Hungary, Germany, Slovakia and Serbia. The operating licences for Slovenia, Austria, Hungary and Croatia must be available at the time of acceptance of each passenger coach; the operating licences for Slovakia, the Czech Republic, Germany and Serbia must be available no later than one year after acceptance of the last passenger coach delivered.

Source: <https://www.lok-report.de/news/europa/item/48166-slowenien-slovenske-zeleznice-schreibt-vier-elektrische-lokomotiven-und-fuenf-zugagarnituren-aus.html>

Spain - Renfe invests EUR 5.5 billion to renew and expand its train fleet

March 2024

Note: This is not the full article, please visit the below-mentioned link for full article

Renfe has announced plans to invest approximately EUR 5,500 million in renewing and expanding its train fleet. This investment will involve purchasing and refurbishing trains and locomotives for both Renfe Viajeros and Renfe Mercancías.

The investment includes acquiring new locomotives, which will increase load capacity and enhance reliability levels. These improvements will enable Renfe Mercancías to offer its customers enhanced productivity. In addition to the locomotives, Renfe has approved tenders for the supply of 149 wagons for its Freight area, totaling EUR 38 million. **Furthermore, there are plans for implementing the ERTMS railway safety system in 28 locomotives of the S/253 series, with an investment of EUR 13.5 million.** These initiatives aim to modernize Renfe's fleet and improve its services.

Part of the amounts of the Renfe Mercancías contracts - EUR 15 million in the locomotives contract and EUR 14.5 million in the wagons contract- come from the Spanish Recovery, Transformation and Resilience Plan, financed by the NextGenerationEU European funds.

Source: <https://cronicaeconomica.com/renfe-invierte-5-500-me-en-renovar-y-ampliar-su-flota-de-trenes/>

Sweden - Nordic Re-Finance strengthens its fleet with approval of Traxx AC2 with ETCS on board in Sweden and Norway

March 2024

Nordic Re-Finance strengthens its fleet with approval of Traxx AC2 with ETCS on board in Sweden and Norway

Nordic Re-Finance is proud to announce that its Traxx AC2 locomotive has received full approval for operation in both Sweden and Norway. **The vehicle, which since 2023 has been approved for traffic in Sweden with the ETCS signalling system, has on March 15th in ERA OSS (European Railway Agency - One Stop Shop) been granted an extended area of use for traffic in Norway as well.**

This approval not only benefits Norwegian operators by allowing them to utilize the locomotives but also permits the vehicles to operate on the Iron Ore line when it is equipped with ETCS ground during the summer of 2024. Renowned for its reliability and high performance, the Traxx locomotive's approval for traffic in Sweden and Norway enables Nordic Re-Finance to offer efficient and competitive solutions for operators.

Nordic Re-Finance's operational project manager for the ETCS project Arvid Haag said:

"We have been working under great time pressure in anticipation of Iron Ore line's transition to ETCS ground this summer. With an approved vehicle type, we now have the opportunity to approve all Traxx AC2 locomotives through the procedure called 'conformity to type.' During the spring,

we will complete our five remaining locomotives so that all twelve locomotives in our Traxx fleet are future-proofed.

Mikael Zagerholm, Technical Manager

We signed a contract for ETCS onboard the Traxx AC2 back in 2020, and after both the pandemic and the outbreak of war in Europe, we are finally seeing the end of this project. Traxx is an excellent locomotive, and with a modern signalling system, we see that it has many decades left in the Nordic market. However, I would like to emphasize the importance of Alstom now taking long-term responsibility for both spare parts for the ETCS system and its delivered Traxx locomotives.

With this approval, Nordic Re-Finance consolidates its position as a leading supplier in the Nordic railway sector and positions itself for continued growth and success in the market.

About Nordic Re-Finance: Nordic Re-Finance is the leading lessor of railway vehicles in the Nordic region and specialises in offering all types of traction to all market players. The company has over 150 freight and shunting locomotives leased in five countries. The company is certified ECM level 1-4 and as a lessor takes great responsibility for the operation and availability of the vehicle fleet.

Source: <https://www.mynewsdesk.com/se/nordic-re-finance-ab/pressreleases/nordic-re-finance-staerker-sin-flotta-med-aodkaennande-av-traxx-ac2-med-etcs-ombord-i-sverige-och-norge-3311333>

Switzerland - BLS equips its network with ETCS train control system

May 2024

The railroad company BLS is equipping its entire rail network with the ETCS Level 1 train control system by the end of 2017, with an estimated cost of around 28 million francs.

The Lötschberg route between Thun and Brig via Kandersteg and Goppenstein will be the first to undergo the upgrade by the end of 2015, as announced by BLS on Tuesday. This route is integral to the international Rotterdam-Genoa freight corridor.

In contrast, the Lötschberg Base Tunnel is already equipped with ETCS, operating at an even higher level. Due to speeds reaching up to 250 km/h, external signals are no longer viable. Therefore, information at this ETCS level is transmitted directly to the driver's cab via the mobile radio network.

The remainder of the BLS rail network will transition to ETCS Level 1 by the end of 2017. This program encompasses 1,350 signal locations.

More safety in denser train traffic

The investment of 28 million Swiss francs will primarily be used to procure and install the transmitters placed in the track, known as balises, as explained by BLS in its press release. Funding will be provided through BLS's regular service agreements with the federal government and cantons.

ETCS replaces the previous Signum and ZUB systems, which are no longer offered by suppliers. According to BLS on Tuesday, these systems have been written off.

ETCS stands for "European Train Control System." The system enhances safety in increasingly dense train traffic. With ETCS Level 1, for example, it is possible to continuously monitor a train's speed, not just before a signal.

This capability can prevent a train from approaching a stop signal at excessive speed, thus reducing the risk of not being able to stop in time. **ETCS is designed to replace national and, in some cases, even regional train control systems throughout Europe, ensuring seamless rail traffic across borders.**

Switzerland has taken on this obligation as part of the Land Transport Agreement and has ordered the conversion of the Swiss standard-gauge network by the end of 2017.

Source: <https://www.tagesanzeiger.ch/bls-ruestet-ihre-netz-mit-etcs-zu-sicherungs-system-aus-681215854759>

Look ahead – InnoTrans trade fair

InnoTrans 2024, the leading international trade fair for transport technology, is set to take place in Berlin from 24 to 27 September 2024. This biennial event is a significant gathering for the transport technology industry, occupying all 42 halls of the Berlin Exhibition Grounds.

For stakeholders in ERTMS, the InnoTrans trade fair presents a unique opportunity to engage with the latest developments in transport technology. The event is divided into five trade fair segments: Railway Technology, Railway Infrastructure, Public Transport, Interiors, and Tunnel Construction. These segments provide a comprehensive overview of the latest innovations and advancements in transport technology, including those relevant to ERTMS.

The InnoTrans Convention, an integral part of the trade fair, serves as an international meeting place for top decision-makers from business, politics, and transport. With top-class panel discussions and expert rounds on current and future-relevant mobility topics, the InnoTrans Convention is the platform for an exchange at eye level. Here, what will move us in the future is discussed on an international level. This includes discussions on the deployment and future of ERTMS. In addition to the convention, the trade fair also offers a variety of other programs. These include the AI Tours, where exhibitors can present their AI-related developments to an expert audience, and the InnoTrans Campus, which provides opportunities for career development.

InnoTrans 2024 is not just about showcasing the latest developments in transport technology. It's also about discussing what will move us in the future on an international level. It's an event that brings together the brightest minds in the industry to share knowledge, exchange ideas, and shape the future of transport technology.

The European Union will be represented at InnoTrans with a common stand for the European Commission, the European Railway Agency and Europe's Rail Joint Undertaking. The stand will not only provide information on the wide range of activities of these institutions in the rail area, but it will also host a large number of events during the days of the trade fair, among which various ERTMS related sessions.

On Wednesday, the EU stand will host info sessions on ERTMS, FRMCS and on the new TEN-T revision. These are the following:

- "Do you speak FRMCS?"
- "The future of ERTMS"
- "Boosting rail through the new rules for the trans-European transport network (TEN-T)"

On Thursday the DMT will organise a specific session on the ERTMS lessons learnt. This session will also take place at the EU stand.



For tickets and further information please visit the InnoTrans website below: <https://www.innotrans.de/en/>

Contact details



For further information on ERTMS,
please visit our website: [ERTMS \(europa.eu\)](https://ertms.europa.eu)



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