European Commission

Newsletter

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Signal

The ERTMS Newsletter

Contents

Did you know? The 2023 Technical Specifications for Interoperability (TSI) Package

In a significant stride toward a seamless European rail network, the European Commission published on the 8th of September the 2023 'Technical Specifications for Interoperability' (TSIs) package. The revised TSIs entered into force on the 28th of September 2023. This marks an important milestone in the journey towards simplifying cross-border train travel across the European Union.

The primary objective of the 2023 TSI package is to further harmonise standards that enhance rail interoperability across borders. By eliminating the complexity of 25 distinct national sets of rules, this initiative sets the stage for a more efficient and affordable rail sector.

Embracing technological advancements

The revised requirements reflect recent technological progress by introducing rail innovations in a consistent manner. They lay the foundation for automatic train operations (ATO) over ERTMS and the digitalisation of technical and operating information for train drivers and rail staff. This digitalisation includes the creation of common infrastructure route and rule books, ensuring universal access to essential rail network knowledge.

Summary of key introductions

1) The ERTMS game-changers

The revised TSI aim to achieve higher capacity and better performance of the rail network. They are key to future digitisation and include:

- Automated Train Operation (ATO grade of Automation [GoA] 1/2), reducing energy consumption and increasing capacity;
- Readiness for the Future Radio Mobile Communication System (FRMCS), replacing GSM-R and introducing 5G technologies;
- Braking curve model optimisation, improving the balance between safety and capacity requirements;
- Provisions to allow for the deployment of ETCS Level 2 with moving block (formerly Level 3), which increases capacity and reduces trackside life cycle costs;
- Onboard train integrity, complementing the provisions above and providing a significant opportunity for cost reduction in trackside equipment;

2) Further enhancement of safety and efficiency of manoeuvres, through the (supervised) mode of supervised manoeuvres replacing the unsupervised shunting mode.

3) Digital technologies through modularisation

The focus is on the Control Command and Signalling (CCS) onboard modular architecture to deliver a more flexible and robust system starting with modularity of the European Vital Computer (EVC) interface with Radio and ATO. The 2023 CCS TSI also includes new subset requirements on the modularity of the vehicle.

4) Technical and operational harmonisation and alignment with the different digital registers

Enhancements to ERTMS technical and operational harmonisation and alignment with the different digital registers that are hosted by the European Railway Agency and include:

- Requirements to avoid partial fulfilment of products to the CCS TSI;
- Greater harmonisation of operational rules linked to ERTMS implementation;
- Necessary ERTMS data included in RINF (Register of Infrastructure).

5) Robust maintenance of the CCS technical specifications and products

Provisions to ensure robust maintenance of the CCS technical specifications and products through:

- Introduction of specification error corrections procedures, which are essential to ensure interoperability on increasingly integrated networks. It will have a focus on unacceptable errors for concerned vehicles in a given area of use;
- Single set of specifications, to allow for error corrected specifications that include different clearly identified onboard envelopes for functional options (different system version).

6) Improved National Implementation Plans

An obligatory template was set out with additional information on onboard deployment and cross-border sections. This will allow to improve the detailed ERTMS planning in the European network.

More information

The 2023 TSI Package is available in the Official Journal of the European Union and can be downloaded in 24 EU languages at:

EUR-Lex - L:2023:222:TOC - EN - EUR-Lex (europa.eu)

In the spotlight - Interview with Mr. Keir Fitch – Head of Unit C.4 (DG MOVE)

Mr. Keir Fitch is head of Unit C.4. at DG MOVE. The mission of the Unit is to establish an interoperable and safe Single European Rail area and to manage the relationships with the European Union Agency for Railways and the EU-Rail Joint undertaking.

1. What are the key amendments introduced by the 2023 CCS TSI revision?

A significant portion of our efforts revolved around addressing the various challenges we had pinpointed that were hindering the smooth deployment and interoperability of ERTMS. It was crucial to tackle these issues to ensure that ERTMS, which is intended to be a unified system for Europe, functions seamlessly as envisioned.

ERTMS, in essence, stands as a **comprehensive toolkit rather than a singular system** due to its developmental history. This diversity has inadvertently made it less dependable as a standardised European system than its original intent. To rectify this, we've taken steps to narrow down the scope within which partial compliance is permissible — meaning reducing possibilities to produce equipment that does not meet complete ERTMS standards. This adjustment aims to facilitate the introduction of more standardised products and trains into the market and operational service.

A closely related initiative is the establishment of a more robust **error correction process**. In this context, we are primarily referring to discrepancies in the formal specifications, which are collaboratively formulated by the industry, UNISIG, the regulatory agency, and other stakeholders before being incorporated into the TSI documents. However, certain aspects within these specifications might lack clear definitions or contain inaccuracies necessitating amendments. The challenge arises in how swiftly these updates can be applied to the existing installed base to ensure consistency. To address this, we have implemented a mechanism for accelerated updates when a demonstrated need is identified. This approach aims to prevent discrepancies in software versions across different instances, thereby enhancing interoperability.

Furthermore, we've built upon the groundwork laid by organisations such as Shift2Rail and Europe's Rail, incorporating their research into our endeavours. We have introduced **comprehensive specifications for Automated Train Operation (ATO)**, which operates on the ERTMS framework within the lower levels of automation—referred to as **GoA1 and GoA2**. In practical terms, this means that while an human operator is still required in the train's cab to initiate the journey, the train can subsequently operate automatically.

We've laid the groundwork for the replacement of the existing train radio system. Currently reliant on the outdated GSM-R technology, which is a first-generation 2G digital mobile system, this aging system must be replaced within the next decade or so. This task is undeniably substantial, but we've taken the first steps by introducing interface specifications for the radio module within the context of this TSI revision.

Onboard modularity is another key focus. This strategic move is aimed at simplifying future upgrades, as only specific components need upgrading rather than the entire onboard system. As with the Future Railway Mobile Communication System (FRMCS) replacing GSM-R, our approach involves phased implementation in this TSI revision, with additional components to follow, building upon the ongoing efforts led by the Joint Undertaking and the system pillar.

Regarding this matter, what we're able to confirm is the **establishment of modularity between the Interoperability Constituents (ICs), encompassing ETCS, ATO, and radio components**. This crucial aspect of ERTMS's interoperability will be introduced within a span of two years. Simultaneously, we've also outlined modularity between the ETCS computer, or the EVC, and the vehicle which comes with a more extended transition period. This transition will become obligatory over a period of five to seven years, contingent upon whether we're discussing the design or production phases.

While the interface specifications are already defined, the lengthier timeline is necessitated by the additional work required from manufacturers to seamlessly incorporate these changes. However, for proactive railway undertakings, it's important to note that these specifications can be implemented into their tenders at present. This proactive approach allows for early engagement with the evolving modularity framework.

There is certainly more to unveil in subsequent revisions, but for now, this encapsulates our current efforts and achievements.

2. With which of the game changers do you have the biggest expectations? How will they impact European railways?

Certainly, all the aspects we've delved into are significant in their own right, and we anticipate substantial impacts as they accumulate over time. While I wouldn't necessarily prioritise one over the others, let's explore each of these elements individually.

Firstly, the **introduction of automation at Grade of Automation (GoA) levels 1 and 2** offers a range of advantages. Notably, this could lead to energy savings by optimising speed to align with timetables, potentially **reducing energy consumption by up to 15-20%** compared to manual driving. Furthermore, when integrated with Level 2 ETCS and ATO systems, precise driving could potentially augment capacity by 20-30% compared to Class B. These benefits are particularly relevant for busy lines, where expanding capacity would entail substantial costs.

Looking at **modularity**, while it carries implications for the future, its benefits are promising. By design, it aims to **facilitate smoother upgrades down the line**, allowing for the **swift integration of emerging technologies** that could enhance current functionalities. This could potentially reduce the need for extensive locomotive equipment upgrades. Depending on the specifics, it might even eliminate certain reauthorisation requirements. Moreover, a standardised interface with clearly defined component roles could foster increased competition in the supply of onboard equipment. This shift from current monopolies could enhance cost efficiency and, in turn, bolster the competitiveness of the railway industry.

In terms of our approach, the current TSI revision represents just the initial phase of our strategy. We're grappling with a significant challenge in the **obsolescence of GSM-R technology**. Manufacturers will soon cease support, pushing the railway industry towards adopting 5G. While the official deadline is 2030, there's a practical limit to further extensions. This transition affects the entire European fleet that currently employs GSM-R, encompassing both ETCS-equipped trains and those utilising pure cab radio.

Our efforts are geared towards streamlining this transition, ensuring the sector is well-prepared. The introduction of V1 FRMCS specifications plays a pivotal role, as it establishes a clear interface separating the onboard unit (EVC, etc.) from the radio interface. This separation means that as long as the interface effectively communicates with the necessary signals, the method of radio signal reception becomes less significant. Consequently, future upgrades can target the radio module exclusively, accommodating shifts beyond 5G or even the integration of satellite communications or Wi-Fi for data exchange during station stops.

Regarding error correction and partial fulfilment, the ultimate goal is to ensure that ERTMS-equipped vehicles function seamlessly across the ERTMS lines throughout Europe, minimising the issues currently encountered. This not only enhances performance but also facilitates flexible use of rolling stock. Failed services can lead to reusing or reselling rolling stock, while successful ones can prompt swift integration of additional rolling stock to meet demand fluctuations.

All these aspects are essential components of our efforts and establishing a hierarchical order wouldn't accurately reflect their interconnected significance. Each contributes uniquely to the overall enhancement of the railway ecosystem.

3. The adopted CCS TSI enhances the technical and operational interoperability of ERTMS through greater harmonisation of operational rules. Could you provide some more information on this and how it will affect the implementation and deployment of ERTMS?

As mentioned earlier, one of the fundamental challenges we have faced with ERTMS is its original design, which was more a versatile toolkit rather than a unified system governed by consistent rules. This approach was initially geared towards facilitating the integration of ERTMS into existing national signalling systems, replicating certain elements of those systems to ease the transition. While this strategy may have simplified the initial deployment of ERTMS, it has resulted in an intricate system that is both costly to maintain and complex to navigate.

This complexity poses a considerable hurdle when seeking to implement advancements such as ATO on top of the ERTMS foundation. The risk here is the potential need to create multiple variations of ATO tailored to each unique variant of ERTMS. To address this issue, our primary objective is to streamline and standardise operational rules, especially for lines dedicated exclusively to ERTMS. This endeavour is at the core of our work within the OPE TSI framework.

Our ongoing efforts strive to bring about a more uniform operational framework across Europe. While perfection may remain an ongoing pursuit, we are committed to crafting a system that promotes consistency and coherence. The progress achieved so far within the OPE and CCS TSIs is a significant step towards establishing a more cohesive European railway landscape. By fostering the development of a single set of European operational rules and subsequent

product specifications, we aim to harmonise the evolution of railway systems across the continent.

4. The CCS TSI revision includes provisions on both error correction and partial fulfilment. How will these new provisions help in achieving the Single European Railway Area (SERA)?

The primary purpose behind these efforts lies in ensuring the **alignment of both trackside systems and rolling stock** with their expected behaviours, fully adhering to established specifications. This focus on integrity helps elevate interoperability to a new level. By establishing this consistency, we gain a comprehensive understanding of how trains will function in various scenarios. Equally crucial, it facilitates the process of upgrades. Presently, a challenge exists where manufacturers have developed numerous software versions, creating complexities in planning and executing updates due to the variations across versions. A systematic error correction approach aims to mitigate this uncertainty, fostering a shared foundation for all stakeholders to build upon.

Beyond the immediate advantages of improved interoperability and streamlined upgrades, there are additional benefits that underscore the significance of this initiative. One notable advantage is the increased flexibility in redistributing rolling stock across different parts of Europe. This flexibility not only enhances operational efficiency but also influences the risk assessment associated with purchasing railway equipment. The European Investment Bank, for instance, has expressed reservations regarding financing high-speed rolling stock acquisitions due to the uncertainty surrounding their versatility. Currently, if a train is designed for a specific line — let's say the Madrid-Barcelona route — it cannot be assuredly deployed on a wholly different European line. Despite being compliant with modern TSI standards, the lack of robust control over cross-line compatibility remains.

In contrast, the establishment of comprehensive retrofitting, free from partial fulfilment, instils confidence in the seamless transfer of trains between various parts of Europe. This level of assurance addresses the concerns related to cross-line operability. The ultimate aim is to create a situation where the expected compatibility is already a reality, mirroring the successful deployment that exists in certain instances today.

5. The revision of the CCS TSI was a difficult process, with sometimes strong disagreement between stakeholders. What could be the lessons learned for a future revision?

I don't see divergence of opinions from stakeholders as a concern in itself. These regulations hold significant relevance for the railway sector, carrying substantial economic implications. Given the intricate and sometimes obscure nature of these regulations**, complete unanimity might indicate a lack of active engagement and consideration**. **Healthy discussions** and debates are essential in such cases. In this context, certain apprehensions arose concerning the evolution of the procedure. Towards the final stages, several Member States felt their voices weren't being heard as we were primarily focused on addressing what seemed to be the remaining challenges.

Despite the understandable nervousness about the outcomes, I want to offer reassurance. The entire process was a comprehensive negotiation involving ERA and the Commission. This negotiation extended through the ERA's working groups, our expert group, and the risk committee. It provided considerable opportunities for all parties to express their viewpoints. While there were dissenting votes, particularly related to the impact in Central and Eastern Europe, there was also broad support. The consensus was that these revisions enhance the safety of the system. Moreover, if executed effectively, they have the potential to render the system more adaptable and agile in the future.

Moving forward, our approach remains centered on close dialogue with all stakeholders, encompassing Member States and various segments of the industry. This engagement is pivotal. A key aspect, as we did this time, is setting a clear mandate for the Agency from the outset. If, for any reason, there's a deviation from that mandate, we intend to initiate discussions with both the Agency and stakeholders to address any arising issues.

I would like to note that we've initiated discussions on lessons learned, acknowledging that there are many to collect from this process. Both the Commission and ERA are actively involved in this endeavour. ERA has conducted at least one session on lessons learned, while the Commission has engaged in such discussions within the RISC committee. Further, in the upcoming autumn, we have met with industry stakeholders and the NRB (representative bodies of railway stakeholders). This dialogue will contribute to refining our approach as we move forward.

6. What will be the process after the adoption and publication of the new CCS TSI? And how can railway stakeholders stay updated?

The immediate process ahead is fairly straightforward. The regulations is legally effective since 28 September 2023. This applies to the CCS TSI and the other TSIs as well. However, there are varying deadlines, often quite distant, before all provisions come into effect.

The newly established regulations are directly applicable. This means they don't require transposition by Member States or action from Infrastructure Managers (IMs). They immediately replace the previous TSI requirements. Practically, though, transitional provisions are extensive.

Especially for vehicles already constructed or under construction, these transitions are paced to accommodate practical considerations.

Next year, likely in the latter part, amendments will be needed to the CCS TSI to align with revised guidelines or subsets being developed in collaboration with the industry. There are subsets related to testing protocols that are not yet finalised but will impact vehicles indirectly, warranting clear enforcement. These subsets include:

1. Subset 076: Overall testing of ETCS subsets;
2. Subset 151: Testing of Automatic Train Operation (ATO);
3. Subset 153: Detailed definition of system versions 2.1 and 2.2 as derivatives of system version 3.0.

A unified document now houses multiple system versions. To clarify how to define reduced envelopes, detailed specifications are provided in Subset 153, enhancing precision in defining system versions 2.1 and 2.2.

The ongoing commitment includes monitoring Member States' proper application of the new TSI package, once fully enforced. ERA has conducted webinars on the CCS TSI and plans informative sessions later this year. Additionally, the focus remains on the future evolution of the CCS program. Automation layers up to Grade of Automation (GoA) 4 are in the pipeline, along with the anticipated adjustments to address Full Service (FRMCS). The initial specifications have been outlined. The introduction of digital coupling is also on the horizon. This might seem unrelated to CCS, but its implications for preserving train integrity can significantly reduce infrastructure requirements.

Importantly, **we rely on Member States** to effectively define the forthcoming **implementation in national plans**. This step will contribute significantly to the broader European implementation, as highlighted by the ERTMS Coordinator's directives. In essence, while the immediate revision is imminent, the journey continues with a focus on seamless integration and progressive enhancements across the railway sector.

7. How will the European Commission support the application of the new provisions of the revised CCS TSI?

Regarding funding, there isn't a **fresh influx of funds** currently available. The potential for additional financial support will likely come under consideration in the next Commission's mandate, contingent upon political deliberations. Pertaining to the present Connecting Europe Facility (CEF) 2 framework, it's important to note that any novel requirements introduced by the CCS TSI will naturally apply to projects seeking Union funds for ERTMS within that CCS realm.

For the time being, our focus remains on established funding sources, namely CEF 2, cohesion policy funds and recovery and resilience fund (RRF). These channels continue to serve as the conventional routes for financial support in the context of ERTMS initiatives.

8. What should be the target system and how should the migration look like?

Our vision for the future of the railway system in Europe is one of **harmonisation and uniformity**, enabling us to compete more effectively with road and aviation sectors. We aim for a comprehensive shift away from the current practice of procuring vehicles for specific routes. Instead, vehicles should seamlessly operate within the larger European railway framework, transcending regional boundaries. To realise this vision, it's clear that the adoption of ETCS as the definitive signalling and train protection system for Europe is the logical trajectory.

While this transformation won't occur overnight, it's imperative that we steadily progress towards this goal. The medium term holds the promise of realising this objective, and it's essential that we ensure this doesn't remain on the distant horizon. We anticipate considerable benefits from this transition, including the **elimination of national variations in rules and operating procedures** that currently **complicate and elevate the costs** of the railway system.

In conjunction with this, the introduction of FRMCS remains a critical step. While acknowledging the challenges it poses for the railway sector, we recognise the urgency of addressing the technical obsolescence of GSM-R. It's evident that this matter cannot be deferred and necessitates a proactive approach.

Supporting this transformation is a robust economic analysis that highlights the benefits, including cost savings, associated with these changes. However, we're also aware of the complexities arising when the party funding the equipment isn't directly the one reaping the benefits. Often, investments by Railway Undertakings (RUs) result in capacity enhancements for Infrastructure Managers (IMs), but this doesn't always translate into direct benefits for the RUs. We're exploring models to ensure that these system-wide benefits are realised even when they don't directly align with the interests of the investing parties.

Looking ahead, the establishment of a deployment group within Europe's rail framework will be instrumental in evaluating the business case for emerging technologies. By identifying challenges early, we can strategise for optimal solutions, addressing mismatches within the industry. This approach should find resonance in the National Implementation Plans (NIPs), which are government developed. We aim to collaborate with them to create ambitious NIPs that span not just CCS but also other TSIs, particularly those related to infrastructure and energy.

Nevertheless, while pursuing these ambitious goals, it's equally crucial to offer certainty to Railway Undertakings (RUs) so they can invest with confidence. We've already incorporated this principle into the revised TSIs by introducing delays between the announcement and implementation of major changes, providing RUs with the time they need to adapt.

The affordability aspect is also paramount, especially in remote rural areas where full deployment of ETCS might be financially challenging. To address this, efforts are underway to explore cost-effective alternatives that maintain compatibility with the harmonised European system. This involves developing simplified versions of ETCS or comparable systems that maintain interoperability while being more suitable for rural routes.

We anticipate that as **harmonisation and interoperability increase**, **the cost of equipment will decrease**, making it more accessible. This should, in turn, reduce the need for substantial public support, as the market for railway equipment becomes more competitive and vibrant. Our ultimate aim is for trains to evolve into standardised commodity products, similarly to aircraft or trucks, transcending individual specifications and meeting the needs of a wider European context.

Latest developments

Disclaimer

All articles included in this section were sourced from publicly available websites covering the period of July – August 2023.

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 – EU to provide EUR 6.2 billion for new projects on the Trans-European Transport Network

July 2023

The CEF - Connecting Europe Facility - has announced an additional EUR 6.2 billion in financial support for 107 new projects on the Trans-European Transport Network (TEN-T). The European Commission said the funding will target transport infrastructure projects aligned with the EU's climate targets.

This support will include the construction of railways, inland waterways, and maritime infrastructure across the European Union. Cross-border connections with Ukraine and Moldova will be established through the creation of solidarity lanes.

Moreover, important cross-border rail links within the TEN-T core network will also receive support. Priority will be given to projects such as the Brenner Base Tunnel, connecting Italy and Austria; the Rail Baltica, linking the Baltic States and Poland with the rest of Europe; and the cross-border sections between Germany and Switzerland (Karlsruhe to Basel) and Germany and the Netherlands (Emmerich-Oberhausen).

Infrastructure upgrades are planned for ports in Ireland, Greece, Spain, Latvia, Lithuania, the Netherlands, Poland, and Spain, aiming to develop an extensive network for short sea routes within the EU. These ports will incorporate onshore energy supply systems to reduce greenhouse gas emissions from ships at anchor.

The improvement of inland waterway infrastructure along the Seine-Seld cross-border link between France and Belgium will be another focus, along with several inland waterway ports located in the Danube and Rhine basins, including the ports of Vienna and Andernach.

As part of the project, the European Rail Traffic Management System (ERTMS) will be deployed on trains and railway lines within Austria, Germany, France, Denmark, the Czech Republic, and Slovakia. Additionally, Intelligent Transport Systems and Services (ITS-Intelligent Transport Systems), particularly C-ITS solutions, will be implemented throughout the road network in combination with Smart Advanced ITS solutions.

CEF funding will also be extended to European air traffic management projects supporting the Single European Sky concept, with the aim of enhancing the efficiency and sustainability of air travel.

What is the Trans-European Transport Network (TEN-T)?

TEN-T is an integrated system connecting road and rail axes, inland waterways, short sea shipping routes, ports, and airports within and outside the EU Member States. The European Commission aims to complete the core TEN-T network by 2030 and the comprehensive network by 2050.

Ukraine in the mix

In response to the situation in Ukraine following Russia's war and the blockade of Ukrainian ports, the European Commission has introduced an action plan for EU-Ukraine solidarity channels. This plan aims to facilitate Ukrainian exports and bilateral trade, with nine projects receiving total EU support of almost EUR 250 million.

These projects will focus on upgrading cross-border connections between neighbouring EU Member States (Poland, Slovakia, Hungary, and Romania) and Ukraine/Moldova.

Source: https://web.tee.gr/int-news/i-ee-tha-diathesei-6-2-dis-eyro-gia/

Austria: Award of major ÖBB contract

August 2023

Siemens Mobility has won an ÖBB tender for the supply of up to 540 electrically powered multiple units, with the contract valued at more than five billion EUR.

ÖBB plans to deploy the Mireo multiple units for long-distance intra-Alpine services and for local services in several federal states. The trains are expected to enter service from 2028, representing another step by ÖBB in modernizing its entire local and long-distance fleet. "We are very pleased to be able to implement the next long-term and forward-looking project for ÖBB, following the recent successful commissioning of the first ETCS line in Upper Austria," says Arnulf Wolfram, CEO of Siemens Mobility Austria.

The framework agreement spans ten years with a total volume of more than five billion EUR. Following the bid evaluation, Siemens Mobility emerged as the best bidder. With the standstill period ending on August 31, 2023, the award decision has now become legally binding. Notably, the Swiss rail technology group Stadler Rail had secured the last three ÖBB contracts before this.

Source: https://report.at/plus/22725-zuschlag-fuer-grossauftrag-der-oebb

Belgium - More than half of Belgian rail network equipped with safety system ETCS

August 2023

The installation and commissioning of the European Train Control System (ETCS) on the 'Dorsal Wallone,' the strategic rail link between Liège and Namur, on March 12, 2023, marked a symbolic milestone for Infrabel, the railways, and our country. From now on, more than half of Belgium's rail network will be equipped with the European safety system. In this article, I reflect on this milestone, as well as on some ETCS achievements and the importance of this strategic safety project for Belgium and Europe.

The heart of the Belgian rail network is now equipped with ETCS.

I am proud of this milestone between Liège and Namur, where 122 km of ETCS track was put into service, bringing us to the 50% ETCS coverage on our network.

Meanwhile, our Infrabel teams continue to work on the roll-out step by step. During the weekend of 3-4 June, for instance, it was the turn of the important railway zone between Brussels-South and Halle. That's when 650 ETCS beacons were commissioned in the tracks overnight: 300 signals were fitted with ETCS and 3,200 possible train paths were tested, a large-scale field operation. Thanks to those 127 km of ETCS main tracks, the counter now stands at 54 % of the main tracks (3,462 km) equipped.

This phase followed the earlier phase in December 2022 when the Brussels North-South Junction (58 km of main tracks, 320 signals) was equipped with ETCS. As many as 1,200 passenger trains pass through that strategic link between Brussels-South and Brussels-North stations every day. This is 1/3 of all trains running daily on our network. So today, the heart of the Belgian rail network boasts the European safety system.

ETCS provides constant and complete safety monitoring of the train journey and the maximum permitted speed. If a train driver drives faster than permitted or fails to respect signals, the system will intervene immediately by automatically slowing down or applying brakes. There are different ETCS technologies whose purpose is the same: ETCS 'level 2' relies on the transmission of information between the infrastructure and a train's control position via radio waves. With ETCS 'level 1', beacons in the tracks transmit the information to the trains.

Top of safest European rail networks

With the exception of Luxembourg - which has equipped its entire rail network with ETCS - Belgium is today the country in the European Union with the largest number of ETCS-equipped tracks in relative terms. By 2023, Infrabel will have equipped a total of 860 km of main track with ETCS. And efforts will continue in the coming years.

The goal is to equip the entire Belgian rail network with ETCS by the end of 2025, further cementing Belgium's position as one of the European leaders. The total investment in Infrabel's ETCS project exceeds €2 billion and is in line with the ETCS Master Plan approved in the Belgian parliament after the Buizingen train accident (15 February 2010).

ETCS is a European and interoperable system. This standard is not only focused on safety, March also allows for the standardisation of signalling systems and thus facilitates international train traffic. This is essential given Europe's ambitions to grow rail traffic for the benefit of mobility, logistics and the environment, especially for a country like Belgium that is a European hub for passenger and freight traffic. Thanks in part to the European institutions and international organisations in Brussels, our country is a strategic hub and around 100 high-speed and international trains pass through the capital every day. Furthermore, Belgium is a member of three international freight corridors that encourage rail freight transport between major economic poles (including ports as gateways) in Europe.

Safety at the service of our customers and Belgium

The roll-out of signalling technology ETCS on our rail network is gaining momentum every day. ETCS, in combination with the train traffic management systems in our signal boxes that are now fully automated, offers our customers the highest level of safety. It thus strengthens the position of Belgium which thus has one of the best equipped and safest rail networks in Europe. The installation of ETCS is a top priority for Infrabel and I would like to thank all our teams - and those of the contractors involved - who are working day and night, in the field and behind the scenes, to make these important steps forward.

Source: *https://www.gww-bouw.be/artikel/meer-dan-helft-van-belgische-spoornet-uitgerust-met-veiligheidssysteem-etcs/*

Bulgaria – Tenders for new trains to be launched by the end of July

July 2023

Tenders for the new locomotives and trains, funded by the Recovery and Sustainability Plan, will be relaunched by the end of July. This was stated by the Deputy Minister of Transport, Dimitar Nedyalkov, as quoted by the ministry.

The megatenders were terminated by Minister of Transport Georgi Gvozdeykov due to shortcomings. They had been previously appealed by major international companies because of the technical requirements set by the previous ministry team.

In the public tenders for the delivery of rolling stock, we found several significant omissions. To avoid the risks associated with these and to increase opportunities for greater competition, the procurement has been suspended. We are currently working to address these shortcomings and plan to restart the procurement by the end of this month, Deputy Minister Nedyalkov said.

Under the ROW, investments are planned for the purchase of 7 double-deck and 35 single-deck electric multiple unit trains, 20 single-deck push-pull trainsets, 18 electric shunting locomotives, and the supply of on-board equipment for 108 electric locomotives and multiple unit trains. **Additionally, investments are foreseen for the implementation of the European Rail Traffic Management**

System (ERTMS Level 2) in the Ruse - Kaspichan railway section. An intermodal terminal in Ruse is also planned to be built under the NRTP by mid-2026. The public procurement has already been launched, and a contractor is expected to be selected by September. The indicative value of the project is BGN 54 million, and well-known companies are already competing for it.

Source: https://duma.bg/puskat-targovete-za-novite-vlakove-do-kraya-na-yuli-n277319

Czechia – Better and safer travel? European commission approves 9 billion for Czech railways

August 2023

The European Commission has approved a program to support the Czech railway with a financial amount of 9 billion EUR. But what will this funding be used for, and who will have the authority to access this support? How will it impact ordinary passengers like us?

Safe and uninterrupted operation

Safe and uninterrupted rail traffic is the main goal of the European Commission's approved program to support the Czech railway. The 9 billion EUR in funding are intended to ensure the safe and continuous operation of the Czech railway system. This program will encompass various initiatives, including the modernization of Czech railway vehicles to align with the European Rail Traffic Management System. **This system includes the implementation of ETCS, the European Train Control System, as well as the introduction of the GSM-R communication system.**

European support programme

The European Support Program consists of five sub-programs. One of these sub-programs aims to facilitate the adoption of the Digital Automatic Coupling (DAC) system, which is designed to enhance the automation of rail freight transport. This new coupling system is expected to replace the conventional technique, which currently requires manual labor from shunters. It's important to note that DAC support was not part of previous program versions. The press release emphasizes that this is a crucial step towards automating train operations.

Who will benefit from this approved program?

The support will be accessible to railway undertakings and the Railway Administration. It's worth mentioning that this approved program builds upon an aid measure that received a positive assessment from the European Commission back in 2007, with an extension granted in 2020.

Source: https://pravednes.cz/click?id=116393670

France – Akiem signs framework agreement with Alstom for 100 Traxx multi-system locomotives

July 2023

Alstom and Akiem have signed a framework contract for 100 Traxx Universal multi-system (MS3) locomotives. The firm part of the order includes 65 locomotives. The total amount of the framework agreement is up EUR 500 million. Akiem confirms its leadership on the leasing European market and its ambition to contribute to the rail market's accelerating activities, with major investment on corridors from France to 12 other European countries.

The Traxx Multi-system locomotives benefit from optimised energy consumption and can run both freight and passenger operations at a speed of up to 160 kilometres per hour. They will cover operations in 12 European countries: Germany, Austria, Switzerland, France, Italy, Belgium, Netherlands, Luxemburg, Hungary, Poland, Czech Republic, Slovakia. As a unique feature for multi-system locomotives, a part of them will be delivered with the diesel or battery last mile feature enabling to access ports, terminals or industrial sites without the need of a shunting locomotive.

All locomotives will be equipped with the leading signalling system ATLAS, Alstom's onboard solution for the EuropeanTrain Control System (ETCS). This system comes with the broadest coverage of countries and lines, both in ETCS as well as for legacy system operation, and superior two-out-of-three architecture.

"We are very proud that Akiem extends their locomotive fleet with their biggest single order of Traxx locomotives for an important number of countries," Kevin Cogo, Vice-President of Rolling Stock, Locomotives & Components for Alstom DACH, said. "Thanks to this agreement, both Akiem and Alstom will reinforce their strong position for locomotives in various corridors including their home market."

"Akiem is thrilled to place this new order with Alstom," Fabien Rochefort, CEO of Akiem, said. "We are constantly investing in our locomotive portfolio to serve our customers and develop new market positions. This stock investments will allow to offer new efficient and sustainable routes which will contribute to increase the modal shift towards rail in Europe. 55 locomotives as part of this order will operate from France towards Europe in a context when no deliveries were experienced for the past decade. We are intending to contribute to the rejuvenation of rail Freight and intercity passenger transport in France and ease innovation and competition with the support of our maintenance and service teams."

Source: https://www.marketscreener.com/quote/stock/ALSTOM-4607/news/Akiem-signs-framework-agreement-with-Alstom-for-100-Traxx-multi-system-locomotives-44347788/

Germany – EU for the development of the Angermünde-Szczecin railway line

July 2023

The EU has announced its support for the development of the Angermünde-Szczecin railway line with a funding of 92 million EUR. The investment aims to improve the railway connection between Angermünde in the Uckermark district and Szczecin. According to the Brandenburg Ministry of Infrastructure and Regional Planning (MIL), the funds will be utilized for construction work on the approximately 50-kilometer stretch from Angermünde to the German-Polish border.

As part of the upgrade, this section of the railway line will be transformed into a double-track system, allowing for

increased train frequency and capacity. Furthermore, the project includes a plan to replace diesel trains with electric ones, thereby contributing to a more environmentally friendly and sustainable transportation system.

To enhance safety and efficiency, the existing tracks will be equipped with the European Train Control System (ETCS), a modern train control and signalling system widely used across Europe. Additionally, the construction of 740-meter sidings will further facilitate smoother operations and enable better utilization of the railway infrastructure.

Source: *https://aussiedlerbote.de/2023/07/es-podderzhivaet-prodlenie-zheleznodorozhnoi-linii-angermiunde-shchetsin/*

Greece – Quick and cheap from... Alexandroupolis!

September 2023

The alternative Transport Corridor, through the Port of Alexandroupolis, which bypasses the Dardanelles, can operate very effectively "Our Port can attract additional freight flows" a Study of Scientists on the Strategic Importance of Alexandroupolis records.

Professor Seraphim Kapros points out that this alternative route is of strategic importance for Greece because it ensures "autonomy", as it offers a land bridge to the hinterland of the Black Sea ports as a more viable and functional solution than the crossing of the Dardanelles Straits.

It will be a double railway line, fully electric, equipped with the European Rail Traffic Management System (ERTMS) and will serve as an alternative land bridge for the transport of goods from Europe to the East. The total length of the line is approximately 1,352 km, of which 721 km belong to the Bulgarian network and 621 km to the Greek territory. The maximum theoretical capacity of the corridor was estimated in the range between 100 and 130 trains/day. The railway project is expected to be completed in 2027-2028, with an estimated cost of €6.5 million. Financing is foreseen to be carried out through a PPP, with an estimated 40% private participation and a consortium of Greece and Bulgaria with 60% participation.

Source:
https://www.elthraki.gr/2023/09/%ce%b3%cf%81%ce%ae%ce%b3%ce%bf%cf%81%ce%b1-%ce%ba%ce%b1%ce%b9-%cf%86%ce%b8%ce%b7%ce%bd%ce%ac-%ce%b1%cf%80%cf%8c-%ce%b1%ce%bb%ce%b5%ce%be%ce%b1%ce%bd%ce%b4%cf%81%ce%bf%cf%8d%cf%80%ce%bf%ce%bb/

Hungary – Something has happened at MÁV: it has changed its mind, but still wants to buy new trains

July 2023

MÁV has announced the purchase of 80 trains, marking a turning point from the past when tenders for rolling stock were cancelled. János Lázár expresses confidence in the railways.

MÁV-Start is planning to purchase a total of 80 electric motor trains, as announced by the state railway company on the Community portal. The announcement comes somewhat unexpectedly, as the public's recent perception of the railway fleet has been "not good, but not tragic."

Regarding the new trains that MÁV plans to buy, the vehicles must have a permitted speed of 160 kilometres per hour, ETCS (European Train Control System), air-conditioned passenger compartments, low floors, bicycle transport, accessible toilets, audiovisual passenger information, WiFi, and sockets for charging electrical devices. While it is not yet known with whom MÁV is negotiating, these technical parameters are also applicable to Stadler's FLIRT and KISS models. However, many other manufacturers can also meet these conditions.

Source: *http://www.vg.hu/vilaggazdasag-magyar-gazdasag/2023/07/valami-tortent-a-mav-nal-meggondolta-magat-megis-uj-vonatokat-szerezne-be*

Ireland: Alstom Secures Landmark Deal with Irish Rail to Transform the Cork Area Commuter Rail Network

August 2023

Alstom, a leading global provider of smart and sustainable mobility solutions, has secured a significant contract with Irish Rail (Iarnród Éireann) to bring about a transformative change in rail travel and mobility on the Cork Area Commuter Rail (CACR) network. **This project, designed to enhance the rail service in the Cork metropolitan area, will showcase Alstom's state-of-the-art signalling technologies, including the Smartlock Computer-Based Interlocking (CBI) system and the European Train Control System (ETCS).**

The CACR initiative is focused on the modernization and improvement of a 62km stretch of the rail network, connecting Mallow to Cork, Cobh, and Midleton. The ultimate goal is to establish a seamless, high-frequency, and integrated suburban rail service to benefit the residents of Cork.

Nick Crossfield, Managing Director of Alstom UK & Ireland, expressed great enthusiasm for the partnership with Irish Rail. He said, "We are excited to embark on this journey, bringing cutting-edge technology to the Cork Area Commuter Rail network. **With Smartlock and ETCS, we are confident that this project will set new standards in safety, efficiency, and passenger experience, providing a strong foundation for sustainable mobility in the region."**

Jim Meade, Chief Executive of Iarnród Éireann, commended the Cork Area Commuter Rail team for the rapid progress of all three components of the CACR Programme. He stated, "New signalling, our new platform, and twin-tracking of Glounthaune to Midleton are set to transform the capacity of our Cork Commuter rail network and position us well to move forward with other rail projects under the Cork Metropolitan Area Transport Strategy, including the critical delivery of new stations."

At the heart of this transformative initiative lies Alstom's Smartlock CBI system. This cutting-edge technology will serve as the project's primary foundation, offering a safe, simplified, and maintenance-friendly solution. By directly interfacing with axle counters and trackside objects through SmartIO, the Smartlock system eliminates the need for intermediate relays, ensuring a robust, efficient, and streamlined operation.

In addition to the Smartlock interlocking system, the project will also incorporate the European Train Control System (ETCS) Level 1 trackside technology. ETCS is a train protection system that guarantees enhanced safety, efficiency, and reliability throughout the Greater Cork area. The implementation of ETCS further strengthens the commitment to safety and ensures a smooth, secure, and eco-friendly rail network.

Source: *https://www.railtarget.eu/technologies-and-infrastructure/alstom-secures-landmark-deal-with-irish-rail-to-transform-the-cork-area-commuter-rail-network-6381.html*

Italy – EUR 47 billion for rail projects in South Italy

August 2023

Italy's Minister of Infrastructure and Transport, Matteo Salvini, has announced a EUR 47 billion investment to revitalize the railway networks in Calabria and Sicily, located in the southern part of the country. Rehabilitation and modernization works are also planned for the train stations along the Napoli – Bari line, including the deployment of new technologies and traffic management systems. **The line will be equipped with ERTMS L2, allowing trains to operate at speeds of up to 250 km/h.** The Catania – Messina project involves the construction of a double track on the Giampilieri – Fiumefreddo section as a variant to the current line, extending it by about 42 km. In comparison to the single-track line currently in operation along the coast, the new route will run inland, with simultaneous construction of new service locations. This section is expected to be completed after 2026. **The entire 223 km line will be equipped with ERTMS Level 2 and is estimated to cost EUR 11.2 billion, enabling trains to travel at speeds of up to 200 km/h.**

Another project aimed at improving the southern railway network is the Palermo – Agrigento – Porto Empedocle upgrade. This project focuses on enhancing the performance of the 59 km Lercara Dirammmazione – Agrigento Centrale section of the Palermo – Agrigento Centrale line, which will be upgraded to accommodate heavier trains by increasing the axle load. Additionally, the 10 km Agrigento Bassa – Porto Empedocle section will undergo track upgrades, redevelopment, and technological improvements. **Both of these sections will be equipped with multi-station computerized control equipment (ACCM) and ERTMS Level 2.**

The second component of the project involves large-scale interventions to develop transport hubs. Italy has already selected strategic stations for this purpose, including Messina, Benevento, Bari, Lecce, as well as stations on the Napoli Metro Line 2. The aim is to integrate heavy rail and urban rail connections, enhancing the attractiveness of sustainable transport. These projects encompass station development, improvements to accessibility, energy efficiency enhancements for each station, and the promotion of rail hubs and urban stops as crucial points for fast and eco-friendly mobility.

Source: *https://www.railwaypro.com/wp/eur-47-billion-for-rail-projects-in-south-italy/*

Netherlands - New funds for ERTMS implementation in the Netherlands, but is it enough?

August 2023

The European Commission (EC) has made amendments to the Dutch scheme for ERTMS implementation, providing an additional injection of 21 million euros. With this new funding, the total budget for the initiative is now 67 million euros, as indicated by the EC. However, as early as 2019, the Dutch rail industry was asserting that a minimum of 90 million EUR was needed for ERTMS implementation in the country.

The Commission intends to allocate these funds to equip locomotives operating within the country with ERTMS. Furthermore, the funding will also account for losses incurred by companies that are unable to utilize the locomotives during the installation process. ERTMS deployment in the Netherlands has faced delays due to the Dutch's continued use of their proprietary automatic train protection system (ATB). This aspect has been a key point of criticism directed at previous State Secretaries for Infrastructure and Water Management by the country's rail sector.

The EC's scheme for ERTMS implementation in the Netherlands received its initial approval in November 2019. At that time, the Commission unlocked 22.2 million EUR as state aid, and an additional 23.8 million EUR were financed through the Connecting Europe Facility. Despite the infusion of new funds, the duration of the amended scheme remains unaltered, extending until December 31, 2023, as specified by the EC.

ERTMS: the Netherlands is lagging behind

The Dutch rail freight industry is expressing dissatisfaction with the shortcomings in achieving interoperability with the ERTMS system implemented in Germany, which could greatly enhance cross-border traffic. Additionally, there is a glaring contrast in the approaches of the Netherlands and Belgium towards ERTMS implementation. Belgium has successfully outfitted over half of its railway network with the European Train Control System (ETCS), the fundamental signalling and train control element of ERTMS. In contrast, only a limited number of Dutch railway lines have integrated ERTMS.

Source: *https://www.railfreight.com/policy/2023/08/09/new-funds-for-ertms-implementation-in-the-netherlands-but-is-it-enough/*

Norway - New digital signalling system (ERTMS)

April 2023

Bane NOR is digitizing the railway with a new signalling system. This will result in fewer delays and more trains running on schedule for passengers and freight.

What are we building and why?

Bane NOR is introducing a new digital signalling system on the railway in Norway. The new system, called ERTMS - European Rail Traffic Management System - is a common

standard for Europe that will make it easier to travel between national borders.

Today's signalling systems are safe but based on old technology. Access to expertise and spare parts is a challenge, and the old signalling systems are prone to failure.

Bane NOR will, therefore, renew all signalling systems. This is Norway's largest digitalization project, and it covers the entire country - that is, over 4,000 kilometres of railway and 300 stations.

With ERTMS, we are moving to a data- and communication-based system. In short, we are moving today's light signals from the track and into the trains. This means less equipment on and along the track and reduces the risk of errors.

The new signalling system will be deployed in stages across the entire rail network until 2032.

National signalling plan

The national signal plan is the plan that tells us when the various railway lines will be digitized with the new signalling system, ERTMS. The plan does not capture the latest changes in the timetable and is therefore under revision.

Train lines may be affected at different times, but we are doing what we can to minimize the impact.

Source: *https://www.banenor.no/prosjekter/alle-prosjekter/nytt-digitalt-signalsystem/*

Poland - Nearly 200 new locomotives to hit the road

August 2023

The carrier intends to purchase 185 electric locomotives for both national and international routes in the current year. Starting from September 3rd, the fastest PKP Intercity train will cover the distance from Krakow to Gdansk in just 4 hours and 50 minutes, while the journey from Krakow to Warsaw will take 2 hours and 10 minutes – setting new record travel times in the history of rail travel. Meanwhile, the train traveling from Warsaw to Wrocław will complete the journey in 3 hours and 33 minutes.

A tender process is presently underway for the procurement of 63 multi-system locomotives. The company has already chosen to acquire 15 locomotives of this type from Newag for PLN 388 million. Furthermore, they have initiated a new tender for purchasing 46 new electric locomotives designated for national services. **These single-system vehicles will be designed for speeds of 160 km/h and will be equipped with the ETCS level two safety system.** The initial cycle maintenance, up to and including the first repair at maintenance level four (P4), will be handled by the vehicle manufacturer with the participation of the carrier's personnel.

The carrier is also introducing an alternative approach to valorization. In the previous procedure, there was a bilateral valorization method for maintenance service provision, including a cap (to safeguard against potential increases in interest rates) of up to 2.06% and not exceeding 15% above the prices stated in the tender. The present tender, on the other hand, employs bilateral valorization without a cap, contingent upon the fulfillment of conditions specified in the contract. It is positive that a second tender is being conducted and that the government has identified another means of funding the acquisition. Given that only one bid was received in the initial tender and the price considerably exceeded the budgeted amount, it's possible that other participants will join the tender," suggests Adam Musiał, the director of the Polish Chamber of Manufacturers of Equipment and Services for Railways.

Starting from autumn 2022, Intercity's fleet is being bolstered by 185 domestically manufactured locomotives.

Source: *Blisko nowych 200 lokomotyw wyjedzie na trasy - rp.pl*

Romania – Softronic in Romania delivers first ETCS -equipped locomotive to LTE

July 2023

Romanian electric train and locomotive manufacturer Softronic has announced that block train transport specialist LTE Logistics & Transport Austria has commissioned the first interoperable Softronic TransMontana v3.2 locomotive.

The delivery is part of a framework contract signed in summer 2022 for five locomotives to be equipped with the European Train Control System (ETCS) supplied by French multinational Thales Group, Softronic said in a press release on Thursday.

The locomotives are authorised at European level to carry freight trains with a maximum speed of 120 km/h on conventional railway tracks.

At the beginning of 2025, LTE Logistics & Transport Austria will own a fleet of ten locomotives produced by Softronic Craiova between 2017 and 2024.

In June 2022, Thales announced that it has been commissioned by Softronic to deliver and equip five of its LEMA locomotives with ETCS Level 2.

ETCS is the key signalling and train control component of ERTMS, the European Rail Traffic Management System, according to information published on the Thales website. ETCS continuously calculates a safe maximum speed for each train, with in-cab signalling for the driver and on-board systems taking control if the permitted speed is exceeded. The system increases operational performance by increasing capacity, speed and safety, while reducing traffic congestion caused by bottlenecks, missing links and lack of interoperability.

Softronic's TransMontana locomotive is an electric locomotive with six asynchronous electric motors and an electronically limited continuous power rating of 6,000 kW.

Based in the southern city of Craiova, Softronic is a rolling stock manufacturer and a leading European player in electric locomotive manufacturing, passenger transport, electric locomotive maintenance, safety and vigilance equipment production for rail vehicles.

The Thales Group, based in Paris, designs and builds electrical systems and provides services for the aerospace,

defence, transport, digital identity and security markets. The group employs more than 77,000 people in 68 countries, including Romania, where it has been present for more than 20 years, employing around 950 engineers in 2022.

Source: https://logistyka.rp.pl/szynowy/art38918141-blisko-nowych-200-lokomotyw-wyjedzie-na-trasy

Portugal: Renfe trains could connect Lisbon and Porto from 2027

July 2023

The two cities could also be connected to Madrid, and the gauge is no obstacle. The intention is part of the operator's expansion strategy, which arrived in France this summer with high-speed trains.

Renfe, the Spanish public train company, wants to connect Lisbon and Porto with two daily trains from 2027 and link the two Portuguese cities to Madrid and A Coruña. In the rest of Europe, the system used is ETCS (European Train Control System), part of the European Rail Traffic Management System (ERTMS), created to guarantee interoperability between the various countries of the European Union.

Two Portuguese companies are developing a system to allow trains with ERTMS to communicate with the Convel system. The Specific Transmission Module (STM) was presented at the end of July.

Source: https://rr.sapo.pt/noticia/pais/2023/08/15/comboios-da-renfe-podem-ligar-lisboa-e-porto-a-partir-de-2027/342833/

Slovakia – RUŠNE ZSSK CARGO will get ETCS ZSSK - Cargo succeeded with 2 applications for a non-refundable financial contribution of EUR 4.9 million

July 2023

ZSSK Cargo has been successful with 2 applications for a non-refundable financial contribution of 4.9 million euros from the CEF programme for the purchase and installation of ETCS signalling equipment in a total of 12 locomotives. The implementation of the system will be essential for future access to European corridor lines.

CEF grants - subsidy for the modernization of locomotives.

ZSSK CARGO has been successful in two applications for a non-repayable financial contribution from the Connecting Europe Facility (CEF). The CEF is managed directly by the European Commission or the European Executive Agency for Climate, Infrastructure, and Environment (CINEA).

One of the supported projects is the implementation of the on-board part of the European Train Control System ERTMS /ETCS on rolling stock with a subsidy of 4.9 million. What is this project about?

The Phase 1 project involves the procurement, installation, and approval of the ETCS Level 2 application level on-board part of the ETCS on two 131 series electric HDVs and ten 363 series electric HDVs. Of this number, prototypes of the ETCS equipment will be set up on one 131 and one 363 locomotive.

In the coming years, the implementation of the on-board part of ETCS on HDVs will be a prerequisite for access to European corridor lines.

For ZSSK CARGO, the implementation of the on-board part of ETCS is, therefore, a forced investment, without which it will not be able to implement the current or planned performance on the railway corridors in the future.

ZSSK CARGO owns 380 HDVs. Of the total number, about 92 are used in cross-border operations. Only 10 HDVs of the 383 Vectron series, which are leased by ZSSK CARGO, are currently equipped with the ETCS (L2) signalling system.

The installation of the equipment itself into the HDVs will be carried out at ZSSK CARGO's maintenance and repair workplaces in cooperation with an equipment supplier to be selected as part of a tender procedure.

Source: https://bratislavskespravy.sk/rusne-zssk-cargo-dostanu-ETCS-%f0%9f%9a%83zssk-cargo-uspela-s-2-ziadostami-o-nenavratny-financny-prispevok-vo-vyske-49-miliona-eur-z-pro/

Slovenia - Slovenian households are the most burdened by mobility costs in the EU

July 2023

Slovenia has the shortest land routes between the Adriatic Sea, the northernmost bay of the Mediterranean, northern Italy, and the Mediterranean part of Western Europe on the one hand, and Central Europe and the Balkans on the other. The trans-European location offers economic opportunities in transport logistics and transport. However, at the same time, the increase in transit traffic is causing environmental burdens, congestion of transport infrastructure, and new initiatives for the construction of transport infrastructure and transport logistics.

Transport subsystems have not developed in a coordinated way in the past. The motorway network has been successfully upgraded, and some regional thoroughfares have been modernized. Investment in rail infrastructure has been insufficient. **Only the Murska Sobota-Hungary border link, the upgrade of the Pragersko-Ormož-Hodoš line, the introduction of the digital radio system (GSM-R), and the introduction of the European Train Control System (ETCS) on the D corridor, i.e. Sežana/Koper-Ljubljana-Pragersko-Hodoš were arranged; upgrading of the Zidani Most-Celje and Maribor-Šentilj lines, construction of the second Divača-Koper track, upgrading of the Pragersko junction, and partial renovation of the Gorenjska line.** The rail infrastructure is outdated, some lines are still unelectrified, there is insufficient capacity for both freight and passenger transport, and journey times are not competitive with road transport. The problem of the Ljubljana rail interchange, a key project for ensuring network capacity and solving the commuter mobility problem in the Ljubljana urban region, remains unresolved. Traffic in the port of Koper is increasing, but the growth in transhipment is hampered by the insufficient capacity of the hinterland railway infrastructure. Public passenger transport - both road and rail - does not meet the needs of passengers, and Slovenia is at the tail end of Europe in terms of the share of passengers carried by public transport.

Source: *https://www.zelenaslovenija.si/novice/za-stroske-mobilnosti-so-slovenska-gospodinjstva-v-eu-najbolj-obremenjena/*

Spain – Alstom to install ERTMS on 28 Renfe 253 locomotives

July 2023

The locomotive manufacturer shall install on-board equipment to make the locomotives compatible with the European standard.

Renfe Mercancías has awarded Alstom a contract for the installation of the ERTMS Baseline 3 system in 28 locomotives of the 253 series.

The contract, worth 11.2 million EURs, will be fully subsidised by NextGeneration EU funds through the Government's Recovery, Transformation and Resilience Plan.

Thanks to the installation of ERTMS, these locomotives will be able to make the most of the capacity of the infrastructures on which they run and which are equipped with the European system.

The manufacturer will have until 31 December 2025 to complete the contract.

Source: *https://www.trenvista.net/mercancias/alstom-instalara-el-ERTMS -a-28-locomotoras-253-de-renfe/*

Sweden – Preparing for the new ERTMS system

August 2023

The Swedish Transport Administration is modernizing and digitizing the railways in Sweden, with preparations and work underway for a new signalling system called ERTMS, the European Rail Traffic Management System. The goal is to improve punctuality and facilitate maintenance.

ERTMS aims to enhance punctuality and simplify maintenance, with long-term benefits for cross-border train traffic in Europe.

The Swedish Transport Administration will conduct work along the railway between Åby-Mjölby-Nässjö and on the Järna-Katrineholm-Åby section. This phased work began in June 2022 and is expected to conclude by the end of 2023 or 2024. It involves burying cables and installing new cabinets along the railway, with most of the work taking place on Trafikverket land.

Source: *https://www.jarnvagsnyheter.se/20230808/15039/forberedelser-gors-nya-systemet-ertms*

Western Balkans – Serbia: About 15 kilometres of the Novi Sad - Subotica railway line laid

August 2023

On the route of the future Novi Sad - Subotica railway line designed for speeds of up to 200 kilometers per hour, approximately 15 kilometers of the line have been laid, as reported by the Railway Infrastructure of Serbia.

Construction work is currently underway at numerous locations along the entire route, with the goal of completing the project by the end of 2024, according to Serbian Railways.

Platforms, platform walls, and canopies are under construction, and apartment buildings are being renovated. The modernization project of the Belgrade-Subotica line adheres to European interoperability standards, and the line will be electrified and equipped with modern signalling and telecommunication equipment (ETCS level 2), as outlined by the Infrastructure of the Railways of Serbia.

Source: *http://www.nshronika.rs/gradske-teme/na-trasi-brze-pruge-novi-sad-subotica-polozeno-oko-15-kilometara-sina/*

Look ahead - Dive Deeper: ERA Webinars Exploring the CCS TSI Revisions

The European Railway Agency (ERA) is hosting a series of enlightening webinars designed to delve deeper into the 2023 CCSI TSI.

These sessions are open to everyone and offer in-depth insights into the recent revisions.

Recap and replay:

The initial webinars, focusing on rolling stock and CCS, as well as fixed installations and operation, were conducted on the 2nd and 15th of June. Missed these sessions? No worries! You can access the recordings and presentations on ERA's website: https://www.era.europa.eu/content/era-webinars-2023-programme.

Upcoming sessions:

24th October: "How to Understand Chapter 7 of TSIs Applicable to Rolling Stock and On-board CCS?"

- 10th November: Session details to be revealed.
- 24th November: Session details to be revealed.
- 7th December: Session details to be revealed.

Contact details

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