Bringing the Benefits of Global Satellite Navigation to Railway Customers in Europe and Beyond

Vienna, 18 March 2019 – The Austrian Infrastructure Minister Nobert Hofer welcomed an illustrious group of European and international experts to discuss the important role of satellite-based positioning technology for the future of the European railway sector today in Vienna. While traditional and ageing technologies are being gradually phased out, satellite technology opens up new possibilities for providing a scalable solution for railway positioning and increasing the safety of rail transport. It also supports cost efficiency for rail infrastructure, and promises to become a global success for the exportation of European technologies such as the European Train Control System (ETCS).

Working together to satisfy the demands of an increasingly digitalised world, the European Global Navigation Satellite Systems Agency (GSA), the European Union Agency for Railways (ERA), and the Shift2Rail Joint Undertaking (S2R JU) joined forces to explore the role of satellite technology in future railway systems. Both GSA and S2R JU have a key role in leading innovation, and engaging with all stakeholders involved, while ERA is orchestrating the process from a regulatory point of view within the ERTMS framework.

The initiative is supported by the European Commission, and endorsed and hosted by the Austrian Ministry for Transport, Innovation and Technology, in continuation of its activities to foster European transport innovation following the Austrian EU Presidency.

“Galileo and EGNOS are of strategic importance for the independence of Europe and they are key technologies for a firm basis for the development of a strong and innovative application market. Austria encourages the market uptake and such events support our national activities in bringing innovative technologies also into the rail system and other areas of transport. I’m very proud about what Austria has already achieved in the rail sector. It is a key goal of my ministry to further maximise the use of space based solutions to improve our daily life”, states Minister Hofer.

Carlo des Dorides, Executive Director, European GNSS Agency added “Europe’s investment in satellite navigation is already benefitting many sectors including mobility, smart cities, farming, mobile applications and more. Our innovative projects in rail show that satellite-based positioning can make rail transport more efficient and safer. It is fundamental now that railway undertakings, infrastructure managers and the EU rail industry, converge on solutions to be implemented within the ERTMS evolution to help ensure interoperability and export of European technologies.” He concluded “It is reassuring to see all stakeholders eager to discuss how to leverage the potential of Galileo and EGNOS for the future of rail transport in Europe. Like space, the next generation of rail operation will know no borders!”
Carlo Borghini, Executive Director of the Shift2Rail Joint Undertaking commented “Shift2Rail is pleased to move forward this European cooperation by accelerating research and innovation solutions for the application of GNSS for rail. It is only by involving all actors that new technologies and solutions can deliver interoperability by design, meeting customer needs and overcoming operational barriers”.

ERA Executive Director Josef Doppelbauer added, “increasing efficiency and competitiveness are the name of the game for railways. For this reason, railways need to innovate - in order to be commercially viable, innovation in rail needs to be based on interoperability. Satellite navigation provides very attractive capabilities for safe train operation that do not require expensive trackside installation, with GNSS opening up new ways, but also challenges in demonstrating safety.”

Global navigation satellite technology plays an ever more immanent role for the railway sector. Satellite positioning has been recognized as one of the key game changers in a Memorandum of Understanding between the European Commission, the European Union Agency for Railways and the European rail sector associations (CER, EIM, EPTTOLA, ERFA, the ERTMS Users Group, GSM-R Industry Group, UIC, UNIFE and UNISIG) concerning the cooperation for the deployment of the European Rail Traffic Management System ERTMS. The challenges and business aspects for future satellite positioning adoption within the sector have been addressed at the conference.

+++ Ends +++

Background

About Shift2Rail - www.shift2rail.org

Shift2Rail is the first European rail initiative to seek focused research and innovation (R&I) and market-driven solutions by accelerating the integration of new and advanced technologies into innovative rail product solutions. Shift2Rail promotes the competitiveness of the European rail industry and meets changing EU transport and mobility needs. R&I carried out under this Horizon 2020 initiative develops the necessary technology to complete the Single European Railway Area (SERA). Within this framework, Shift2Rail is working on delivering solutions for a fail-safe, multi-sensor train positioning system applying Global Navigation Satellite Systems (GNSS) technology to the current ERTMS/ETCS core. It will enable the improvement of the identification of train location and integrity information, while reducing overall costs for the system.

About the European GNSS Agency - www.gsa.europa.eu

As an official European Union Regulatory Agency, the European GNSS Agency (GSA) is in charge of managing operations and service provision of Galileo and EGNOS, ensuring that European citizens get the most out of Europe’s satellite navigation programmes in terms of innovation, competitiveness, economic growth, and benefit to users. The GSA is Europe’s link between space technology and user needs, it works together with institutions, industry, service providers, SMEs, entrepreneurs, and research institutions to respond to users’ needs and provide a satellite navigation service able to ignite a broad range of applications, and serve the user communities, including the European rail community and European rail passengers.

About the European Union Agency for Railways - www.era.europa.eu

The Agency is the system authority for ERTMS, ensuring the specifications are maintained and managed in accordance with the principles of stability and compatibility, and helping the implementations of the system according to the principles of compliance and discipline. The new roles defined in the 4th Railway Package for the Agency in delivering vehicle authorisations and approvals to ERTMS trackside projects allows a strengthened leadership in the efficient implementation of the framework and of application of the standards.

The Agency works institutionally with the sector organisations, and for ERTMS has dedicated actions on technical, safety and operational areas. In the field of railway communications, the Agency defines the
roadmap for the evolution of operational radio in view of the planned GSM-R life expectancy, aiming at a definition of the new radio communication systems.

Contacts

**Austrian Ministry for Transport, Innovation and Technology (BMVIT)**
Volker HÖFERL
Spokesperson
Radetzkystraße 2, 1030 Vienna
E-Mail: volker.hoeferl@bmvit.gv.at
Phone: +43 1 711 62 - 65 8121

**European Union Agency for Railways (ERA)**
Max OBENAUS
Communication Officer
120, rue Marc Lefrancq
F – 59 307 Valenciennes Cédex
E-Mail: max.obenaus@era.europa.eu
Phone: +33 (0) 327 096 530

**European Global Navigation Satellite Systems Agency (GSA)**
Cristina COMUNIAN
Communications Officer
Janovskeho 438/2
170 00 Prague 7
Czech Republic
E-Mail: cristina.Comunian@gsa.europa.eu
Phone: +420 234 766 780

**Shift2Rail Joint Undertaking (S2R JU)**
Caroline KEARNEY
Communication Officer
White Atrium building, 2nd Floor
Avenue de la Toison d’Or 56-60
B-1060
Brussels/Belgium
E-Mail: caroline.kearney@s2r.europa.eu
Phone: +32 2 541 83 82