



Press Release

The European project “ESRIUM” to use and maintain EGNSS-enabled smart road infrastructure launched remotely

1st February 2021 - The 9-partner strong consortium that makes up the “EGNSS-enabled Smart Road Infrastructure Usage and Maintenance for increased energy efficiency and safety on European road networks” (ESRIUM) project came together online to kick-start the project on 9th December 2020.

The project received a funding grant of €3 million by the European Commission under the programme **Horizon 2020** to foster greener and **smarter road usage**, road maintenance, and increase **road safety**. It includes 7 work packages and covers a range of applications. After an overview by **coordinator JOANNEUM RESEARCH Forschungsgesellschaft mbH**, each work package leader presented their plan and mapped out next steps in the virtual meet-up.

ESRIUM key innovation will be formed by a homogeneous, accurate and recent **digital map** of road surface damage and road wear. ESRIUM’s core proposition is a **data platform**, which hosts highly detailed EGNSS-referenced map data of road damage and associated safety risks at centimeter-level resolution. Further addressed as “road wear map”, it will contain unique information, which is of value to multiple stakeholders: road operators will be able to lower the road maintenance effort by optimal planning. Further, road operators will be able to lower road wear and increase traffic safety especially for heavy vehicles by suggesting driving adjustments to use the road surface more evenly.

Considering the market introduction of partly automated truck fleets, the precise track of these vehicles can be adjusted by communicating precise routing recommendations in- and cross-lane. For truck fleet operators this will increase the general safety for their vehicle fleet. Further, **incentive measures** for following these recommendations will be investigated. Especially with the increasing levels of autonomy, systems will utilize infrastructure support to handle the requirements of the automated driving task and additional external requests.

In ESRIUM, these opportunities are addressed by utilizing C-ITS infrastructure and EGNSS based localization in planning the trajectories of such automated vehicles. Key to the ESRIUM innovation is a precision localization service, which provides **reliable localization information** of road damages and of the vehicles using the roads. Considering a European-level business-case, only **Galileo** may provide such a service in homogeneous quality, even at very remote locations on the European continent.

The members, from **5 different countries**, come from the business and academic community and will work together for the next three years for the replicability and sustainability of project results.

You can follow ESRIUM on [LinkedIn](#) and [Twitter](#) to keep updated with its next developments.



This project has received funding from the European GNSS Agency under the European Union’s Horizon 2020 research and innovation programme under grant agreement No 101004181.

The content of this press release reflects only the author’s view. Neither the European Commission nor the GSA are responsible for any use that may be made of the information it contains.



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Project Factsheet

Duration:	1 December 2020 - 31 November 2023
Total cost:	€ 3 410 893,75
EC contribution:	€ 3 000 000
Coordinator:	JOANNEUM RESEARCH FORSCHUNGSGESELLSCHAFT MBH
Partners:	JOANNEUM RESEARCH FORSCHUNGSGESELLSCHAFT MBH , VIRTUAL VEHICLE RESEARCH GMBH , AUTOBAHNEN- UND SCHNELLSTRASSEN-FINANZIERUNGS- AKTIENGESELLSCHAFT , MAANMITTAUSLAITOS, FH OO FORSCHUNGS & ENTWICKLUNGS GMBH, EVOLIT CONSULTING GMBH, ENIDE SOLUTIONS .S.L, NNG SZOFTVERFEJLESZTO ES KERESKEDELMI KFT, POLITECNICO DI MILANO

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ESRIUM online Kick-off meeting, 09/12/2020.



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