

Galileo OSNMA successfully tested in mass-market receivers with live signal

Qascom and the PATROL project team are proud to announce the successful testing of Galileo Open Service Navigation Message Authentication (OSNMA) using a mass-market receiver, during the [ongoing signal-in-space testing phase](#) in view of the “Public observation” phase.

Galileo OSNMA is an authentication mechanism that allows GNSS receivers to verify the authenticity of the information transmitted by the satellite itself making sure that the data they receive are indeed from Galileo and have not been modified in any way. OSNMA is a novel and unique service provided free-of-charge to all users, contributing to increase the overall security of GNSS-based applications and services.

The PATROL project is funded under the European Union Fundamental Elements programme, a research and development (R&D) mechanism supporting the development of chipsets and receivers. The project started on Q1/2018 with the objective to develop a fully **OSNMA-enabled close-to-market solution for smart tachograph applications** (based on [Teseo V](#) receiver by ST Microelectronics).

“The Navigation Message Authentication is a long-awaited service in GNSS since it is considered an important step to mitigate future cyber security threats, contributing to meet the need for trustworthiness in several applications” says Carlo Sarto, GNSS authentication expert at Qascom.

Mr. Flavio Sbardellati, PATROL’s Project Officer for the European GNSS Agency, confirms that the successful live testing of Galileo OSNMA represents an important step for the satellite navigation industry and for Europe, showing the way for a more secure navigation in civil mass-market receivers.

*“In PATROL we have demonstrated the ability to efficiently implement **OSNMA on a modern and compact receiver design for automotive and mass-market**”* says Fabio Pisoni, GNSS System R&D at STMicroelectronics

PATROL User terminal, compliant with the new smart tachograph’s regulations, demonstrates the benefit provided by OSNMA in a modern application requiring a trusted position information. The demand for safety and security is constantly increasing in the GNSS applications for the automotive market, according to Alexandre Allien (CTO at FDC), and the smart-tachograph market is confirmed as a concentrate of cutting-edge technologies and innovation, pioneering the use of OSNMA.

The PATROL project is coordinated by **Qascom**, with **FDC** as consortium partner and subcontractors **STMicroelectronics**, **GMV Aerospace and Defence**, **Actia** and the **University of Padova**. PATROL is funded by the **European GNSS Agency (GSA)** through the Fundamental Elements programme, under procurement No GSA/OP/23/16.

In the last 15 years Qascom has contributed to the design of GNSS authentication schemes, including OSNMA, in collaboration with space agencies and industries. In the context of PATROL project, Qascom tested the first mass-market implementation of OSNMA. Further information concerning the project is available at the website www.patrol-osnma.eu or can be requested by contacting Qascom at info@qascom.it

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