EU-FUNDED PROJECT MOVES FORWARD ON GALILEO PRS STANDARDS

17 FEBRUARY 2011

The ‘PROGRESS’ project, aimed at defining new specifications and standards for future Galileo PRS receivers, has held its final meeting in Brussels. The results of the project now pave the way towards the development of working prototypes.

Galileo's Public Regulated Service or PRS is to be an encrypted signal that will serve European government agencies, including emergency services, police, and, potentially, the military. It is designed to provide positioning and timing to users requiring a high continuity of service, with controlled access ensured by encryption of the data.

Speaking at the final PROGRESS workshop in Brussels on 8 February 2011, Carlo Des Dorides, new Executive Director of the European GNSS Agency (GSA), said, “The PRS is a very important pillar for Galileo, and the work that has been done under the PROGRESS project allows for the establishment of common standards in terms of technologies and new prototypes. But it has also helped to foster new working ties between important groups such as Eurocontrol and the European Defence Agency.”

Seeing real movement

Launched in 2009, PROGRESS (PROgram for the Governmental REceivers Specification and Standardisation) has been aimed at specifying the necessary PRS receiver performance and setting up frameworks for standardisation, safety certification and security accreditation for PRS receivers and security modules.

The GSA’s Rodolfo Crescimbeni says, "This is the first big project launched by the GSA to work towards development of the PRS user segment. The results we are here to discuss include many important elements: the characterisation and specification of three new form factors for PRS receivers, namely low-, medium- and high-end, and guidelines for accreditation of those receivers. PROGRESS results are now fundamental for the elaboration of Common Minimum Standards and for the PRS Pilot Project."

Progress key achievements:

- Establishment of European standardisation committee and fora;
- Definition of performance specifications for expected application domains, and production of the corresponding MOPS (Minimum Operational Performance Standards);
- Definition of technical and security requirements and standards for PRS receivers and Security Modules;
- Definition of Concepts of Operations (ConOps) and security requirements;
- Guidelines for security certification and accreditation of receivers and Security Modules;
- Identification of performance and regulatory requirements for certification of safety applications;
- Interface Control Document and Protection Profile for PRS Security Module;
- Simulation and assessment of PRS receiver performance;
- A new PRS implementation plan, for timely development of key PRS products and the standardisation and certification process.

Next steps

Project coordinator Frank Mangin of FDC says, “With the completion of PRS standardisation activities, the development of working prototype receivers can now begin. Prior to the availability of the actual PRS signal from space, simulators and secure test environments will support experimentation and evaluation of PRS applications by ‘early adopters’.”

The GSA’s Olivier Crop said, “We are very happy with the results of this initiative. What we know is that there are companies that are already working on designs for the PRS receiver, so it is very important that they can see the results of this project and that they know which way we are going.”

More information:

- PROGRESS website
- The Progress Workshop Programme
- Galileo Programme Status
- Public Regulated Service
- Setting up a Standardization Framework for PRS
- PRS Receivers initial Specifications
- PRS Receiver Security Requirements
- Security Constraints and Certification
- Safety Certification Recommendations
- FDC - Way Forward
- Issues at stake wrt State Aircrafts