

Space applications: a market for the taking

The European Commission's Global Navigation Satellite Systems (GNSS) Applications Action Plan adopted today aims to place European industry in pole position to take full advantage of the global downstream market worth about €100 billion in particular by using its own satellite navigation programmes, Galileo and EGNOS (European Geostationary Navigation Overlay System). EGNOS, the European satellite-based augmentation system that paves the way for GALILEO, has been in service since 1 October 2009. It can offer enhanced satellite navigation signals which are up to ten times more precise than GPS. Significant commercial and research opportunities are available to universities, developers and manufacturers in Europe to research, innovate, develop or sell applications based on this sophisticated technology.

Antonio Tajani, European Commission Vice-President in charge of Industry and Entrepreneurship, said: “Europe simply cannot afford to ignore the economic benefits of taking full advantage of this market – the alternative is not an option. Action must be taken to ensure Europe's SMEs become aware of the extensive business opportunities and the European citizens about the vast variety of possible applications.. Like the Internet, satellite applications will play a part in all our daily lives.”

The uptake of GNSS applications in Europe has until now been slow notwithstanding Europe's investments and the availability of EGNOS. The share of the European industry in worldwide GNSS applications market is moreover low. The limited usage of applications based on EGNOS and GALILEO leads to critical dependencies from military-inspired GNSS that are beyond European control.

Advantages of EGNOS

All EGNOS application domains which use positioning and velocity information can benefit from the **sharply improved accuracy**. This for example includes all transport modes from the management of infrastructure and the provision of geo-localised information, logistics, precision agriculture, civil protection and emergency management, mapping and land registry, fisheries, energy, management of natural resources, mining, Earth sciences, meteorology, the modelling of climate change, environment, justice and law enforcement and, border control.

Why is the Applications Action Plan needed?

The Commission believes that European industry should reap maximum benefit from the investment made in the programmes. Coordinated action by the European Commission among Member States will draw as much attention as possible to the necessity of investment in research, ensure the widest possible dissemination of vital information and optimise awareness raising activities. This will avoid a conflict of standards and a duplication of efforts if undertaken by individual Member States.

Main action points

Through the 24 actions points listed in the plan, the Commission will co-ordinate activities in this domain. This process has led to focusing the action plan, for the period up to 2013, on the following domains in particular to take advantage of the improved accuracy of EGNOS: applications for individual handsets and mobile phones; road transport; aviation; maritime transport and fisheries; precision agriculture and environment protection; civil protection and surveillance.

Among other things, the European Commission will

- Allocate **€38 million worth of FP7 funding** to a broad spectrum of research proposals on GNSS application in 2011;
- Seek certification of EGNOS for **aviation including Safety of Life**; in conjunction with Eurocontrol target aircraft manufacturers, general aviation and small airports;
- Investigate possibilities for **Advanced Driver Assistance Systems (ADAS)** and seek certification of Galileo for Intelligent Transport Systems while also targeting the road transport community;
- Promote Galileo and EGNOS-enabled **chips and handsets**;
- Establish an International EGNOS & Galileo **Application Forum** where users, developers, infrastructure managers and systems providers can exchange views on feeding into the evolution of the GNSS project.

The focus of the GNSS Applications Action Plan is from 2010-2013 – though objectives extend beyond 2020. It clearly underpins official Commission priorities as laid out in the EU2020 Strategy and the EU flagship initiative 'An industrial policy for the globalisation era'.

The European Commission also emphasises the need for further EU R&D funding for GNSS applications in order to foster the development of applications based on EGNOS and Galileo, thereby ensuring Europe's independence from foreign, military-controlled systems.

More information

http://ec.europa.eu/enterprise/policies/space/galileo/index_en.htm