## Basic information

| | |
|---|---|
| **2010/2208(INI)**<br><br>INI - Own-initiative procedure | Procedure completed |
| Transport applications of the Global Navigation Satellite Systems - short and medium term EU policy<br><br>**Subject**<br><br>3.20 Transport policy in general<br>3.30.03.06 Communications by satellite<br>3.40.05 Aeronautical industry, aerospace industry | |

## Key players

### European Parliament

| Committee responsible | Rapporteur | Appointed |
|---|---|---|
| TRAN Transport and Tourism | ȚICĂU Silvia-Adriana (S&D) | 20/07/2010 |
| | Shadow rapporteur<br><br>KUHN Werner (PPE)<br><br>JENSEN Anne E. (ALDE)<br><br>LICHTENBERGER Eva (Verts/ALE)<br><br>FOSTER Jacqueline (ECR)<br><br>KOHLÍČEK Jaromír (GUE/NGL) | |

| Committee for opinion | Rapporteur for opinion | Appointed |
|---|---|---|
| ITRE Industry, Research and Energy | GLANTE Norbert (S&D) | 13/10/2010 |

### Council of the European Union

| Council configuration | Meetings | Date |
|---|---|---|
| Competitiveness (Internal Market, Industry, Research and Space) | 3057 | 2010-12-10 |

### European Commission

| Commission DG | Commissioner |
|---|---|
| Mobility and Transport | KALLAS Siim |

## Key events

| Date | Event | Reference | Summary |
|---|---|---|---|

| | | | |
|---|---|---|---|
| 23/09/2010 | Committee referral announced in Parliament | | |
| 15/03/2011 | Vote in committee | | Summary |
| 24/03/2011 | Committee report tabled for plenary | A7-0084/2011 | |
| 07/06/2011 | Decision by Parliament | T7-0250/2011 | Summary |
| 07/06/2011 | Results of vote in Parliament | | |
| 07/06/2011 | End of procedure in Parliament | | |

| Technical information | |
|---|---|
| **Procedure reference** | 2010/2208(INI) |
| **Procedure type** | INI - Own-initiative procedure |
| **Procedure subtype** | Initiative |
| **Legal basis** | Rules of Procedure EP 55 |
| **Other legal basis** | Rules of Procedure EP 165 |
| **Stage reached in procedure** | Procedure completed |
| **Committee dossier** | TRAN/7/03822 |

Documentation gateway

**European Parliament**

| Document type | Committee | Reference | Date | Summary |
|---|---|---|---|---|
| Committee draft report | | PE454.505 | 17/12/2010 | |
| Committee opinion | ITRE | PE452.612 | 28/01/2011 | |
| Amendments tabled in committee | | PE458.490 | 09/02/2011 | |
| Committee report tabled for plenary, single reading | | A7-0084/2011 | 24/03/2011 | |
| Text adopted by Parliament, single reading | | T7-0250/2011 | 07/06/2011 | Summary |

**European Commission**

| Document type | Reference | Date | Summary |
|---|---|---|---|
| Document attached to the procedure | COM(2010)0308 | 14/06/2010 | Summary |

# Transport applications of the Global Navigation Satellite Systems - short and medium term EU policy

2010/2208(INI) - 14/06/2010 - Document attached to the procedure

PURPOSE: to present an Action Plan on Global Navigation Satellite System (GNSS) Applications.

CONTENT: EGNOS (European Geostationary Navigation Overlay Service), the European satellite-based augmentation system that paves the way for GALILEO, has been in service since 1 October 2009. Six months before, on behalf of the EU, the Commission took over from the European Space Agency (ESA) ownership of the system. With its three geostationary satellites and 40 ground stations spread over Europe and North Africa, EGNOS supplements the Global Positioning System (GPS), to which the US provided access for civilian use, with no guarantee of service, back in 2000. EGNOS offers free enhanced satellite navigation signals over Europe which are **ten times more precise than GPS**. All application domains which use positioning and velocity information can benefit from this improved accuracy: all transport modes through 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, border control, etc.

Another advantage EGNOS can offer civilian users is integrity, i.e. a measure of the trust which can be placed in the correctness of the information supplied by the system, with the user being automatically alerted whenever an error made by the system is beyond a certain confidence limit. Integrity plays an important role in Safety of Life applications in transport (all modes of transport, airport management, automatic vehicles), sensitive commercial applications (high-precision oil platform location, logistics, transport of dangerous goods), or liability-critical applications needing legal recourse (reconstruction of road accidents, road user charging, synchronisation of electrical or telecommunication networks).

Together with the GPS signal, EGNOS today, and later GALILEO, strengthens the infrastructure leading to a global market for GNSS products and services, called downstream GNSS applications. In 2008, this was worth EUR 124 billion. The market is founded primarily on basic positioning and timing signals, but is expected to benefit from the planned introduction of authentication and encryption of signals. Experts predict that, in volume, 75 % (52% in revenues) of this market will come from products and services linked to mobile telecommunications and personal handsets, with a further 20 % (44% in revenues) from intelligent transport systems for road and the remaining 5 % (4% in revenues)from other domains of application.

Despite Europe’s investment in its GNSS infrastructure and the availability of EGNOS, **European industry has only a low share of the global GNSS applications** market compared with what it is capable of achieving in other sectors of high-technology (a good third). This is a problem since:

- applications based on EGNOS and subsequently on GALILEO would make a **decisive contribution to the development of a knowledge-based society** and the creation of high value jobs in the EU. Europe will therefore be missing a huge opportunity if it does not take an appropriate share of the economic benefit expected from GNSS applications. Also, if GALILEO and EGNOS do not become the underlying GNSS standard in Europe, many application domains may remain shackled with technologies which prevent them from benefiting from the added-value of new advanced services;
- the limited use of applications based on EGNOS and GALILEO leads to **critical dependencies** as GNSS are very pervasive, providing vital position, navigation, and timing information for a whole range of daily-life activities and for Europe’s security and social and economic development. By relying only on GPS-based applications, the **EU would be exposed to the potential non-availability of the GPS signal**, which is beyond the EU's control since its primary objective is to support the military operations of a third country. In the same way as the Internet, the pervasiveness of GNSS services is huge.

The most recent and conservative estimates of the overall benefits of EU GNSS programmes to EU industry, citizens and Member States are put at between EUR55 and EUR 63 billion over the next 20 years, with most important benefits arising from indirect revenues in the downstream industry (between EUR 37 billion and EUR 45 billion). As a consequence, the low uptake of applications based on EU GNSS is a problem that affects European society in general, and in many ways.

A **detailed action plan** is called for, to boost people's confidence in the programmes, to foster the development of EGNOS and GALILEO downstream applications, and to achieve the quickest, deepest, broadest development of applications across all domains so to reap maximum benefit from the EU’s infrastructure.

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 Commission will:

- allocate EUR 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 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.

# Transport applications of the Global Navigation Satellite Systems - short and medium term EU policy

2010/2208(INI) - 10/12/2010

The representatives of the Member States' governments, meeting in a conference on the sidelines of the Council, decided that the European GNSS agency will have its seat in **Prague**.

The agency is entrusted with certain tasks in the implementation of the European global navigation satellite systems (GNSS) under the EGNOS and the Galileo programmes. These tasks include in particular specific security aspects such as security accreditation and the operation of the Galileo security centre, as well as the commercialisation of the European GNSS systems. The agency, which works under the authority of the Commission, was initially established in 2004 as the "European GNSS Supervisory Authority" and has been provisionally located in Brussels. Its role and functioning was redefined by Regulation 912/2010, which also gave it its new name.

# Transport applications of the Global Navigation Satellite Systems - short and medium term EU policy

2010/2208(INI) - 07/06/2011 - Text adopted by Parliament, single reading

The European Parliament adopted a resolution on transport applications of Global Navigation Satellite Systems (short-and medium-term EU policy) in response to the Commission communication on an Action Plan on Global Navigation Satellite System (GNSS) Applications.

The resolution welcomes the Commission communication and the series of specific sectoral, regulatory and horizontal actions proposed therein. Parliament agrees with the Commission that a targeted action plan is, at this point, the best option for giving a further impetus to the development and application of EGNOS and Galileo, particularly in the transport field. Members stress that satellite navigation systems should **ensure interoperability** between different systems (including conventional systems) and should also **allow intermodal use** in both passenger and freight transport services.

Parliament endorses the view that EGNOS and Galileo can make an important contribution to **road traffic management** and that an awareness campaign in that sector is required in order to increase the use made of the opportunities it provides in relation to fee collection, *eCall*, online booking of safe parking sites for trucks, and real-time tracking to contribute to safer and more environmentally friendly road transport.

Regretting that all of the European Union is not at this time covered by EGNOS, Members call for **EGNOS system coverage to be extended to southern, eastern and south-eastern Europe** as a matter of priority, so as to enable the system to be used throughout Europe in every transport sector, and stress the importance of ensuring that its coverage extends to both the MEDA countries and the Middle East and Africa.

Of the 15 sectoral actions included in the Action Plan, 9 have an immediate and important transport application. The Commission is called upon to:

- ensure swift certification of EGNOS for **civil aviation** through the competent authorities;
- bring forward the necessary regulatory proposals to deliver GNSS added value for safety in all forms of transport, particularly on the **roads**, and to help improve freight transport efficiency;
- **intensify industrial cooperation with non-EU countries** with a view to promoting the development and interoperability of EGNOS and Galileo applications and services;
- make a careful appraisal of the need to amend existing legislation on **digital tachographs** in order to ensure that the opportunities for positioning and speed information offered by GNSS are used appropriately;
- take steps to increase awareness and improve knowledge of possible GNSS applications in the **maritime and inland waterway sectors**;
- efficiently implement the **strong awareness-raising measures** set out in the Action Plan, in order to secure the extensive use of EGNOS in Europe;
- examine what **data protection** concerns might arise with the use of EGNOS applications and services and to do all it can to dispel these.

The resolution insists that the Commission should propose, in the context of the budgetary procedure and the future multiannual financial framework (MFF), steps to **ensure adequate levels of funding** for GNSS research and development, as well as for implementation. It renews its call, regarding both this specific project and similar projects, such as the TEN-Ts, for the Commission to submit a **multiannual financing** proposal going beyond the period of the MFF, in order to provide a stable and reliable financial framework for more ambitious European projects whose scope exceeds the present bounds.

Parliament calls on the Commission to inform Parliament how the annual maintenance cost, estimated at EUR 800 million, will be financed once Galileo has become operational.

The Commission is also invited to come forward with a **comprehensive funding strategy** which in addition to adequate EU and Member State contributions, could include, inter alia, coordinated tax incentives, simplified grant application procedures, and arrangements that could channel venture capital to SMEs and facilitate the development and marketing of EGNOS and Galileo applications, in cooperation with the European Investment Bank and the European Investment Fund.

Lastly, the resolution regrets that the shortage of funds allocated to research and innovation for applications based on EGNOS or Galileo is considerably delaying technological progress and the growth of industrial capacity, as well as environmentally effective implementation, in the European Union. It therefore urges the Commission to introduce arrangements enabling small and medium-sized enterprises to **gain access to funding more readily**.