Basic information

2009/2226(INI) INI - Own-initiative procedure	Procedure completed
Mid-term review of the European satellite navigation programmes: implementation assessment, future challenges and financing perspectives **Subject** 3.30.03.06 Communications by satellite 3.40.05 Aeronautical industry, aerospace industry 3.50.01.05 Research specific areas	

Key players

European Parliament

Committee responsible	Rapporteur	Appointed
ITRE Industry, Research and Energy	REMEK Vladimír (GUE/NGL)	30/11/2009
	Shadow rapporteur BŘEZINA Jan (PPE) GLANTE Norbert (S&D) HALL Fiona (ALDE) TOŠENOVSKÝ Evžen (ECR)	

Committee for opinion	Rapporteur for opinion	Appointed
AFET Foreign Affairs	KOPPA Maria Eleni (S&D)	21/01/2010
BUDG Budgets	HERCZOG Edit (S&D)	16/12/2009

Council of the European Union

Council configuration	Meetings	Date
Transport, Telecommunications and Energy	3080	2011-03-31

European Commission

Commission DG	Commissioner
Mobility and Transport	KALLAS Siim

Key events

Date	Event	Reference	Summary
17/12/2009	Committee referral announced in Parliament		
12/01/2011	Non-legislative basic document published	COM(2011)0005	Summary
31/03/2011	Resolution/conclusions adopted by Council		Summary
12/04/2011	Vote in committee		Summary
18/04/2011	Committee report tabled for plenary	A7-0165/2011	
08/06/2011	Decision by Parliament	T7-0265/2011	Summary
08/06/2011	Results of vote in Parliament		
08/06/2011	End of procedure in Parliament		

Technical information

Procedure reference	2009/2226(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	ITRE/7/01770

Documentation gateway

European Parliament

Document type	Committee	Reference	Date	Summary
Committee opinion	AFET	PE440.114	08/07/2010	
Committee draft report		PE441.020	04/02/2011	
Committee opinion	BUDG	PE456.900	16/02/2011	
Amendments tabled in committee		PE460.827	14/03/2011	
Committee report tabled for plenary, single reading		A7-0165/2011	18/04/2011	
Text adopted by Parliament, single reading		T7-0265/2011	08/06/2011	Summary

European Commission

Document type	Reference	Date	Summary
Non-legislative basic document	COM(2011)0005	12/01/2011	Summary
Commission response to text adopted in plenary	SP(2011)8071	24/10/2011	

Mid-term review of the European satellite navigation programmes: implementation assessment, future challenges and financing perspectives

2009/2226(INI) - 08/06/2011 - Text adopted by Parliament, single reading

The European Parliament adopted a resolution on the mid-term review of the European satellite navigation programmes: implementation assessment, future challenges and financing perspectives.

Parliament recalls that it has consistently given its full support to the European Global Navigation Satellite System (GNSS), implemented through the Galileo and EGNOS programmes. Galileo is aiming to become the technologically most advanced, state-of-the-art GNSS in the world, able to set the global standard for the future. EGNOS and Galileo will generate EUR 60 billion of indirect benefits to the EU economy and society, in the form of enhanced road and aviation security, reduced air pollution and pesticide consumption, new jobs and public safety.

Whilst welcoming the Commission report on the mid-term review of the European satellite navigation programmes, Parliament regrets the delay in publishing the mid-term review, for too long creating uncertainty concerning the overall progress of the project and its financial situation. Parliament call on the Commission to update the GNSS Strategic Framework in the light of the current situation, including the main actions, estimated budget and timetable necessary to meet the objectives. With a view to preventing future cost overruns, the Commission is also asked to put in place stringent cost containment policies, and to implement recommended risk mitigation measures, such as dual sourcing.

Financial situation: Members note that the current budget can only fund the deployment of Initial Operating Capacity (IOC), comprising 18 satellites. They believe that IOC should be completed by 2014 at the latest to ensure that Galileo does indeed become the second GNSS constellation of reference for receiver manufacturers. They urge the Commission to launch the four In-Orbit Validation (IOV) satellites, to establish a clear road-map for the launch of the remaining 14 satellites, and to conclude the final work packages. Parliament believes that that clear and unambiguous support from all European Institutions to the fulfilment of FOC is needed to convince users and investors of the long-term commitment of the EU, and it calls on the Commission to send a positive signal to the market to this effect. Members deplore the fact that no proposal has been made to provide additional financing for this programme by readjusting the current multiannual financial framework.

Full operation capacity (FOC) should be reached by 2018 at the latest, which is estimated to require additional financing of EUR 1.9 billion and annual funding to cover operating costs of approximately EUR 800 million from 2014 onwards. Members want the Commission to pursue all possible financial efficiency savings and to put in place an appropriate financing structure to limit the necessary additional financing. Highlighting the fact that current EU funding of R&D for GNSS stands at no more than EUR 15 million per year, they warn of damage to other R&D programmes if additional funding for these activities is taken out of the current framework programme (FP7), and state that more funding should be provided under FP8 and through other measures to facilitate the development of GNSS-based products and services. They also stress the need to increase funding with a view to enhancing the development of GNSS applications and services.

Public awareness: Members are strongly convinced that additional funding for GNSS can only be secured if awareness of the benefits for the EU economy and society brought by GNSS is raised considerably and they urge the Commission and the EU GNSS Agency (GSA) to put much more effort into raising awareness of GNSS among potential users and investors.

International dimension: Members call on the Commission to involve regions of the world where the adoption of European GNSS technology and applications may help market development, such as Latin America, South-East Asia or Africa, and they urge the Commission and Member States to deploy all available means to quickly resolve the current compatibility issues with China.

Future challenges: financing and governance: Members emphasise the strategic importance of space policy and the GNSS programme in the drive to establish a genuine European industrial policy and call on the Commission to integrate satellite navigation in the development of all other relevant Community policies. They also call on the Commission:

- in the interests of long-term stability, to submit quickly legislative proposals on the future level of services, financing and governance of the GNSS programmes;
- to include in the impact assessment to be performed in the framework of the upcoming legislative proposal clear and comprehensive information on: (i)the technical specifications (accuracy, geographical coverage, integrity, etc.) for the services (Open Services, Safety of Life, Commercial Services, Public Regulated Services) that the various Galileo satellite configurations could provide (including IOC and FOC, used in combination with other GNSS systems or on a stand-alone basis); (ii) the role of EGNOS services with regard to the various possible Galileo configurations and whether or not EGNOS should be kept in a FOC constellation; (iii) the costs of the possible Galileo and EGNOS configurations in terms of not just infrastructure investment but also management and contingency costs.

Financing: Parliament states that Galileo and EGNOS, as **European programmes owned by the EU which address a public interest at EU level**, should mainly be financed through the EU budget. Alongside the contribution from the EU budget, all possible sources of financing should be investigated, including innovative forms of financing. Members emphasise that ad hoc, emergency budgetary solutions such as those seen in the past are likely to jeopardise the success and added value of such strategic, large-scale EU projects and undermine the political momentum around them. They suggests that a predetermined annual amount should be provided from the EU budget (for the financing of the remaining Galileo infrastructure as well as the operating costs), and want the Commission to present a detailed breakdown of the estimated financial needs by summer 2011. Parliament believes that unexpected additional costs should be financed from the Community budget without endangering other existing programmes, and it calls on the Commission to assess the possibility of establishing a ‘Galileo reserve fund’ to cover such unexpected costs.

Governance: Parliament feels that the **long-term governance and management structure of GNSS** should address the division of tasks and responsibilities between the Commission, the GSA and the European Space Agency (ESA), as well as other relevant issues. It calls on the Commission to make swift progress with the ongoing reflection on future governance schemes for the operation of the system, to take responsibility for long-term operations and adaptation of the infrastructure, to ensure the delivery of continuous data and services to users, and to maximise opportunities for the development of commercial services. Members also stress the need for the long-term governance and management structure of GNSS to be fully transparent, noting that coordination with the Council and the European Parliament should take place on a regular basis. Lastly, they call on the Commission to establish mechanisms to ensure that GNSS based services comply with fundamental rights such as privacy and data protection.

Mid-term review of the European satellite navigation programmes: implementation assessment, future challenges and financing perspectives

2009/2226(INI) - 31/03/2011

The Council adopted conclusions reaffirming its strong commitment to the European satellite radio navigation programmes, whilst calling for containment of the costs they entail. The conclusions respond to the Commission's report on the mid-term review of the EGNOS programme, which is already operational, and the Galileo programme, which is still in its development phase, with the first services scheduled to become operational in 2014-2015.

In an exchange of views, ministers highlighted the main elements of the conclusions. Responding to Member States' concerns about costs, the Commission indicated that it would be able to give a **more precise assessment of the costs once the final two contracts for the deployment of Galileo had been signed**, before the summer. The Council conclusions underline the strategic and economic importance of the programmes, which are intended to ensure the EU's independence in this field, establish the EU as one of the leading players in the space technology market and trigger further economic activities, in particular through the development of applications for the possibilities offered by the programmes.

At the same time, the Council invites the Commission to provide more details on the assumptions and calculations underlying the estimated additional financial needs (EUR 1.9 billion over the 2014-2020 period) for the completion of the Galileo infrastructure and to explore possible ways to achieve savings. It emphasises that any **further cost overruns should be avoided**. Looking forward to the Commission's proposal for the funding of the programmes under the next multiannual financial framework to apply from 2014, the Council considers that in view of the nature of the project, the programmes should continue to be financed by the EU budget.

The conclusions also stress that **keeping to the timetable for the provision of the first services (2014-2015) is essential** to build users' and industry's confidence in the programmes. International cooperation needs to be continued to settle issues regarding the compatibility and interoperability of the Union's system with those of other countries. Moreover, it is important to further reflect on the future governance of the programmes.

The EGNOS programme, which enhances the accuracy of civilian GPS services, became operational on 1 October 2009 and is now available for use with both an Open Service and a Safety-of-Life Service for aviation. As regards the Galileo programme, two experimental satellites are already in space in order to test the technology and secure frequencies, and the first four satellites of the future system will be launched in 2011-2012. In 2014, the first services are planned to be delivered on the basis of 18 satellites. The system will be fully operational when all 30 satellites are in place; that should be achieved in 2019/2020.

The **main points of the Council conclusions** may be summarised as follows:

The Council underlines that the European satellite navigation systems are of **strategic importance for the independence of the EU regarding satellite navigation**, positioning and timing services and will offer a relevant contribution to the implementation of the "Europe 2020" strategy for smart, sustainable and inclusive growth.

Furthermore, the Council:

- stresses that, as EU flagship programmes in space, EGNOS and Galileo would allow the development of a **strong and innovative downstream application** market in Europe and will significantly contribute to the economic recovery of Europe and address major challenges such as climate change, ecological preservation and sustainable transport;
- emphasises the need for a timely deployment of a competitive and independent Galileo constellation and acknowledges the substantial economic and social benefits for the EU and its citizens;
- acknowledges the progress made in the programmes under the governance scheme put in place in 2008 and welcomes the fact that the EGNOS open service is operational and has been adopted by several user communities; it encourages the uptake of its recently operational Safety of Life service, in particular in the aviation sector, on the basis that it will be delivered free of charge to end-users;
- takes note that the Galileo ground and space segments developed under the In Orbit Validation phase are nearing completion and that the first orders within the current procurement of the Galileo deployment phase should lead to an Initial Operational Capability in 2014-2015. The Council calls upon all actors involved to do their utmost to achieve this goal, within their respective roles and responsibilities;
- underlines the importance of this progress for **establishing the necessary confidence amongst the public, receiver manufacturers and application developers** that will facilitate take-up and investment in products and services;
- highlights the need to receive, on a regular basis, information from the Commission on the implementation of the principles for the procurement of the deployment phase of the Galileo programme, in particular the 40% figure for sub-contracting, in conformity with Regulation (EC) No 683/2008;

- stresses that the **estimated additional financial needs presented by the Commission for the completion of the infrastructure should be more thoroughly substantiated** with regard to the assumptions and calculation on which they were constructed, and calls upon all actors directly involved in the governance of the programmes to take all possible measures, within their respective roles and responsibilities, to avoid any further cost overruns;
- urges the Commission to pursue its cost and risk analysis of the programmes to identify and evaluate the impact of all possible options for potential cost and risk reductions and optimisation, such as dual sourcing for the provision of satellites and launchers, reconsidering the implementation of the Safety of Life service and operational efficiencies;
- underlines its wish that the **cost and risk analysis should result in cost saving**, including efficiency savings, and cost containment, while reaffirming its commitment to the specific objectives of the programmes as defined in Regulation (EC) No 683/2008;
- notes the overall estimated operating costs of the systems, including operational management of the infrastructure, provision of the services, replacement and renewal of components with a limited service life and new technology developments, and that these costs will occur progressively as from the provision of the initial operational services;
- considers that, Galileo and EGNOS being European programmes owned by the EU, **should continue to be financed by the EU budget**, taking into account the specificities of large scale projects, the public nature of the services, as well as the fact that direct revenues will not offset costs; URGES the Commission to optimise Galileo's potential direct and indirect revenues;
- underlines the need to proceed with no delay with the ongoing reflection on possible future governance schemes, both public and private, for the day to day operations of the programmes, involving the future role of the Commission and Member States and taking into account the need for continuity and consistency.

Lastly, the Council urges the Commission to optimise and rationalise the use of existing structures and to give particular attention to the operational governance of EGNOS.

Mid-term review of the European satellite navigation programmes: implementation assessment, future challenges and financing perspectives

2009/2226(INI) - 12/01/2011 - Non-legislative basic document

PURPOSE: present of the report from the Commission on the mid-term review of the European satellite radio navigation programmes.

CONTENT: in accordance with Regulation (EC) No 683/2008, the Commission presents a report constituting the annual report and **mid-term review of the European satellite radio navigation programmes**. It takes stock of the progress made on the programmes and sets out the challenges ahead.

(1) The development of programmes since 2007: when the Commission took over responsibility for managing the Galileo and EGNOS programmes in 2008, they were experiencing significant cost overruns and delays, as well as serious governance problems. Significant progress has been made over the last three years: the EGNOS open service officially became operational on 1 October 2009. The system has operated since then in accordance with the requisite specifications. It is operated by a service provider (hereinafter'ESSP') under contract to the Commission. The main subject of the contract is the uninterrupted provision of the open service and of the safety-of-life ('SoL') service.

A milestone was reached in July 2010 with the certification of ESSP under the regulations governing the single European sky. The period for finalising the EGNOS system should be completed in the near future and the SoL service for the needs of civil aviation should be declared open in early 2011. In addition, it is planned to extend the area covered by EGNOS services gradually to include all the countries belonging to the European Civil Aviation Conference. Studies are also continuing into extending coverage into Africa, the Arab countries and the countries immediately to the east of the EU.

Where the **development phase** is concerned, the two experimental satellites, Giove A and Giove B, are operating very satisfactorily. In addition, the assembly of the first four satellites in the future constellation, which will be launched in 2011-2012, as ESA has confirmed, is currently being completed.

Work on the **deployment phase** was launched in 2008 and is proceeding actively. This work has been divided up essentially into six packages, each of which is the subject of a public procurement procedure. Competitive dialogue with the tendering firms is a key element in the procedures which have been launched.

As a result, the first four contracts, **with a total value of around EUR 1 250 million**, were awarded in 2010; they are for the packages covering system engineering support, satellite construction (**with an initial order for 14 satellites**), launchers (for the launch of 10 satellites, but with options for additional launches) and operations, respectively. The other two packages, relating to ground infrastructure, will be awarded in 2011. The contracts for additional equipment and facilities will also need to be awarded in the course of 2011. For those contracts where there was competitive supply, savings have been possible with respect to original estimates, whereas this was not the case in monopoly situations.

Horizontal measures: the report discusses several horizontal measures flanking the deployment of the infrastructure, which have been taken on the regulatory front, with regard to international aspects and in respect of future uses. These include the **compatibility and interoperability of the systems**, which are the focus of complex discussions with China, the United States, Russia, India and Japan, and also within the United Nations. Where the development of downstream markets is concerned, in June 2010, the Commission adopted a GNSS Applications Action Plan to promote the use of satellite radio navigation in what it considers to be priority fields.

(2) New challenges: However, the programmes are now faced with fresh challenges arising from the materialisation of a number of risks which were previously identified by the Commission, and the **organisation of the programmes must be further fine-tuned** in order to increase their efficiency.

The project has experienced **cost overruns** attributable in particular to the increased cost of the development phase, the increased price of the launchers, the lack of competition for the award of some packages and additional costs associated with the programme. The report notes that the additional cost of the development phase amounts to some EUR 500 million in total. The price of launch services has entailed an additional cost of more than EUR 500 million by comparison with the original budget.

The assessment shows that average annual operating costs amount to some EUR 800 million at 2010 prices, not adjusted for inflation, of which EUR 110 million is accounted for by EGNOS.

The estimates made to date point to a requirement for around EUR 1 900 million in funding over the period 2014-2019 to complete the infrastructure associated with the Galileo programme. Added to this will be the operating costs of the system once it has become operational, i.e. as from 2014-2015.

Furthermore, the **economic situation** of the EU and its Member States has led the Commission not to seek, up to now, the allocation of additional resources within the current multiannual financial framework, even though this is causing delays in completion of the full deployment of Galileo and an increase in overall costs.

A new basis for the work on the European satellite radio navigation programmes needs to be established so that progress can continue without compromising the objectives laid down by the European Parliament and Council. Accordingly, the Commission recommends an approach which envisages the present organisation being maintained and improved over at least 10 years, although it will have to evolve in line with the needs of the exploitation phase.

On the **political front**, several decisions still need to be taken. In a context in which Europe's economic and social progress is heavily dependent on mastering and using leading-edge technologies such as those relating to nuclear fusion, space, air traffic management and life sciences, it is important to reach decisions about the means, including budgetary means, of coping with the risks inherent in such technologies. Conclusions also need to be reached on the development of the EU budget and on how the risks are to be apportioned between the EU and its Member States. The decisions laying down the budgetary and financial principles governing the continuation of the European satellite radio navigation programmes will need to be taken in parallel with those concerning the governance framework. This must seek to make all the players more aware of their responsibilities, in order to ensure an orderly transition to future governance arrangements while at the same time enhancing control of the project and of its associated costs.

The adoption of such political decisions requires time and thought. **Detailed proposals will be drawn up by the Commission at a later stage** on the basis of the guidelines to be laid down by the European Parliament and the Council in the light of this report.