

Basic information

2011/2148(INI)

INI - Own-initiative procedure

Towards a space strategy for the European Union that benefits its citizens

Subject

3.50.03 European space policy

Procedure completed

Key players

European Parliament

Committee responsible	Rapporteur	Appointed
ITRE Industry, Research and Energy	PATRICIELLO Aldo (PPE)	08/06/2011
	Shadow rapporteur GLANTE Norbert (S&D) KRAHMER Holger (ALDE) BÜTIKOFER Reinhard (Verts /ALE) TOŠENOVSKÝ Evžen (ECR) REMEK Vladimír (GUE/NGL)	

Committee for opinion	Rapporteur for opinion	Appointed
AFET Foreign Affairs	The committee decided not to give an opinion.	
INTA International Trade	The committee decided not to give an opinion.	
ENVI Environment, Public Health and Food Safety	TATARELLA Salvatore (PPE)	27/07/2011
TRAN Transport and Tourism	ZASADA Artur (PPE)	20/06/2011
REGI Regional Development	The committee decided not to give an opinion.	

European Commission

Commission DG

Commissioner

Key events

Date	Event	Reference	Summary
04/04/2011	Non-legislative basic document published	COM(2011)0152 	Summary
07/07/2011	Committee referral announced in Parliament		
23/11/2011	Vote in committee		
30/11/2011	Committee report tabled for plenary	A7-0431/2011	Summary
19/01/2012	Decision by Parliament	T7-0013/2012	Summary
19/01/2012	Results of vote in Parliament		
19/01/2012	Debate in Parliament		
19/01/2012	End of procedure in Parliament		

Technical information

Procedure reference	2011/2148(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/7/06161

Documentation gateway

European Parliament

Document type	Committee	Reference	Date	Summary
Committee draft report		PE467.225	21/09/2011	
Committee opinion	TRAN	PE469.889	13/10/2011	
Amendments tabled in committee		PE473.828	13/10/2011	
Committee opinion	ENVI	PE472.221	26/10/2011	
Committee report tabled for plenary, single reading		A7-0431/2011	30/11/2011	Summary
Text adopted by Parliament, single reading		T7-0013/2012	19/01/2012	Summary

European Commission

--	--	--	--	--

Document type	Reference	Date	Summary	
Non-legislative basic document	COM(2011)0152 	04/04/2011	Summary	
Commission response to text adopted in plenary	SP(2012)212	08/05/2012		
National parliaments				
Document type	Parliament /Chamber	Reference	Date	Summary
Contribution	CZ_SENATE	COM(2011)0152	20/10/2011	

Towards a space strategy for the European Union that benefits its citizens

2011/2148(INI) - 30/11/2011 - Committee report tabled for plenary, single reading

The Committee on Industry, Research and Energy adopted an own-initiative report by Aldo PATRICIELLO (EPP, IT) in response to the Commission's communication entitled "Towards a space strategy for the European Union that benefits its citizens".

Members welcome the Commission's Communication as the first step towards a **comprehensive EU space policy** serving the interests of its citizens, its policies and its diplomacy. Nevertheless, they stress that the **priority areas of action should be made clearer** and that an assessment of all the technical options and related costs, risks and benefits, and of the social implications, should be undertaken, including all possible impacts on the European Union's industrial base and European industrial policy.

The report stresses that space solutions (relying on state of the art technologies and a competitive European industrial base) are vital to address today's important **societal challenges**, such as natural disasters, resources and climate monitoring, to develop the telecommunications sector and to foster relevant applications in the fields of climate change policies, land-use planning, environment management, agriculture, maritime safety, fisheries and transport.

Members consider that the European Union is responsible for coordinating and consolidating national space policies and programmes with a view to **establishing a coherent European approach** in cooperation with all relevant stakeholders. It also stresses the need for clear governance in relation to space policy, making optimal use of the skills available in Europe, with effective supervisory and coordination mechanisms, in order to harmonise priorities and ensure the sound management of resources derived from national funding and from the European Union, the ESA and other European agencies dealing with space and of significance to the EU.

Members agree with the Commission that Europe must maintain **independent access to space** to be able to achieve its established objectives in carrying out its space policy and continue to benefit from the spin-offs from space application. They; therefore, encourage the Commission to put forward specific proposals in the **strategic area of launch vehicles**, in particular by giving them special attention in the context of industrial policy in the space sector.

Flagship Galileo and GMES projects: Members consider that **Galileo is one of the European Union's flagship programmes** as well as being the first satellite navigation system in the world designed for civilian use, and could enable the Union to remain independent in a strategically important field. They are convinced that the aim of Full Operating Capacity (FOC), based on a constellation of 27 satellites plus a suitable number of spare satellites and adequate ground infrastructure, is a prerequisite in order to attain the added value of Galileo in terms of authentication, high precision and uninterrupted service and therefore to reap the economic and societal benefits

As a result, the report formulates the following recommendations:

- the Commission should complete the **legislative and financial framework**, particularly with regard to the establishment of a financial framework for 2014 - 2020, an approach on effective governance, Galileo services and rules on responsibility; the financing plan to be adopted for Galileo needs to be such as to ensure that long-term needs are able to be met and continuity is provided, including with regard to operating, maintenance and replacement costs;
- the **capacity to provide initial services should be completed by 2014 at the latest** to ensure that Galileo does indeed become the second GNSS constellation of reference for receiver manufacturers;
- the Commission and the EU GNSS Agency (GSA) should put much more effort into **raising awareness of GNSS among potential users and investors**, promoting the use of GNSS-based services, as well as identifying and concentrating the demand for these services in Europe.

The resolution stresses that Galileo and EGNOS are instrumental in the creation of a Single European Sky and for the further development of safe and cost-effective air traffic management in Europe. They are also vital for efficient and environmentally sustainable road traffic management, road-use fee collection systems, eCall and real time tracking systems, and future digital tachographs. Members therefore call for the for the setting of an ambitious and firm timetable, along with **stable financing of research and innovation** in implementing the two programmes.

Members consider that **GMES** is also a European Union flagship programme playing a key role in earth observation. They urge the Commission to complete the legislative framework and put forward a proposal for effective governance of the different levels of development and management of the programme.

The Commission and the other institutions are invited to **include financing for GMES in the multiannual financial framework for 2014-2020**. Members underline that the costs relating to GMES are already covered until 2013, totalling EUR 3 billion (approximately EUR 2.3 billion for the satellites and EUR 700 million for related services) and that it is estimated that the programme's operational costs for the period 2014-2020 will average EUR 850 million per year. They call on the Commission to **promote public-private partnership** and attract more private-sector capital.

Secure Space to Achieve Security and Defence Objectives: the report supports the discussions being held by the Commission on strengthening the 'security' component of the GMES programme with regard to the monitoring of borders, support for the European Union's external action, maritime surveillance, complex emergencies, humanitarian aid and civil protection. Space policy should also include policies on the security of critical European space infrastructure and on the safe recovery of disused equipment.

Members consider that maximum use of satellite communication services will directly support the competitiveness of European manufacturing industry, foster the industrial base in Europe and respond to the following key policy objectives:

- achieving total coverage of the EU with broadband Internet, including for next generation services;
- implementing sustainable, safe and intelligent transportation on land, at sea and in the air;
- maximising the EU contribution to cooperation programmes with developing countries and enhancing the EU contribution to the achievement of the Millennium Development Goals;
- ensuring an adequate EU role in responding to future disasters within and outside the EU.

Boosting Research and Innovation: Members consider that the European Union needs a **solid knowledge and technological base** if it is to act independently and have a competitive space industry. They stress the importance of a **research and innovation strategy** in the area of space policy. They call on the Commission to draw up a strategic agenda in order to ensure consistency between the efforts of the European Union in the field of R&D and those of the ESA and the Member States concerning all necessary technologies, skills and double sources needed to achieve competitiveness, European independence, access to international markets and reduction of risks for European programmes.

Members ask the Commission to examine, in cooperation with the ESA, options for **space exploration**, indicating the potential costs and benefits; considers in this connection that a joint strategy should be developed with international partners through a **cooperation agreement** based on the general consensus of all stakeholders and with reasonable contributions from the European Union.

International coopération: Members reiterate that international cooperation for peaceful purposes is a basic value of the European Union. They point out that the European Union should be a leader in the space field and maintain a substantial strategic role at world level, particularly in the international negotiations on the Space Situational Awareness System and space exploration. The report stresses that work in the space policy sector may be made more effective through **industrial cooperation and sharing of investment** in major programmes, such as the International Space Station.

The Commission is invited to draw up an international cooperation strategy, in collaboration with the Member States and the ESA, in order to strengthen dialogue in the space policy field with strategic partners (the United States, the Russian Federation and Japan) and explore the possibility of establishing a similar dialogue with other emerging powers such as China, India and Brazil. International cooperation, particularly with regard to research, must be reciprocal and of mutual benefit.

Relations between the European Union and the ESA: Members considers that the growing involvement of the European Union in the space sector calls for its relations with the ESA and the national agencies to be redefined, taking account of the fact that the technical and planning expertise developed by the ESA and the national agencies are essential to maintaining the technological capacity and the competitiveness of European industry at a high level.

Towards a space strategy for the European Union that benefits its citizens

2011/2148(INI) - 19/01/2012 - Text adopted by Parliament, single reading

The European Parliament adopted a resolution in response to the Commission's communication entitled "Towards a space strategy for the European Union that benefits its citizens".

Recalling that space policy is a key element of the Europe 2020 strategy and an integral part of the [flagship initiative on industrial policy](#), Members welcome the Commission's Communication as the first step towards a comprehensive EU space policy serving the interests of its citizens, its policies and its diplomacy. Nevertheless, they stress that the priority areas of action should be made clearer and that an assessment of all the technical options and related costs, risks and benefits, and of the social implications, should be undertaken, including all possible impacts on the European Union's industrial base and European industrial policy.

Addressing societal challenges: the resolution stresses that space solutions (relying on state of the art technologies and a competitive European industrial base) are vital to address today's important societal challenges, such as natural disasters, resources and climate monitoring, to develop the telecommunications sector and to foster relevant applications in the fields of climate change policies, land-use planning, environment management, agriculture, maritime safety, fisheries and transport.

Members point out that a European space programme should focus on areas of European added value and avoid dispersion of efforts or duplications with activities undertaken by the European Space Agency (ESA).

A coherent approach: Members consider that the European Union is responsible for coordinating and consolidating national space policies and programmes with a view to establishing a coherent European approach in cooperation with all relevant stakeholders. It also stresses the need for clear governance in relation to space policy, making optimal use of the skills available in Europe, with effective supervisory and coordination mechanisms, in order to harmonise priorities and ensure the sound management of resources derived from national funding and from the European Union, the ESA and other European agencies dealing with space and of significance to the EU.

Parliament agrees with the Commission that **Europe must maintain independent access to space** to be able to achieve its established objectives in carrying out its space policy and continue to benefit from the spin-offs from space application. They therefore, encourage the Commission to put forward **specific proposals in the strategic area of launch vehicles**, in particular by giving them special attention in the context of industrial policy in the space sector.

Flagship Galileo and GMES projects:

(1) Members consider that **Galileo is one of the European Union's flagship programmes** as well as being the first satellite navigation system in the world designed for civilian use, and could enable the Union to remain independent in a strategically important field. They are convinced that **the aim of Full Operating Capacity (FOC)**, based on a constellation of 27 satellites plus a suitable number of spare satellites and adequate ground infrastructure, is a prerequisite in order to attain the added value of Galileo in terms of authentication, high precision and uninterrupted service and therefore to reap the economic and societal benefits

As a result, Parliament formulates the following recommendations:

- the Commission should **complete the legislative and financial framework**, particularly with regard to the establishment of a financial framework for 2014 - 2020, an approach on effective governance, Galileo services and rules on responsibility; the financing plan to be adopted for Galileo needs to be such as to ensure that long-term needs are able to be met and continuity is provided, including with regard to operating, maintenance and replacement costs;
- **the capacity to provide initial services should be completed by 2014** at the latest to ensure that Galileo does indeed become the second GNSS constellation of reference for receiver manufacturers;
- the Commission and the EU GNSS Agency (GSA) should put much more effort into **raising awareness** of GNSS among potential users and investors, promoting the use of GNSS-based services, as well as identifying and concentrating the demand for these services in Europe.

The resolution stresses that Galileo and EGNOS are instrumental in the creation of a Single European Sky and for the further development of safe and cost-effective air traffic management in Europe. They are also vital for efficient and environmentally sustainable road traffic management, road-use fee collection systems, eCall and real time tracking systems, and future digital tachographs. Members therefore call for the **setting of an ambitious and firm timetable**, along with stable financing of research and innovation in implementing the two programmes.

They also draw attention to the importance of the EGNOS system covering the whole of the EU and emphasise the need to expand that system in southern, eastern and south-eastern Europe, the Mediterranean region, Africa and the Arctic.

(2) Members consider that **GMES is also a European Union flagship programme** playing a key role in earth observation. They urge the Commission to complete the legislative framework and put forward a proposal for effective governance of the different levels of development and management of the programme.

The Commission and the other institutions are invited to **include financing for GMES in the multiannual financial framework for 2014-2020**. Members underline that the costs relating to GMES are already covered until 2013, totalling EUR 3 billion (approximately EUR 2.3 billion for the satellites and EUR 700 million for related services) and that it is estimated that the programme's operational costs for the period 2014-2020 will average EUR 850 million per year. They call on the Commission to **promote public-private partnership and attract more private-sector capital**.

Secure Space to Achieve Security and Defence Objectives: Parliament supports the discussions being held by the Commission on **strengthening the 'security' component** of the GMES programme with regard to the monitoring of borders, support for the European Union's external action, maritime surveillance, complex emergencies, humanitarian aid and civil protection. Space policy should also include policies on the security of critical European space infrastructure and on the safe recovery of disused equipment.

Members consider that maximum use of satellite communication services will directly support the competitiveness of European manufacturing industry, foster the industrial base in Europe and respond to the following key policy objectives:

- achieving total coverage of the EU with **broadband Internet**, including for next generation services;
- implementing sustainable, safe and intelligent transportation on land, at sea and in the air;
- maximising the EU contribution to cooperation programmes with **developing countries** and enhancing the EU contribution to the achievement of the Millennium Development Goals;
- ensuring an adequate EU role in responding to future **disasters** within and outside the EU.

Boosting Research and Innovation: Parliament considers that the European Union needs a **solid knowledge and technological base** if it is to act independently and have a competitive space industry. It stresses the importance of a **research and innovation strategy** in the area of space policy that ensures technological progress, industrial development and EU competitiveness and creates jobs in the EU.

It calls on the Commission to draw up a **strategic agenda** in order to ensure consistency between the efforts of the European Union in the field of R&D and those of the ESA and the Member States concerning all necessary technologies, skills and double sources needed to achieve competitiveness, European independence, access to international markets and reduction of risks for European programmes.

Members ask the Commission to examine, in cooperation with the ESA, **options for space exploration**, indicating the potential costs and benefits; considers in this connection that a joint strategy should be developed with international partners through a cooperation agreement based on the general consensus of all stakeholders and with reasonable contributions from the European Union.

International cooperation: Members reiterate that **international cooperation for peaceful purposes is a basic value of the European Union**. They point out that the European Union should be a leader in the space field and maintain a **substantial strategic role** at world level, particularly in the international negotiations on the Space Situational Awareness System and space exploration. The report stresses that work in the space policy sector may be made more effective through industrial cooperation and sharing of investment in major programmes, such as the International Space Station.

The Commission is invited to draw up an **international cooperation strategy**, in collaboration with the Member States and the ESA, in order to strengthen dialogue in the space policy field with strategic partners (the United States, the Russian Federation and Japan) and explore the possibility of establishing a similar dialogue with other emerging powers such as China, India and Brazil. International cooperation, particularly with regard to research, must be reciprocal and of mutual benefit.

Relations between the European Union and the ESA: Members consider that the growing involvement of the European Union in the space sector calls for its relations with the ESA and the national agencies to be redefined, taking account of the fact that the technical and planning expertise developed by the ESA and the national agencies are essential to maintaining the technological capacity and the competitiveness of European industry at a high level.

Towards a space strategy for the European Union that benefits its citizens

2011/2148(INI) - 04/04/2011 - Non-legislative basic document

PURPOSE: Communication setting out practical options for developing an EU space strategy.

CONTENT: Article 189 of the TFEU conferring on the Union a shared competence on space which it pursues alongside that of the Member States, opened up new perspectives for developing an EU space strategy. In this new framework, Europe's space policy is aimed at achieving the following objectives: (i) promoting technological and scientific progress; (ii) stimulating industrial innovation and competitiveness; (iii) enabling European citizens to reap the benefits of space applications and (iv) raising Europe's profile on the international stage in the area of space. In order to achieve those goals, Europe needs to **keep independent access to space**. This Communication sets out the priority actions designed to put those objectives into practice.

Priority actions for EU space policy: the Communication notes that the European Parliament in its [Resolution](#) of November 2008 approved the European Space Policy and urges that definite action be taken on the four proposed priorities – climate change, security, innovation and exploration. The fifth Space Council reaffirmed these as priority areas where specific action continues to be required.

Satellite navigation: the Galileo and EGNOS programmes: these two programmes form an integral part of the Europe 2020 strategy, as they are intended to push the EU to the forefront by developing innovative ways of exploiting satellite navigation, boosting economic activity in the market further downstream, creating new business opportunities, facilitating the provision of humanitarian aid and enhancing the wellbeing of Europe's citizens (by making transport safer, increasing civil protection and developing social services for the elderly and the disabled, to give but a few examples). The benefits of these programmes for the EU cut across all sectors of the economy, such as transport, telecommunications, the environment and security. The GNSS applications markets are growing rapidly, and their annual turnover worldwide is expected to reach around EUR 240 billion by 2020. Moreover, as a result of the advantages of Galileo and EGNOS compared with the other competing systems, they are expected to generate economic and social benefits worth around EUR 60-90 billion over the next 20 years. Later in the year, the Commission will draft a proposal for legislation aimed at adapting the institutional framework that covers the Galileo and EGNOS programmes to take account of the guidelines put forward by the European Parliament and the Council.

The GMES Programme: the GMES programme plays a vital role in monitoring the sea, land and atmospheric environment, aiming to facilitate better understanding of the European and global environments as a basis for policy. It will help underpin a sustainable use of resources as well as providing better information on climate change. Regulation (EEC) No 911/2010 governing the initial operations of the GMES programme 2011-2013 was adopted in 2010 by the European Parliament and the Council. The current priority is to ensure that the programme is implemented quickly and effectively, in partnership with the Member States, and that it is fully operational by 2014.

Secure space to achieve security and defence objectives: the seventh meeting of the Space Council in November 2010 recommended that within the GMES programme, additional consideration should be given on how to meet the specific needs of security policies and the services dedicated notably to maritime surveillance, border control and support for EU external actions.

The S (Security) component of the GMES programme must therefore be enhanced. Discussions are taking place to analyse how new developments affecting space technologies can contribute to effective solutions for areas such as monitoring borders, support for the EU's external action, maritime surveillance, complex emergencies, humanitarian aid and civil protection.

Furthermore, in 2008, the fifth Space Council meeting confirmed that the Union needs to play an active role in the implementation of the Space Situational Awareness (SSA) system and its governance mechanisms. Implementing this system involves gathering existing resources, making good

any shortfalls and maintaining and operating the system. The SSA system should be organised according to a structure, yet to be defined, that would take account of the level and extent of participation of each Member State and of the other bodies involved, depending on the missions to be accomplished and constraints to be respected.

Space Exploration: active involvement by the EU in this area would enable it to establish a closer link between space exploration and social and economic challenges by merging the interests of the different Member States and ensuring that internal resources are used effectively. There is a political dimension to space exploration that goes beyond the issues inherent in research and development. The Union could also explore options to work with the ISS, ensuring that all Member States participate in it. The EU's independent access to space also means increased European capability to pursue independent missions from Europe's spaceport in Kourou.

Furthermore, a high-level international platform should be set up in order to identify the areas of space exploration open to international cooperation, to strengthen the political dimension of international discussions on space exploration and to enhance cooperation synergies with non-Member States; in short, a platform enabling the EU to coordinate the European space effort.

Space industry policy: the space industry is a key sector given society's increasing dependence on space infrastructure and applications for both civilian and military use. In the space industry, there is a high degree of concentration but few SMEs. In Europe, in common with other space powers, the space sector is highly reliant on public procurement, and has to contend with increased competition on the world market. The Commission believes that it is vital to draw up quickly a space industry policy that fully reflects the specific needs of each sub-sector. The main objectives of such a policy would be the steady, balanced development of the industrial base as a whole, including SMEs, greater competitiveness on the world stage, non-dependence for strategic sub-sectors such as launching, which require special attention, and the development of the market for space products and services.

Research and innovation: space policy can make a decisive contribution to making the Innovation Union a reality. Mobilising innovation support mechanisms will make it possible to improve developing infrastructure by boosting the market for applications and services derived from the Galileo /EGNOS and GMES programmes, as well as for the telecommunications sector. In turn, the setting of ambitious space objectives will stimulate innovation.

Telecommunications satellites: in order to maintain Europe's lead in satellite communication technologies, research must be carried out at European level, given the spin-offs it can create for other application sectors. The availability of the appropriate radio spectrum will be necessary to ensure that satellite communications and space infrastructure help achieve the European Digital Agenda and EU space policy objectives

International dimension: the EU, in close collaboration with the ESA, will continue to strengthen its "space dialogues" with its strategic partners – i.e. the United States and Russia – with a view to increasing cooperation. It will also propose that space dialogues, the scope and objectives of which will be set out in appropriate bilateral arrangements, be established with other existing and emerging space powers, in particular China. The EU will seek constructive solutions to issues of cooperation and sharing open frequencies in the field of satellite navigation

Governance: the communication discusses the importance of strengthening cooperation with Member States as well as developing relations with ESA. The Commission is looking into the possibility of presenting a proposal for a **space programme in 2011**.