



*European Economic and Social Committee*

**INT/689**  
**EU space industrial policy**

Brussels, 18 September 2013

**OPINION**

of the  
European Economic and Social Committee  
on the

**Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: EU space industrial policy - releasing the potential for economic growth in the space sector**

COM(2013) 108 final

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Rapporteur: **Mr van Iersel**  
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On 28 February 2013 the Commission decided to consult the European Economic and Social Committee, under Article 304 of the Treaty on the Functioning of the European Union, on the

*Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: EU space industrial policy - releasing the potential for economic growth in the space sector*

COM(2013) 108 final.

The Section for the Single Market, Production and Consumption, which was responsible for preparing the Committee's work on the subject, adopted its opinion on 17 July 2013.

At its 492<sup>nd</sup> plenary session, held on 18 and 19 September 2013 (meeting of 18 September), the European Economic and Social Committee adopted the following opinion by 151 votes to one with four abstentions.

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## 1. **Conclusions and recommendations**

- 1.1 The EESC highly welcomes an EU Industrial policy in the Space sector<sup>1</sup>. It endorses also the provided budget of EUR 11 billion for Galileo, Copernicus, and R&D in Horizon 2020 for 2014–2020, in addition to the existing annual budget of EUR 4 billion of the European Space Agency (ESA). These decisions are in line with standing views of the EESC<sup>2</sup>.
- 1.2 EU space policy, sustained by political commitment throughout Europe, should ensure independent European access to space along the whole value chain, i.e. from the conception phase to development, launching and exploitation. Long-term and high-risk activities ask for predictability, certainty, and continuous commitments.
- 1.3 The EU needs critical mass. An internal market for space requires dealing with a well-defined notion of a European level playing field, both for internal and external reasons.

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<sup>1</sup> EU Space Industrial Policy – Releasing the potential for economic growth in the space sector, COM(2013) 108 final, February 2013.

<sup>2</sup> See notably [OJ C 162, 25.6.2008, p. 24](#), concerning the EC Communication on European Space Policy, COM(2007) 212 final.

- 1.4 Pro-active industrial policy is needed in response to large institutional markets around the world which have an increasingly strategic and technological impact. Competitiveness of European industry must be enhanced. Still substantial internal barriers must progressively be overcome.
- 1.5 EU Industrial policy should bring different strategies of Member States (MS) under one umbrella and streamline national preferences into one framework.
- 1.6 All parties have to work in the same direction. ESA has a special place. Its performances are very successful and undisputed. In the new set-up ESA will, in addition to its traditional role, become facilitator of space projects under EU rules. New methods and relationships will be put in place. They require well-developed coordination and fine-tuning between all players, i.e. the services of the Commission, ESA, and the MS.
- 1.7 Formal arrangements for consultation of industry are needed, especially with regard to SMEs. A sufficient part of the budget of Copernicus must be earmarked for new services and applications.
- 1.8 The space sector asks for a very qualified workforce, on the basis of appropriate contracts. Continuous attention is needed for appropriate skills, ensured by up-to-date education and training, facilitating mobility.
- 1.9 Strategic security and defence considerations are the driving forces for space policy in all countries. New space EU policies and actions are based on Article 173 and, notably, Article 189 of the TFEU. They must be embedded in a closer agreement between MS regarding security and defence, and, thus, in a broader perspective of EU foreign policy. On the other hand experiences in space policy may, in some well-defined areas, be exemplary for European defence. These should be taken into account in the forthcoming debate on European defence.
- 1.10 EU's space industrial policy can indeed give a boost to a competitive, solid, efficient and balanced industrial base in Europe, being supportive for governmental services as well as for business and citizens. The sector is still fragile. The crisis adds new uncertainties. It now comes to implementation!
- 1.11 Against this backdrop the EESC fully endorses the five objectives, defined by the Commission: a coherent and stable regulatory framework, a strong industrial base, including SMEs, competitiveness and cost-efficiency, markets for application and services, and technological non-dependence and independent access to space<sup>3</sup>.

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<sup>3</sup> See EC Communication, page 4.

1.12 Europe's position in the world must be consolidated and strengthened in the world by enhancing performance and competitiveness of European industry, keeping pace with ambitions with other space-faring nations and world-class technology, promoting cost-efficiency along value-chains, and developing markets for space applications and services.

## 2. **Historical context, EESC's commitment**

2.1 Due to security and defence considerations space policy developed outside the framework of the EU Treaty. MS had their own space strategies. Common European interests were to a certain extent channelled via R&D and industrial projects of ESA.

2.2 In 2003 a new phase was initiated by the Framework Agreement between ESA and the EU. FP7 got involved in research projects and an EU sector-based industrial policy came within reach. Upstream and downstream investments intensified, competition increased, specialised private business developed new applications and services.

2.3 The EESC strongly endorsed the EU strategy of combining the ESA concept with closer involvement of the European Institutions as well as concrete proposals and decisions to that end<sup>4</sup>.

2.4 In subsequent opinions the EESC emphasised the significance of EU space policies for public services, business and, notably, citizens. It endorsed the steps forward in several specific areas as there are the European Earth Observation Programme (GMES), the GMES – Space Component, and A Space Strategy that benefits its Citizens<sup>5</sup>.

2.5 In 2012 the EESC advocated to bring the financing of GMES within the 2014-2020 Multiannual Financial Framework (MFF)<sup>6</sup>. On 8 February 2013 the Council decided accordingly in allocating EUR 3.78 billion for GMES – from now on named Copernicus – EUR 6.3 billion for Galileo, and EUR 1.7 billion for R&D within Horizon 2020. The decision must still be approved by the EP.

2.6 The recent EC Communication on Industrial policy in the space sector is a further step, needed as "Europe in Space is currently losing ground to most, if not all other space faring nations"<sup>7</sup>.

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4 See footnote 2.

5 See [OJ C 339, 14.12.2010, p. 14](#); [OJ C 44, 11.2.2011, p. 153](#); [OJ C 43, 15.2.2012, p. 20](#).

6 See [OJ C 299, 4.10.2012, p. 72](#) on GMES and its operations from 2014 onwards.

7 See ASD-Eurospace position paper on industrial policy, February 2013, page 2.

### 3. **Current developments**

- 3.1 Circumstances have changed drastically. Worldwide investments by new space-faring nations are rising fast. The US remains the strongest player. The American turnover in the sector is about ten times higher than in Europe. China and India are becoming robust competitors. Recently Russia has announced to step up its space budget substantially.
- 3.2 Strategic considerations of autonomy and self-reliance are leading. All market in China, India, Japan, and almost in Russia, is 100% institutional. In the US it is more than 70%. This is clearly opposite to Europe where 50% of the market depends on the private sector. It must be noted that in terms of volume the 20% market share of the private sector in the US represents more than the 50% private market share in Europe.
- 3.3 The global market is growing whilst competition intensifies due to the arrival of the new space-faring nations. This threatens the hard-won position of European industry as barriers form even whilst the new entrants conduct aggressive export policies. Due to reductions in the defence budget the American space sector is also shifting to exports worldwide.
- 3.4 Against this backdrop the EESC fully supports the objective of maintaining European independent access to space as put forward in a series of Council Conclusions and in EC Communications. More than previously Council and Commission rightly stress the need of European autonomy in strategic areas of the space sector, promoting and safeguarding independent European access to space.
- 3.5 Europe is currently still substantially dependent on American technologies. Efforts to reduce this dependence ensuring certainty of uninterrupted deliveries of knowledge and high tech material require major efforts from governments, ESA and the EU.
- 3.6 In response to long-term and high-risk activities predictability, certainty and continuous commitments are indispensable. On its way to full maturity the sector is still fragile, especially where SMEs, crucial for the development of applications, are concerned. The current crisis adds to vulnerability.

### 4. **Industrial policy for the space sector**

- 4.1 In this challenging climate the Commission has presented its proposal for an active EU industrial policy, based on Articles 173 and 189 of the TFEU.
- 4.2 For the first time the Commission has carried out an in-depth analysis of the challenges as a result of consultations with a range of public and private parties. This widely accepted analysis is a major building block for the leap, from the approximately current EUR 4 billion budget of ESA, to the additional EUR 11 billion space budget 2014–2020. Given the aggressive policies by other space faring nations, this is a decisive step forward.

- 4.3 This extra funding is also a good starting point in a sector which is tending to grow considerably in the coming decade for two reasons:
- it is a strategic sector;
  - with its supportive technologies it is an enabler for many other economic activities, generating positive synergies towards sectors that benefit directly from space technologies and services.
- 4.4 An increasing number of activities benefit from space services: security, agriculture, transport, regional development, ocean monitoring, meteorology, telecommunications, broadcasting, bridging digital divides.
- 4.5 Additionally, space will be supportive to a number of global issues such as climate change, food security, fisheries, deforestation, monitoring natural resources, catastrophe monitoring. Europe should be equipped with its own global system to play its full role in line with its economic position in the world. Awareness among the public has to be raised.
- 4.6 The EESC fully supports the decision that the EU, in putting the right conditions in place, makes use of the opportunities of a pro-active industrial policy. It sees this as a concrete elaboration of the larger concept of EU Industrial policy as laid down in the EC Communications on Industrial policy of 2010 and 2012.
- 4.7 It should ensure an independent European access – and related technologies – to space in conceiving and developing space systems as well as in launching and exploitation programmes. Self-reliance and independent verification of data is indispensable, certainly with respect to China, but even to befriended nations, like the US, with which Europe is necessarily in competition.
- 4.8 The main body of industrial policies, driven by national strategies, remains still in the MS. These strategies are part of the larger domain of security and defence policy which explains also the narrow link between governments, national research and industries. This leads to internal barriers and, thus, to fragmentation and patchwork as well as to a European staying behind.
- 4.9 This underlines that the need for a level playing field is a prerequisite for any EU industrial policy. The Commission should elaborate clear criteria to precisely define the notion of "level playing field". Such well-defined notion is also indispensable for any "reciprocity" measure in mutually opening international markets with third countries.
- 4.10 The EESC insists that a level playing field and transparent internal competition within the Union must be the ultimate goal. It will help considerably to keep pace with the rest of the world.

- 4.11 Regarding the Commission's R&D policy the EESC mentions two major concerns that have to be met:
- Horizon 2020 programmes to support EU competitiveness by efficient tendering, in close cooperation with ESA and with the separate space R&D programmes of the MS;
  - the guarantee of a streamlined transition from R&D to the operational phases of EU programmes.
- 4.12 These concerns must be seen in conjunction shrinking R&D budgets in MS. The overall expenditure remains more or less equal due to compensating financial participation of the Commission. The only exception is Germany that recently has raised its R&D space budget with 10%.
- 4.13 As the EESC has pointed out at various occasions, a successful industrial policy is transverse: coordination must be ensured among the various EC General Directorates in order to reach all objectives elaborated by DG Enterprise, for instance with DG Connect regarding SatComs and with DG Trade regarding opening of markets and the guarantee of "security of supply" of critical components.

## 5. **ESA and EU**

- 5.1 Science and technology is basic. The EESC underlines once more the great significance of ESA for European space policy. Given the hurdles that have to be overcome in any intergovernmental framework, previous and current performances of ESA are unquestioned. From the start it has contributed significantly to European space activities as they are. ESA has had an indispensable role in space R&D and, to a certain extent, also in industrial activities, not least due to positive cost-quality ratios of the products.
- 5.2 ESA is a well-equipped partner for national governments and industries. Accordingly, its achievements are a highly qualified part of the chain that builds and reinforces the basis for European industry. Moreover, the ongoing system of "fair return" has encouraged governments to keep an eye on the overall performance in R&D and subsequent activities in the respective countries.
- 5.3 However, gradually it became manifest that new avenues had to be opened if the EU really wanted to be a competitive global player. The Framework Agreement of 2003 between ESA and the EU started to add EU policies and financial resources as well as to enhance competition and competitiveness. A successful partnership between ESA and the EU took off. A continuing commitment of ESA will be a firm building block for any EU Space industrial policy.

- 5.4 This being said, the fast changing circumstances ask for an accurate assessment of the procedures and proceedings and for an optimal utilisation of financial resources to support continuing competitiveness and resilience of European companies.
- 5.5 ESA's role in creating a sound basis for the exploitation of Europe's own space systems through focused and integrated applications is recognised yet the support can provide to EU policies is still to be fully realised. The closer EU/ESA cooperation should generate strong momentum in this respect.
- 5.6 New approaches and mechanisms are required to sustain a deliberate policy of successful deployment and sustainable exploitation of operational space systems. Equally, an effective Europeanisation of resources must be put in place to sustain three objectives:
- maintenance of a strong scientific base;
  - new incentives to applied technology and to the market;
  - incentives to develop new series of applications and services, (which support other sectors).
- 5.7 The recent decisions are in line with the modernisation the EESC advocated in its opinion of 2008<sup>8</sup>. At the time the EESC emphasised that the increasing maturity of the space market asks for more flexibility which, in a time of ever faster technological cycles and increasing synergies and applications, is, as a rule, not guaranteed by fixed patterns of relationships that result from the principle of fair return as practiced by ESA<sup>9</sup>.
- 5.8 Sudden changes have to be avoided. Therefore the EESC advocated an analysis and dialogue on Europe's desirable performance in ten years' time: "the dialogue should include the way ESA is financed, the dynamic contribution of medium-sized companies, and the maintenance of the highest level of competition"<sup>10</sup>.
- 5.9 The EESC considers the Council Resolution of last November regarding the relationship between the EU and ESA<sup>11</sup> in conjunction with the new financial framework, adopted on 8 February, as one concrete application of its recommendation in 2008. The EU is entering a new phase.
- 5.10 In implementing the decisions, ESA, benefitting from its long-lasting experience, will be made responsible for the executive management, but doing so on the basis of EU rules. If

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8 See [OJ C 162, 25.6.2008, p. 24](#).

9 See *ibid* point 1.11.

10 See *ibid* point 1.13.

11 Resolution on the role of ESA in sustaining Competitiveness and Growth in Europe, 20 November 2012.



implemented well, an optimal balance will be struck between competences of ESA and usual market mechanism of the EU.

- 5.11 It is not yet to foresee how the agreed work methods will function, certainly not in the first phase. Despite slight changes during the last couple of years in which market approaches were pushed forward, a new relationship with science and research in space has to come into being. The Committee therefore welcomes the development of workable boundaries between the principle of fair return conventionally applied in the ESA (the purpose of which is to foster and exploit a versatile space industry in Europe) and the rules of the EU's internal market, which the Commission is bound by, in order to expand the fruitful cooperation between the Commission and the ESA and further strengthen the European space industry.
- 5.12 This dimension was also addressed in the CCMI's supplementary opinion on this topic. It has since been possible to provide satisfactory answers to some of the critical questions raised there.

## 6. **Specific issues**

- 6.1 In drawing up space policy according to Article 189 parallel competences of Commission and MS should be applied as much as possible. MS should also take the initiative to cooperate on specific issues among themselves. Such processes can be monitored by the Commission.
- 6.2 The right conditions must be defined in a changing competitive and dynamic environment in support of a firm competitive basis for EU industry. Therefore the EESC insists that, from now on, industry is given a formal place in the consultative bodies, especially when it comes to areas in which smaller companies are active. Requirements must be defined in an open and transparent way.
- 6.3 Among the issues to be discussed are a free and open data policy, quality, standards, and certification. Services are supplied both by public sector bodies (PSBs) and private actors, which makes effective monitoring necessary.
- 6.4 Well-established consultative arrangements will sustain the huge potentialities of SMEs. A sufficient part of the budget for Copernicus and Galileo must be used to develop new services and applications.
- 6.5 Due to technology-intensity the workforce is, on average, highly qualified. Worldwide space employs 800 000 employees, of which 25% in the US, and 4% (!) in Europe. There is a growing need for graduated employees to enhance European potentialities and to generate beneficial synergies. Decent labour contracts should be the rule in order to enhance the attractiveness of the sector.

- 6.6 Space feeds the imagination of youngsters. The EESC insists on an active labour policy, based on up-to-date education and training, and promoted in technical higher education, including a close relationship with research and innovation. This will also foster desirable and appropriate mobility.
- 6.7 Given the overwhelming significance of the institutional market, industrial policy in the space sector is intimately related to procurement policies. These should meet high requirements of quality and transparency. The EESC underlines that industry would highly welcome the preparation of a specific Space Procurement policy, where the EU is directly involved, once its scope has been defined between the Commission and the MS.
- 6.8 Such policy will pave the way for the EU to assume its role of owner of European Space infrastructures and that of customer for space based services to fulfil a wide range of public policies.
- 6.9 The EESC underlines the major role regions and regional engagement have to play to foster the developing activities of the space industry. The role of regions is underestimated. They must be informed and equipped adequately in order to benefit from a possible positive impact of making efficiently use of space services.
- 6.10 Satisfactory quantitative market measurements are lacking, which results in a lack of reliable data about the final effect of space research in downstream application. The analytical knowledge of up- and downstream must be deepened.
- 6.11 A Euroconsult analysis that, among others, argues that in the US upstream investments generate twice as much profitable downstream activities than in Europe, is contested, but is never analytically refuted<sup>12</sup>. For the EU another interesting model, singular in its kind, is an updated analysis on the economic impact of the various segments of the UK space industry<sup>13</sup>.
- 6.12 The EESC encourages the Commission, ESA, and the MS to pursue joint analyses of the various segments of the sector and to put these in worldwide perspective. Consolidated figures on (new) employment, growth rates, and applications will enhance the relevance of the sector and sustain ongoing public support.

## 7. **Security and defence**

- 7.1 Similar to space policies of Europe's competitors, an EU space policy would, in the EESC's view, bear more fruits, if it is embedded in a growing agreement between MS regarding strategic issues in defence and security and, thus, in a broader perspective of EU foreign

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<sup>12</sup> Euroconsult analysed in 2011 that the relation between upstream and downstream application is EUR 1: EUR 16, while in Europe the relation would be "only" EUR 1: EUR 8.

<sup>13</sup> UK Space Industry, "Update of the Size and Health of the UK Space Industry", by Oxford Economics, 2010.

policy. This link should also be taken on board in the forthcoming debate on European defence, where appropriate.

- 7.2 European cooperation in space is considerably further developed than in any sector of defence. Defence-related space activities may be also related to the elaboration of EU defence policy as pilots or examples for common defence projects. The EESC notes that such a proposal has already been made as long ago as 1987! It has never been given a follow-up.

Brussels, 18 September 2013.

The President  
of the  
European Economic and Social Committee

Henri Malosse

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