

ENVE-V-030

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OPINION

EU SPACE INDUSTRIAL POLICY

THE COMMITTEE OF THE REGIONS

- points to relevant aspects to be regulated in the context of the nascent EU space policy: industrial standards, issues related to technical operations and commercial exploitation of satellite communication infrastructure;
- agrees that demand-oriented public policy making for the EU's space sector is intended to empower users, but cannot be reduced to consumer subsidies;
- urges the European Commission to establish the criteria of public usefulness in the service of the competences and needs of public authorities that will be used in evaluating user demand;
- points out that a close relationship between the local/regional level, which is working with industries to detect and support their first steps, and the national/community levels, should be a vital aspect of the EU industrial policy;
- wishes to draw attention to the evidence derived from local and regional best practices that, in the
 overwhelming majority of cases, Copernicus/GMES downstream services cater to the needs of
 public policy and have demonstrated their usefulness for public goals;
- suggests that services and applications developed on the basis of space technologies could be cofinanced from the Structural Funds, provided that there is enough political will and awareness on the part of those managing the funds. A mechanism of this kind has already been employed in the 2007-2013 Financial Framework, where unused cohesion funds/ERDF funding was reallocated to a new priority: satellite based broadband internet for remote regions;
- expresses the opinion that the operational phase of Copernicus is crucial for the economic breakthrough of new technology developments, but that financial support will be required in order to overcome the start-up costs connected with the uptake of new technology by a variety of users.

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Rapporteur

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Reference document

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

Opinion of the Committee of the Regions EU space industrial policy

I. POLICY RECOMMENDATIONS

THE COMMITTEE OF THE REGIONS

1. welcomes the Commission's communication, which clearly states the importance of EU industrial space policy;

Preliminary remarks

- 2. stresses that the space sector is a key element of the Europe 2020 Strategy and its Flagship Initiatives, in particular the Innovation Union and Industrial Policy. Space technology is especially important to the knowledge-based economy, influencing future economic competitiveness and providing the tools for resolving other pressing terrestrial problems. A space spin-off can be defined as something that has been learned or changed during "space activities, which is then used or transferred to other contexts creating further economic value;
- 3. notes that according to the ESA's assessment on the downstream value-adding sectors of space based applications, the European market is smaller and less specialised in the private market in comparison with the world market. Also, contrary to other space nations, the defence industry does not set initial standards and activities. Worldwide, most companies operate on several segments and along the value chain. In Europe, hardly any actors can be found controlling the entire value chain. Overall, specialisation in Europe (which has a focus on specific satellite navigation applications) is slightly less than worldwide;
- 4. is acutely aware of the main policy issues for the EU's space sector, which include market organisation, administrative simplification, procurement principles, access to data, the customership of public institutions and the regulatory framework;
- 5. acknowledges that, in general, the EU space industry has a major impact on Europe's scientific and technological standing. This includes encouragement for the European science and technology base and the wider effects of space technology on the broader economy;
- 6. agrees with the Council Conclusions of 30 May 2013 on "EU Space Industrial Policy Releasing the potential for economic growth in the space sector" that, in the interests of a balanced industrial base, the participation of SMEs in the supply chain is an essential component of the competitiveness of the European space industry, and joins with the Council in urging the Commission to further assess the need for new innovative financial instruments;
- 7. considers that, from the point of view of local and regional authorities, it is particularly important to promote the use of space-based applications in EU policies and that the EU

should therefore design appropriate support measures to stimulate the development and deployment of space-based applications across public and private users, in particular in local authorities and the SME sector, together with associated innovation support measures;

A. Objectives and actions of the industrial space policy

- 8. shares the Commission's opinion that space is extremely important for the EU and its citizens and, like the Commission, sees the major challenges facing the EU space industry in light of the developments in emerging space powers (such as China and India). As diagnosed in the Communication, this situation is the result of insufficient financing rather than any lack of efficiency on the part of the European space sector;
- 9. understands that, at a time when the EU and its Member States are facing financial difficulties, the focus of the EU industrial space policy should be on laying the foundations for a future boost of the sector on the global market and on removing obstacles that could hamper this process. Therefore, the Committee fully supports the objectives described in the Communication: establishing a regulatory framework, developing a competitive industrial base, stimulating cost-efficiency, developing markets for space applications and ensuring technological non-dependence and independent access to space;
- 10. supports the argument that efficient space governance in Europe requires an agreement between the main shareholders, i.e. the EC, the ESA and the Member States, whilst noting that, from the political point of view, a joint European defence policy decision would facilitate cooperation among national military sectors, from which the civil space sector would also benefit;
- 11. acknowledges the market achievements of the European space sector, especially in the area of SatCom, and supports the Commission in its efforts to keep this segment competitive on the global market. From this perspective, the Committee strongly supports the initiative of guaranteeing European operators access to radiofrequency channels. This issue is of importance for regions, as SatCom provides means for closing the broadband gap in low population areas;
- 12. recognises the importance of the technological non-dependence of the European space sector and agrees with the proposed solutions, such as cross-fertilisation with non-space sectors, launching relevant calls for projects under the Horizon 2020 Programme and investing in the training of a skilled workforce for the space industry;
- 13. wonders, however, whether the funding available (e.g. under Horizon 2020) would be sufficient to make a significant step forward in developing technological non-dependence. Therefore, urges the Commission to present a detailed plan showing how this goal is to be achieved;

- 14. suggests that, with regard to the skilled workforce, the initial priority should be to begin the search in the new EU Member States, which have all expressed their interest in and ambition to join the club of space nations and, in addition, demonstrate a high level of education in engineering and the physical sciences;
- 15. strongly supports market development for space applications and services and notes that local and regional authorities may play a fundamental role in this process;
- 16. in this context, wishes to recall that local and regional authorities are an important end user of space services. However, to fully exploit the potential of space applications, LRA users should be made more aware of their benefits. A more intensive dialogue between service provider and end-user is necessary;
- 17. furthermore believes that, within their territories, LRAs bring together different economic actors and the players involved in the innovation triangle. LRAs are in charge of innovation and SME programmes that could be linked with space and thus contribute strategically to enhancing the space market;
- 18. also notes that, through their proximity to the public, LRAs have unique access to different societal groups within their territories and are thus ideally positioned to inform people about the benefits of space services; in light of this, networks of local and regional authorities, such as the NEREUS network (Network of European Regions Using Space Technologies), take on a particular meaning;

B. General local and regional concerns

- 19. acknowledges, from the position of regions as one of the main users of satellite applications, in particular Copernicus/GMES services and products, that an EU space industrial policy should support technical innovation and remove the obstacles that hinder its development. The success of the EU space policy will be measured in terms of growth, cost-avoidance, cross-sectoral spillover and highly skilled, productive job opportunities;
- 20. shares the Commission's opinion that encouraging demand-side innovation is the main challenge to be addressed by the EU space policy in order to bring economic benefits to EU regions and citizens from funds already invested for space in the Framework Programmes;
- 21. agrees that demand-oriented public policy making for the EU's space sector is intended to empower users, but cannot be reduced to consumer subsidies;
- 22. urges the Commission to establish the criteria of public usefulness in the service of the competences and needs of public authorities that will be used in evaluating user demand;

- 23. observes, from the regional perspective, that local and regional end users will only take up Copernicus services and products if they see a clear business case for employing them;
- 24. recommends that the Commission should address the issue of the funding mechanisms for actual and potential users, which could be made available by the EU and its Member States when services become operational. In Europe, as elsewhere in the world, earth observation is a public infrastructure and pursuit of the public interest entails dependence on public funding for research and development as well as for the operational deployment of services;
- 25. expresses the opinion that the operational phase of Copernicus is crucial for the economic breakthrough of new technology developments, but that financial support will be required in order to overcome the start-up costs connected with the uptake of new technology by a variety of users;
- 26. expects that users such as local and regional authorities and SMEs will continue to require incentives and support from the EU and from Member States and notes that the ESA could also be involved in providing support for users;
- 27. wishes to draw attention to the evidence derived from local and regional best practices that, in the overwhelming majority of cases, Copernicus/GMES downstream services cater to the needs of public policy and have demonstrated their usefulness for public goals;
- 28. suggests that services and applications developed on the basis of space technologies could be co-financed from the Structural Funds, provided that there is enough political will and awareness on the part of those managing the funds. A mechanism of this kind has already been employed in the 2007-2013 Financial Framework, where unused cohesion funds/ERDF funding was reallocated to a new priority: satellite based broadband internet for remote regions;

C. Addressing the problems of the sector

- 29. notes that the space sector is characterised by long development cycles. This increases the market risks, as market potential for new applications needs to be assessed far in advance. As a result, it is difficult for space entrepreneurs to attract investors. Moreover, the long operational life of space assets (10-15 years for a telecommunications satellite) makes the market very cyclical, and it is very difficult to adjust supply quickly to changing demand conditions;
- 30. recognises that in the upstream sector, high fixed costs due to heavy R&D investments and long development times and the small size of the market prevent the creation of economies of scale, which encourages a tendency towards concentration (e.g. in the launch business). On the other hand, large economies of scale are possible in the downstream sector, making larger

- markets more viable economically. The very nature of these challenges means that the central role of governments in the European space economy cannot be overlooked;
- 31. stresses that it is absolutely crucial for the European Union and its Member States, in concert with the ESA, to take, without delay, the necessary political, legal and technical decisions to provide for the requisite financial resources to ensure independent access to space, complete the space systems currently being developed or planned and promote R&D and the development of innovative space services and applications;
- 32. perceives that space manufacturing, although of strategic importance, is still not a major force in national economies as compared with other industrial sectors in Europe and calls for the future EU space industrial policy to ensure greater independence of the EU from the supply of strategic components by third countries;
- 33. encourages the ESA to continue its support to organisations interested in transferring space technology into other industries through funding for feasibility studies, market analyses and prototyping. Support for start-up companies is available through business incubators as well as the 'incentive' (or seed funding) available from the ESA Technology Transfer Programme Office (TTPO). The Committee also calls for a dialogue which could lead to increased opportunities for actors at the local and regional level;
- 34. expresses the opinion that it is vital that the EU promotes "smart specialisation" and cooperation between its regional and innovation funding programmes if it is to avoid falling behind its international competitors;
- 35. agrees with the Council Conclusions that a key element of smart specialisation is the involvement of the regions as key players in Europe's innovation policy, which can also help the research sector unlock the massive financial potential of the EU's regional funds. Developing business models and upgrading business skills available in SMEs in the area of earth observation related services is particularly important from the point of view of local and regional authorities;
- 36. calls for coordinated EU and national policies to speed up the maturation process of the European earth observation sector on both the supply and demand side. The recent consolidation wave is a signal that the industry itself is preparing for the next phase. The time is right for crucial customer groups like governments to embrace large-scale EO applications. When governments succeed in unifying demand in an EU context, this will, on the one hand, raise demand and, on the other, permit standardisation (and economies of scale for the industry);

D. Impact of the space sector

- 37. notes that a number of life-sciences related technology spinoffs from the space sector are currently under-exploited in the EU, and that there would be huge benefits on a European level of having a well-targeted spin-off strategy at the start of a space programme, involving wider participation from representatives of other industries;
- 38. stresses the importance of satellite technology3 in the EU space sector and notes that roughly two thirds of all satellite sales are for telecommunications applications. In the context of the EU space industrial policy it is therefore important to take into account the fact that this market has been subject to cyclical variations, reflecting primarily changes in the demand for GEO telecommunication satellites and associated launch services;
- 39. observes that mobile phones, the Internet, credit cards, road tolls, television broadcasts and weather forecasts are but a few examples of everyday life functions which partially or wholly rely on satellites. Other more strategic functions include for example farming, monitoring of ocean and wind currents, navigation for ships and aircraft, monitoring of emergencies, pollution, climate and the environment;
- 40. also notes that the growth of private actors in space has helped to make space technology and services more affordable and accessible, which has enabled states without national space programmes and developing states to gain from some of the benefits that space can provide;
- 41. acknowledges that the European Framework Programme (FP7) has been an important contributor to promoting innovation in Galileo/EGNOS and the accompanying services; however, the rapporteur might deplore that within FP7, attention for applications has been at a very low level, while it has been concentrated on the upstream sector;

E. Future approach to the EU industrial space policy

- 42. wonders whether the emphasis, which has hitherto been limited to the labour market, infrastructure and compliance with competition (in other words, the quality of the economic environment), is enough, or whether the focus should instead be shifted to the ability to produce exportable goods and services;
- 43. welcomes the fact that the GALILEO and Copernicus programmes have been taken into account in the EU's 2014-2020 Multiannual Financial Framework;
- 44. points out that, despite the fact that the European strategy for the period 2014-2020 is concentrated on research and development and high technology, the EU could lose its competitive edge in this area against the rapidly developing industrialising countries such as India, China and Brazil, if the Member States' budgets for research and development remain below the target set out in the Lisbon Strategy;

- 45. notes that the success of any industrial policy is also inextricably linked with the macroeconomic trends in the EU and national economies and calls for the development of high tech, research intensive industrial production, where competitive advantage can be used;
- 46. considers balanced implementation of the Europe 2020 Strategy to be important; wonders, therefore, whether competitiveness in innovative sectors is enough to improve employment and growth across the entire EU economy and calls for support to be given to the whole space sector so that the structure of the sector will be more balanced as far as large, medium and small companies are concerned;
- 47. acknowledges that while the European Commission does have tools in place (such as smart specialisation) to ensure a more geographical approach to industrial policy in the key sectors, much still remains to be done to ensure sufficient access to funding (risk capital) from sources that are not too risk averse;
- 48. points out that a close relationship between the local/regional level, which is working with industries to detect and support their first steps, and the national/community levels, should be a vital aspect of the EU industrial policy;

F. Subsidiarity and proportionality

- 49. agrees with the Commission's opinion that in accordance with Art 4.3 TFEU, in the areas of research, technological development and space, the Union shall have competence to carry out activities, in particular to define and implement programmes; however, the exercise of that competence shall not result in Member States being prevented from exercising theirs. The shared competences will last until the EU creates secondary EU legislation in these areas, at which point national parliaments must remove any conflicting national law;
- 50. notes that the fragmented and limited funding available for space research is considered one of the main barriers to further development of space activities and therefore calls for better coordination of space activities between the EU, the ESA and their respective Member States, thus enabling Europe to exert global leadership in the space sector. The importance of EU involvement in funding Space research activities is supported by the fact that many space research activities would not take place without EC support. EU action is thus deemed indispensable in this respect;
- 51. is of the opinion that the action proposed in the Communication is necessary because the issue being addressed has trans-national aspects that cannot be satisfactorily regulated by Member States and because existing EU measures and targeted assistance provided in this framework are not sufficient to achieve the intended objectives. The proposed action will provide a clear benefit, by reason of its scale and its effectiveness, compared with fragmented action at national, regional or local levels, mainly by virtue of economies of scale, since comprehensive

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space programmes require a level of investment that Member States cannot afford on their

own;

52. notes, moreover, that the present initiative does not seek to replace initiatives taken by

Member States. It seeks to complement action taken at their level and reinforce coordination

where such coordination is necessary to achieve common objectives;

53. considers the arguments to be clear, adequate and convincing. Therefore EU action envisaged

by this Communication is in line with the principle of subsidiarity;

54. agrees with the Commission that, concerning proportionality, the EU should legislate only to the extent necessary. Preference should be given to encouraging cooperation between

Member States, coordinating national action or to complementing and supporting such action

by guidelines, setting up information exchange mechanisms etc. Relevant aspects to be

regulated in the context of the nascent EU space policy will be industrial standards, issues

related to technical operations and commercial exploitation of satellite communication

infrastructure;

Brussels, 8 October 2013

The President

of the Committee of the Regions

Ramón Luis Valcárcel Siso

The Secretary-General of the Committee of the Regions

Gerhard Stahl

II. PROCEDURE

Title	EU Space Industrial Policy
Reference(s)	COM(2013) 108 final
Legal basis	Article 307 TFEU. Optional referral
Procedural basis	Simplified procedure Rule 26 (1) of the CoR Rules of Procedure.
Date of Commission letter	28 February 2013
Date of President's decision	14 March 2013
Commission responsible	Commission for the Environment, Climate Change and Energy (ENVE)
Rapporteur	Adam Struzik (PL/EPP), Marshall of the Mazowsze Region
Analysis	17 July 2013
Discussed in commission	2 September 2013
Date adopted by commission	2 September 2013
Result of the vote in commission	Unanimous
Date adopted in plenary	8 October 2013
Previous Committee opinion	none
Date of subsidiarity monitoring consultation	n/a