



**European Committee
of the Regions**

ENVE-VI/036

132nd plenary session 5-6 December 2018

OPINION

The space programme of the European Union and the European Union Agency for the Space Programme

THE EUROPEAN COMMITTEE OF THE REGIONS

- Supports the European Commission's vision of the EU Strategy for Space, and its implementation through the establishment of the Space Programme of the EU. A unified and integrated Space Programme with an increased budget of 16 billion euro will give rise to increasing synergies between fields such as space and energy, space and digitalization and many more, allowing regions to fulfil their important role;
- Stresses that the emphasis in the proposal on management procedures for cooperation between the European Union, the European Union Agency for the Space Programme, the Member States and the European Space Agency, should ensure that there is no duplication and should not reduce efforts for a more ambitious European Union space industrial policy;
- Calls on the European Commission to further clarify and elaborate on the concept and creation of space hubs and innovation partnerships, more specifically on the financial and management responsibilities of different actors, and underlines that such initiatives can be especially relevant for regions, including regions involving more than one Member State;
- Calls on the European Commission to add clearer proposals on how to increase the use of Earth observation data and technologies by national, regional and local authorities, small and medium-sized enterprises, scientists, researchers and dedicated networks for Copernicus data distribution so that these bodies have the ability and the opportunity to transform data into information that is of use to citizens;
- Underlines the importance of awareness-raising and an inclusive space policy which offers many benefits for science, research and development and inspires the younger generation.

Rapporteur:

Andres Jaadla (EE/ALDE), Member of Rakvere City Council (Rakvere linnavolikogu liige)

Reference document

Proposal for a Regulation of the European Parliament and of the Council establishing the space programme of the Union and the European Union Agency for the Space Programme and repealing Regulations (EU) No 912/2010, (EU) No 1285/2013, (EU) No 377/2014 and Decision 541/2014/EU COM(2018) 447 final

**Opinion of the Committee of the regions -
The space programme of the European Union and the European Union Agency for the Space
Programme**

I. POLICY RECOMMENDATIONS

THE EUROPEAN COMMITTEE OF THE REGIONS

1. Recognises the importance of space as an enabling technology supporting many EU policies in fields such as smart city solutions, agriculture, environment, climate, disaster risk reduction and response migration, security, spatial planning and others; and underlines the possibilities provided by access to high-quality and up-to-date data for existing and future needs, enhancing European competitiveness, providing wide socio-economic benefits and improving European security;
2. Supports the European Commission's vision of the EU Strategy for Space, and its implementation through the establishment of the Space Programme of the EU. A unified and integrated Space Programme will give rise to increasing synergies between its components, efficiency and effectiveness;
3. Finds that bringing together EU space activities in one Regulation provides a coherent framework and increased visibility in this strategic field;
4. Sees this reform of the EU Space Policy as an opportunity to really "open the club" and allow a broad range of areas to benefit from space activities, for existing and new activities;
5. Notes that the use of synergies between energy and space issues is important for proper implementation of the EU's energy policy. Local and regional authorities are becoming increasingly active in the energy sector, and thus areas such as alignment of the energy infrastructure by applying satellite technology should be promoted;
6. Calls on the European Commission to further clarify and elaborate on the concept and creation of space hubs and innovation partnerships, more specifically on the financial and management responsibilities of different actors, and underlines that such initiatives can be especially relevant for regions, including regions involving more than one Member State;
7. Calls on the European Commission to add clearer proposals on how to increase the use of Earth observation data and technologies by national, regional and local authorities, small and medium-sized enterprises, scientists, researchers and dedicated networks for Copernicus data distribution so that these bodies have the ability and the opportunity to transform data into information that is of use to citizens;
8. Recognises that the promotion, throughout the entire supply chain, of the widest and most open participation possible of start-ups, new entrants, small and medium-sized enterprises, other economic operators and local and regional authorities, including the requirement for sub-contracting by tenderers, is mentioned in the proposal but would like more clarity on how the

Space Programme proposes to support the initial investment for those local and regional authorities, in introducing the use of satellite data to ensure they fulfil their responsibilities when facing technical, financial or expertise related obstacles;

9. Finds that the Regulation should better explain how the EU intends to deal with commercial actors in space in order to support European industry in a sector which is specific in many respects, due to its concentrated nature, dual-use characteristic, high barriers to entry because of high initial investments and related factors, and finds that provisions on how to secure independent access to space should be strengthened;
10. Stresses that the emphasis in the proposal on management procedures for cooperation between the European Union, the European Union Agency for the Space Programme, the Member States and the European Space Agency, should ensure that there is no duplication of work, nor duplication of structures through the expansion of the new agency. A transfer of other duties to the new agency should not occur through the Commission alone, but only in consultation with the European Parliament and the Council;
11. Welcomes the increased funding for the Space Programme, to assure the continuation and further development of the European flagship Space Programmes Copernicus, Galileo and EGNOS, while also adding two new initiatives, namely SST and GOVSATCOM;
12. Regrets the lack of specifically allocated funding for space research in Horizon Europe, as this could provide more incentives and security for the European industry to develop further in this sector and ensure the best possible synergies between industry and research;

General Comments and Analysis

13. On 26 October 2016, the European Commission adopted the "Space Strategy for Europe". The purpose of the Space Strategy was to set out the overall strategic vision for the Union's activities in space, while ensuring proper coordination and complementarity with the activities pursued by the Member States and the European Space Agency (ESA). The draft Regulation furthers the aims of the Space Strategy with specific measures to strengthen existing programmes, create new ones and allocate EUR 16 billion for space policy.
14. The Committee of the Regions supports the aim of the EU Space Strategy and recognises its importance for the regions. The draft Regulation furthers these aims but, in some instances, does not go far enough or is not clear enough on how to achieve results. European citizens, businesses and research communities are becoming more and more active in the space sector. Against this background, uptake and promotion of uses of space-based data and services are vital for ensuring that the benefits reach society, subnational levels of governance and businesses. Given its strategic impact for Europe's space policy, the competence for up-take and promotion of use of space-based data and services should therefore remain an important point of attention for the European Commission which regularly reports on its efforts in this respect to the European Parliament and Council.

15. The use of space technologies to support services on earth is becoming increasingly important. More private actors are active in space. The use of outer space has become a feature of everyday life in a way that was not imaginable when the space age started 60 years ago, with space-based information and services affecting many areas of everyday life. Space technologies are indispensable for the digital economy, are a vital ingredient to make public services more efficient and also provide new opportunities for research. The EU has been an important user of space technologies for decades and has developed essential space components such as Galileo and Copernicus. The EU can achieve what would largely be impossible for any Member State alone: cooperation is important if Europe is to have a significant role in space.
16. The importance of closer coordination between science and space programmes in the EU should be stressed, together with the role of regions and local authorities in promoting better integration of science and space activities with entrepreneurship. Digital and space-based technology development should be more strongly supported by the EU and research and space budgets coordinated more closely, as these technologies are recognised key drivers for innovation in a variety of areas relevant for sustainable development (such as digitalisation, artificial intelligence, energy, environment disaster risk management and climate change). Access to highly technology- and knowledge-intensive scientific projects is vital for future of the space sector in the EU. For the purpose of strengthening the capacity of the European space industry, it is important to continue, in parallel, the participation of European businesses and universities or research institutes in ESA's programmes in preparing cutting-edge technologies for space missions and systems. Benefits for business development should be fostered by making use of the EU SME instrument for scaling-up entrepreneurship and business opportunities in space-based products and services in future Framework Programmes.
17. The proposal consolidates existing space activities and creates new ones such as a Space Situation Awareness (SSA), that would enable taking measures against risks in space, such as debris, in-orbit accidents, space weather events and so on. There are also plans to create a Governmental Satellite Communication (GOVSATCOM) network, which would enable communication in locations or situations where normal communication is unavailable.

Industrial policy and procurement

18. Space technologies are expensive and knowledge-intensive, which means that there are considerable barriers to entry for enterprises. At the same time, there is still insufficient understanding of the importance of space as an enabling technology. Enterprises of all sizes in all regions could use space in various ways, but in particular smaller firms, more remote regions or smaller Member States may need additional information or support in order to develop ideas on how to exploit the potential of space technologies.
19. The mention of space hubs, innovation partnerships and other innovation support is positive, and the proposal explicitly mentions the regional level. There is however no detail on how this is to be achieved.
20. Despite provisions in the proposal, the competitive nature of EU procurement and the skills and resources required for participation can lead to conditions that are advantageous to larger

corporations. This imbalance could in time lead to market distortions that may disadvantage start-ups, new entrants, and small and medium-sized enterprises, as well as local and regional authorities in accessing the economic opportunities that may arise from the space programme.

21. Small firms may be more flexible and responsive, being closer to users, and thus provide important links of the value chain and have a given role in space. Enterprises in all regions could use space in various ways on various scales. Smaller firms, remote regions and small Member States can contribute equally to the processing of the enormous amount of data generated, finding new and innovative ways to use it. Regional authorities should use available financial instruments and promotional measures to help increase interest in making use of space technologies for market needs, e.g. by means of systems to provide support to technology incubators for start-ups in this area.
22. The procurement principles in the draft Regulation mention small and medium-sized enterprises and a wide geographical choice, as well as use of multiple suppliers and the need to involve all Member States and avoid concentration. The proposals on support for competitiveness are not specific in the Regulation text.
23. There is a need to raise awareness about the possible market effects on European industry and the regions. The EU public procurement procedure has a different emphasis to the ESA procedures on geographical distribution or fair return (*juste retour*). The effect of a shift of procurement system on regions needs to be taken into consideration, as ESA procurement is of great importance for many regions.
24. There is a lack of a level playing field in the space domain, as other countries have large defence sectors that ensure investments and that can sponsor civilian uses, as most activities in space are dual use. Europe needs to ensure close cooperation and make sure that all possible measures are taken to remedy the absence of equal conditions and support European firms.
25. Local and regional authorities should be involved in space-related clusters in a variety of sectors for which space can provide important data (such as energy, transport, environmental monitoring, agriculture and smart-city solutions). Regional clusters, incorporating more than one Member State, can be a useful industrial policy tool for space policy, increasing EU competitiveness and supporting regional development.
26. The Regulation should better explain how the EU intends to deal with commercial suppliers, in particular in the context of security-related data. It should in general better specify priorities and the means of dealing with private entities and recognise possibilities for joint procurement with private entities.

Awareness- raising and an inclusive space policy

27. Space use offers many potential benefits for research and development activities and, if well promoted and presented, included in all levels of education, can excite and inspire new generations of researchers and entrepreneurs in Europe. This is essential if Europe is to remain at the forefront of space activities in an increasingly globalised environment. Regional and local

authorities should support (formal and informal) educational measures to raise the younger generation's awareness of the benefits of making use of space technologies in the civilian economy and everyday life, including in managing local and regional security.

28. The EU is well placed to support research activities, exchanges and similar. The proposal does not pay much attention to this side of space policy. Research and development could be mentioned more and in specific terms. As it is now, it appears as if the synergy between industry and research is not emphasised enough.
29. Synergies in the field of cyber security should be found, as cyber security is an issue for all aspects of space activities (ground segment, satellite, uplink/downlink and data).

Galileo and Copernicus

30. Galileo, the EU global satellite navigation system (GNSS), provides free position data that gives Europe strategic autonomy. EGNOS provides a regional European system. European autonomy is essential in today's complicated and unpredictable geopolitical environment. The importance of satellite data is constantly increasing. Technologies of the future, such as self-driving cars, are just one example. Galileo provides the possibility to develop new services and products, including by small and medium-sized enterprises and in all Member States. Such possibilities and ways to profit from them need to be presented in an accessible manner, to encourage widespread use.
31. The use of data from Copernicus is not as widespread as it could be, even if the data is free to use. Measures are needed to promote the use of data to a wider community. The Regulation mentions the chain of data that would support wider use. With very many users and a high volume of data, rapid and secure access is essential. This is of great importance to regions, as enterprises everywhere, including small and medium-sized ones, may develop new services based on the available data.
32. It is positive that measures are proposed to provide Data and Information Access Services (DIAS). More targeted support by the EU and national sources for the development of the downstream sector for satellite-based services and applications would be important. The necessity to promote and facilitate the use of Earth observation data and technologies by local authorities, small and medium-sized enterprises, scientists, researchers, dedicated networks for Copernicus data distribution, national and regional bodies has been recognised in the proposal, but it remains unclear how this will be achieved.

SST

33. The proposal for a Space Surveillance and Tracking System (SST) is an important and useful addition, given the increased intensity of space use.
34. In the provisions on the scope of the SST, the wide involvement of stakeholders in all parts of the EU should be made clear, including the use of existing solutions, which may include commercial solutions, in order to quickly and efficiently provide services to SST users.

GOVSATCOM

35. GOVSATCOM will directly serve the needs of Member States that have not had the capacity to develop their own space systems, thereby creating direct added value for the action of the EU.
36. For some regions, for example, border regions, GOVSATCOM may be particularly relevant. This is initially done primarily via Member States but perhaps later (after the evaluation of 2024) directly for the regions that may be able to contribute to the work of the Agency.

Access to space

37. Access to space is important for activities such as GNSS, Copernicus and Galileo. Europe should have autonomous and independent access to space, to ensure sustainability. It is expensive and complicated to start launching activities with significant barriers to entry, which means that ways to support modern, efficient and flexible launch infrastructure facilities should be considered.
38. Such means may include, for example, the establishment of an adapted procurement policy for European institutional launches, as well as a coherent policy on the viability of critical infrastructure. The possibility of aggregation of launches, the development of alternative launching technologies, and support for ground infrastructure should be clearly mentioned in the Regulation.

Organisational issues

39. The main organisational proposal is to increase the role of GSA so that, instead of being a body for a specific programme (Galileo) it would become a space agency for the EU, which will be built up alongside ESA with a high risk of duplication of work and the creation of duplicated structures. This must be avoided by, prior to any transfer of tasks to GSA, carrying out a compulsory and careful examination of whether ESA already has any of these tasks. The relevance of EU policies should, as well as the added value vis-à-vis Member State activities, also present added value vis-à-vis ESA activities.
40. A large part of the draft Regulation is about organisational matters of the proposed Agency, mainly taken over from the Regulation on the GSA. The focus on such matters creates a danger of too great an emphasis being placed on building up administrative structures and, ultimately, insufficient human and financial resources for the core issues such as a more ambitious EU space industrial policy.
41. Today, small countries in particular already have problems finding human resources to take part in many different activities. Such difficulties could increase and lead to greater differences between Member States in their ability to actively participate. The best use of resources should be carefully considered, as frameworks for cooperation between ESA and the EU already exist.

42. The existing fruitful cooperation between different European space-related organisations, including EUMETSAT or ECMWF, for example, should be continued and enhanced. Existing knowledge and structures should be used to their full potential.

Budget

43. The budgetary allocation is to be welcomed. The Space Programme supports many EU policies, which means that the cost is not just a cost for specific activities, but is a means to provide an essential component for other EU policies. In this respect it has to be highlighted that the financial resources envisaged for up-take and the promotion of use should reflect the growing involvement of citizens and companies. Thus, it should not be less than in the current period, e.g. for Copernicus not less than 5% of the total Copernicus budget. The up-take budget for EGNOS/Galileo should not include expenses for the establishment of new administrative structures but focus exclusively on promotion and market development. Activities already undertaken may, if not adequately funded, fail or become irrelevant, which would jeopardise investments made.
44. It is regrettable that the Horizon programme does not include dedicated space funding.
45. Notes that the introduction of space technologies requires large initial investments and recommends that public authorities examine the possibility of creating new, market-oriented and attractive funding instruments for small and medium-sized firms that develop space technologies.

Additional issues

46. In contentious recent space issues, such as that of space resource use (including space mining), dealt with in the legislation of Member States such as Luxembourg, the EU can contribute to reaching a greater international consensus, on how such national legislation relates to international law as expressed in numerous conventions.

47. As for the EU joining space conventions, this possibility is mentioned in the proposal but should be evaluated case by case.

Brussels, 6 December 2018

The President
of the European Committee of the Regions

Karl-Heinz Lambertz

The Secretary-General
of the European Committee of the Regions

Jiří Buriánek

II. PROCEDURE

Title	The space programme of the European Union and the European Union Agency for the Space Programme
Reference	Art. 307(4) TFEU
Legal basis	Art. 41(a)
Procedural basis	
Date of Council/EP referral/ Date of Commission letter	– 7 June 2018
Date of Bureau/President's decision	
Commission responsible	Commission for the Environment, Climate Change and Energy (ENVE)
Rapporteur	Andres Jaadla (EE/ALDE), Member of Rakvere City Council (Rakvere linnavolikogu liige)
Analysis	
Discussed in commission	Scheduled for 27 September 2018
Date adopted by commission	Scheduled for 15 November 2018
Result of vote in commission (majority, unanimity)	By unanimity
Date adopted in plenary	Scheduled for 6 December 2018
Previous Committee opinions	
Date of subsidiarity monitoring consultation	–