

Governance of Space Activities in an Evolving European Framework – How to Achieve Coherence and Effectiveness?

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Governance shall enable and support the successful development of space capabilities and the use of space for benefiting society. While European space activities have never before reached such heights as of today, the number and complexity of actors and institutions involved in Europe has never been as arduous at the same time. Decision-makers face the task to develop the governance of space activities in Europe on the multilateral as well as on the national level in a way that coherence and effectiveness are achieved and maintained. A recent conference co-organised by Eurisy and ESPI with the Hungarian Space Office as the local host investigated into the conditions and requisites for governance, which helps Member States and Europe as a whole to fulfil the potential of space. Emanating from this initiative, this paper presents an analysis of the issues at stake and provides perspectives for achieving coherence and effectiveness.

1. The Setting

The recent achievements of Europe in space are amazing. From science and interplanetary missions (Mars, Saturn), to its successful contributions to the International Space Station (ATV, COF) and to the field of applications satellites (GMES, EGNOS and Giove for Galileo), Europe – together with missions of its single States – demonstrates leading technologies and missions. With the substantive new programme decisions by the ESA Ministerial Council of November 2008, space is developing stronger than almost all other sectors during the current financial and economic crises. At the same time, governance of space is getting more and more complex. The success of this strategic policy area is accompanied by a rise in determining actors, institutions and the involvement of more user communities. Nobody should see an ambiguity in this development: the more actors get involved in space, the better it is for this policy area. There arises only the challenge to find ways to handle this trend. The umbrella for this is set through the European Space Policy and the perspective incorporated in the Lisbon Treaty. The underlying principles for any efforts to deal with governance are clear as well: any

development has to aim at maximising coherence, synergies and effectiveness.

2. The Analysis

It is in this setting that Eurisy and ESPI selected the topic of governance as the theme for their first joint large scale activity. Together with the local host, the Hungarian Space Office (HSO), they set up a dialogue under the title of “Models of Governance of National Space Activities in the Evolving European Framework - Optimising Benefits from Participation in European Programmes”, which took place in Budapest on 26/27 January 2009. More than 100 participants from 25 countries interacted with around 30 high-level speakers during these two days.

The basic understanding was made clear already at the outset: governance is not a goal in itself. It is an instrument to successfully implement programmes and provide for an environment to create initiatives, which strongly emerge from the member State level. Following an examination of the European space sector current situation, the conference was in particular conceived to focus on the new member States of the European Union, especially those who have a demonstrated

interest to also get involved in activities of the European Space Agency. The question asked was, how to get prepared, based on the experience of the established actors (large and small). The discussions, however, turned then to broader approaches, analysing governance issues, which have to be faced by established actors as well as the new entrants. Top-down views from the European to the nation State level were combined with bottom-up views and sector analysis leading to a multi-level analysis of Europe's governance structure.

What became clear for the national level is that no single solution can be found for the variety of new entrants but that tailor-made solutions have to be sought. The implications of this variety can only be understood through dialogue, a dialogue making capacities and interests transparent in order to find effective solutions. The support for such a dialogue and joint action was made clear in the policy keynotes delivered at the conference by Member of the European Parliament Etelka Barsi-Pataky and ESA Director General Dordain. While the first set out the approach to space as a strategic policy area for Europe, the latter identified four areas of concrete need for shaping governance on the European level (Galileo, GMES, exploration and Space Situational Awareness) and outlined principles to do so.

3. The Issues

The European Level

The great difference regarding capabilities as well as expectations among the new entrants can best be understood, when seeing that a few of them are not satisfied with going simply for niche markets but aiming at entering the upstream market of technology development. Such ambitions have broad consequences. It starts with the need for these countries to provide early inputs to European-level bodies during the early stages of programme development so they meet national industrial, scientific and user needs. Although the basic position of the established European space industry is to welcome new ideas to "the family", a clear line is drawn against competition in set areas like current launchers (not so for future systems, which might be particularly suited to find industrial contributors), with maybe opportunities to provide parallel supply in other areas of critical technologies.

This means that niches will remain the main

focus for the new entrants, while the question of who defines and allocates the niches (the European level or the new entrants themselves or in coordination with the established actors) is still to be answered. The role of the new entrants in the European value chain is open. There is, however, an agreement space applications development is the most promising area with the best opportunities due to the larger commercial markets, the higher financial return and the lower entry barriers. In addition new member States have to be regarded as interesting markets themselves. In this context, getting involved in closing the gap from demonstration projects to operational applications and services might also be an opportunity for new entrants.

The debate on governance on the European level is highlighted in the analysis of the PECS mechanism. As ESA's instrument (Eumetsat has a distinct and effective system of its own) to lead new member States to the operations of the Agency, it has been and still is in the centre of debate. The view was expressed, that PECS nations and their industries risk a "Catch 22" situation, in which they do not have the capability to win ESA contracts and cannot bid for ESA contracts to develop capability because they are not full members, making it difficult to demonstrate to politicians the benefits of membership. Making the transition can require a step change in budgetary commitments, industrial capability and expert personnel resources. The transition could possibly be eased if the PECS agreement included a commitment for a gradual but continuous increase in ESA contributions and a gradual increase in entitlement to observer status in ESA boards and committees.

In general, new entrants do need to receive access to the existing European-level network and lobbying groups. This is also important for being able to communicate with the decision-makers in the European Parliament (as well as other national parliaments – including their own). They need information about mechanisms and knowledge. One additional European sub-level of action could be the link with regions active in space and organized on the European level for example in NEREUS.

The National Level

On the national level, States - the established as well as the new entrants - should be guided in their space activities by a long-term vision providing stability internally and as a partner on

the European level. Political stability and reliability in this respect is important for shaping a durable and successful partnership. It might be useful to identify a key factor at a given point in time to provide political motivation and to develop and maintain a kind of national interest in the executive as well as legislative branch. A national space policy should be developed within the context and complementarily with European policies, including the European Space Policy and the European Space Programme. Through this, the long-term vision can also be balanced with flexibility to address short-term challenges.

For the structures of national space governance the following elements might serve as a framework: a space policy (or the definition of clear objectives and priorities), a space programme, a lead ministry (or even the lead with the head of government), finding the right structure to get all relevant ministries involved, an administrative structure comprising a space agency/office, research facilities, academic institutions, industry and the commercial sector, user communities. They have to be composed in a tailor-made way for each country, missing single elements would, however, bear severe consequences for a successful engagement. Budgetary provisions will usually see a build-up raising the question of how to accompany this with a useful parallel build-up of capacities. A regulatory framework (in particular a national space law, licensing mechanisms, liability issues, data regulations and export control) should accompany the administrative and organizational development. An industrial policy will also be necessary, since space is not wholly market-driven.

But as it was said in the beginning: governance is not a goal in itself but a tool to achieve common objectives. It has to provide the opportunity for a successful engagement in space activities. Therefore the performance of science, research, manufacturing industry and other commercial areas has to be the criterion for success. In this respect, the role of national programmes besides European participation is of great importance. A lead national satellite might also rally the development of technological competence and management skills. A crucial question for the new entrants certainly is how to guarantee the potential of competence, complementarity and cost-efficiency through SMEs and how to improve their capabilities in the fields of project management or quality control and standardisation (inter alia in the framework of

ECSS), also for example with e-learning instruments. True for all, education and outreach have to guarantee a stable human resource base.

4. (Pre-)Conditions and Principles

Successful governance rests on (pre-) conditions and principles. The two most important have already been introduced: coherence and effectiveness. The first shall characterise the need for a harmonised regulatory and organisational setting with a stringent set of goals and objectives on all interacting levels. The second shall remind that governance is not a goal in itself but that from poor governance stems problems rather than good output, whether missions, technologies or applications. Poor governance can also occur when actors (be it agencies, industry or research organisations) do not fulfil the roles, which they are best suited for but aim at taking over responsibilities not included in their mandates. Ideally, those actors have to establish a stringent chain of action and competence based on trust and coordination.

Reliability and fairness are two other basics, which need to be respected for the European setting. Reliability is needed from all, fairness however has to be asked from the established actors vis-à-vis the new comers. Fairness - maybe not without facing objections - comprises also the realist principle that those who pay are those who drive. The opportunities must be fair and the structural conditions must allow the new entrants, which are ready to shoulder and maintain commitments, to become part of an efficient European space community.

Last to mention, but often pointed out during the conference, the role of personalities is often crucial – be it with established actors, be it maybe even more so with the new entrants. Key decision-makers, key industrialists and key scientists have been and will be the drivers for a successful engagement of Europe in space, inside and on the global scale. Our conference demonstrated that Europe has many of those talents.

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