



SUMMARY

“Space Policy: A New Strategic Challenge for Europe”

Alpbach Technology Forum Working Group 5

Today's society depends on space activities. Major examples are weather forecasts, satellite telecommunications, satellite TV, monitoring of the Earth's environment, mitigating the effects of disasters and security aspects. The ability to observe from space for treaty verification has contributed to stabilize the world. Space science is extending our understanding of the universe and the human role therein. Space assets are integral components of our public infrastructures. Few citizens realize how dependent their lives are on space assets. Economically, in 2003 alone, worldwide space spending was on the order of 140 billion US\$.

The debate on European Space Policy launched by the European Commission is an indication for the growing importance assigned to space activities in Europe. It has led to the publication of an Action Plan for implementing a European Space Policy in form of a White Paper and to the inclusion of a shared competence in the field of space between the European Union and its Member States in the European Constitutional Treaty.

The Importance of Space Activities

The international Working Group participants first presented their views on the importance of space activities on which the present strong political attention for space is based.

There is a wide range of reasons why governments engage in space activities. The basic justifications have been different for different countries at different times. What originally started out as a competition between superpowers evolved over time into a framework for international cooperation, involving an ever growing number of countries.

For Europe independent access to space, space applications for the benefit of citizens and governments and space science have been traditional reasons to engage in space activities. It has made major investments into space, money well spent, for without it Europe would be lacking many basic capabilities and infrastructures. The increasing role of space in civil and military security and in defence matters was noted.

The role of a strong space industry in developing and providing the means for making the benefits of space technology applications available to citizens is vital. Space technology can be reused in sectors other than the space sector, providing added value.

Status of Space Policy Discussions in Europe

The European Union is now comprised of 25 Member States encompassing more than 400 million citizens and a geographic area of more than four million square kilometres. Europe has set itself the challenging goal, by 2010 to become the most competitive knowledge-base society in the World.

To ensure that space activities will efficiently contribute to this goal and continue to generate important benefits for European citizens the European Commission's White Paper proposes that the future European Space Policy shall secure European space independence through guaranteeing access to space, enhancing space technology, promoting exploration and space education, strengthening European excellence in space science and creating a friendly environment for innovation and competitiveness.

A common European space policy will offer many benefits by federating European citizen's demands and policy's needs. The appearance of the EU is ringing in a new area for space activities in Europe. This throws a challenge to ESA, the EU and its Member States to better cooperate with each other. Good cooperation is absolutely essential for success of the European Space Policy which will provide the fundament for the future European Space Programme. Against this background the scenarios for clear work-sharing between all the players involved will have to be developed and priorities for the future European space policy will have to be formulated. Regarding the later, possible international collaborations have to be taken into account.

There is consensus that ESA will continue to be the organisation for developing and implementing space and associated ground segments and to manage the associated projects and industrial contracts. The European Union's role is to identify user needs in support of European policies.

From an organizational point of view two options for ESA could be taken into consideration: the full integration of ESA into the administrative framework of the EU or for ESA to remain an agency with relative autonomy which may offer a higher degree of flexibility. A view was expressed that adaptation of the ESA Convention to the EU Constitution will open up better possibilities to act (qualified majority acting).

As to geo-return, a pragmatic solution could be developed without formally adapting fully to free market and competition rules; also a distinction could be made regarding programmes initiated by ESA and run by ESA and programmes delegated to ESA by the EU.

The issue was raised on how to integrate the new EU Member states into the existing framework of space activities. Some of the new EU Member States are well prepared; some will take longer to build-up the necessary industrial and organizational capabilities.

Current budget constraints in European space programme limit the ability of industry, especially small and medium-sized companies, to innovate and to sustain themselves in the space sector.

In meeting these challenges, the planned Space Council (meeting of the EU Council and the ESA Council at Ministerial Level) will assume a central function. The debates on the financial perspectives are just beginning in the newly created High Level Space Policy Group. Specific work programme for space and security have been proposed by the European Union within the new EU budget for 2007-2013. These programmes may be supported through either infrastructure type of contributions or through framework programme-type of contributions. Any new financial commitments through the European Union's budget may not be diluted by an equivalent reduction of national space budgets.

The European Commission has taken a careful, robust and evolutionary bottom-up approach towards establishing a European Space Policy. While progress in the European Space Policy may not always proceed as quickly as some would have like to see, but there is common agreement that Europe has succeeded so far in bringing not only space experts, but also politicians, economists – and with the Green Paper process – the public to the same table to discuss space issues. The most challenging and exciting times for European space activities are still ahead of us!

European Space Policy in the Context of Worldwide Space Activities

In outer space there are no legal borders. Space activities have an inherently international aspect. International space cooperation and space confrontation have traditionally been playing important roles in international affairs. It was therefore deemed necessary to take a look at current developments in Europe from a more global perspective.

Internationally the most recent critical development in space activities has been the announcement of the new United States Space Exploration Vision which is placing a focus on sustained civilian space exploration activities, projecting a return to the Moon and human space missions to Mars and beyond. In the past, exploration - physically going somewhere - has never been a political goal per se. Even the Apollo Programme that succeeded in putting humans on the Moon was motivated by the competition between two political systems. The new vision is a long-term commitment to human and robotic space exploration. The big question is, will other nations agree and decide to participate, or will they pursue their own vision?

Russia has traditionally been a strong contender in human space flight activities. China has recently successfully launched its first astronaut and it will be interesting to see how it will proceed on these activities. Europe will need to decide whether, and how, it wants to position itself vis-à-vis a U.S. led space exploration effort. We are in a period of global re-evaluation of the role of government-sponsored space activities. What broader objectives should drive space investments in the future is a question being asked by political leaders around the world. As Europe tries to answer that question for itself it cannot ignore the responses being provided to other governments by those who advocate continued and even increased space spending, and how those governments decide to move forward in space.

While Europe has presently chosen to focus on application and security aspects of space, the debate on Exploration and Human Space Flight will be central to decision on which path Europe will decide to embark on in the future. Participants expressed the view that the Vision of Space Exploration should not be underestimated. It is a new posture from the US that Europe needs to take into account seriously.

A European Exploration Programme, which may be based on the ongoing activities in ESA's Aurora programme, would learn from the experiences gained in the Galileo and the GMES programmes and would also take into account the lessons learned from participation in the International Space Station programme. Should Europe decide not to take up the challenge and to engage in space exploration activities, its politicians have to understand that they will be cut out from many innovations and future opportunities. Above all it should not be forgotten that there is still a gap of a factor of six in the civilian space budgets, and a gap of a factor of 20 in military space budgets of the USA and Europe.

It remains an open question if future space cooperation will be based on an open, global perspective or will fall back into a model of national and multi-polar competition.

The European Space Policy Institute (ESPI) strives to play major role in the discussions

towards a European Space Policy. It is not meant to substitute already existing organizations and structures, but instead to provide a linkage between them. Its goals are to help developing a model of what should comprise a European Space Policy. It will embark to inform and sensitize decision makers, media, and the public, engage in studies and make available reports on current space policy-related issues, and organize workshops and seminars for specialists and non-specialists alike. It may also provide guidance on how Europe may cooperate internationally in space activities.

One common sentiment was shared by all the European participants: if we want to play a major role in the World, we have to speak with a single voice and act as Europeans and not as national entities.

Summary, Outlook and Conclusions

The meeting provided a welcome opportunity for free and frank discussions among the Working Group participants, who are important contributors to the formulation of space policy goals, as well as among the numerous attendees. It was especially fruitful to learn how the ongoing space policy deliberations are being viewed among the European participants themselves and from an outside, US-American, perspective.

Austria, as a space using country with its own national space programme, a Member State of the European Space Agency and several other space-related international organizations, is an active contributor to shaping the new European Space Policy. It is the host country for the United Nations Office for Outer Space Affairs, which provides the Secretariat for the UN Committee on the Peaceful Uses of Outer Space, and for the European Space Policy Institute.

When Austria takes over the EU Presidency in the first half of 2006, space policy in general, the future European Space Programme and the question of how to include space activities into the EU's infrastructure programmes and the Seventh Framework Programme for Research will be included as major issues on the Presidency's Agenda.



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