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“Space Strategy for Europe: The Road Ahead”

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Ladies and Gentlemen,

I am happy and honored to take up the challenge of delivering a closing address to this 9th Annual Conference on the European Space Policy. It is not my first appearance here, but I have been invited today for the 1st time as representative of the Advisory Council of the European Space Policy Institute. ESPI is a research institute, based in Vienna, unique of its kind, and in many respects an asset for Europe. I am grateful to be given the opportunity to share with you today some reflections regarding the evolution of the space sector worldwide, and singularly regarding the stakes and opportunities for Europe in this fast-evolving framework.

I would first like to salute the efforts made by the European Commission through the elaboration of its Communication on European Space Strategy recently issued. A lot has been said during these two days on the merits of this document, which sets a frame and boundary conditions to the European activities in Space. I am also happy to stress how much it reverberates many of the conclusions of the report I recently delivered, as former minister in charge of Space, to the French Prime minister regarding the French National Space policy in Europe.

As a matter of fact, the primary objective of the European space strategy should be to ensure that space remains accessible to Europe and safe to operate.

Regarding space transportation, I will once again pay tribute to the efforts made by the member States, to foster the European independent access to space with the development of Ariane 6. I am proud of having been given a chance to contribute to this difficult and critical decision. It was a necessity to maintain our autonomy for access to space thanks to a modular and more competitive launcher to be delivered in 2020, with a renewed Vega.

However, access to space is not just a matter of launchers:

- It is also about unrestricted access to the state-of-the-art of key critical technologies at reasonable economic conditions,
- it is also about industrial capabilities and competitiveness, that relentlessly need to be improved, especially when worldwide competitors are getting so active in every direction.

All these issues are fully addressed in the Communication of the European Commission, together with the need for a market take-up in the downstream space-related services and applications sector. As a matter of fact, a robust domestic market is one, and maybe the most important condition, to level the playing field with our competitors strongly backed by massive public commands at a higher price than the export prize. All these issues now need to be urgently and effectively tackled.

Regarding applications, their diversity and their benefit for the economy and for citizens have been dealt with during the conference : environment, telecommunications, internet

for all, IOT, security, defence, agriculture, prevention and better management of natural disasters, not forgetting the diffusion of technological innovations to the whole industry. Much more communication should be done towards citizens to create a favorable environment for increased investment in space. I would not oppose exploration to everyday applications because we need both: improvement of daily life and dream of new frontiers, new scientific challenges and attraction for the still unknown.

But, back to our topic, I would like to elaborate with you on what, in my view, is not yet sufficiently addressed in this document, and would thus deserve further developments.

First: We need to set European ambitions in Space.

Space is one of the few domains of excellence of Europe in high technologies. There are not that many. Some suggest that this good positioning allows for reducing the efforts. I might not share these views, but we must define the role and the place we ambition for Europe, which should be more than the addition of the individual ambitions of European member States:

- Do we want to be one among the space faring “nations” or do we want to be a full fledged space power, which implies to have the means to act in space in full autonomy?
- Do we want to be active in each and every domain of space applications? Or are there some that we deem not worth addressing?

- Do we intend to play a role in the future international attempts for space exploration? Or will we abandon it to the other nations?

This is just to mention a few... Of course, all options are respectable, provided they are decided on solid political grounds and based on in-depth strategic analysis.

But these are all difficult questions, to be addressed in a difficult budgetary context... and times of plethoric public funding will not come back...

Second: New space, smart space or open space, whatever name you give to it.

A lot is going on around the world with the bubbling of bold initiatives from private actors, some of them being fresh new comers in the sector. The Gafas or the Gafa spirit companies are mainly interested in space as provider of data. It can explain the recent 1 billion \$ investment of Google in Space X. Data are said to be the new black gold and data world market is supposed to increase by 15% per year in the next ten coming years. These newcomers bring a new spirit, the start-up culture of risk taking, of agility and a capacity for marketing, communication and story-telling. They directly address end-users and meet their needs. They also impulse new technologies, less expensive and more evolutive. It is undoubtedly a new challenge Europe has to face. In this respect, the achievement of platforms to collect and diffuse Copernicus data is a relevant initiative to help European SMEs and start-ups delivering new applications and services.

Constellation of satellites, nanosatellites, micro launchers, cubesats also imply new business models. It is too early at

the moment to assess how many among those newcomers will ultimately prove to be successful, both technically and financially. However, all claim - and to some extent demonstrate - that relaxation of constraints inherent to public procurement allows them to dramatically increase effectiveness in the development phase, and to radically optimize recurring and operational costs. Taking advantage of such supposed benefits implies for public buyers to shift from a position of almighty customer to a position of consumer, procuring off-the-shelf products or services developed under pure private management. NASA and DoD have started to evolve along these lines in carefully selected areas. This is one step ahead of the traditional PPP arrangements currently considered in Europe for innovative procurement and this implies long-term commitments for the procurement of products and services that are not compatible with the current legal framework of both ESA and EC. However, aren't there some areas in which such approach would be relevant?

Third: New threats

As a matter of fact, New Space comes along with New Threats with the multiplication of initiatives and actors. This will inevitably put additional pressure on the space environment. Now we know, unlike previous generations, that space has some limitations! And accounting for the limitation of resources radically changes the nature of international negotiations to come.

Moreover, the whole existing international space-related legislative framework is meant for dealing with slow-pace evolution of a sector totally dominated by states and governmental bodies. This has little to do with the current situation.

So, we can reasonably anticipate some lively discussions in the near future in the international instances dealing with space. Some thoughts should be given on ways to allow Europe to speak with a stronger voice on the international scene so as it plays the role it deserves in future unavoidable negotiations related to space traffic management, security of operations in orbit, and evolution of space laws and regulations. It has a lot to do with economics, law and politics and this would be the right opportunity to assess a unified European approach against multiple (and, ideally, coordinated) national legislative steps.

Conclusion: There are still many avenues to explore in terms of reflection regarding European Space Policy at large. Space is a unique and invaluable resource that we have to share with others. Thus, European Space Policy cannot be devised in isolation. Thus, it should be faced with the reflections and initiatives taking place in the rest of the world, in the US of course, but also in China, in Russia, in Japan, in India and in all the other nations that might not have strong space capabilities, but nevertheless increasingly rely on space infrastructures and the associated applications and services. As a consequence, it makes little doubt that they will increasingly claim to have a say in space-related matters. ESPI is by design the adequate organization for such purposes, and I hope it will be extensively challenged to come up with analysis and proposals for the next steps of the development of European Space strategies and policies.

Thank you for your attention.