

**TOWARDS
A “SPACE ECONOMIC DIPLOMACY”**

CONTRIBUTION OF THE EUROPEAN SPACE INDUSTRY

Introduction: “economic diplomacy matters for the European space industry”

As stated by President Juncker in the White paper on the Future of Europe published in March 2017, reinforcing the tools of the EU’s external action to "harness globalization" will be a key area of action for the EU institutions in 2017- in line with the objectives of the “Global strategy” presented by High Representative Federica Mogherini in June 2016.

In this context, the European space industry has been following with a great interest recent institutional reflections around the development of a “European economic diplomacy”: putting the promotion of European industry’s competitiveness worldwide, jobs and growth at the top of the EU political agenda is indeed key to ensure that Europe remains a strong global actor.

More specifically, the orientations detailed in the “Space strategy for Europe” about the ambition, through EU trade policy instruments and economic diplomacy, to promote the internationalization of the European space industry and establish a level playing field have been very positively welcomed by Eurospace industrial community. It is also extremely encouraging to notice that recent debates in the Council and Parliament have shown that both institutions are clearly positive about this notion.

In Eurospace’s view, the momentum created by this institutional alignment is a tremendous opportunity to promote further the development of concrete economic diplomacy measures for the European space sector.

In order to bring a constructive contribution to this collective institutional effort, our community has been consolidating a consensual industrial perspective, presented in this position paper. This paper aims at providing EU institutions with a state-of-play of our reflections and details some operational and ready-to-use measures that could be promptly put in place by the European Commission (EC) together with the European External Action Service (EEAS), giving then a tangible dimension to this developing “European space economic diplomacy”.

The European space industry stands ready to refine any point of interest raised in this position paper and contribute further to the EEAS, Commission, Member States or European Parliament’s reflections on this topic.

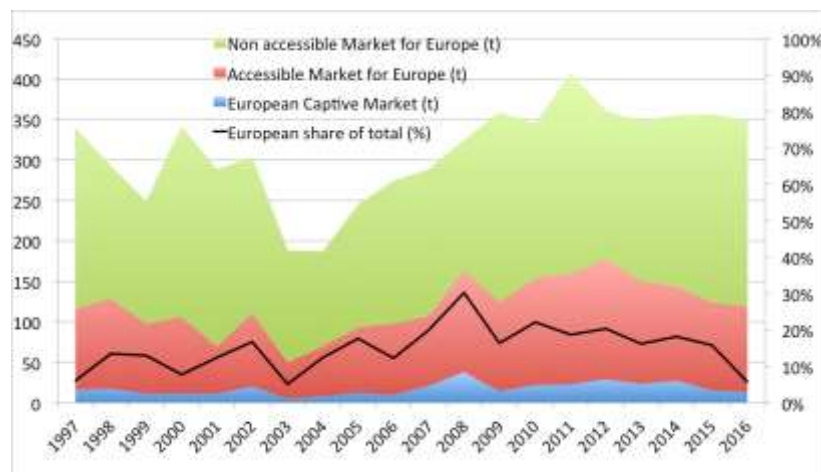
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The rationale behind “space economic diplomacy”

Highlight on captive market dynamics in the space sector

- Space markets are often not accessible to all suppliers on the same level.
- Some markets are neither accessible to the European satellite industry, nor to European launch services providers:
 - In particular, all institutional need in the USA Russia, China, India and Japan are served exclusively by their own national players which provides a strong advantage for their national industries
 - Such advantage allows some players to apply low price offers on export market creating a non-level playing field
- Accessible markets represent an average 36%¹ of the total space activity worldwide in the past 2 decades:



- In two decades European suppliers have managed to capture an average 47% of their accessible market.
- An average 17% share of the accessible market is captive for European suppliers (the European institutional demand), i.e 6% of the total market
- Globally, 64% of the global space market (in mass) is not accessible to European suppliers.

| Spacecraft markets* | Global launch markets* |
|--|---|
| <ul style="list-style-type: none"> ▪ Institutional customers tend to favour local supply. ▪ The extent of international competition in satellite markets seems limited... ▪ ... And export markets are very limited in size. ▪ Most markets (88% in mass) appear to be organised regionally. | <ul style="list-style-type: none"> ▪ With the exception of the ISS servicing activities, US demand has a clear preference for US launchers. ▪ Russian demand is consistently served exclusively by Russian launchers. ▪ 40% of Europe's total launch needs are satisfied by Russian launchers. |

¹ All values are expressed as % of mass at launch lacking better international comparison points

- By way of comparison, 20% of the European institutional launch demand has been satisfied by Russian launchers (70% being Soyuz launchers operated in Guyana Space Center), which lays the foundation for further aggregation of Europe's institutional launch demand.
- Few countries have autonomous launch capacity... And even less own a range of launchers able to support all their needs.

**Period considered: 2011-2015*

Space markets in Europe: assessment of a unique situation worldwide

- When benchmarking Europe with our main competitors, clear structural differences can be highlighted on the European side: indeed, there are limited space military programmes as compared to all other space powers (USA, Russia, China...) and no EU ambition for Europe-made human-rated systems. It explains notably that:
 - European institutional investment in space is comparatively – and significantly – lower than in other space-faring nations (e.g about six times lower than in the USA).
 - In the past 5 years, the Russian and US institutions generated a market for 350 tons worth of satellite and associated launch services for Russian and US suppliers, similarly, Chinese institutions created a captive domestic market worth more than 200 tons, when the European equivalent is only 105 tons.
 - European space domestic market (for launchers and satellites) is therefore significantly smaller in volume than the Russian, Chinese and American ones.
- This international comparison highlights that public institutional demand and support remains the first guaranteed basis to stabilize the activity and foster competitiveness of the domestic space industry.

Europe's positions on space markets worldwide: reflect of a robust industrial competitiveness to be preserved

- As a consequence of this unique situation described above and unlike its international competitors, the European space industry highly relies on the commercial business and export sales.
 - 64% of the spacecraft mass produced by the European space industry is devoted to commercial activities, against 36% to local institutional markets (which represents 55% of the sales in value).
 - The same ratio for spacecraft mass in the US industry is 40 % (against 60% to the domestic market).
- It makes it all the more challenging to sustain the current level of excellence of our industry, since we are much more exposed to the hazards of commercial markets and harsh competition favored through the absence of a level playing field.
- The contracts signed in the space sector, often at the crossroads between strategic and national interests, exhibit a very political nature. Space cooperation and launch services

agreements are a true instrument of influence – and sometimes dominance – for all other space powers.

- Aggressive strategies from other space powers also challenge European position worldwide.
 - In China for instance, the White Paper on China’s space activities – published last December – made very clear that the country caught up its technological weaknesses, and is now looking for new commercial opportunities to extend its leadership/ambitions in the space sector. The space strategy is now an official pillar of the one-belt/one-route international policy of China.
 - In Russia, where Proton is still the main competitor to Ariane 5, the enlargement of the launch services customer base is a critical need to support the much anticipated modernisation of the industrial sector.
 - Of course, the USA aggressively promoted the space dominance doctrine for years and has still legal instruments and political arguments to limit the penetration of space markets of its European competitors, including with such tools as export controls.

On the basis of this analysis and given the institutional alignment on this topic mentioned in introduction, the European space industry welcomes ongoing – particularly timely- reflections at EC and EEAS on the development of a “European economic diplomacy”. For our industrial community, using space as a strategic “pilot sector” makes in addition a lot of sense considering the specificities explained above, and we therefore encourage EU institutions’ way forward in this direction.

Furthermore, considering the rising interest expressed for space matters at the European Parliament in the past three years, for instance through the Sky & Space Intergroup, we believe that a strong parliamentary support will be key to reinforce the political momentum around the topic of “space economic diplomacy”.

Eurospace proposed way forward

While being fully supportive of economic diplomacy measures in order to support and expand the European space industry’s positions worldwide, it remains pivotal to remind that this effort shall be accompanied by structural measures consolidating the European institutional market via a dedicated EU space industrial policy –all this aiming at achieving a level-playing field with other main space-faring nations.

From this standpoint, Eurospace believes – in the same spirit as EC and EEAS – that a proactive and integrated “space economic diplomacy” should take into account an “offensive” as well as a “defensive” dimension.

With this background in mind, Eurospace proposals for “space economic diplomacy” are developed around four main axis:

- Towards a tailor-made institutional support of the EU;
- Maximizing the use of EU R&D programmes to serve space economic diplomacy objectives;

- Putting Europe's excellence in space at the service of the EU development policy worldwide;
- Maximizing market access and business internationalization in the space sector through appropriate EU policy instruments.

Towards a tailor-made institutional support of the EU

Based on already existing initiatives, best practices and lessons learnt, the efforts of DG GROW and EEAS services in gathering the forces of the different institutional stakeholders (DG TRADE, DEVCO, CONNECT, EAC...) around export opportunities should continue to be encouraged during the implementation phase of the Space Strategy. This tailor-made EU institutional support should also be aimed at favoring fair competition (restore level playing field).

In this context, additional concrete measures can be envisaged at different scales, such as:

- The **expression of political support at higher political level** (Commissioner(s)). In this perspective, a more structured and systematic involvement of DG GROW would be instrumental to liaise with other DG's and identify potential existing synergies between the EU and industry's targeted customers. This action could typically be part of the formal/ informal agenda of EU summits with third countries and organisations (e.g ASEAN).
- Beyond this high-level political support, the industry would need the EU to exert its leadership and deploy its diplomatic efforts in **providing advocacy for European solutions**, opening doors and providing support with the local decision-making bodies.
- With a **more systematic involvement of local EU delegations and offices around the world**, this support should also include commercial awareness considerations and aim at monitoring/ensuring that a fair treatment is in place with respect to competitors from third space powers.
 - When it comes to promoting European solutions and assets in view of or during bidding processes, we recommend transparent coordination with national diplomatic efforts, considering that a clear EU added value may come at this stage when there is only one European player involved.
- Leading regular **"awareness-raising campaigns"** about the European space programmes and the use of derived space services and data involving representatives from the European space industry within the EU delegations, would be also an excellent way to make potential future prospects familiar with our industry's know-how and expertise.
 - In this respect, the series of trade missions launched by DG GROW in Latin America are very positive initiatives and should be pursued further.
 - Our community also shares the Commission's willingness to conclude partnerships with third countries (those concluded with Latin America countries being examples of good practices) to allow them to capitalize on the European legacy in view of, for instance, creating regional space agencies, for accessing Copernicus data as well as to favor EU investment to develop their ground segments business.
 - In parallel of addressing this "external" aspect, the European space industry recommends also internal awareness-raising actions within the EEAS to make sure the EU delegations worldwide are using space data and services derived from EU programmes whenever they fit their needs.

Maximizing the use of EU R&D programmes to serve space economic diplomacy objectives

- Taking stock that Horizon 2020 has been, in the past, fruitful for opening the door and entering into contact with companies and institutions in “prospect” countries, **EU R&D programmes could also be mobilized to pursue the space economic diplomacy objectives, i.e foster growth and jobs in Europe and become more efficient in promoting our economic interests abroad.**
 - A flexible instrument under H2020-space and its successor allowing industry to initiate early contacts with potential governmental customers could be set-up.
- In the meantime, further support, through EU R&D programmes, to the **development of critical components associated with non-dependence and promote measures to ensure the sustainability of the related supply-chains** are key elements to ensure Europe’s autonomous access to the state of the art in space technologies.

Putting Europe’s excellence in space at the service of the EU development policy worldwide

The European Union is also a prominent actor in terms of development aid, far ahead of the US, Japan or China, when Member States one by one weigh very little, resulting in a significant collective influence. Similarly to other space powers’ strategies (e.g China), reinforcing synergies between the EU space flagship programmes, the expertise of the European space sector and the EU development policy could contribute to maximize the impact of the latter and build long-term relations based on the use of space capacities and services. Accordingly, **DG DEVCO should be fully part and parcel of the reflections around a “space economic diplomacy”**. More specifically DG DEVCO could be encouraged to:

- Support training of third countries professionals in space-related activities.
- Promote requests from potential third beneficiary countries – this necessitating extensive awareness-raising actions – of procurement of European space-related infrastructures (e.g. to have direct access to Copernicus data). This may require stronger and more structured exchange mechanisms between DG GROW and DG DEVCO, allowing a better understanding of mutual needs, strengths and constraints. In the same vein, the EU space flagship programmes could be vehicles to solidify cooperation via, possibly, training sessions in Europe, ground segment, and exchange on operational services developed (EGNOS, Galileo, Copernicus services centers...).

Maximizing market access and business internationalization in the space sector through appropriate EU policy instruments

As an exclusive competence of the EU, trade policy constitutes a leverage to ensure reciprocity in market access conditions and foster accordingly the level playing field for industry. For this purpose, the Commission should integrate the objectives of a “European space economic diplomacy” to:

- Revise its trade agreement elaboration guidelines to make sure that the specificities of the space sector and the European space industry are taken into account when trade agreements impacting the space sector are being negotiated. In the meantime, space is explicitly excluded from the scope of WTO, and this trade policy-related action shall in no way aim at putting space under WTO competences.
- Launch in parallel a wider reflection along with the EIB, on the basis of other space powers' export financing strategy, regarding:
 - The relevance of EU existing instrument contributing to the internationalization of European businesses to the specificities of the space sector and associated markets.
 - The opportunity create an instrument supporting export activities, e.g to provide loans, guarantees and credit insurance in order to reduce investments uncertainty and risks related to business development strategies, and thus encouraging EU businesses to get a foothold in new markets.

Eurospace proposals in a nutshell

| | “Defensive approach” | “Offensive approach” |
|--|--|---|
| <i>Tailor-made institutional support</i> | <ul style="list-style-type: none"> ➤ EU institutional effort in the field of economic diplomacy to be accompanied by structural measures consolidating the European institutional market via a dedicated EU space industrial policy –all this aiming at achieving a level-playing field with other main space-faring nations. ➤ Encourage coordination between institutional stakeholders (DG GROW, TRADE, DEVCO, CONNECT, EAC, EEAS) to help identify export opportunities and potential existing synergies between the EU and industry’s targeted customers. | <ul style="list-style-type: none"> ➤ Deploy diplomatic efforts, in transparent coordination with national diplomatic efforts, to provide advocacy for European solutions, open doors and provide support with the local decision-making bodies ➤ Encourage the expression of political support at higher political level ➤ Lead regular “awareness-raising campaigns” within EU delegations involving representatives from the European space industry |
| <i>Use of EU R&D programmes</i> | <ul style="list-style-type: none"> ➤ Further support, through EU R&D programmes, the development of critical components associated with non-dependence | <ul style="list-style-type: none"> ➤ Set up a flexible instrument under H2020-space allowing industry to initiate early contacts with potential governmental customers |
| <i>Putting Europe’s excellence in space at the service of the EU development policy worldwide</i> | <ul style="list-style-type: none"> ➤ Promote further synergies between DG GROW and DG DEVCO and joint objectives and roadmap for “on-site” collaborations benefiting European economic actors | <ul style="list-style-type: none"> ➤ Support training of third countries professionals in space-related activities (ground segments, services centers...) ➤ Promote requests from potential third beneficiary countries of procurement of European space-related infrastructures |
| <i>Maximizing market access and business internationalization in the space sector through appropriate EU policy instruments</i> | <ul style="list-style-type: none"> ➤ Revise EC guidelines for the elaboration/ negotiation of trade agreements to make sure that (when relevant) specificities of the European space industry are taken into account, with the objective to establish a level playing field | <ul style="list-style-type: none"> ➤ Reflect on the opportunity to set-up an instrument supporting export activities, e.g to provide insurance and loans to domestic companies for their export operations ➤ When relevant, include “space” in trade negotiations to ensure a fair treatment of the European space industry’ on third markets |