ASD-EUROSPACE
The Space group in ASD

Eurospace position paper on aggregation of European institutional launch services

Preamble

Space is a strategic and multifaceted tool in daily-life for European governments, businesses and citizens: indeed, space-based applications support major crisis management, economic growth, innovation, employment and information access, resulting in a significant benefit for people, growth, employment and innovation.

In order to keep the European autonomous access to space, it is thus essential for Europe to maintain its global leadership throughout the entire value chain of the space sector.

With 82 successful Ariane 5 flights in a row and 11 flawless Vega flights out of 11 attempts from the Guiana Space Center, the current ESA-developed European fleet of Launchers is characterized by an unprecedented, worldwide recognized reliability. Arianespace, the European Launch Service Provider, has got more than 40 years of experience and competence in this sector and can count on a highly competitive industrial base with skilled workforce and recognized high level of expertise and excellence.

Nonetheless, the current worldwide scenario is being severely challenged by an aggressive competition and asymmetries in access to the market: in particular, the size of captive markets and pricing policies are different from one space power to the other, resulting in an unbearable competitive disadvantage for the European launcher industry. The aggregation of all European institutional launch services is needed in order to counter such distortions and move towards a level-playing field to the benefit of Europe developed launchers.

The current scenario - Analysis of asymmetries

Arianespace's business model relies on a significant success in the commercial and foreign institutional launch market.

On the contrary, Arianespace's competitors benefit of a strongly protected institutional domestic market: American, Russian, Chinese, Japanese and Indian Launch Service Providers rely on an exclusive access to their respective civil and military governmental market through long-term procurement contracts. For the sake of comparison, the US captive institutional market, civil and military, represents more than $5 Billion per year for domestic launch related procurement activities, while the European institutional market, which too often has been open to competitive bids, represents only around €500 Million per year.

Chart 1, Annex 1, shows how in the period 2012 to 2016 the institutional demand of launch services in space powers has been met by captive market solutions, with the sole exception of Europe. Charts 2 and 3, Annex 1, illustrate respectively the distribution in 2017 of global launch services per space power, and between captive and non-captive market segments.

This asymmetry in volumes of captive launches is further stressed by the pricing policy: generally, institutional launches are offered at significantly higher prices than the commercial ones, the latter being able to benefit by extra revenues generated by "generous" institutional contracts.

For example, Space X can practice an extremely diversified pricing policy for the same class of launch service, e.g.:

- Commercial and foreign institutional offers: 45 to 75M$ with prevailing trend and offers around 55/60M$,
- Institutional offers for US market: 82 to 112M$, with prevailing offers now above 100M$.

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Chart 4, Annex 1, provides an overview of the price levels trends in the non-captive GTO market segment between Arianespace and Space X: the distortion is evident, with Space X selling in its institutional captive market at prices dramatically higher if compared to those applied to the export market. In addition to such major advantages, governments of Arianespace's competitors are also covering costs associated with maintaining launch infrastructures. Always regarding Space X, the US Air Force, NASA and state governments shoulder the bulk of these expenses, whereas Arianespace contributes to the direct funding of Europe's spaceport, through more than 200 M€ external procurements per year (fixed costs), the majority of which is being then dedicated to exploitation, maintenance and adaptation of the strategic launch facilities.

How to improve the current scenario

In 2014, the European industry has taken an unprecedented step to improve its competitiveness through the development of Ariane 6 and Vega C, both co-financed by industry, and for which industry bears the risks linked to exploitation, with the commitment on the public side to ensure five institutional launches per year for Ariane 6 and two for Vega C in order to sustain the corresponding part of the business case. In that respect, the aggregation of the European institutional launch service needs is the first measure to be taken by European institutions in view of being served by Europe developed launchers.

Indeed, by securing guaranteed yearly average volumes of institutional launches at agreed market prices is considered to be a basic, affordable and sustainable countermeasure against the abovementioned asymmetries, enabling industry to plan all the activities at an increased rate, thus moving forward the establishment of a level-playing field.

In particular secured, high-rate and bulk-procured launch services will provide long-term benefits to industry, allowing to increase its competitiveness and therefore its long-term sustainability.

An additional measure could be the institutional co-funding of selected activities related to the exploitation of launch facilities, such as contributing to maintaining the ground infrastructures, as well as mission and launch service needs.

Annex 1

CHART 1 - 2012-16 Institutional demand of launch services

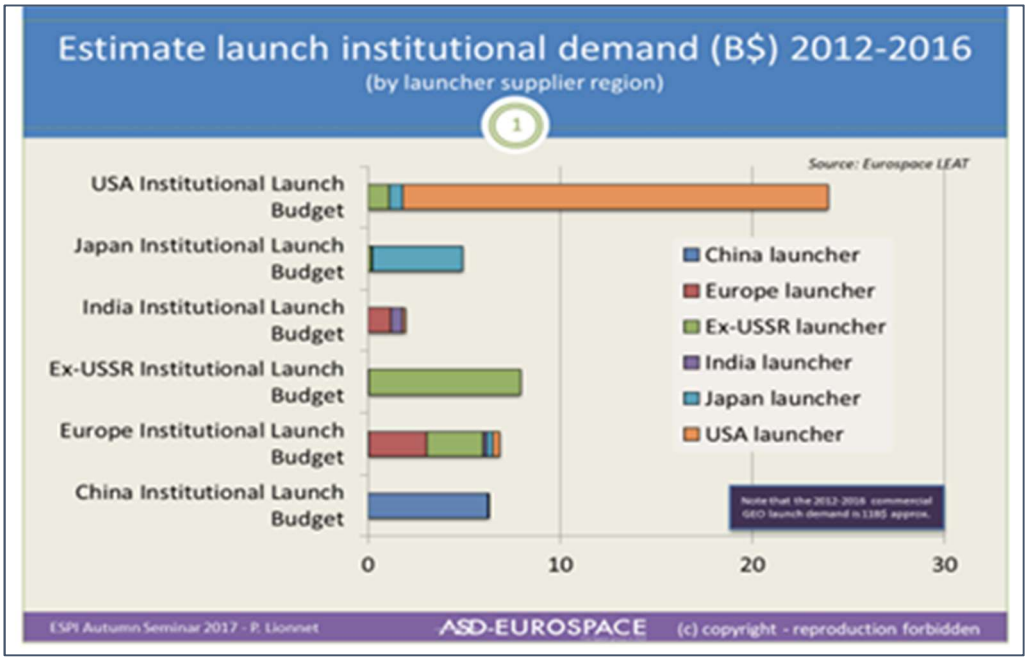

CHART 2 - Global launch services share per space power (2017)

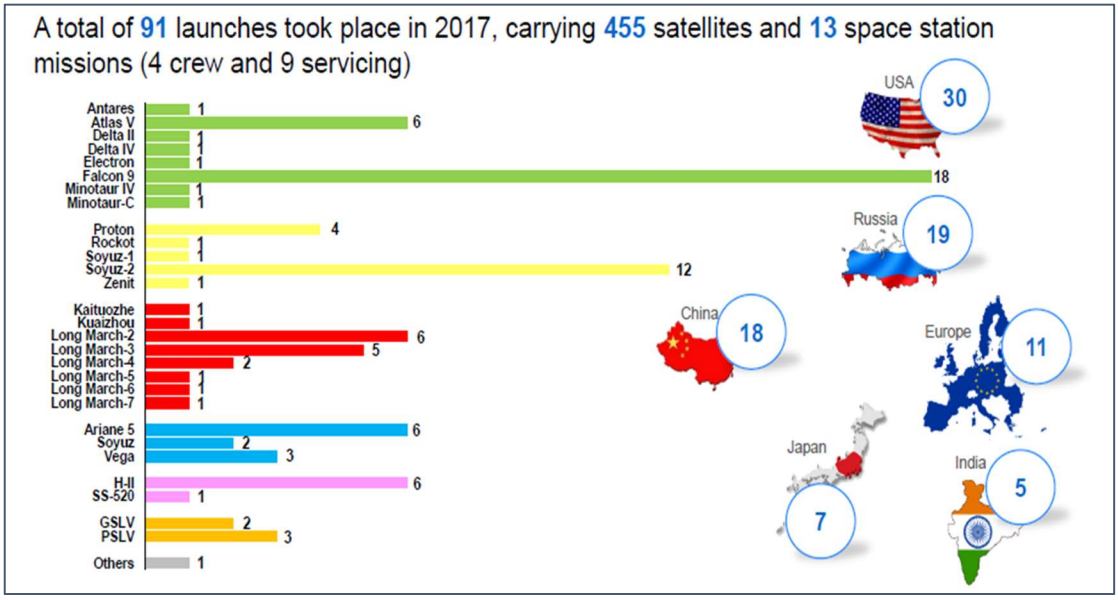

Chart 3 - Captive and commercial launches (2017)

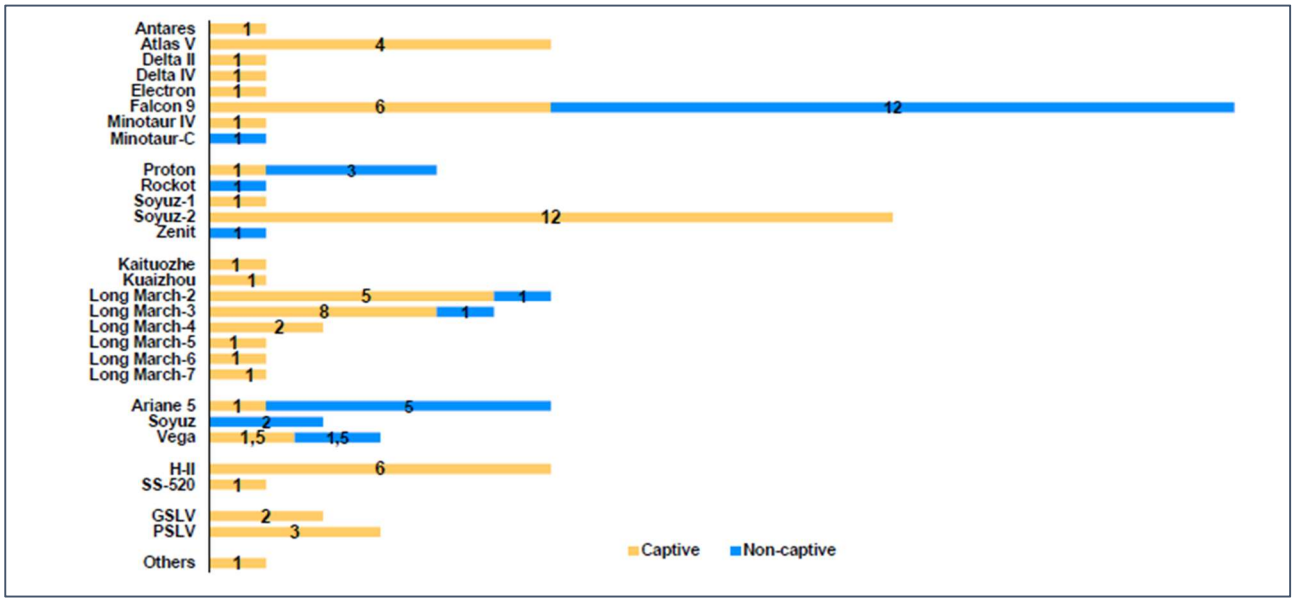

Chart 4 - Overview of the price levels trends in the non-captive GTO market segment between Arianespace and SpaceX: