SPACE DIPLOMACY FOR BUSINESS

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WHY (AND HOW) EUROPEAN ECONOMIC DIPLOMACY MATTERS FOR THE SPACE SECTOR

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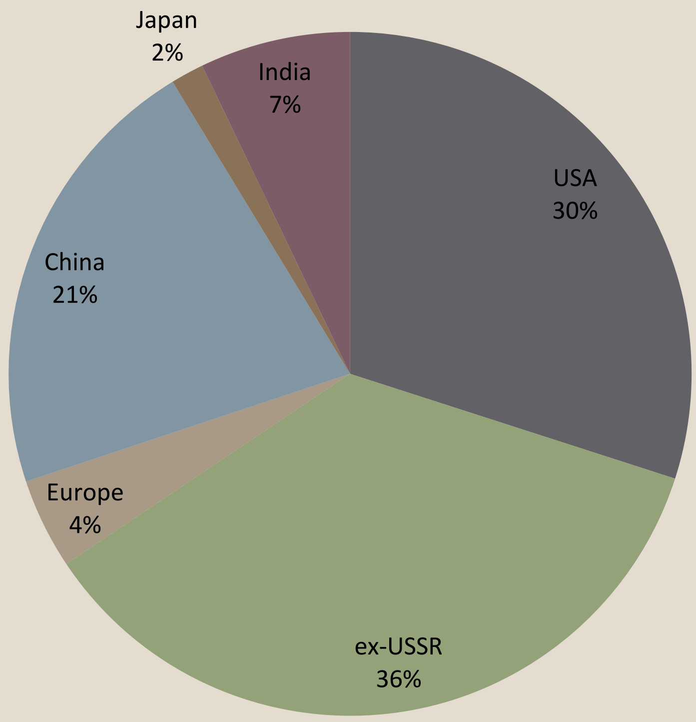
HIGHLIGHTS ON PROMINENT SPACE MARKETS DYNAMICS

A EUROPEAN UNIQUENESS IN SPACE

A RATIONALE FOR SPACE ECONOMIC DIPLOMACY ACTIONS

The European space industry & the world: main features

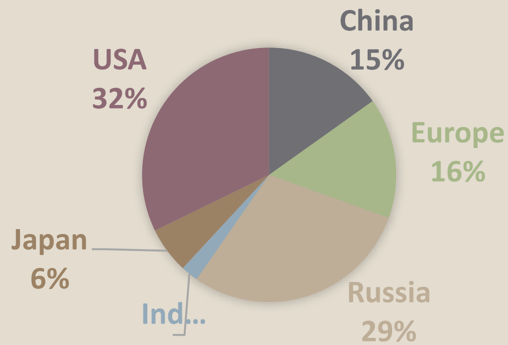
Employment in the space manufacturing sector worldwide (est.)



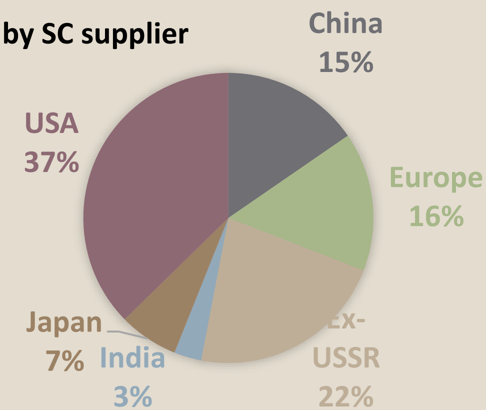
>> Space industry workforce worldwide: about 700.000 people

Space industry output (past 5 years / 2014-2018)

Total mass launched to orbit by launcher supplier

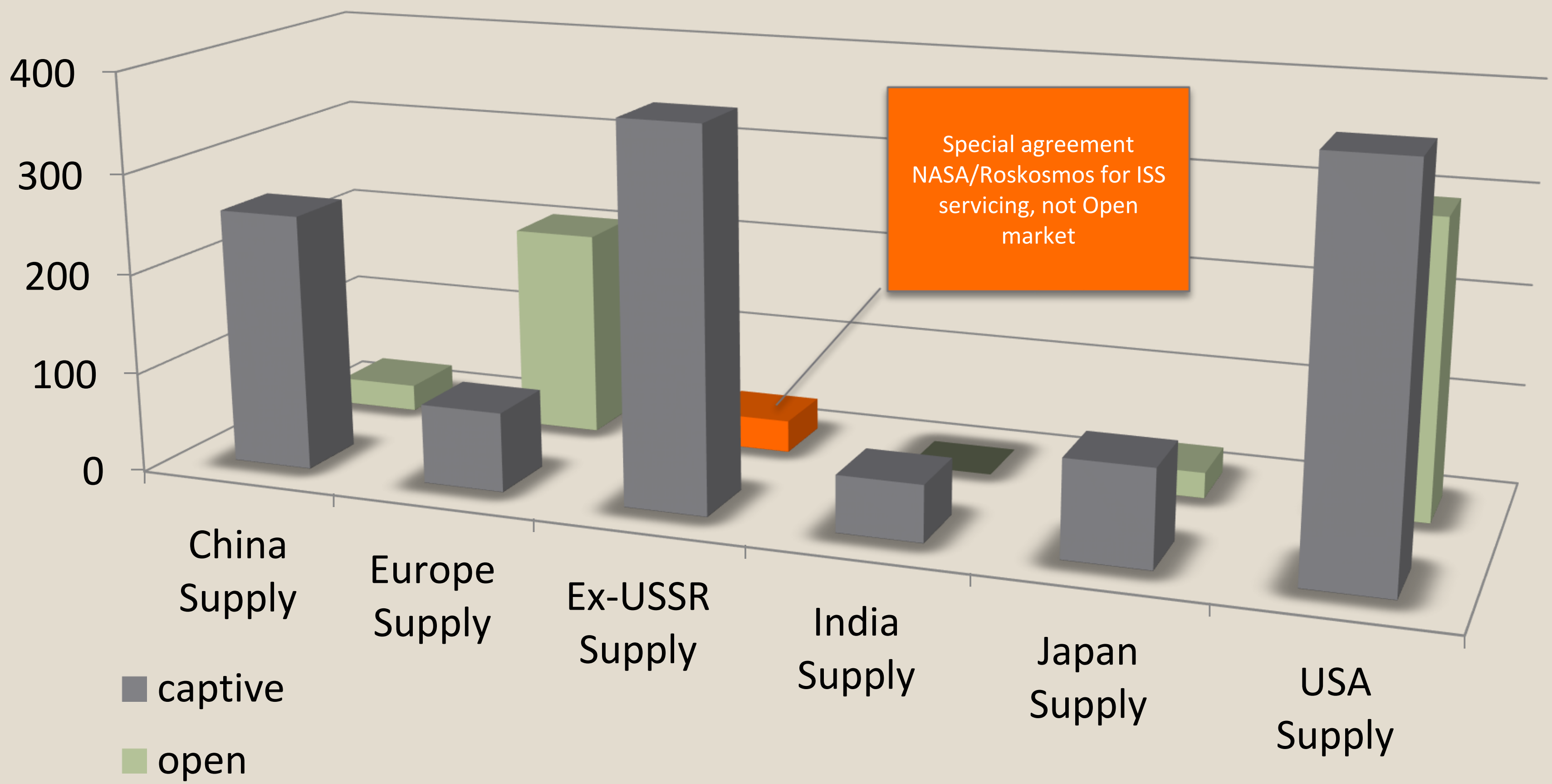


Total Spacecraft Mass by SC supplier

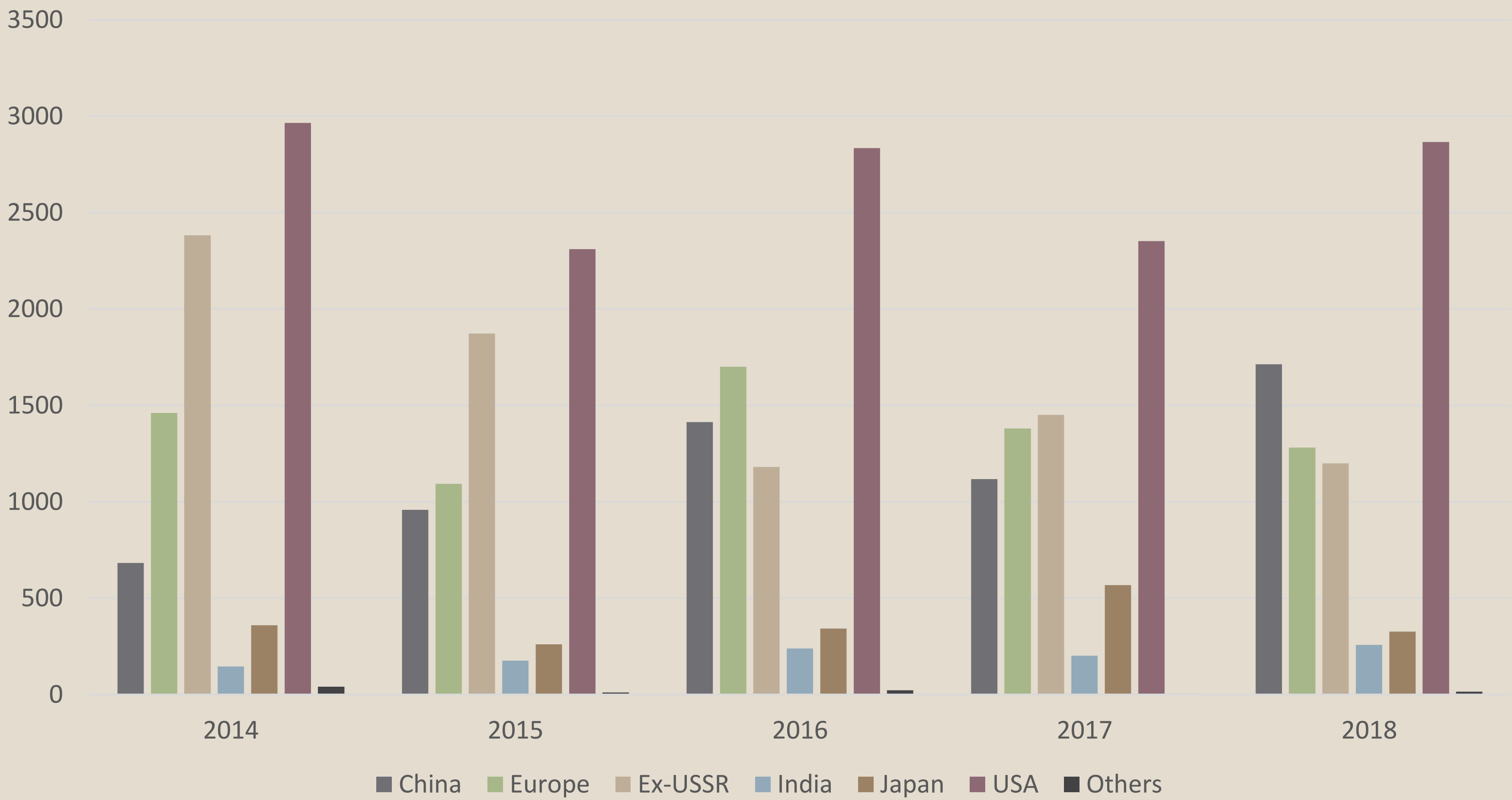


Suppliers exposure to captive/open SC markets (2014-2018)

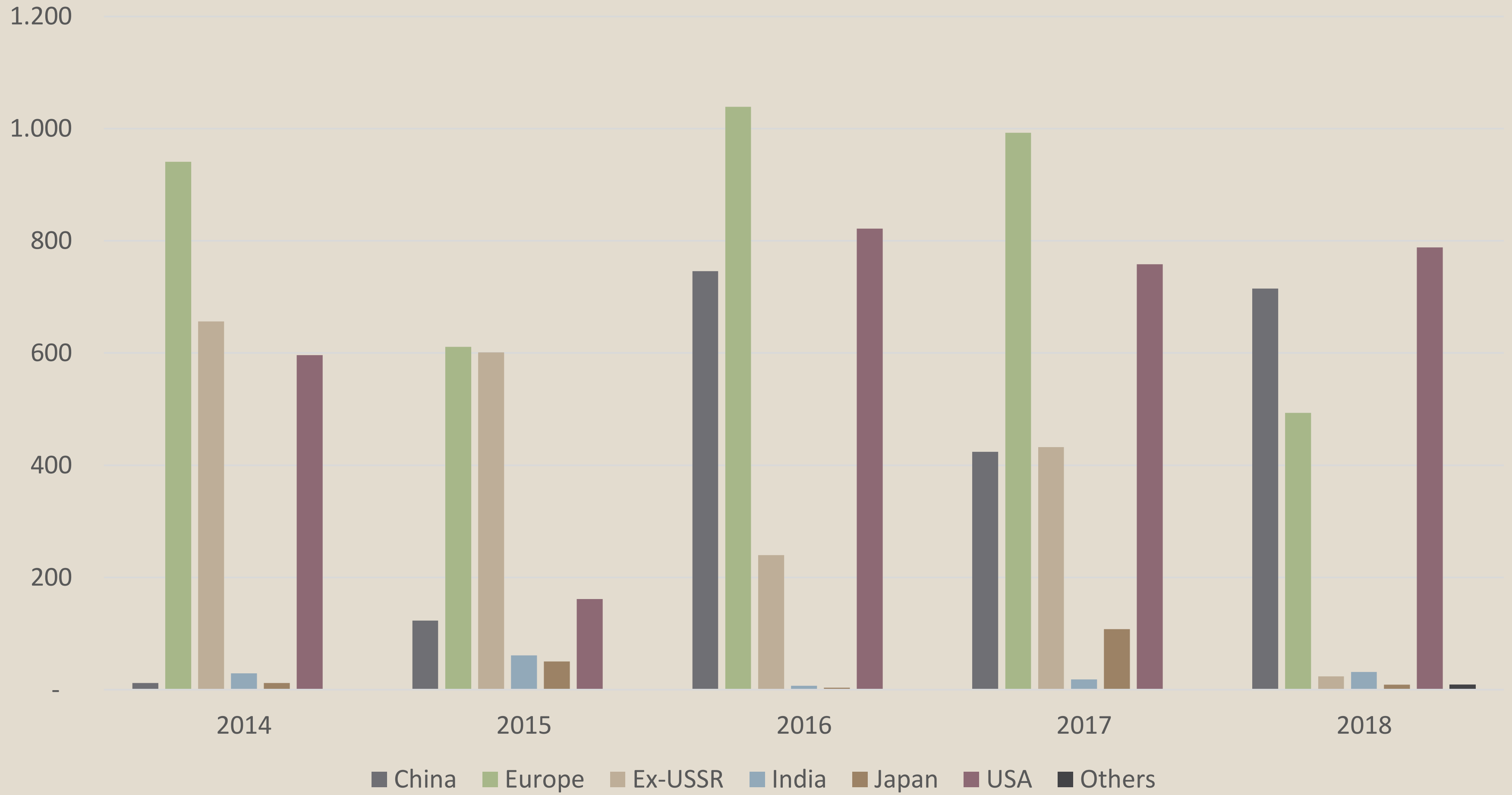
Mass launched (tons) – SC Supplier perspective



Global Launch services market by launch country (M$)



Commercial Launch services market
By launch country (M$)

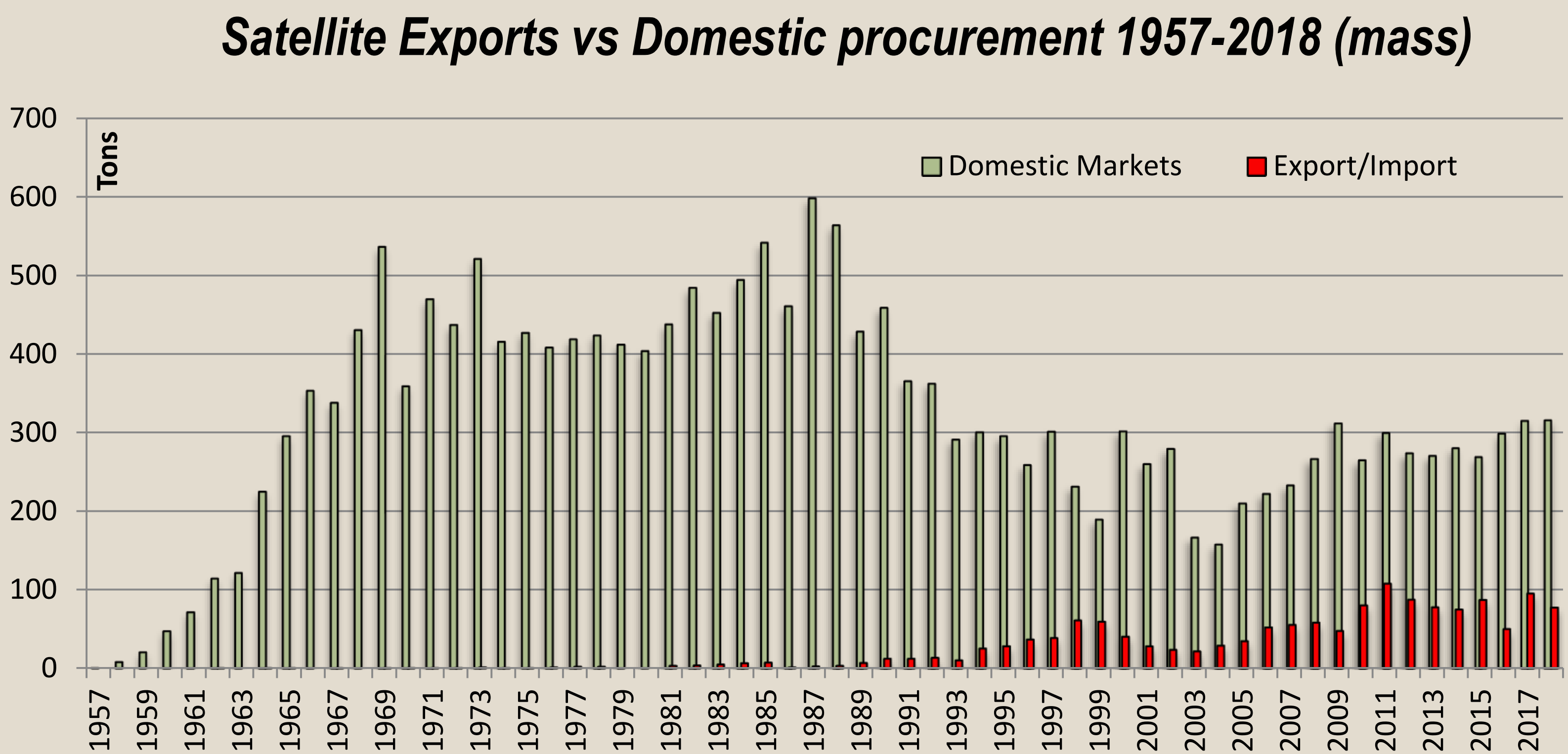


A FEW HINTS ON SATELLITE EXPORTS WORLDWIDE

A RELATIVELY NEW (AND STILL LIMITED) PHENOMENON

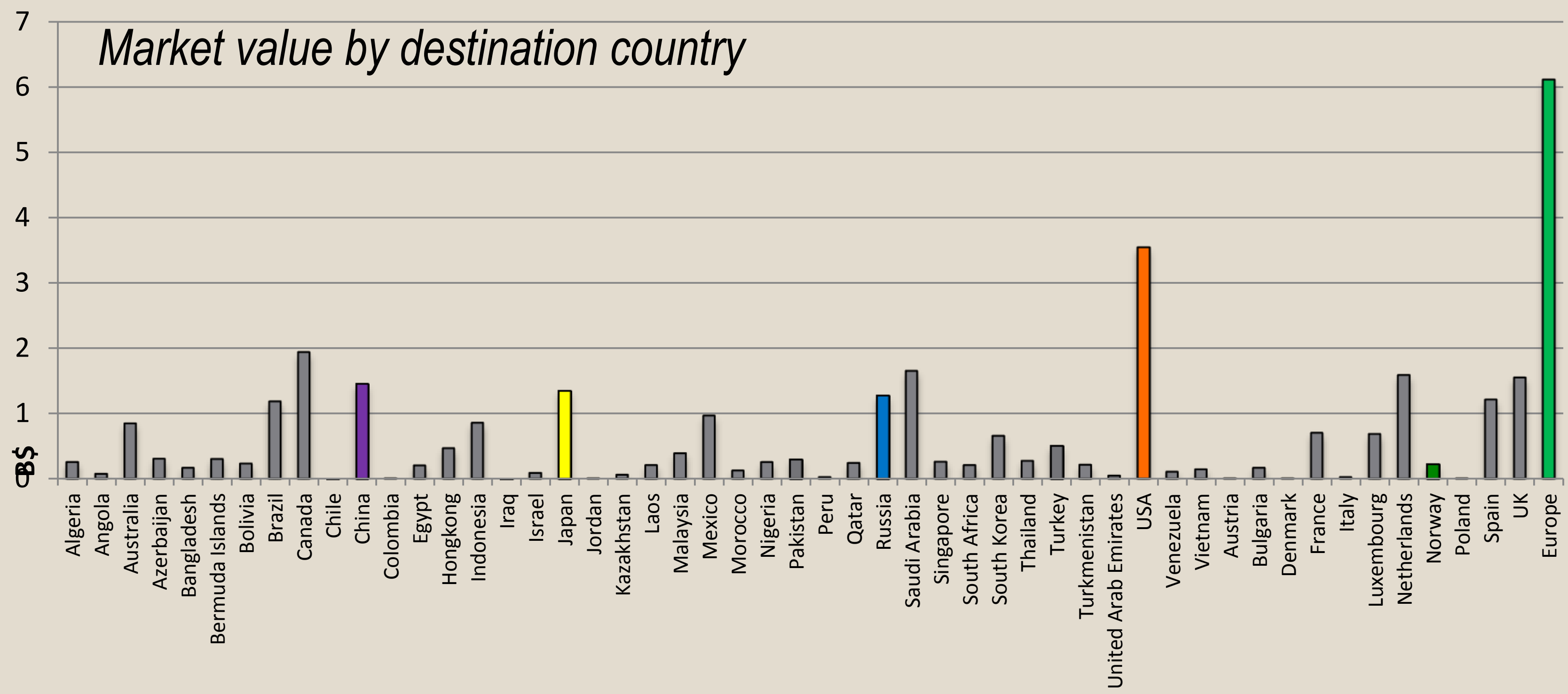
THE EUROPEAN SITUATION: BETWEEN COMPETITIVENESS ON EXPORT MARKET SEGMENTS AND SATELLITE TRADE DEFICIT WITH THE USA…

A brief history of worlwide satellite exports



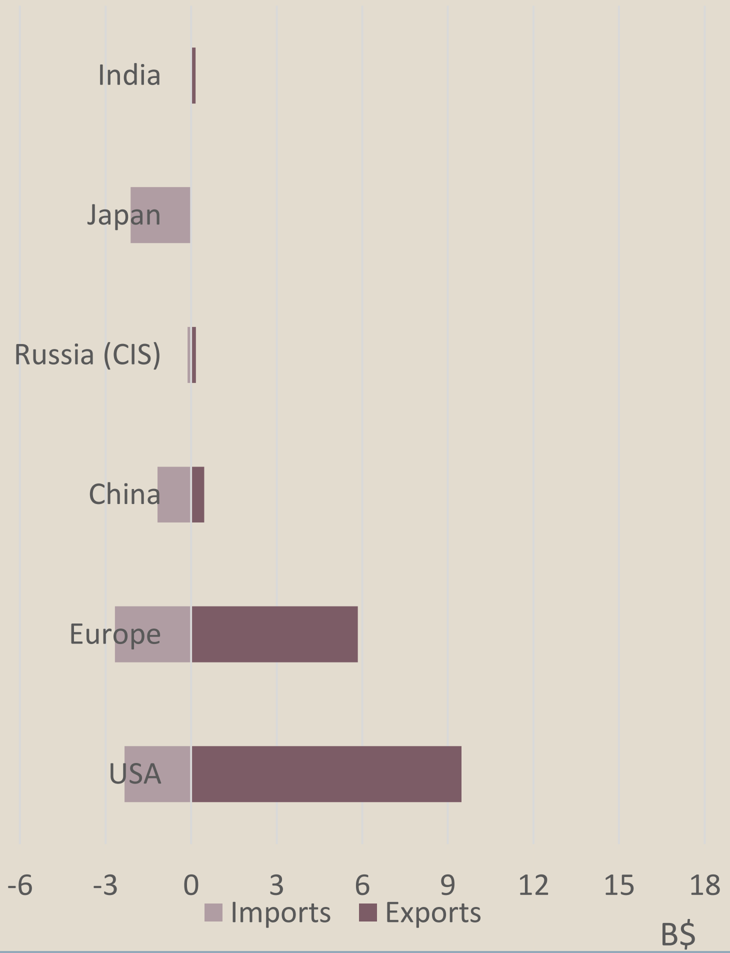
Where are satellites exported to?

Sum of Satellites Values (B$) 2009 - 2018

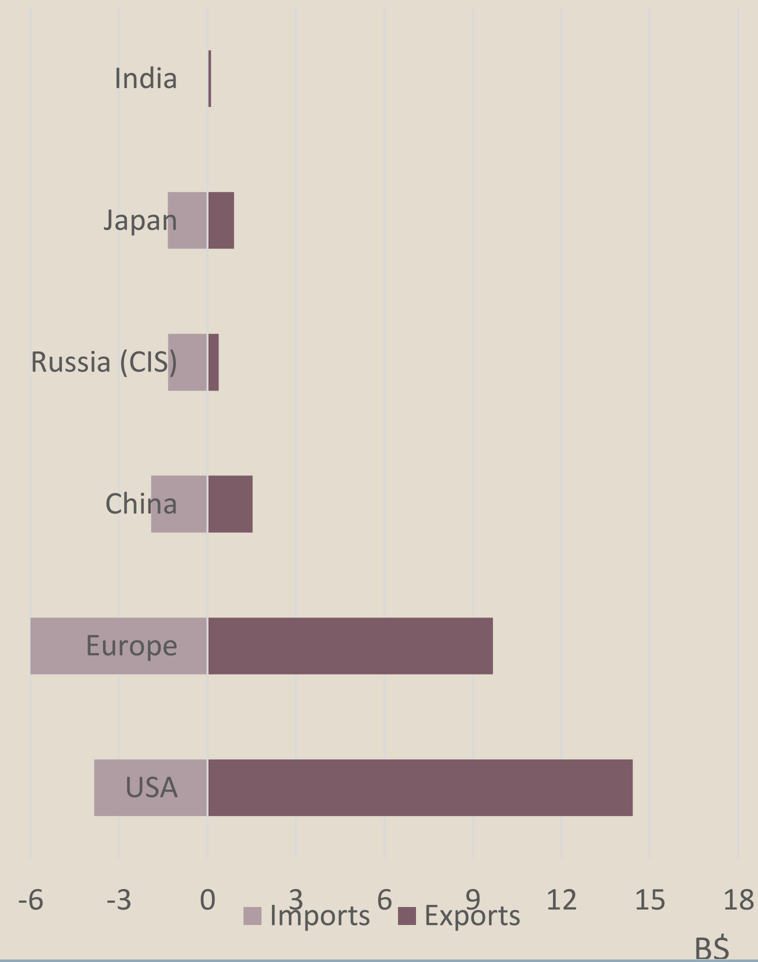


Satellite trade balance: between strenghths & weaknesses

Sum of S/C Values 1999 – 2008 B$

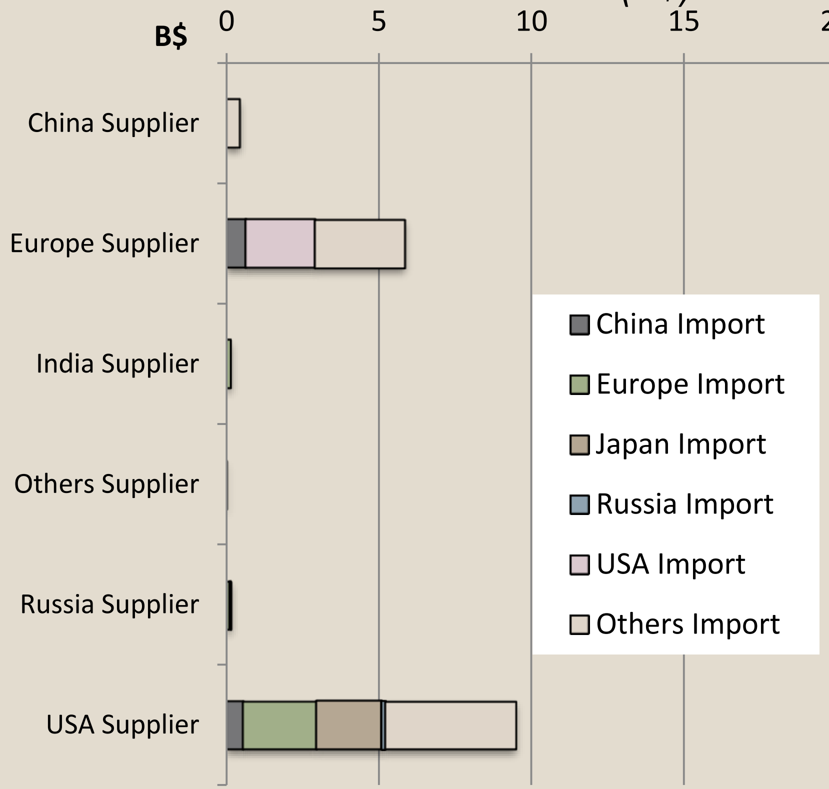


Sum of S/C Values 2009 – 2018 B$

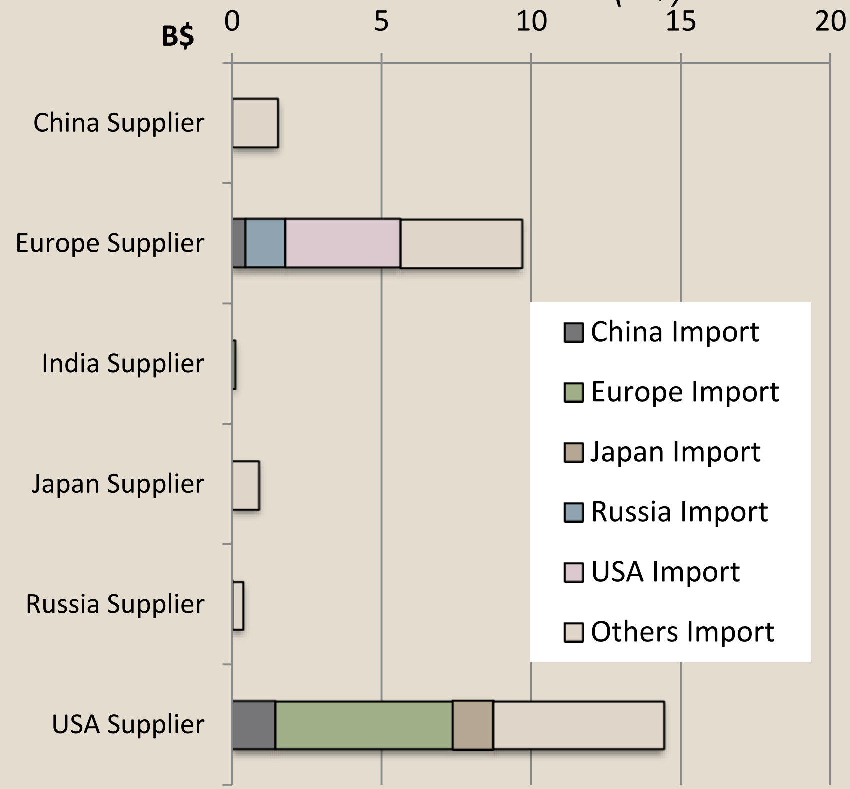


Satellite exports: supply & demand synthesis

Satellite export countries and destinations 1999 – 2008 (B$)



Satellite export countries and destinations 2009 – 2018 (B$)



TOWARDS AN EU SPACE ECONOMIC DIPLOMACY – RECOMMENDATIONS OF THE EUROPEAN SPACE INDUSTRY

BETWEEN A « DEFENSIVE » AND AN « OFFENSIVE » DIMENSION, A TWO-SIDED APPROACH

SPACE ECONOMIC DIPLOMACY, A PILLAR OF A WIDER EU SPACE INDUSTRIAL STRATEGY IN SUPPORT TO INDUSTRY COMPETITIVENESS

NEW EUROPEAN COMMISSION: AN OPPORTUNITY TO BEEF UP SPACE ECONOMIC DIPLOMACY-RELATED ACTIONS

Eurospace proposals in a nutshell*

**Towards a « space economic diplomacy », Eurospace position paper, 2017*

"Defensive approach"	
Tailor-made institutional support	➢ Encourage coordination between institutional stakeholders (DG GROW, TRADE, DEVCO, CONNECT, EEAS) to help identify export opportunities and potential existing synergies between the EU and industry's targeted customers.
Use of EU R&D programmes	➢ Further support, through EU R&D programmes, to the development of critical components associated with non-dependence ➢ Set up a flexible instrument under Horizon Europe-space allowing industry to initiate early contacts with potential governmental customers
Trade policy instruments	➢ 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

Eurospace proposals in a nutshell*

**Towards a « space economic diplomacy », Eurospace position paper, 2017*

"Offensive approach"	
Tailor-made institutional support	➢ 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
EU development policy as a leverage	➢ Promote further synergies between DG GROW and DG DEVCO so that space-based technologies & services support the objectives of DG DEVCO's multiannual indicative programme ➢ 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
Trade policy instruments	➢ Reflect on the opportunity to set-up a European export financing credit-like agency 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

Developing space economic diplomacy: in line with the ambitions of the next European Commission…

European Commission

Ursula von der Leyen
President-elect of the European Commission

Mission letter

Brussels, 10 September 2019

Sylvie Goulard

Commissioner-designate for Internal Market

Defence industry and space

The European defence industry generates a total turnover of €100 billion per year, and space policy is one of our Union's most valuable and strategic assets. More cooperation in defence spending and space will have a positive spillover effect on the European economy.

- You will be responsible for the implementation and oversight of the **European Defence Fund**. In doing so, I want you to encourage collaborative projects with as much cross-border participation by small and medium-sized enterprises as possible.
- I want you to focus on building an **open and competitive European defence equipment market** and enforcing EU procurement rules on defence.
- I want you lead on the implementation of the Action Plan on **Military Mobility**, in close cooperation with the Commissioner for Transport.
- You should foster a **strong and innovative space industry**, maintaining the EU's autonomous, reliable and cost-effective access to space.
- As part of this, you will implement the future Space Programme, covering **Galileo and EGNOS**, the EU's global and regional satellite navigation systems and **Copernicus**, the EU's Earth observation programme.
- You should explore ways in which we can make the most of our assets to deliver on climate objectives, including the use of Copernicus to monitor CO_2 emissions.
- I would like you to focus on improving the crucial **link between space and defence and security**. You should support the Member States in increasing the uptake of the Galileo Public Regulated Service, which can be used by governments for emergency services, peacekeeping operations and crisis management.

As a rule, you will work under the guidance of the Executive Vice-President for a Europe fit for the Digital Age. You will be supported in your work by a new Directorate-General for Defence Industry and Space, as well as the Directorate-General for Communications Networks, Content and Technology and the Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs.

Economic diplomacy, to be part and parcel of a wider EU space industrial policy?

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STRENGTHENING THE EUROPEAN SPACE SECTOR THROUGH AN AMBITIOUS INDUSTRIAL POLICY

High-level guidelines from the European space industry

Background and European uniqueness in space

The space sector is one of the few industrial sectors where **Europe remains extremely competitive** with respect to the traditional (USA, Russia) and rapidly emerging powers (China): with 4% of the global industrial workforce (45,000 jobs in Europe), the European space industry has produced and launched about 20% of the space infrastructures in the last five years. This achievement is the **result of several decades of European cooperation** - through the European Space Agency and thanks to the more recent role played by the European Union.

The situation of Europe in space reflects nonetheless a certain number of specificities that sets us apart from the other large space powers: the **institutional demand for space infrastructure and services remains limited on our continent**, whereas it constitutes, in all the other space powers, a very important protected (captive) market, which is fuelling domestic industrial competitiveness. **European institutional investment is thus six to seven times smaller than in the United States**; The Russian space budget has meanwhile increased by an average of 10% per year over a decade, while the Chinese budget efforts in this sector are considerable, with significant achievements.

As a consequence of this unique situation and unlike its international competitors, the European space industry highly relies on the commercial business and export sales – that are now experiencing a severe downturn and face uncertainties in the medium term: between 2014 and 2018, 72% (estimation) of the spacecraft mass produced by the European space industry was devoted to commercial activities, against 28% to local institutional markets (which represented about 65% of the estimated sales in value). The same ratio for spacecraft mass in the US industry was an estimate of 43 % (against 57% to the domestic market). This situation of extreme exposure of our industry to the competition on open markets makes the institutional support to promote the competitiveness of the sector, through dedicated measures of industrial policy, even more crucial, in line with article 189 of the Lisbon Treaty.

1 *Supporting the expansion of industry's positions worldwide*

Considering that the European space industry strongly relies on the commercial business and export sales, a stronger support from the EU institutions to actively promote European space industry offers on the open markets should be a priority – in complement and good coordination with national efforts - with the objective to **facilitate access to new markets**– by the active promotion of European capabilities.

2 *Investing in research & innovation: a must to preserve long-term competitiveness*

Furthermore, **today's investment in innovation will be the driver of tomorrow's competitiveness** for the European space sector: maintaining Europe leadership in space implies indeed the availability of a first-rank domestic industry, able to design, deliver and exploit state-of-the-art space systems, required by public and private customers worldwide. EU funding in R&D&I is needed to boost European competitiveness and innovation, and contribute to job creation and growth. From this standpoint, the implementation of Horizon Europe, via relevant budgets, adequate tools and appropriate priority areas, shall ensure that Europe consolidates its leading position.

3 *Ensuring a key role for space-based technologies in support to the EU's rising ambitions in security & defence*

Even more in the field of "military space" than on other space markets, **captive government markets create externalities on space infrastructure market that distort the terms of the competition, at the detriment of the European space industry** – since there are f.i limited space military programmes in Europe or no ambition for Europe-manned systems sustaining industrial activities on a long-run.

In such a context where Europe is lagging behind, **new EU policy actions could have a key role to play to foster the competitiveness and innovativeness of the EU's space technological and industrial base** – and contribute to bridge the existing gap with the other space powers.

For this purpose, the **implementation of the new regulation creating the European Defence Fund** can therefore offer a new opportunity to boost institutional investment in strategic and military applications of space – the central pillar of American, Russian and Chinese space policies.

In complement with this new instrument and pursuant to the TFEU provisions, a priority for the next European Commission should be to decline operationally, in due cooperation with the Member States, the ambitions expressed in the pillar of the Space strategy calling to *"reinforce Europe's autonomy in accessing and using space in a secure and safe environment"*. This would require to address the missing capabilities Europe needs to be equipped with to ensure its awareness, autonomy and freedom of action (i.e **security of EU-owned infrastructures in space and security from space).**

4 *The European space sector needs a regulatory framework driven by strategic considerations and worldwide practices*

Since space markets are still characterized by a predominance of public demand and a captive dimension, the development of a **procurement strategy that takes into account the specificities of the space sector** should be a priority, aiming at:

- Preserve and enhance the European capabilities to design, develop, launch, operate and operate space systems (**European autonomy imperative**)
- Strengthen the competitiveness, efficiency and reliability of the European space supply chain
- Reduce the technological dependence of the European space sector and ensure security of supply for critical technologies (**European sovereignty imperative**)

Based on the current policies in all the other space powers and in order to **ensure predictability for manufacturers through long-term commitments, stable regulatory framework and sustainable budgets**, a reflection on the **modalities of a "European preference"** should thus be initiated, in order to meet the European institutional needs for space technologies and services.

In the meantime, it is essential that any attempts to open European institutional markets to non-European actors be strictly conditioned not only to mirror reciprocity practices, **but also to ensure that reciprocity is conditioned to a level playing field with non-European competitors**. In the same vein, the **adaptation of the EU trade policy** to defend the European strategic autonomy and promote a "level playing field" is also a major challenge for the European manufacturing space industry.

5 *Making EU public policies reap the full benefit of space-based technologies and services*

Lastly, **unlocking the cross-sectoral added-value of space based technologies and services** at the benefit of other Union's policies should be actively promoted, with the three-fold objective to maximize the impact of investments pursued in space infrastructures, foster therefore industrial activities and optimize efficiency of public decision-making: **all this contributing ultimately to provide wider and more tangible socio economic benefits to the European citizens.** In this context, new schemes should be jointly reflected to implement a demand-side policy, where the European Commission would evolve from an exclusive role of "space technology prescriber" towards a stance of sectorial consumer or user of space-based data.