

## THE STATE OF THE EUROPEAN SPACE INDUSTRY IN 2018

### OVERVIEW – THE EUROPEAN SPACE MANUFACTURING INDUSTRY IN 2018

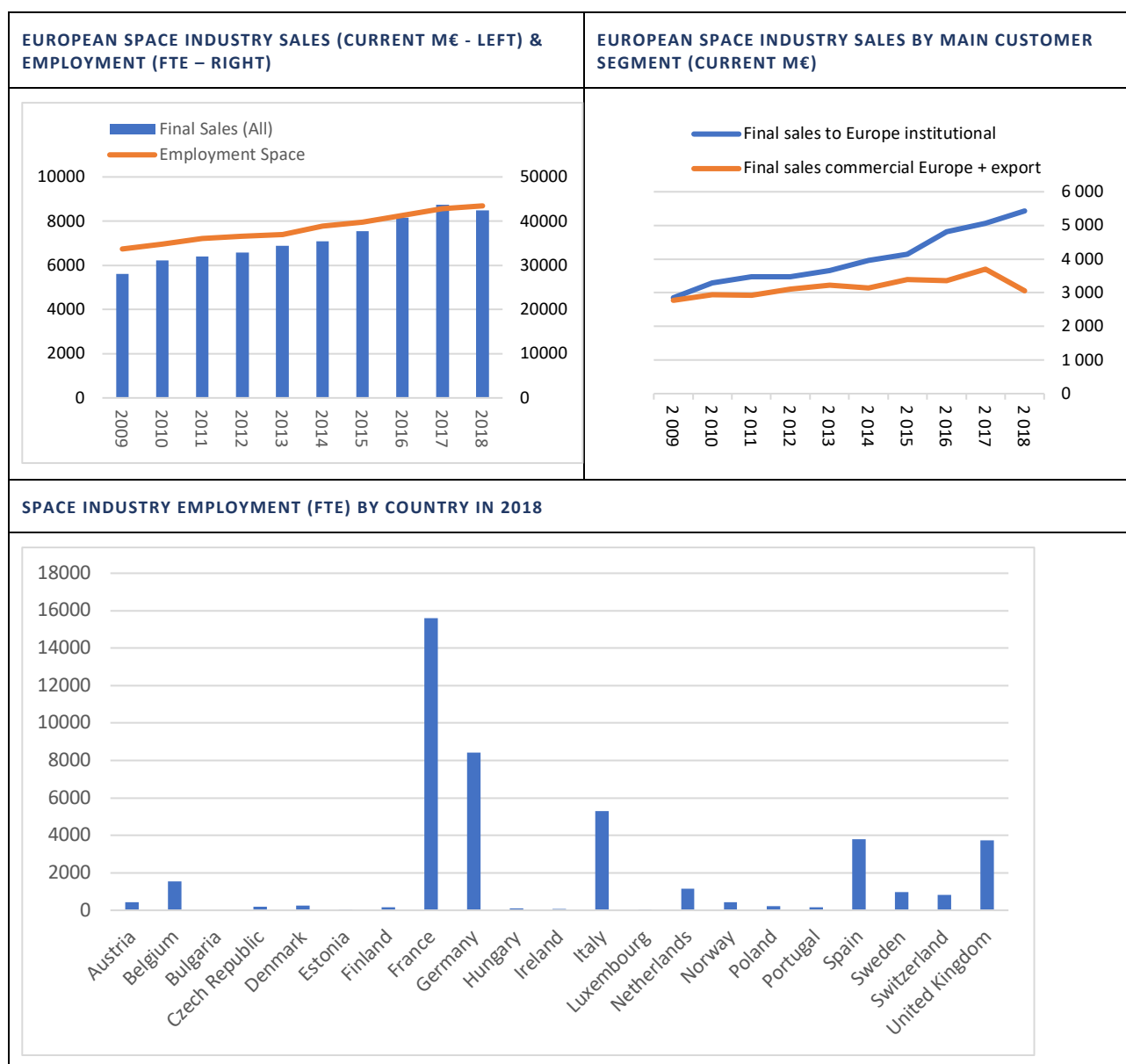
The space manufacturing industry, a strategic sector embedded in the larger aerospace and defence industry, designs, develops and builds space systems (launchers, spacecraft and the related professional ground segment<sup>1</sup>) for public and private customers in Europe and across the Globe.

**The space industry is at the higher end of an important value-added stream of commercial and public/strategic services.** Space value-added services and their ground segment users (e.g. Copernicus, Galileo, Broadcast and broadband services, geo-information...) generate socio economic benefits and support the development of Europe.

### KEY FACTS

**Final sales<sup>2</sup> worth 8.48 B€ (-3%) - Direct industry employment 43 454FTE (+1,45%).** Women represent an average 22 % of industry employment, with a qualification structure similar to men.

After an unprecedented long series of growing sales, the European space sector is facing a slowdown in 2018, as a direct consequence of two main trends: the European commercial and exports markets have experienced a decrease, which has been partially offset by growth in the institutional European market, the core market of the European space industry. Notably, employment in the sector is not (yet) following the same trend as for sales. Indeed, it is still growing, even if not as fast as in the previous years.



<sup>1</sup> According to standard definitions the space manufacturing industry does not include service activities such as that of satellite operators (Eutelsat, Inmarsat...) or launch service providers (Arianespace). These entities are customers to the manufacturing industry.

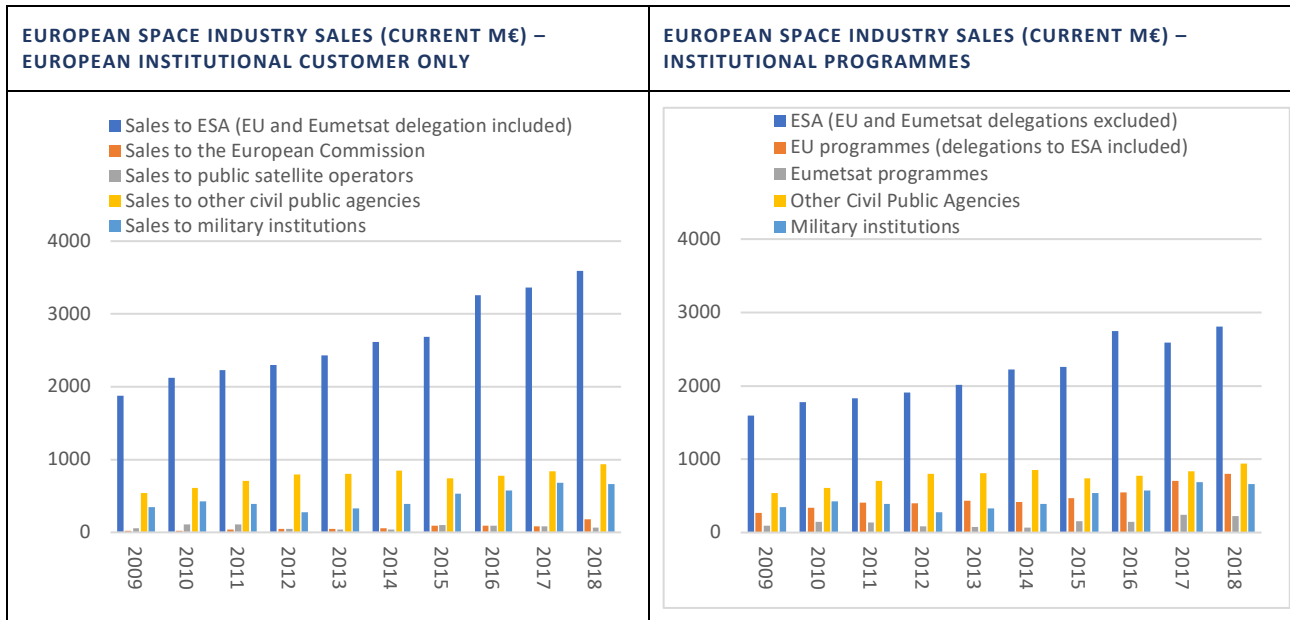
<sup>2</sup> Eurospace measures industry sales to final customers invoiced in the year. This measure ensures that intermediate sales are eliminated to avoid double counting.

## EUROPEAN INSTITUTIONAL MARKETS : A FOUNDATION FOR THE SPACE INDUSTRY

The European institutional market is still growing in 2018 thanks to a demand coming from ESA, the European Commission and the military institutions.

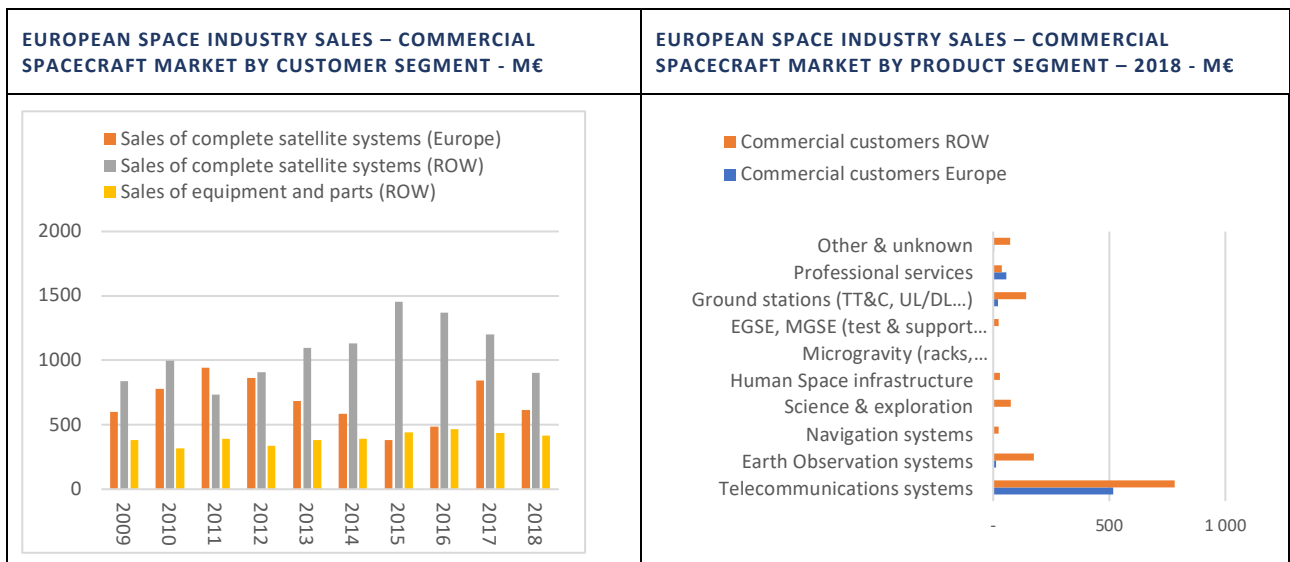
Indeed, sales to ESA worth 3 592 M€ with a 7% increase between 2017 and 2018. Sales to the European Commission in 2018 are growing fast with an increase of 117 % between 2017 and 2018 to reach 177 M€. Finally, military institutions sales are participating to a large amount to the European institutional market demand.

When focusing on institutional programmes different trends can be highlighted. Firstly, if the European Union and Eumetsat programmes are excluded from the sales to ESA, these are quite stable since 2016 and reach 2812 M€ in 2018. Furthermore, European Union programmes contribution to sales is increasing regularly since 2009. More precisely, between 2009 and 2018, European Union programmes related sales increased by 179% reaching 797 M€ in 2018. Finally, military programmes are almost continuously in growth since 2009. Indeed, between 2009 and 2018 they increased by 117% reaching 661 M€ in 2018.



## COMMERCIAL SPACECRAFT MARKETS: A WORRYING TREND

In 2018, the European commercial and export markets are both facing a slowdown. However, the European commercial market shows a better resilience than the export one.



Sales of complete satellite systems (ground segment included) in Europe are experiencing a 27% decrease in 2018 with 613 M€ of sales. However, the segment is still strong when comparing its value through the decade. Furthermore, satellite demand in Europe exhibits a slight cycle, thus the decrease can be put into perspective. However, the most worrying trend in 2018 concerns the export market where every segment is facing a fall. As an example, sales of complete satellite systems decreased by 25% in 2018 with 901 M€ of sales. Sales of equipment and parts also decreased by 4% in 2018 with 417 M€ of sales although this latter segment shows good resilience through the decade.

Focusing on the commercial market sales by system, it is worth noting that telecommunications systems are the most impacted segment. In 2018, telecommunications systems sales worth 1303 M€ with a 26% decrease between 2017 and 2018. Earth observation sales also experience a decrease of sales with 221 M€ in 2018 with a 21% decrease between 2017 and 2018.

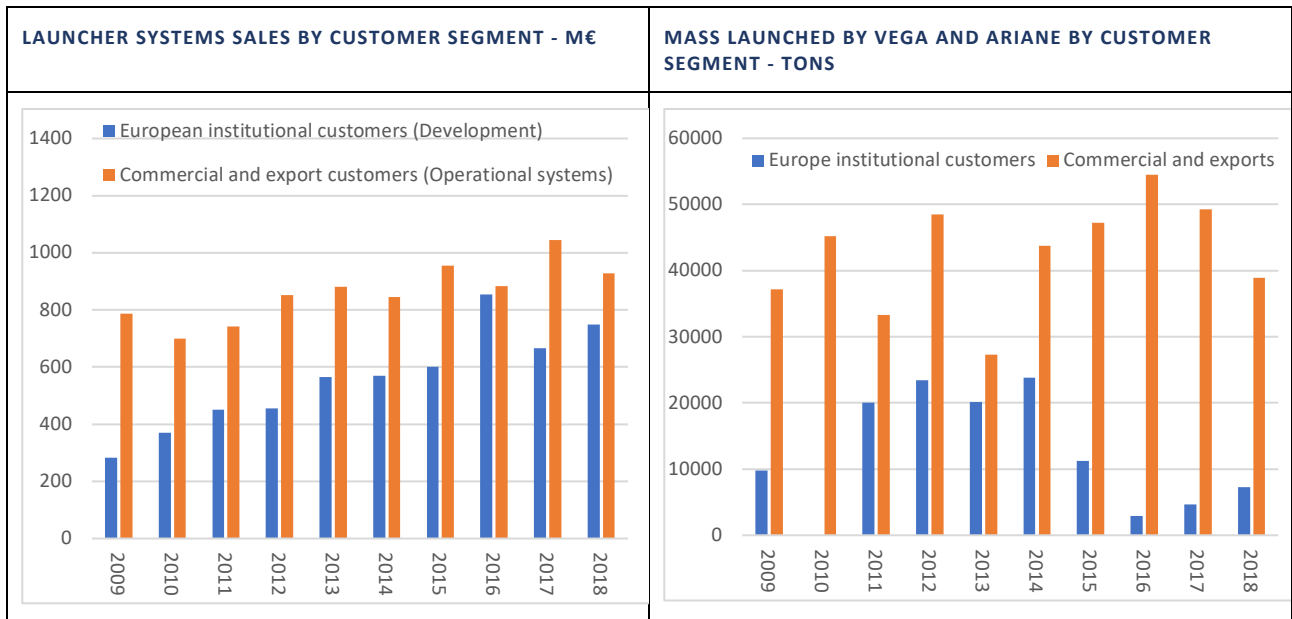
**LAUNCHER SEGMENT MARKET – A SIGNIFICANT EXPOSURE TO COMMERCIAL CUSTOMERS**

The European industry produces two launchers lines: Vega and Ariane. Both are launched at CSG by Arianespace (which also operates for the Russian Soyuz launcher). The industrial sector develops and manufactures the launcher systems, produced in batches and delivered for integration and operations in Kourou. The launcher segment revenues are very strongly related to Arianespace performance on the launch services market.

The launcher systems market is almost exclusively European. This market is shared between institutional customers (mainly ESA) who fund the development and the system consolidation activities, and commercial customers (mainly Arianespace) who procure operational launcher systems by batches. Operational systems sales have decreased by 11% in 2018, but the activity still remains sizeable. In 2018 launcher systems sales represent 1677 M€ which is a 2% decrease from 2017.

The structure of revenues from launch services generated by Arianespace operations of Vega and Ariane 5 (Soyuz excluded) is very different, with most of sales being associated to commercial and export customers. In 2018, Arianespace launched about 5 times more satellites (in tons) for commercial and exports customers than institutional customers, and this gap is quite stable in recent years.

The European launch system economy is strongly dependent from the commercial launch market. The uncertainties and reduction of demand for large GEO satellites will also affect the European launcher ecosystem.



*This analysis has been performed by Eurospace Space Industry Markets Working Group that monitors European space market situations and provides support to the annual Eurospace facts & figures survey.*