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Analysis of today
Assessment of tomorrow

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Europe's space competitiveness falls into a black hole

Europe's once thriving space industry is being buffeted by international competition, particularly from Elon Musk with his SpaceX and Starlink ventures. The sector exemplifies the bloc's competitiveness challenges, as set out in last month's Draghi report.

While the head of the European Space Agency, ESA, earlier this month called on Europe to "raise its ambition" in space, for many European governments and companies, the final frontier seems increasingly out of reach.

The Draghi report contains this somewhat understated warning: "The EU has developed a world-class space sector, despite much lower levels of funding, but is now starting to lose ground."

Yet, it also gives an idea of the scale of the challenge, noting European public funding for space rapidly falling behind that of its rivals: "In 2023, public expenditure in Europe on space stood at USD 15 billion, compared with USD 73 billion in the US. China is expected to overtake Europe in the next few years, reaching an expenditure of USD 20 billion by 2030."

The European sector is plagued by threatened cutbacks, outmoded ways of working and technologies, inefficient interoperability and investment and relentless international competition, not only from the US but also from countries such as China, India and Japan.

Decline of Europe's space sector

No wonder two of its main players, Airbus and Thales, are laying off thousands of workers in their space-related branches, even while they conduct talks to merge these businesses.

While some welcome the latter as a step towards the economies of scale that the Draghi reports call for, others warn about a combined smaller and lesser company with serious knock-on effects down the supply chain.

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The most drastic decline of Europe's space sector can be seen in the Arianespace launch business. It was dominant until about a decade ago and even held 50 percent of the commercial global space launch market twenty years ago. Today, it is a very distant competitor to SpaceX, and more expensive at that.

Eutelsat, the world's third largest satellite operator by revenue and headquartered in Paris, earlier this week (20 October), sent a payload of Starlink competitor OneWeb satellites into orbit… aboard an American SpaceX Falcon 9 rocket. It was the first Eutelsat launch since it merged with UK-based OneWeb more than a year ago.

The choice to use SpaceX, rather than the European-owned Arianespace rockets was in this case informed by geopolitical circumstances: Arianespace had retired its Ariane 5 rocket and placed the order with Russia's Soyuz. When Russia attacked Ukraine in 2022, Eutelsat had to look for an alternative.

Yet, this situation would not have arisen, had the Arianespace successor rocket, Ariane 6, been completed in time, rather than four years behind schedule, and, of course, billions of euros over budget.

Too little, too late

Some of that might not have mattered either, or have been just a temporary setback, had Ariane 6 been a gamechanger when it was finally launched for the first time in July this year.

Yet, at US$81 million, it is still some US$ 14 million more expensive per launch than the Falcon 9. It is not partially reusable, while Falcon 9 reuses the boosters, and thus is not

likely to offer as frequent launches as the SpaceX rocket. All in all, many see it as "too little, too late".

Arianespace's decision not to go for reusable components, while SpaceX was known to be developing those, is now being rationalised by pointing to the much lower launch frequency of the Ariane 6. Half a dozen launches are scheduled until the end of 2025, compared to the more than 90 launches of the Falcon 9 in 2024.

But this seems disingenuous, as Ariane 6 might have had more launches, had it been more competitive. The Ariane 6 schedule is only expected to become busier over the course of several years, but is unlikely to be able to compete with the Falcon 9 or its successor.

The knock-on effect is becoming ever clearer, to the great frustration of European space administrators and advocates. Eutelsat has now signed a multi-launch deal with Japan's Mitsubishi because it fears Arianespace might not be able to meet its needs down the line. "Are we going to fit into their launch manifest or not?", Eutelsat's CEO Eva Berneke told Spacenews last month.

Mario Draghi has proposed something like 'buy European' policy, at least for the bloc's own agencies

Even worse, as it concerns a pan-European agency, EUMETSAT has switched the launch of Europe's next weather satellite from Arianespace to SpaceX, evoking furious reactions. The head of the French space agency called it a "brutal change" in a social media post.

Particularly the latter has prompted calls for a 'buy European' policy, at least for the bloc's own agencies. Draghi has also proposed something like this, rather euphemistically calling for "the introduction of targeted European preference rules."

The European space sector's woes are by no means limited to the launch business. Plans to create a network of secure satellites for military, government and business use, IRIS2, are up in the air, particularly due to doubts from cash-strapped Germany.

IRIS2 is meant to rival, and reduce possible dependence on, Musk's Starlink network and was meant to receive final approval this month. But the loss of one of its main champions in Brussels, former EU-commissioner Thierry Breton, now makes many doubt whether it will see completion. Particularly as the delays also endanger the availability of bandwidth for the satellites.

Pan-European integration

The space sector, as can be seen from the IRIS2 programme, is intricately linked to security and defence. That is why the Ariane 6 is often justified in European independent space access terms rather than, as used to be the case, on commercial grounds.

Yet, space has so many commercial applications and is so ever-present in our everyday lives, think of GPS, telecommunications, etc., that a Europe that wants to be competitive cannot ignore it.

> Internationally, Europe still has plenty to offer, the Ariane 6 rocket, for example

It might not be all gloom and doom for the sector yet. Internationally, Europe still has plenty to offer, the Ariane 6 rocket, for example, will launch satellites for Amazon's Kuiper project, a Starlink rival.

And for the first time, China is cooperating comprehensively with ESA on a satellite that will be launched on an Arianespace Vega C rocket next year.

Plans to revitalise the sector by encouraging more private initiatives, for example in the launch industry, and improving pan-European integration and cooperation, are welcome, but as the Draghi report outlines, what the industry needs most, is much more public expenditure.