FROM PAD TO ORBIT: THE NEED TO SUSTAIN INDEPENDENT EUROPEAN ACCESS TO SPACE

MAKING THE EUROPEAN SPACE LAUNCH INDUSTRY THE DRIVER OF EUROPEAN PRIORITIES IN SPACE

Table of contents

Executive Summary

Autonomous access to space is a strategic prerequisite for Europe's security, resilience, and global influence. Recent disruptions, and most notably the lost opportunities with Soyuz following the war in Ukraine and delays affecting Ariane 6 and Vega-C, have exposed the fragility of Europe's access-to-space capabilities. While recent successes have restored operational capacity, structural challenges continue to undermine long-term sustainability.

Europe faces a systemic competitive disadvantage in the global launch market. Unlike its competitors, it lacks a strong, captive institutional market and relies heavily on commercial demand. With only around 10% of the global launch market accessible to European providers, and significantly lower institutional launch volumes compared to the United States and China, the European space industry struggles to achieve the scale, cadence, and cost-efficiency required to remain competitive.

To address this imbalance, a fundamental shift in the way European access to space policy is designed is required. The proposed European Competitiveness Fund (ECF) and the inclusion of an access to space pillar represents a critical opportunity for the European Union to play a stronger role in securing autonomous access to space.

In this context, key recommendations from the European space industry include:

- Adopting an end-to-end procurement model that aligns satellite and launch acquisition, improving efficiency, reducing delays, and increasing predictability for industry;
- Aggregating European institutional demand under a centralised EU framework, enabling economies of scale, stronger bargaining power, and long-term visibility through multiannual launch planning;
- Implementing a "Buy European" principle for institutional missions to guarantee demand for domestic launch providers and safeguard critical industrial capabilities;
- Ensuring long-term investment and infrastructure sustainability through guaranteed launcher demand aligned with industrial business plans over a 5-7-year horizon, recognising that autonomous access to space requires public support and may entail higher costs as a strategic trade-off;
- Strengthening innovation and industrial competitiveness through coordinated EU and ESA efforts, support for emerging technologies, and development of a dynamic, competitive ecosystem including new entrants.

Ultimately, access to space must be treated as a strategic, policy-driven capability rather than a purely commercial service. A coordinated European approach, anchored in sustained public demand, long-term planning, and targeted investment, is essential to ensure that Europe remains a credible and autonomous space power.

Preamble

There is no freedom of action in space without freedom of access to space. At a time when space is becoming an increasingly contested arena where powers assert themselves and challenge each other, to guarantee the security and the safety of our citizens and the resilience of our space infrastructures, it is more crucial than ever for the European Union to have autonomous, resilient and economically-sustainable access to space. This need is even more compelling given that the European Union has experienced first-hand the consequences of the lack of launchers during 2022, when the war in Ukraine prevented the operation of the Soyuz launchers that were to deploy Galileo satellites. The temporary absence of a European solution due to an unprecedented combination of factors (Vega-C launch failure, difficulties in the transition between Ariane 5 and Ariane 6) has highlighted the critical dimension of access to space as an indispensable attribute of a space power and a vector for Europe's political and commercial ambitions.

Access to space is thus the indispensable enabler of the benefits space-based applications offer daily to public authorities, businesses and citizens.

In the current geopolitical context, where threats have reached levels not seen for decades, **the need for independent, robust, sustainable and resilient access to space infrastructure, including the industrial supply chain, is critical**.

The launcher crisis clearly demonstrated how costly and strategically detrimental the loss of autonomous access to space can be, underscoring that such a situation must not be allowed to occur again. With four successful Ariane 6 flights and three flawless Vega launches in 2025, the ESA-developed European launcher fleet has now reached an unprecedented and globally recognised level of reliability. This was again demonstrated in early 2026 with the first successful Ariane 64 flight. In addition, Europe can rely on extensive experience and competence from its domestic industry, with skilled workforce and recognised high level of expertise and excellence. Finally, European institutions are enabling new actors to emerge, notably driven by ESA's European Launcher Challenge.

Nonetheless, independence of Europe in accessing space is today challenged by an aggressive competition and asymmetries in access to the launch market: in particular, the size of captive markets and pricing policies are different from one space power to the other, resulting today in an unbearable competitive disadvantage for the European launcher industry.

Today, **ensuring the long-term sustainability and resilience of Europe's access-to-space capabilities must therefore be a shared strategic priority for all Member States**. The current model already reflects a significant level of European solidarity, notably through ESA programmes financing launch systems and ground infrastructure. However, an updated approach involving the European Union (which is today the single most important institutional customer of European launch services) is now needed to reinforce our collective autonomy.

And indeed, the European Commission seems determined to act; as proposed in its Proposal for a Regulation "on establishing the European Competitiveness Fund (ECF)", a new component dedicated to access to space would now support other components of the EU Space Programme. In particular, Article 65 foresees that "*the Union shall foster an autonomous and resilient access to space, by*

supporting European reliable and cost-efficient launch services together with a cohesive European approach, taking into account the essential security interests of the Union and its Member-States".

To achieve these objectives, EU access to space activities shall, according to the ECF proposal, cover in particular:

- Procurement and aggregation of launch services for the needs of the Union and, at their request, aggregation and joint procurement of launch services for the needs of Member States, international organisations, and other public entities;
- Access to space innovation, including the upgrade and development of new technologies and systems and services;
- Development, adaptation, construction, maintenance and operation of critical Union based ground infrastructure, including but not limited to the facilities necessary to test, launch and recover access to space technologies and services capabilities.

The European space industry, represented by Eurospace, welcomes the inclusion of access to space as a key feature of the future space component of the European Competitiveness Fund and, in general, welcomes an ambitious involvement of the EU in contributing to secure Europe's independent access to space. Through this Position Paper, the European space industry provides its recommendations for the evolution of European institutional demand to ensure European access to space through market-informed analysis and policy-driven actions.

Rationale for EU action

Although access to space infrastructure currently only makes up about 5% of the global commercial space value chain, it unlocks the remaining 95%, from satellites to space services and related infrastructures. Current trends highlighting the growing importance of space-enabled activities and industries are likely to further reinforce access to space as the critical enabling nexus of the entire space value chain. The successful inaugural flight of Ariane 6 in July 2024 and return to flight of Vega-C in December 2024 have restored Europe's autonomous access to space, but structural challenges remain, not least the size of the institutional market in Europe.

Since Europe gained access to space over 60 years ago, European institutional demand for launches has been intrinsically limited, accounting for only 1% of the global market. **Over the last ten years, fewer than three institutional launches per year were launched on European launchers, on average, compared with around twenty per year in the United States and forty in China**. From the onset, this low domestic demand for sovereignty missions has translated into a very limited institutional launch cadence, thus forcing European launchers to rely on commercial competitiveness to achieve economic sustainability. While this unique reliance on commercial markets has become a defining characteristic of the European launch model, the small size of the European institutional market has limited the ability of the European launcher industry to scale up. The result is that, while international competition has intensified, European players are unable to maintain a level playing field with key competitors (mostly SpaceX) who benefit from robust and, above all, captive institutional demand, leading to heightened cadence and improved cost structures.

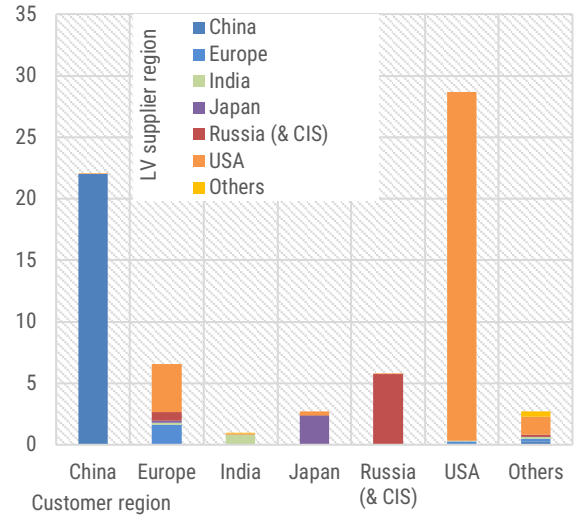
Indeed, the increased competitiveness of US launch service providers, as witnessed on the open market, largely stems from two main characteristics:

1) A strong domestic anchor market for institutional missions, both civilian and military, in which launches are sold at a premium in the name of "national security", and
2) A trend towards own demand which allows the Launch Service Provider (LSP) to self-generate launch opportunities through its own satellites, thus optimising launch cost through cadence increase.

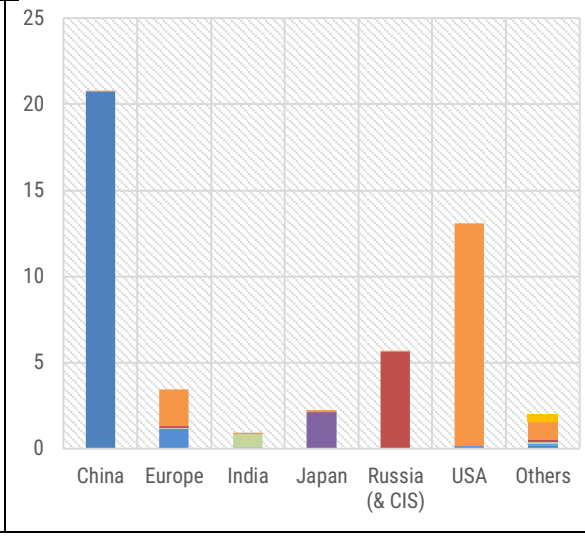
This means that only a fraction of the global launch services market is open to competition for European launch services providers:

- 70% of the world satellite launch market is captured either domestically (US, China or Russia…), or are part of an integrated launch demand (e.g., SpaceX, Rocket Lab, United Launch Alliance, Mitsubishi, Northrop, Blue Origin, Landspace, Firefly…);
- 20% have already been contracted to national launch vehicles of non-EU governments;
- Leaving only 10% of the market open for the European launch providers during the 2023-2032 period.

Launch demand and supply by region
ALL customers – 2021 to 2025 – 69B$ - 13,8B$/avg



Launch demand and supply by region
Institutional customers – 2021 to 2025 – 48B$ (70% of total demand)



Today, Europe remains the only institutional market in the world that is not captive. On the contrary, Europe's competitors benefit from a strongly protected institutional domestic market: US, 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 comparison, the US captive institutional civil and military market, represents more than $2.6 Billion per year (avg 2021-2025) for domestic launch related procurement activities, while the European institutional market – which too often has been open to competitive non-European bids – represents only around $640 Million per year.

The EU internal market lacks the depth and public funding comparable to US and Chinese markets, resulting in structurally lower institutional demand for launch services. Since 2021, EU, ESA and other European institutional missions have represented an average of 17 tonnes launched per year, compared with approximately 150 tonnes annually for both China and the United States. This significant demand gap limits the potential for economies of scale and places European providers at a

systemic competitive disadvantage, although the recent increase in public demand across Europe may help improve the situation.

This asymmetry in volumes of captive launches is further stressed by the pricing policy[1]: generally, non-European institutional launches are procured at significantly higher prices than the commercial ones, the latter being able to benefit by extra revenues generated by highly profitable institutional contracts. At the same time, there is insufficient recognition of the full costs associated with maintaining autonomous launch infrastructure. Inevitably, the actual full launch costs borne by launcher operators differ from the prices offered on the market. Non-European launch service providers, whose larger domestic markets and sustained public demand allow them to spread fixed costs more efficiently, *de facto* benefit from a cost advantage. As a result, the addressable market for European actors is further constrained, and lower launch rates mechanically translate into higher average costs per launch.

If it is unthinkable today to procure Galileo satellites or MTG weather satellites from non-EU companies, the same reasoning must apply to launch services if the EU wants to have a sustainable and high-performing European launcher industry. Simply put, **launching European satellites on European launchers is a strategic and economic imperative if Europe wants to be a credible space power**.

In recent years, market demand for launchers has been driven by the two mutually reinforcing factors of launcher availability and satellite demand. Launch demand appears to be less driven by launch prices than by satellite demand. It must be highlighted that SpaceX did not competitively price the Galileo MTG and Sentinel launches procured recently[2].

In fact, there are a growing number of launcher companies in Europe, a testimony of the dynamism of the sector, that could give the EU the luxury of choice. However, the support for this heightened intra-European competition, decided by the Member States at the November 2023 Sevilla Summit and further confirmed by budgetary commitments at the 2025 ESA Ministerial Conference, will also have the mechanical effect of spreading the already low European demand more thinly on all providers, should all new entrants succeed in becoming operational. **If the EU wishes to sustain several launch service providers, it will be necessary for the EU to widen its demand, and accept higher price structures conducive to sustaining a wider launch supply**.

To guarantee sustainable access to space, it is also essential to master the full range of technologies required for today's missions from LEO to GEO, and to anticipate future needs. This implies the testing and development of key technologies not currently mastered in Europe such as reusability[3] – allowing launchers and/or launcher components to fly multiple times instead of being discarded after a single launch – and staged combustion engines, which provide higher efficiency and performance than conventional rocket engines.

[1] *Space X can practice an extremely diversified pricing policy for the same class of launch service, for example:*
- *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$.*

[2] *Galileo L12 and L13 launches cost respectively 99.4M$ and 97.3M$, both well above Falcon 9's commercial price of 67M$ in 2023 (date of contract signature).*

[3] *The economic viability of reusable launchers depends on a sufficiently high launch cadence, as reuse only becomes cost-effective when vehicles can fly frequently. This in turn reinforces the importance of a strong and predictable European launch market, supported by captive institutional demand.*

The space component of the European Competitiveness Fund has a critical role to play in support of European access to space through deliberate decisions and targeted investment choices.

Rethinking Europe's path to autonomous access to space

Only a profound transformation of the European space policies will sustainably secure the EU's autonomous access to space.

As with all critical infrastructures, market forces alone cannot guarantee the continuity, reliability and resilience required to safeguard strategic capabilities. Access to space fundamentally remains more policy-driven than market-driven, as evidenced by the importance of defence missions in terms of demand signal and market-defining investment trends (ESA Report on the Space Economy 2025[4]). In this context, the Commission has the financial resources and regulatory tools that can allow it to play a unique role in:

- Providing long-term visibility;
- Anchoring demand;
- Creating the conditions for the long-term sustainability of the European space market;
- Contributing to ensure that essential launch services remain continuously available to Europe.

Streamline launch procurement processes and better align them with satellite procurement ("end-to-end space procurement")

Launch procurement processes should be streamlined and more closely aligned with satellite procurement through a genuinely integrated, end-to-end space acquisition approach that treats launch and spacecraft as interdependent elements of a single system, rather than separate contractual tracks. In other words, **launch services and EU flagship programmes satellites should be planned and procured in parallel**.

Greater synchronisation across planning, budgeting, and contracting would reduce fragmentation, avoid delays caused by mismatched timelines, and improve overall programme efficiency and cost-effectiveness. Such an approach would also provide much-needed predictability for the European space industry, where visibility and guaranteed demand forecasts are essential for companies to anticipate demand, stabilise production, and make long-term investments in infrastructure, innovation, and skills that support industrial sustainability. At the operational level, it would also enable technical optimisation of the deployment plan, including closer coordination, even co-design between satellite manufacturers, and launch providers to maximise deployment efficiency and performance. At the strategic level, the synchronisation of launch and satellite procurement would strengthen Europe's ability to plan and secure its future space capabilities over the long term, guaranteeing reliable and autonomous access to space while supporting resilience, security of supply, and technological sovereignty.

In this respect, **the European Commission should take a leading role in driving a more integrated and predictable procurement framework by starting to coordinate the launch and satellite acquisition for the components of the EU space programme under a coherent, end-to-end planning mode**[5]. This

[4] https://space-economy.esa.int/documents/tJMabTj61KkdGVOtF6SKw6wGSxicen6ajUWamCG3.pdf

[5] *A first important step would already be to ensure closer internal alignment between the Commission and EUSPA during procurement processes as it could further prevent duplication of discussions and streamline decision-making.*

could include synchronising programme timelines and budgets introducing multiannual launch demand forecast that provide clear visibility on future launch demand.

The Commission could further increase predictability through framework contracts or long-term service agreements that guarantee baseline volumes, reducing uncertainty for industry.

In addition, sufficient visibility on future launcher demand is essential to enable industry to strengthen a secure, robust and sustainable supply chain. **Forecast horizons limited to two or three years are not sufficient to trigger the level of industrial investment required, particularly for production assets and long-lead supply chain capabilities**. Ensuring resilient European access to space requires longer-term visibility and commitments, for example through guaranteed launcher demand aligned with industrial business plans over a 5-7-year horizon, and through targeted support for the industrial investments necessary to sustain and strengthen Europe's launch capabilities and supply chain.

Solve the internal market fragmentation

European institutional (*i.e.,* EU, Member States, ESA, Eumetsat) launch demand should **be aggregated at European level**, with the European Commission acting as a Central Purchasing Body (as described in Annex I, Chapter 2, Art. 32 of the EU Financial Regulation) to provide stable, guaranteed and sustained demand. Considering the planning cycle of each MFF and the long-term visibility of its own programmes, the European Commission could of course start by aggregating its own demand and purchase launches in batches on preferential terms and allocate them according to its needs. Such an approach would help create economies of scale, reduce costs and de-risk private investment[6].

The **U.S. National Security Space Launch (NSSL) model** offers an operational example of a public procurement framework designed to ensure assured access to space while leveraging competition and commercial launch capabilities to support national security missions.

Key characteristics of the NSSL model

- **Assured access to space as the core objective**: The programme ensures that critical national security payloads - from the Department of War and the US Intelligence Community - can be launched reliably despite technical or geopolitical disruptions, by qualifying multiple providers and architectures. This focus drives long-term planning, industrial base management, and risk-sharing arrangements with industry.
- **Multi-provider framework with dual-lane procurement structure**: NSSL deliberately fosters competition between multiple launch providers to reduce costs and enhance resilience by separating launches into two procurement "lanes":
  - Lane 1: multiple-award Indefinite Delivery-Indefinite Quantity (IDIQ) contracts for lower-risk or more commercially aligned missions, with task-order competitions and an annual "on-ramp" for new providers;
  - Lane 2: reserved for the most demanding national security missions, relying on a small number of fully-certified providers (currently 3) and the highest mission-assurance standards.
- **Tiered mission assurance:** Oversight and verification requirements scale with mission criticality, allowing more commercial practices for lower-risk mission while maintaining, stringent processes for critical payloads.
- **Use of firm-fixed-price, IDIQ, and block-buy contracts:** These mechanisms provide price predictability and volume leverage for the government, while giving industry clearer demand visibility.

[6] *The current concept of a European Launch Service Aggregation (ELSA) platform primarily focused on matchmaking between supply and demand does not appear to address the clearly identified industrial needs. This platform risks introducing additional layers of complexity and overlapping with functions that are already inherent to the role of launch services providers. Of course, Industry is ready to provide inputs to the European Commission for reviewing the ELSA platform in order to improve its alignment with industrial needs.*

- **Industrial base development and resilience:** The model aims to strengthen and diversity the launch industrial base, enabling new entrants in Lane 1 to mature and compete for higher-end missions.

Potential lessons for the European launch sector: Several elements of the NSSL model could be adapted to support Europe launch ecosystem, provided they align with an increase in European institutional demand.

- A **structured multi-lane procurement scheme**: it could allow European institutional customers to distinguish between high-criticality missions (e.g., defence, flagship missions, science) and more risk-tolerant missions (e.g., technology demonstrators, some EO constellations), with different assurance and procurement models.
- **Multi-award framework contracts and block-buy:** it would provide greater predictability of demand for institutional missions, and thus stimulate investment and innovation among European providers. This would increase the overall competitiveness of European launch providers.
- **Explicitly linking launch procurement policy to clear industrial objectives**: it could accelerate the maturation of new small- and medium-launch providers while maintaining reliable access to heavy lift capabilities for strategic missions.

In practical terms, launch aggregation by the European Commission would mean centralising the planning, contracting, and purchasing of institutional launch services for all European institutional actors; using the central purchasing body would be on a voluntary basis and institutional shall be encouraged to join this approach, including through financial incentives. **This is also an opportunity for the Commission to align all procuring entities through a BUY EUROPEAN principle**. Additional financial instruments should also be considered in order to compensate the cost of European launcher preference. The Commission would therefore gather launch requirements annually, but committing on a broader horizon, from its EU Space Programme, align timelines with other European institutional customers and consolidate them into a single European launch plan.

Building on the Multiannual Financial Framework cycle, the Commission could develop a rolling multiannual launch manifest that forecasts institutional demand up to seven years ahead, providing industry with clear visibility on volumes and schedules. As said above, a natural starting point, this approach could cover the Commission's own flagship programmes and missions.

On this basis, launches could be purchased in batches or through long-term framework agreements with European launch service providers, securing preferential pricing and guaranteed slots while reducing administrative duplication. By committing to a core number of institutional launches per year to sustain European launch capabilities – similar to how governments in other space powers provide guaranteed institutional mission to their domestic providers – **the Commission would provide industry with a predictable baseline demand, enable lower unit costs and stabilise production rates**.

If extended to other European institutional stakeholders, appropriate governance mechanisms and entry points would need to be defined.

In case of launcher delays, the European Launch Service Aggregation platform could provide access to launch opportunities with alternative European launchers, thereby improving overall system resilience.

To encourage the use of European launchers, the European Commission could establish incentive mechanisms to co-finance launch costs for missions procured according to a BUY EUROPEAN principle; (in a way similar to the European Defence Fund, where member States are incentivised to join efforts through a contribution from the EU budget). Such incentives would strengthen the

European institutional market, while improving visibility and coordination of institutional demand across Europe, thereby supporting strategic planning, industrial forecasting, and investment visibility for launch service providers. It would also help trigger supply chain activity earlier and improve the availability of launch services on short notice, as industrial production planning would be supported by clearer long-term visibility. This approach could also have positive spill-over effects on innovation, particularly by supporting more responsive in-orbit demonstration and validation (IOD) and experimental missions.

Guarantee the sustainability of European critical infrastructure

Guaranteeing the sustainability of Europe's critical space infrastructure and its supply chain require a clear and consistent policy committed to the preservation and strength of autonomous European launch capabilities as a strategic asset.

In particular, the European institutional launch market should give preference to European launch service providers, ensuring that launchers are designed, manufactured, and operated in Europe, by companies not to be subject to control by a third country or by a third country entity.

Policymakers must recognise that guaranteed access to space cannot be treated (neither in Europe nor anywhere in the world) as a purely commercial matter and inherently entails a price premium for European institutional customers (as it is the case in the US). Domestic preference represents a strategic investment in Europe's freedom of action and long-term competitiveness; failing to prioritise domestic solutions hence entails significant political and financial costs, as it would weaken the European industrial base and lead to a loss of critical competencies.

In this regard, the rules governing access to procurement will be key: in order to support the European industry, definitions of what constitute a European launcher, European launch technologies and European launch service provider (made in Europe by Europeans) shall be defined and enforced, building upon existing legislative texts.

Such an approach is essential to support the resilience and sustainability of the European industrial supply chain, secure highly specialised skills and supply chains, and protect sensitive technologies that underpin Europe's security, resilience, and technological sovereignty. **Beyond demand visibility, targeted measures are needed to strengthen industrial production capabilities, including potential financial support for strategic production assets, critical technologies, and supply chain bottlenecks**. In this regard, mechanisms similar to initiatives such as SAFE (i.e., supporting the strengthening of Europe's Defence Technological and Industrial Base) could be considered as a reference. Such instruments would help consolidate Europe's industrial ecosystem, reduce strategic dependencies, and ensure that access-to-space capabilities remain robust, competitive, and sustainable over the long term.

Create a dynamic and competitive European industrial ecosystem

Creating a dynamic and competitive European industrial ecosystem requires sustained support for research, development and innovation across the full space value chain, from early-stage research to commercial deployment. The European Commission should therefore strengthen investment in R&D and in the demonstration of emerging space technologies, in close synergy between existing ESA

and EU programmes, avoiding fragmentation and ensuring programmatic coherence and efficient use of resources.

Access to space capabilities are indeed critical enablers for all other EU Space Programme components. Technological developments thus need to answer today's mission requirements but also prepare for tomorrow's capability needs, such as enhanced performance or increased mobility in space for dual-purpose In Space Operations and Services (ISOS) missions and in-space transportation infrastructure. This requires the development of key technologies not currently mastered in Europe, most of which are relevant to both access to space and act in space as mission areas of strategic and economic interest for the EU.

In this regard, the current Space Partnership between the European Commission and the SPACE AISBL[7] association is the ideal vehicle to help align public missions with market opportunities and to:

- Define a co-created development roadmap for new space transportation solutions, identifying the most critical demonstration, validation, and pre-operational testing activities;
- Mobilise the full spectrum of European space stakeholders, ensuring broad participation across all relevant space research and industry segments;
- Align the in-orbit demonstration capabilities with market-driven requirements, supporting both strategic EU objectives and the competitiveness of the European space industry;

Beyond funding alone, the support from the European Commission should also include facilitated access to shared testing, qualification, and launch infrastructure, enabling companies to validate technologies, reduce development costs, and accelerate time-to-flight. Lowering these technical and financial barriers is essential to stimulate experimentation, attract private capital, and scale innovative ventures within Europe rather than abroad: Research and Innovation Actions (RIA) or Innovation Actions (IA) could be specifically supported at EU level in synergy with ESA to ensure that mission development and access-to-space capabilities are designed in a coherent and coordinated framework.

Such an approach would also help de-risk early launch preparation activities while missions are being matured, allowing time for strategic discussions on possible adaptations to ESA's launcher support roadmaps, rather than waiting for such discussions to materialise before generating the funding opportunities required to support mission deployment.

In addition, the Commission's in-orbit demonstration and in-orbit validation support could be further expanded in this direction. Today, candidates selected for IOD-IOV programmes are typically transferred to ESA for execution, often based on relatively short development cycles assuming minimal launcher or system adaptation. In the future, pre-development activities could be considered for elements such as dedicated dispensers or mission-adapted deployment interfaces, beyond currently available standard solutions, to better support experimental missions and technology maturation.

Finally, a balanced industrial approach is also essential. During 2023's Seville summit, ESA Member States decided to create a "European launcher challenge", with the aim of selecting emerging European companies that demonstrate the technical maturity and competitiveness to become a credible launch service provider. In time for the start of the next MFF in 2028, it would be coherent

[7] *The Space AISBL is gathering five representative associations, covering the full supply chain for space systems in Europe: EASTRO, EASN, ESRE, Eurospace, SME4Space*

to organise a 2nd phase to encourage the emergence of an adequate number of sustainable players in Europe to serve the EU's launch needs. Competition within the framework of the EU should indeed foster realignment of national endeavours around a common capability ambition and encourage, in the medium-term, European industry to reconvene around consolidated European champions for the long-term benefit of Europe's access to space while avoiding monopolistic players and providing institutional customers a choice of service providers. The current structure and volume of the space launch demand accessible to Europe would not be able to sustain a plethora of commercial launch system providers in each key market segment (though it is essential to ensure that all the useful innovations brought about by current European investments can remain available in Europe). The size of the EU's space access infrastructure should also reflect this reality. However, the situation may change if the demand increases and/or if the public sector regards the availability of multiple solutions as a policy objective in itself (rather than a natural consequence of the size of demand). In this case, it must ensure that adequate resources are committed to align with this ambition.

As such, the current and future European launchers enable a wide range of mission designs. From small lift to heavy lift, the European Commissions' various programmes also have various launcher capabilities requirements and the suite of European launchers (operational and upcoming) are able to deliver on the various mission profiles required by all European institutions.

EUROPEAN LAUNCHERS OFFERING BY 2028

	AVIO	arianespace	arianespace	isar aerospace	RFA	maiaspace	PLDSPACE
Launcher name	Vega-C	Ariane 62	Ariane 64	Spectrum	RFA One	Maia	Miura 5
Maiden orbital flight	2022	2024	2026	2026	2026	2027	2026
Launches	9	5	1	1	0	0	0
Cadence / year	3-4	9-10		Exp. 20	Exp. 20	Exp. 20	Exp. 6-14
Performance	3.3 t LEO 2.3 t SSO	11 t LEO 6.8 t SSO 4,8 t MEO 5.1 t GTO	24 t LEO 10.7 t MEO 11.7 t GTO 8.3 t LTO	1 t LEO 0.7 t SSO	1.6 t LEO 1.3 t SSO 0.45 t GTO	4 t LEO 1.5 t expendable 0.5 t SSO reusable	0.6 t SSO
OPERATIONAL				**UPCOMING**			

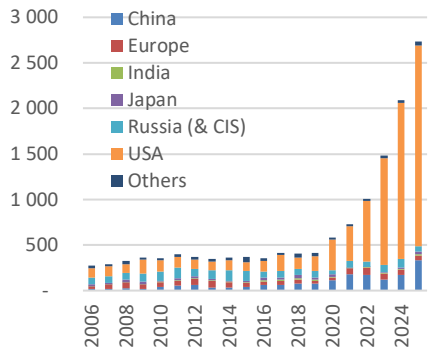
In addition, while maintaining large prime contractors responsible for end-to-end system performance and reliability, specialised, competing suppliers for subsystems, production, and testing should be encouraged to drive cost reduction, faster iteration, and resilience across the ecosystem.

Annex

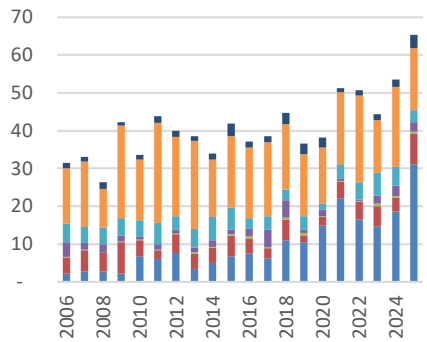
Global infrastructure demand

Definition: The demand for building and launching satellites and other spacecraft (not included the R&D funded by space agencies).

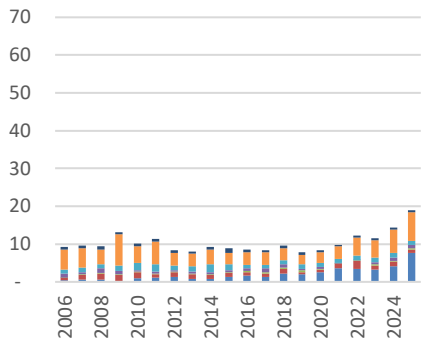
Spacecraft mass launched (tonnes) – By customer region



Spacecraft market (B$) – By customer region



Launch services market (B$) – By customer region

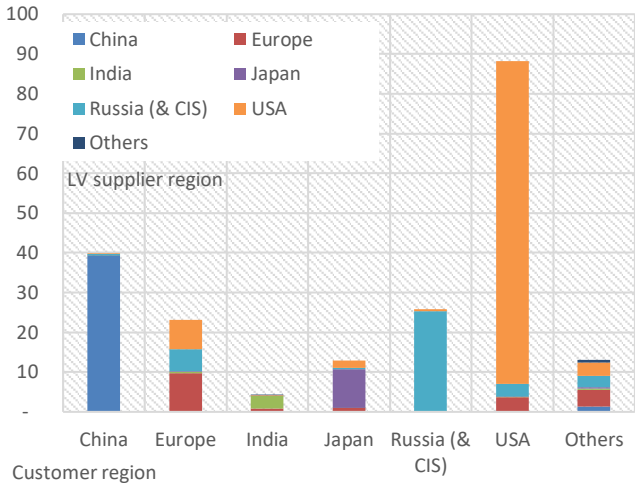


- Global spacecraft market: 55B$ -- Global launch market 14B$ -- moderate growth trend

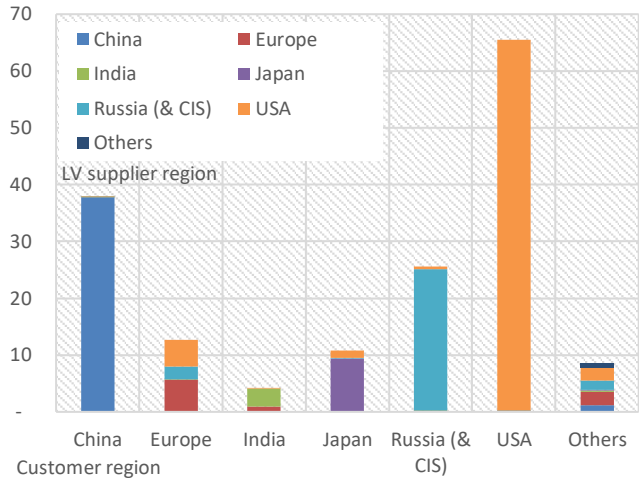
The global space activity is growing. It records an increase, in mass, in spacecraft market and in the launch services market. However, these increases are not proportional. Although the USA is leading the growth in total launched mass, it is China that is leading the charge for the growth in spacecraft and launch services markets. The majority of the growth in mass of the past five years is linked to the rapid deployment of the Starlink constellation. The Chinese institutional space programme has fuelled the growth of the spacecraft and launch service market in the past five years.

A market organised in regional silos

Launch demand and supply by region
ALL customers – 2006 to 2025 – 207B$



Launch demand and supply by region
Institutional customers – 2006 to 2025 – 165B$ (80% of total demand)



- 2006-2025: The total launch service market is estimated at 207B$. 80% of which is for the deployment of institutional payloads.

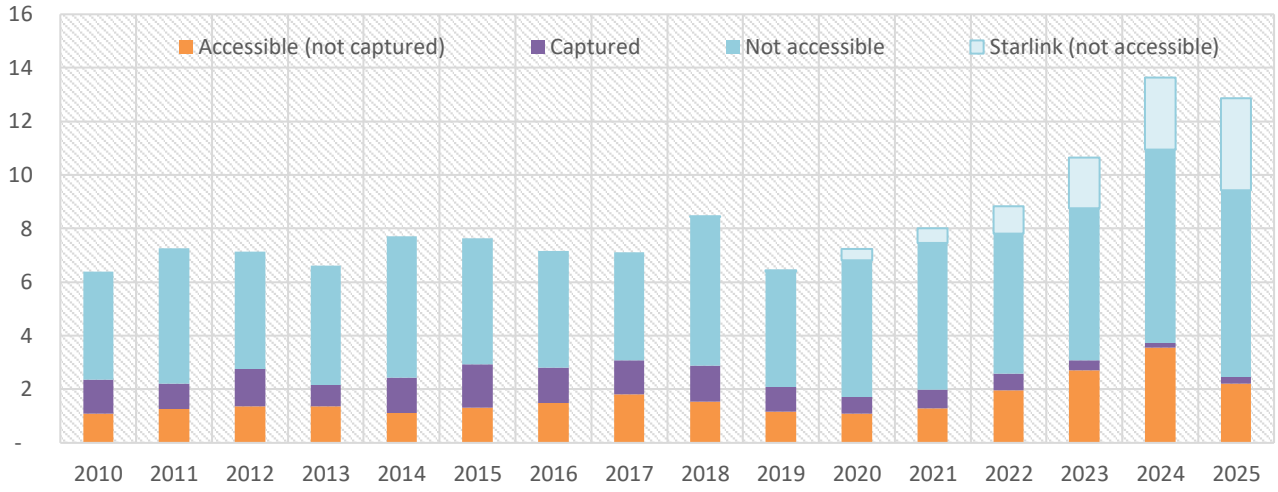
- The Starlink demand alone has generated 10B$ worth of launch demand since 2019.

Globally the majority of launch customers procure their launch services domestically and this is especially true for institutional customers. One notable exception to this rule, is Europe, it is the only region where the majority of institutional demand is addressed by foreign providers rather than domestic players. Until 2022, the Soyuz launcher was available and operated by European entities, this enabled the launch of institutional payloads such as Galileo spacecraft aboard Soyuz launchers from the Guiana Space Centre.

Global launch demand (B$)

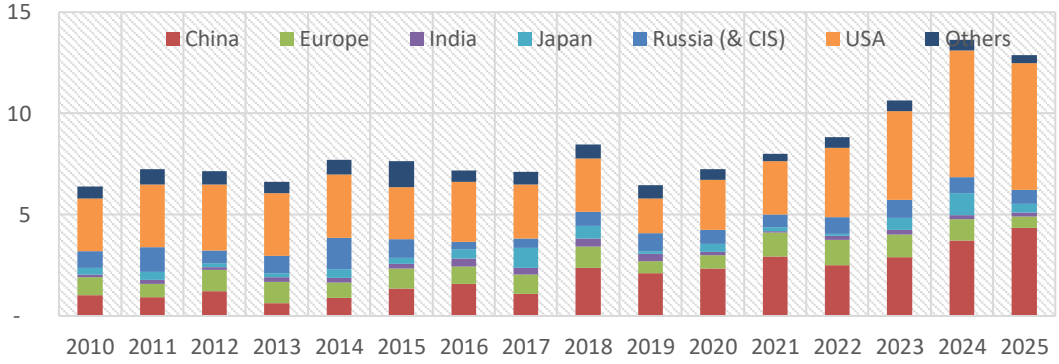
The global launch services market is increasing from 6B$ in 2010 to 13B$ in 2025. This increase however hides disparities.

Launch services demand with accessibility status for European launchers



Over the past 16 years, the total accessible market for European launch service providers (LSPs) has shown significant volatility. While the broader market recovered following a trough between 2019 and 2021, Europe's captured share has been decreasing since its 2015 peak. European LSPs have struggled to regain the market presence they held during the 2010–2019 period. This recent downturn is largely attributable to the recent launcher crisis characterised by the phase-out of Ariane 5, developmental delays for Ariane 6, and the grounding of Vega-C.

Launch services demand by customer region



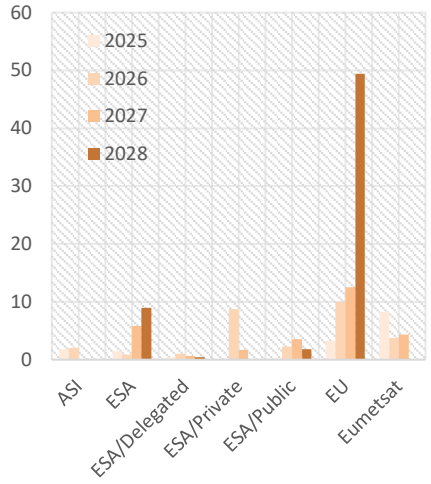
Consistent with previous data, the Chinese launch market has shown remarkable growth. It has grown from 1B$ in 2010 to 4.3B$ in 2025. This rapid growth is linked to the deployment of a plethora of governmental civil and military programmes. Similarly, the US launch market has expanded significantly in recent years, fuelled by the deployment of massive LEO constellations like Starlink and Amazon LEO. Nevertheless, the U.S. market remains primarily driven by

high-value institutional programmes, such as the Starshield military programme, which contribute more to total market value than commercial missions.

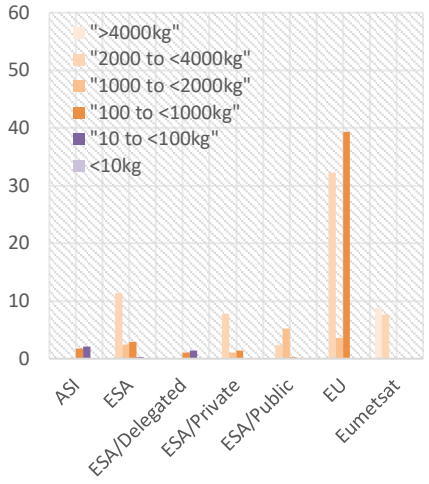
European launch demand vs European launchers 2025-2028

By customer, in mass and number

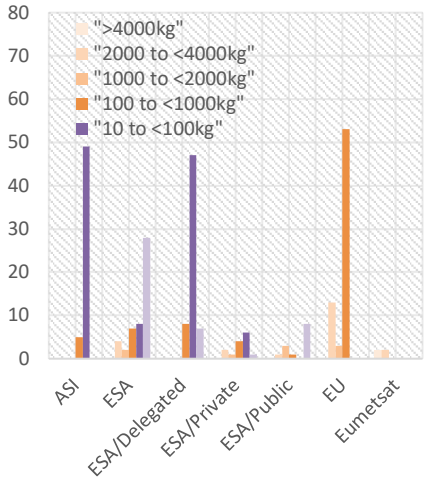
By Customer (mass tonne)



By satellite size (mass tonne)



By satellite mass class (number)



These charts forecast announcements for all European institutional missions. These are all expected programmes to be launched in the near future, for example: constellation announcements such as IRIDE for ASI or IRIS² for the European Union.

The European Union and ESA constitute the primary drivers of institutional launch demand, which is estimated at 130 tonnes until 2028. Most of the launch mass is expected to originate from programmes such as Galileo, Meteosat and IRIS² (initial launch deployment to start in 2028 until 2030). The majority of the launch demand is composed of small satellites <100 kg. Small satellites are traditionally launched on rideshare missions on heavy-lift launchers (*e.g.* IRIDE deployment on various Falcon 9 transporter missions). Small satellite programmes often forego small-lift launchers as they incur greater costs per kilogram than heavy-lift ones. Thus, small satellite programmes represent a limited launch demand for European LSPs.