

ECSECO WHITE PAPER

EXPORTS: AN IMPERATIVE FOR THE EUROPEAN SPACE INDUSTRY?

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1. Introduction

The European space industry is a dynamic and fast-changing sector, crucial to the broader aerospace and defence strategies of Europe. Despite its technological strengths and strategic value, the industry faces significant hurdles to achieving sustainable growth. These challenges include slow growing government budgets and private sector sales, and a fragmented financial landscape, which especially limits the growth potential for SMEs and start-ups. While the sector holds great promise, overcoming these financial obstacles and expanding international exports will be key to unlocking further growth.

This paper draws on discussions from the European Centre for Space Economy and Commerce (ECSECO) event on May 22, 2024, where industry experts and investors gathered to assess the sector's needs and challenges. Their insights were crucial to the analysis presented here, which takes a close look at the industry's current state, emphasising the importance of streamlining financing, fostering public-private partnerships, and fostering export-driven growth.

The accompanying white paper focuses on the commercial and financial hurdles the European space sector faces, particularly the need for organic growth and international market expansion. In line with the tenth recommendation of *The future of European Competitiveness, Part B¹* report – namely “Promote further access to international space markets“ – the paper stresses the critical role of exports and the importance of addressing financial challenges, further reflecting the discussions and conclusions from the ECSECO event, although it may not cover all viewpoints within the broader European space ecosystem. Ultimately, the analysis highlights the pressing need for strategic actions to promote organic growth through increased overseas commerce and sustain Europe's competitiveness in the global space market.

¹ [The future of European Competitiveness, 2024](#) – European Commission

2. Commercial & Financing Challenges in the European Space Industry

2.1. About the European Space Industry

The European space manufacturing industry is situated within a diverse yet fragmented domestic market, serving a wide array of international clients. These clients span both public entities, such as space agencies, and private companies, like satellite and launch service operators.

2.1.1. Institutional vs. Commercial Demand

Institutional demand continues to dominate as the largest customer segment for the European space industry. In fact, civil and defence public entities, which include the European Space Agency (ESA) and various EU member states, account for two thirds of the total industry sales in 2023². On the commercial front, however, the landscape appears more challenging. Sales to European private customers fell sharply by 19.5% in 2022², and sales to private customers outside Europe dropped by 21%. For European firms, this trend signals a growing competitive disadvantage, likely driven by stagnant budgets, restrictive industrial policies, and Europe's limited autonomy in space activities—currently rated at 3.0 on the autonomy scale³.

2.1.2. SMEs and Startups: Navigating Growth Amidst Financial Struggles

Despite these market challenges, small and medium-sized enterprises (SMEs) and start-ups represent the fastest-growing segments in terms of employment, although they account just for 15% of the full-time employees (FTEs) – considering solely European space manufacturing companies – with new businesses driving much of the industry's workforce expansion. Yet, these firms face unique financial hurdles. A notable portion relies heavily on private capital and equity funding, creating an unstable financial ecosystem. 10% of the European space upstream workforce is paid out of equity rather than revenue – a precarious dynamic that underscores the fragility of the sector. More than 400 new companies currently employ over 8,000 FTEs⁴, but their sustainability hinges on further private capital or on the availability of an

² ASD EUROSAPCE: Facts & Figures 2022

³ ESPI: Europe as a Space Power, 2023 - ESPI

⁴ ASD EUROSAPCE: Facts & Figures 2022

additional EURO 1.2 billion in demand annually (as estimated by Eurospace). Both elements (private capital and increase in public demand) appear to be unrealistic given the current dynamics of the European market.

2.1.3. Private Financing and Market Stagnation

Given the limitations in private financing, and the underlying need for VC exits, European space companies are now compelled to focus on organic growth strategies. The underperformance of space sector special-purpose acquisition companies (SPACs), coupled with persistent lack of exits, has dampened investor confidence. This, in turn, has led to reduced valuations and smaller funding rounds for European space start-ups. The growing scepticism among investors points to a larger issue within the European ecosystem: a lack of cohesive financial backing and market uptake to match the industry's technical capabilities

As domestic commercial demand remains sluggish and institutional budgets risk to tighten, European space companies view the expansion into new foreign markets as an integral part of their go-to market strategy. Securing overseas demand is becoming a critical strategy for firms looking to achieve sustainable growth. **Currently, sales to non-European public customers account for just 4% of total industry sales, a figure that reflects an underperformance in global markets but also an opportunity. Public sales outside Europe have also dropped by 20% since 2020, further emphasising the need for European firms to better penetrate international market⁴.**

To sustain the industry, established companies, SMEs, and start-ups require a mix of private and public support. Start-ups, in particular, need early-phase assistance through development programmes and grants to build a foundation for future operations. However, scaling up requires more than just funding—it requires real business opportunities. Anchor customers, particularly institutions, are critical in helping companies demonstrate the viability of their products, which, in turn, can catalyse commercial market success.

Projects-like IRIS2 offer medium-term opportunities, but alone, they will not be enough to drive the long-term growth of Europe's burgeoning space industry. Interestingly, the growing incorporation of military and strategic elements into European space policy might open new opportunities. However, this would mark a significant shift from Europe's traditionally civilian-

focused space efforts, a move that will require a paradigm shift from current processes and activities as well as across the value chain and governance landscape.

To overcome these challenges, European space companies need to focus on fostering organic growth by expanding into foreign markets. Securing overseas demand will improve cash flow and enhance their ability to attract further investment. Additionally, achieving greater integration within the European market could alleviate some of the fragmentation issues currently hindering the sector's growth. Ultimately, targeted institutional support and strategic international partnerships will be key in rejuvenating the industry and securing Europe's place in the global space landscape.

3. The Commercial Opportunity of International Markets

The United States stands as Europe's largest and most influential commercial partner in the space industry, a relationship that has long been defined by a symbiotic and robust trade in both spacecraft and launch systems. However, significant structural changes within the U.S. space sector are beginning to reshape this dynamic. SpaceX, alongside new actors which have optimised their satellite production capabilities (Rocket Lab), are not only transforming the satellite systems segment but also redefining the launchers market, challenging Europe's historical dominance in these areas. Moreover, the shift from geostationary (GEO) satellites to Low Earth Orbit (LEO) constellations for telecommunications, a sector where Europe historically excelled, is further altering the competitive landscape.

Meanwhile, new commercial markets are emerging, particularly in the Middle East, offering significant opportunities for European space companies. These markets, however, come with their own challenges. Unlike the well-established transatlantic trade, these new opportunities are driven by joint ventures, local capacity building, and a demand for specialised subsystems rather than complete systems. The Middle East's growing space ambitions present unique opportunities for growth, requiring European companies to form new types of partnerships and tailor their offerings to meet specific market needs. These partnerships are key, notably as other actors (the U.S.) get direct support domestic bodies.

3.1. The United-States – A Market in Transition

For Europe, the U.S. represents both a key commercial partner and a major competitor. Europe and the U.S. are the largest exporters, contributing 90% of the value of spacecraft exports globally. European exports to the U.S. have grown threefold in 30 years⁵, with European space exports representing USD 23.1 billion in the past decade, contributing an average net surplus of USD 1.1 billion per year to the European trade balance, underscoring the importance of transatlantic space trade.

European LSIs like Airbus Defence and Space and Thales Alenia Space have historically been leaders in the commercial satellite market but are now facing increasing challenges due to the

⁵ [Three decades of spacecraft, 2021 – ASD EUOPSACE](#)

structural market shift occurring in the U.S and in the satellite communication segment. The European space industry has traditionally produced more spacecraft than its domestic market could absorb, making exports essential for its long-term sustainability.

To strengthen and expand its commercial position, European companies should maintain their symbiotic trade relationship with the US. However, Europe’s reliance on the U.S. as a commercial partner also presents risks, particularly with regards to ITAR regulations or if transatlantic relations were to deteriorate. To mitigate such risks, Europe has been investing in its own capabilities, as seen in the EU’s push for greater autonomy in satellite navigation (Galileo) and Earth observation (Copernicus). As demonstrated by collected information from surveyed SMEs, the U.S. is poised to remain a main commercial driver of the European space industry.

The shift away from Large Systems Integrators (LSIs)’s complete systems and launchers is a sizeable opportunity for up-and-coming Europeans space SMEs, more suited for parts and subsystems supplying-based commerce. Supplying the new U.S. demand remains a main priority for European SMEs.

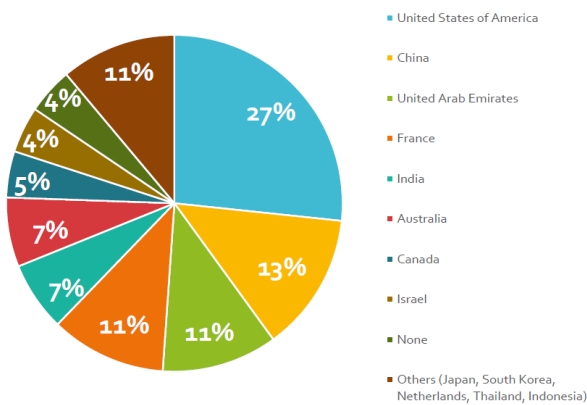


Figure 1: Most promising export country in the Next Three Years (SME4SPACE Survey, 2022)

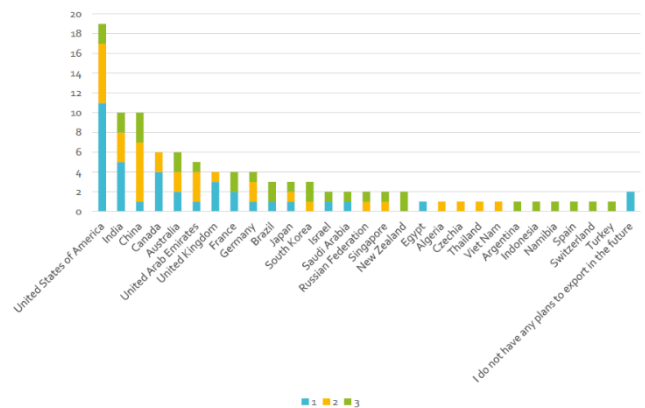


Figure 2: Companies with Export Experience, Top Three Export Target Markets (SME4SPACE Survey, 2022)

Recent developments in the space industry have seen historically growing space economies alongside new national ambitions joining the fray. In Asia, Japan and India have positioned themselves as the newest global players. The Indian National Space Authorisation Centre (IN-SPACe) aims to grow the country’s share of the global space economy to 8%, with USD 11

billion of exports by 2033⁶. Amongst these new prospective markets, the Middle East has been highlighted as of high potential for the European space sector, and notably for SME's and start-ups.

3.2. The Middle East

Government space expenditures in the Middle East have reached USD 1.4 billion. With the rapid budget increases of both the UAE and Saudi Arabia, the space budget distribution across the Middle East has flattened, with the top 3 countries in the Middle East controlling 80% of the region's budgets. Such growth in both the budgets and competitive landscape is driving projections of increases in the government expenditure in space from the Middle East to USD 2.7 billion, with 92% growth occurring within the next decade⁷.

The Middle East has increased its priority of investments into science, exploration, and access to space from 2018 to 2032⁷. Key drivers for this growth include sovereignty, security, leadership, science and technology, economy, and capacity building. With respect to the global market share, the Middle East targets to reach 7.5% in 2030⁸. The two largest industry segments expected to grow are satellite communications, and earth observation¹³.

These elements provide a vacuum within which Europe can step into to cement its commercial position and secure contracts to capitalise on the Middle East's projected growth. Seizing this opportunity, European space companies like ICEYE, Loft Orbital, and Agrotec have recently invested in the region. More precisely, ICEYE played a key role in a major merger with UAE satellite operator Yahsat, resulting in the creation of a new company named Space42⁹, Loft Orbital co-founded a private infrastructure company with Marlan Space¹⁰, and Agrotec started talks with the Saudi Space Agency and with the Saudi Arabian Military Industries aiming bring its business and know-how to the entire Middle East¹¹.

⁶ [India's space economy has potential to reach USD 44 billion by 2033: IN-SPACE chairman](#), 2023 – The Economic Times

⁷ [Beyond the Stars: The Middle East's Space Ecosystem on the Move](#), 2024 - Euroconsult

⁸ [Middle East to Continue Three Fold Growth in Space Sector, Says Report](#), 2024 – GEOSPATIAL WORLD

⁹ [On eve of merger with cash-rich Yahsat, Bayanat now has 1st of its seven Iceye-built radar satellites](#), 2024 – SPACE INTEL REPORT

¹⁰ [Loft Orbital and Marlan Space to create satellite production company in Middle East](#), 2024 – SATELLITEPROME.COM

¹¹ [Italian aerospace firm Argotec targets Saudi expansion in growing space and aviation sector](#), 2024 – ARAB NEWS

3.2.1. Saudi Arabia

Saudi Arabia has increased its space budget by more than four times since 2021. The formation of the wholly owned public infrastructure fund (PIF) company, Neo Space Group (NSG), was announced to act as national space champion. NSG has five dedicated industry segments: Satellite Communications, Earth Observation, Remote Sensing, Satellite Navigation and Internet of Things (IoT).

Key considerations for European actors: SA's primary ambition is to connect roughly 2.6 billion people¹² who still lack touchpoints to the global communication infrastructure. The kingdom has signalled openness to leverage technologies from abroad¹³, including attracting investment from both the U.S. and Chinese technology companies. For Europe, Riyadh has granted 350 licenses to EU companies¹⁴ to relocate their headquarters to Riyadh. The Saudi's government goal is to attract a total of 480 companies¹⁵ to open those regional headquarters by 2030. Finally, in May 2024, Brussels welcomed the opening of the European Chamber of Commerce in the Kingdom of Saudi Arabia (ECCKSA)¹⁶. The chamber will serve as a platform to facilitate business cooperation and promote trade and investment between the EU and Saudi Arabia. With respect to regulation, SA emphasised a commitment to protecting intellectual property and patents while balancing a pro-investment, pro-partnership, open-market stance¹⁷.

3.2.2. The United Arab Emirates

The United Arab Emirates have tripled their budget between 2022 and 2023 and are now the largest developing space nation in the Middle East in terms of available budget. Already in 2021, the UAE government entered into an agreement with Blue Origin to support economic development through space activities, including tourism¹⁸. The partnership discussion involves the possibility for a spaceport to be set up in the UAE desert for suborbital flights. In Abu Dhabi, the Hub71 technology park is bringing together investors and tech start-ups to

¹² [Vision 2030, Kingdom Of Saudi Arabia](#)

¹³ [Saudi Arabia's tech renaissance: Insight, 2024 – Gulf Business](#)

¹⁴ [350 EU Companies Granted Licenses to Relocate Their Headquarters to Riyadh, 2024 – Khaleei Mag](#)

¹⁵ [Saudi Arabia is requiring companies to establish headquarters in the kingdom. That strategy may pay off., 2023 – Atlantic Council](#)

¹⁶ [EU welcomes first European Chamber of Commerce in the Gulf, based in Saudi Arabia, 2024 – European Commission](#)

¹⁷ [Saudi Vision 2030 and Its Role in the Advancement of the IPR Regime – AL TAMIMI & CO](#)

¹⁸ [Blue Origin and UAE form partnership for future space tourism missions, 2021 – ORBITAL TODAY](#)

boost the growth of this booming space ecosystem, notably France’s BPI France¹⁹ and Thales²⁰. The former of which provides an avenue for European firms to gain a foothold in the Emirates through immersion programmes while the latter Thales Emarat Technologies will work closely with Hub71 start-ups and other members to identify potential areas of collaboration that will boost innovation in the UAE.

3.3. New Markets - Key Considerations

As the global space industry evolves, the European space sector, which has traditionally focused on exporting complete systems, must increasingly pivot towards the growing market for equipment and parts. This shift is driven by the rising investment in domestic space capabilities across various nations, particularly in the Middle East, where countries are gradually becoming skilled spacefaring nations. The equipment and parts segment are poised to become a critical area of export for European space SMEs, presenting both opportunities and challenges.

Key Considerations for Partnerships with Middle Eastern Countries and Companies:

- **Limited Trained Workforce:** The Middle East is facing a shortage of skilled and localised workforce that is required to sustain the growth of its space sector. Effective global partnerships and investment into the region’s space sector is underpinned by a desire of shared value creation and long-term capability development through workforce training and technology transfer. European SMEs should aim to facilitate these transfers with adequate contracts, such as joint-ventures and co-developments.
- **Limited Regional Capacity:** An export opportunity emerges due to the limited capacities or regional suppliers, which only capture 25% of the market value created in the upstream sector of the region. As the demand for high-performance satellite systems grows, the need for sophisticated imported equipment will increase, providing European space start-ups and SMEs with a market advantage.

¹⁹ [Hub71 and Bpifrance to offer new mutual opportunities for Abu Dhabi and French-based startups, 2020 – HUB71](#)

²⁰ [Global and local tech power with Thales Emarat Technologies | Thales Group, 2021 - Thales](#)

- **Development of Joint Ventures (JVs):** With domestic ambitions for systems production comes new joint-venture and partnership prospects. In the Emirates, the UAE Space Agency has invested billions in homegrown capabilities and partnerships with other countries and commercial players²¹. This further underlines a paradigm shift away from complete system sales.

3.3.1. Strategic Imperative for Diversification

Despite the U.S.'s historical importance as a commercial partner, the necessity to diversify into new markets is becoming increasingly clear for European SMEs and start-ups. The Middle East, with its rapidly expanding space programs, offers significant growth opportunities. However, tapping into these markets requires navigating a complex landscape of joint ventures, internal capacity building, and a shift towards supplying subsystems rather than final products.

To achieve success in these new markets, European SMEs will need to develop specific support structures that ensure both economic and organisational viability. This includes not only understanding the local market dynamics but also building long-term strategic partnerships that can adapt to the evolving needs of the Middle Eastern space industry.

²¹ [Loft Orbital forms joint venture with UAE-based firm to scale satellite production in the Middle East, 2024 – Tech Crunch](#)

4. Export Challenges for the European Space Industry

As European space start-ups and SMEs seek commercial growth to sustain their expansion, accessing foreign markets presents a significant—and necessary—opportunity. Nevertheless, a set of challenges impede early-stage space businesses from leveraging exports to enhance their value proposition²².

4.1. European Market-Specific Challenges

4.1.1. Limited Resources

Penetrating foreign markets necessitates substantial financial resources, robust infrastructure, and specialised expertise (e.g., market research, logistics, and marketing campaigns). However, as highlighted by the European Investment Bank (EIB), the scarcity of investors with space industry expertise and the limited availability of commercial loans, together with the lack of established market positioning and connections with foreign suppliers, customers, and financing partners, severely limits the viability of foreign expansion for European startups. These efforts result even less sustainable for early-stage companies, often struggling to attain the necessary scale and financial stability to support such endeavours. Finally, the differing needs of upstream (requiring substantial capital investment and presenting longer development cycles) and downstream (more dependent on emerging markets and government uptake) space companies further complicate securing the necessary growth capital for foreign market expansion²³.

4.1.2. Entry Barriers

Incumbents benefit from established relationships with customers, technology providers, and local space agencies, making it challenging for external companies to enter foreign markets and gain a competitive advantage. Additionally, competition with foreign government-backed companies and the challenge of adapting advanced space technologies for commercial use intensify the risks for exporters. These factors, combined with financial uncertainties such as

²² [Opportunities and Challenges for Small and Medium Enterprises \(SMEs\)](#), 2022 - International Trade Council

²³ [The future of the European space sector](#), 2019 - European Investment Bank

exchange rate fluctuations, payment delays, and supply chain disruptions, put significant pressure on the cash flow capabilities of exporting space SMEs.

4.1.3. Geo-Political Complexities

Space ventures entering foreign markets face heightened exposure to regulatory changes, trade barriers, and political tensions. In this regard, navigating the complexities of trade regulations, tariffs, and non-tariff barriers (e.g., export subsidies in the foreign country, import quotas, customer procedures, local content requirements), poses significant challenges for ventures expanding into foreign markets. These challenges often result in lengthy and costly delays, as evidenced by the 2021 Telesat Lightspeed LEO constellation project, where the delays due to increased COVID-related supply chain issues hindered the negotiation process, causing the Canadian government to finance the totality of the project, and forcing the French ECA to opt out of the deal and the French-Italian aerospace firm Thales Alenia Space to lose a USD 5 billion business opportunity²⁴.

4.1.4. European Market Limitations

Despite the harmonisation of EU regulations, national implementation can vary significantly. Additionally, the fragmentation of European public institutions hinders market access, forcing SMEs and start-ups in the space sector to adopt suboptimal strategies, such as establishing multiple branches across Europe without necessarily focusing on value-adding activities. Finally, EU member states can impose additional controls and requirements based on national security interests, leading to inconsistencies in export controls. In this context, the lack of European-level diplomacy, together with the resistance of some governments to support the establishment of foreign branches in order to limit the possible loss of state-sponsored Intellectual Propriety Rights, further complicates expansion efforts, forcing space companies to navigate diverse national regulatory environments. Diplomatic support, including European delegations and guarantees, becomes therefore essential to streamline both long-term strategic initiatives and urgent short-term goals. This support is particularly crucial for smaller

²⁴[Canada Increases Telesat Lightspeed Investment, 2024 - SpaceNews](#)

countries, which might lack the critical mass to influence international negotiations, in promoting the commercialisation and expansion of their space ventures.

4.2. Space Technology-Specific Challenges

4.2.1. Regulatory and Technology-Related Risk

The absence of international trade agreements specifically for space goods and the lack of shared technical standards complicate cooperation between different space systems, products, and services. The European space sector's regulatory landscape is complex, involving multiple agencies and legal frameworks designed to ensure competitiveness and security while fostering international cooperation²⁵. Beyond Europe, U.S. regulations like the Export Administration Regulations (EAR) and the International Traffic in Arms Regulations (ITAR) have extraterritorial implications, complicating the export process for EU companies. These restrictions pose significant challenges, particularly for smaller companies navigating this complex regulatory environment. A coherent set of rules for standards harmonisation can foster interoperability and increase trade volumes. An example of such an initiative is ESA's ECSS²⁶, established to develop a single set of user-friendly standards for all European space activities, covering engineering, management, product assurance, and sustainability.

4.2.2. Dual-Use & Military Goods

Both at EU and Global level, space activities are subject to legislations regulating dual-use good and Weapon of Mass Destruction (WMD), as demonstrated by the Council Regulation 428/2009²⁷ and the Directives 2009/43/EC and 2009/81/EC²⁸, respectively ensuring strict controls for space products with both civilian and military purposes when exported to non-EU countries, and enhancing the competitiveness of the European space and defence industry by reducing barriers and promoting a single market for defence goods and services.

To engage in exports, countries must also adhere to the EU Dual-Use Regulation 2021/81²⁹. The regulation, governing the EU's export control regime, ensures that dual-use items do not

²⁵ [ITAR-defense.gouv.fr](https://itar-defense.gouv.fr), 2024 - Ministère des Armées

²⁶ Active Standards | European Cooperation for Space Standardization

²⁷ [Seeking Harmonisation: European Space Export Control at the Crossroads \(ethz.ch\)](#), 2011 - ESPI

²⁸ [U.S. Export Regulations \(trade.gov\)](#), 2024 - International Trade Administration

²⁹ [\(EU\) 2021/821](#), 2021 - Official Journal of the European Union

contribute to the proliferation of Weapons of Mass Destruction (WMD). In practice, companies must obtain export licenses depending on the nature of the goods and their destination. At the same time, space ventures must also adhere to the guidelines set by various multilateral regimes, like the Wassenaar Arrangement³⁰ (which imposes export controls on dual-use goods and technologies) and the Missile Technology Control Regime³¹ (which regulates the export of missiles and related technology). Finally, the presence of country-specific sets of regulations and licensing authorities further complicates the European regulatory framework³².

This context leads to added complexities and given the current growing geopolitical tensions and rise of space military budget, the Commission issued a White Paper³³ on Export Controls on January 2024, presenting strategies to strengthen EU export controls in response to escalating geopolitical tensions. As non-compliance can lead to severe penalties, including fines, imprisonment, or reputational damage, such regulations heavily impact the expansion capacities of space companies producing dual-use goods, and are forced to allocate extensive resources to clearly define their scope of operations and to ensure compliance with the regulatory requirements.

³⁰ Wassenaar Arrangement, 2023 - The Wassenaar Arrangement

³¹ Report by the MTCR Chair: Fourth Outreach Visit to Malaysia, 2023 - MTCR

³² Overview of national measures, 2021 - Official Journal of the European Union

³³ White Paper On Export Controls, 2024 - CIRCABC

5. Support in Financing Export Ventures

European space companies face unique challenges when exporting to other markets, facing complex landscapes characterised by constrained access to finance, strategic matters like the green transition, geopolitical tensions, disrupted supply chains, rising inflation and high interest rates, as well as domestic, foreign, and third-party regulations (e.g., ITAR). In addition, government and institution-backed preference for local or national products and services result in protectionist policies and decreased institutional financing presence, further requiring space companies to re-adapt their products and services and to precisely define their commercial, civil government, or defence scope. Despite their efforts, the complex international market environment causes 70% of European space companies to generate less than 30% of their revenues from non-European exports, de-facto increasing the need to rely on European and domestic markets. Moreover, 40% of exporting companies report that it takes a year or more to develop the capability to export, highlighting the importance of financial support to cover the expensive and lengthy process of entering foreign markets³⁴.

5.1. Governmental Support & Export Credit Agencies (ECAs)

Historically, governmental support has helped easing the burden while also facilitating trade through counselling. Nevertheless, as a result of the aforementioned challenges, fiscal buffers have eroded, widening the gap between public investments and demand. As such, alternative private investment institutions are on the rise, presenting new funding opportunities through custom financial products. In this context, ESPI Alternative Finance Study³⁵ highlights the crucial role of **Export Credit Agencies (ECAs)**, together with **private investment** and **government support**, in facilitating access to foreign markets (also emphasising the complexity of entering the U.S. market due to high regulatory standards and capital requirements).

ECAs are private or quasi-governmental institutions that act as an intermediary between national governments and exporters to issue export insurance solutions and financing guarantees. The purpose of these banks is to support deals benefiting domestic enterprises,

³⁴ Export and International Market Survey Synthesis, 2022 - SME4SPACE

³⁵ Bridging the Financing Gap in the European Space Sector, 2024 – ESPI

providing low-interest loans at longer terms, allowing the borrowing company to spread CAPEX over several years (it was the case for Eutelsat OneWeb, where two thirds of the total project cost, namely ~ USD 2 billion, were provided by English, French, and Indian ECAs). Other ECAs include the Export-Import Bank in the US, COFACE in France (who supports space industry endeavours that might not attract conventional debt or investment funding due to their risk profiles), and the SACE in Italy (who aims to match foreign buyers to national suppliers, providing competitive trade financing supports and long-term financing guarantees) together with the Italian Trade Agency (who supports business development of Italian companies abroad and promotes the attraction of foreign investment into Italy through its 79 offices in 65 countries). Altogether, these agencies allow to connect government support and exporters, playing a crucial role in supporting space companies in accessing foreign markets.

Case Study: SATRIA Backed by BPI

In 2021, Bpifrance Assurance Export is provided a USD 261 million export credit guarantee to support Thales Alenia Space, the designer and supplier of the telecommunications satellite for Indonesia's SATRIA project. The Indonesian Ministry of Communication and Information Technology (KOMINFO) initiated this project to deliver fast internet access to remote areas. The project, structured as project finance with co-financing from the Asian Infrastructure Investment Bank (AIIB) and the Korean Development Bank (KDB), involves a public-private partnership led by PT Satelit Nusantara Tiga, to install and operate the satellite and ground segments. The project secured approximately USD 545 million, out of which USD 431 million was debt.

Besides ECAs, the European Innovation Council (EIC) offers financial and commercial support through programmes like Pathfinder³⁶, Transition³⁷, and the EIC Accelerator³⁸. At the same time, collaboration with DG DEFIS³⁹ and the CASSINI Hub⁴⁰ provides technological de-risking and market entry support, which is crucial for space companies looking to expand.

³⁶ [EIC Pathfinder](#), 2024 – EIC

³⁷ [Transition](#), 2024 – EIC

³⁸ [Accelerator](#), 2024 – EIC

³⁹ [DG DEFIS](#), 2024 – European Commission

⁴⁰ [Cassini Hub](#), 2024 – European Commission

5.2. Private Investment

From a **private-support** perspective, space ventures mostly rely on their own capital to support foreign expansion, with only 20% of the financing requirement being satisfied through bank loans⁴¹. Drawing from the experiences of U.S. space startups, successful international expansion relies on adaptability to local regulatory frameworks and market demands. In this regard, a strong ecosystem fostering co-investment at both national and EU levels could streamline the investment process, ensuring greater product-market fit and regulatory compliance, and making the space sector more attractive to private equity and VC investors. This, in turn, would reduce reliance on government and ECAs support, which remains indispensable.

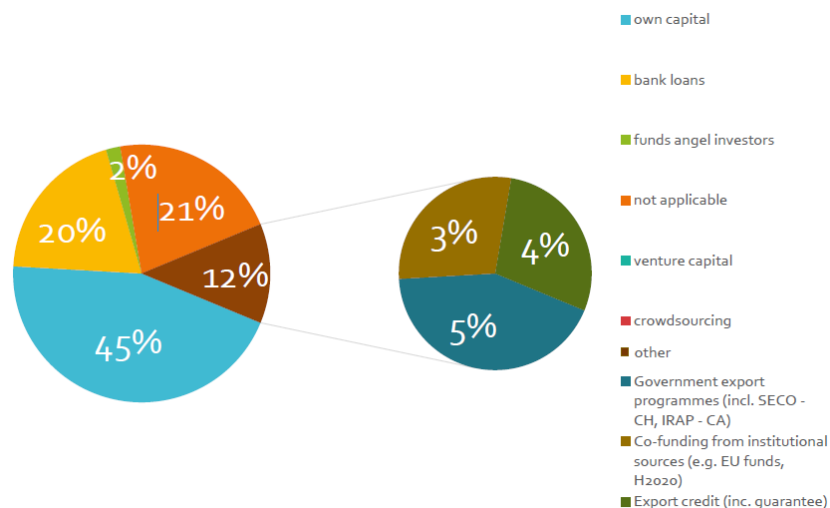


Figure 31: Sources of Financing for Foreign Expansion (SME4SPACE Survey, 2022)

5.3. Institutional Support

Finally, from an **institutional perspective**, balancing export controls with policies that encourage exporting is crucial. Regulatory frameworks should facilitate rather than hinder expansion, ensuring that space companies can grow while complying with necessary controls. Despite the recommendations given by organisations like the Organisation for Economic

⁴¹ Export and International Market Survey Synthesis, 2022 - SME4SPACE

Cooperation and Development (OECD), other nations continue to employ export subsidies to support their space industries, underscoring the competitive nature of the industry.

While greater import controls and export subsidies may strain Europe's already fragile trade balance, clear domestic support – through policies and diplomatic efforts – is now essential to enhance the global competitiveness of European space companies. Failing to do so wouldn't only limit the capacity of space ventures to expand beyond national borders but would also heighten the exposure to the increasing competition from emerging space powers, such as India and the Middle Eastern countries.

Unlike Europe, whose scope of action is restricted by its geopolitical alliances, these regions can trade freely with countries sanctioned by the U.S. and Europe itself. As such, failure to actively promote exports to these markets could, over time, reduce their dependence on European products, posing a long-term threat to European space exports and diminishing the global space industry's reliance on European technology.

6. Recommendations and Concrete Actions

The complexities of the European market, particularly with its space industry, significantly affects the ability to export of space ventures. These companies face the impact of fragmented regulations, complex export controls, and safety concerns. To mitigate these challenges, it is essential to harmonise regulations, strengthen diplomatic support, and provide unified technical and financial assistance across Europe. Coordinating efforts at the European level can streamline market entry, foster cooperation, and enhance competitiveness.

More precisely, addressing the unique challenges of the space industry requires the development of financial products and services tailored to these specific complexities. Key strategies include further leveraging ECAs, simplifying regulatory processes, strengthening institutional support, and encouraging co-investment and private funding.

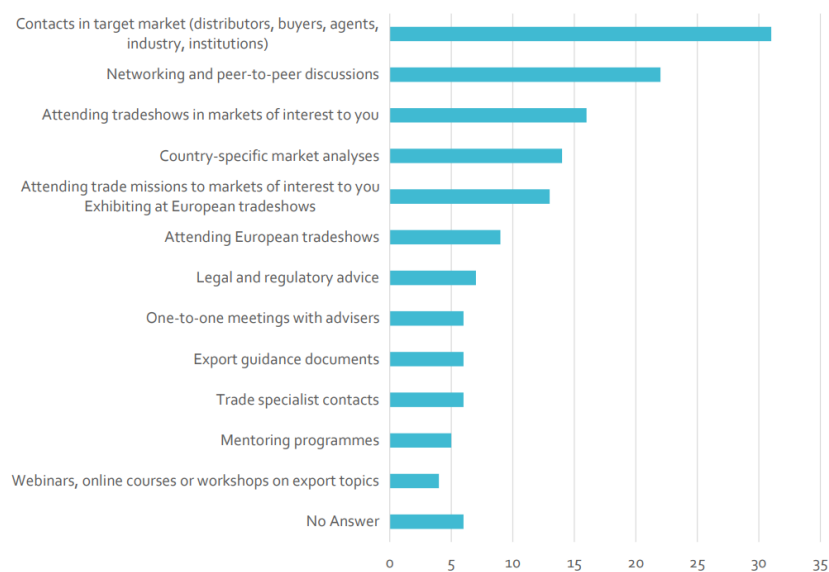


Figure 2: Most Beneficial Support to grow Export (SME4SPACE Survey, 2022)

In light of the key support mechanisms identified by exporting space ventures in the *SME4SPACE Survey*, as well as the elements highlighted during the ECSECO event, a series of institutional and financial actions can be proposed to foster long-term growth and ensure success in a growing, yet fragmented sector.

6.1. Institutional and Regulatory Actions

6.1.1. Creation of a European Export Hub for Space

European stakeholders should consider establishing a dedicated European Space Export Hub. This hub could provide tailored export support and guidance, especially for SMEs and startups navigating the complexities of international markets. Acting as a central resource, it would offer insights into market conditions, help companies navigate regulatory hurdles, facilitate access to export financing, and create greater connection opportunities with distributors, buyers, and agents of each country.

- **Concrete Action:** The Export Hub could be a joint effort, bringing together key players such as Eurospace, national Export Credit Agencies (e.g., COFACE and SACE), the external action service of the European Union, and EC’s Enterprise Europe Network. This initiative would streamline support services, offering everything from market research and credit facilitation to training on foreign regulations.

6.1.2. Organisation of European Space Export Fairs and Mentorship Programmes

The establishment of European Space Export Travelling Fairs and Space Startup Competitions – such as the European-Japanese⁴², the European-Indian⁴³, and UAE’s⁴⁴ contests – could provide companies, especially SMEs, a platform to showcase their experience in accessing foreign markets, while gaining insights into industry trade practices of other companies in the sector. Coupled with this knowledge exchange, the organisation of mentorship programs would offer valuable guidance from experts with proven experience in driving international expansion.

- **Concrete Action:** Industry-specific Associations, together with the EU and ESA, could support the organisation of trade shows and export fairs, fostering networking events, peer-to-peer discussions, mentorship programs, and one-on-one consultations. This would enable companies to directly learn export best practices, reducing research costs, mitigating expansion risks, and enhancing intra-European collaboration efforts.

⁴² [First European-Japanese Space Startup Competition, 2024](#) – ESA

⁴³ [Winners of the First European-Indian Space Startup Competition, 2024](#) - ESA

⁴⁴ [UAE Space Agency calls on space startups to participate in space startup pitch competition, 2023](#) – ThePrint

An exchange programme favouring residencies of European startup of the ESA BIC network/alumni in non-European business incubation/acceleration structures could also be beneficial to support the implementation of this action.

6.1.3. Targeted Market Intelligence and Adaptation Programmes

Developing market-specific intelligence programmes for European space companies, with a focus on new markets such as the UAE, Saudi Arabia, and India, could be key to their success. These programmes would deliver detailed insights on local regulations, potential partnerships, and market demand, ultimately satisfying the need for contacts with trade specialists and of country-specific market analyses.

- **Concrete Action:** ESA, in collaboration with local trade agencies and chambers of commerce, could contract institutions (ESPI, EARSC, ...), and/or the EU External Action Services and/or consultancies to organise workshops, webinars, and online courses, while publishing detailed intelligence reports. These resources would cover everything from compliance with local laws to cultural norms and effective sales strategies tailored to each market. A partnership agreement between the ESA BIC network and the local space incubation/acceleration entities could support this action.

6.1.4. Increased Role for European Delegations in Space Exports

European diplomatic missions and trade delegations should take on a larger role in facilitating space exports by negotiating favourable trade conditions, reducing regulatory barriers, and supporting companies as they enter new markets.

- **Concrete Action:** Greater collaboration with the EU's External Action Service (EEAS) and European embassies could embed space export experts within diplomatic missions and further integrate within Europe's foreign policy. These experts would assist companies by offering regulatory guidance, facilitating contract negotiations, easing the access to export guarantees, and lobbying for reduced trade barriers in key international markets. Potential collaboration pathways could be provided by ESPI.

6.1.5. Accelerated Export Pathways for Dual-Use Technologies

Establishing faster export pathways for dual-use space technologies (those with both civilian and military applications) could help European companies tap into lucrative defence and security markets.

- **Concrete Action:** Working with European defence agencies, European stakeholders could streamline export approval processes for dual-use technologies, particularly in markets with high demand for space-based surveillance, communications, and defence systems, ultimately providing ad-hoc legal and regulatory advice.

6.1.6. Best Practices for the Establishment of Joint Ventures

Given the challenges of workforce and regional supply in emerging space markets like the Middle East, and considering the activity of space companies operating in these regions, the promotion of Joint Ventures could foster export for European space companies and offer a cost-effective way to expand into these markets.

- **Concrete Action:** ECSECO could host webinars and events to promote best practices associated with the establishment of Joint Ventures, effectively outlining their advantages and limits while facilitating the creation of international business opportunities among European space companies and their foreign counterparts.

6.2. Financial Actions

6.2.1. Customisable Export Financing Instruments

There is a need to develop export financing solutions that are specifically designed for space companies aiming to break into new markets such as the Middle East, India, and Southeast Asia. These instruments should be adaptable to the unique financial demands of space ventures.

- **Concrete Action:** In collaboration with European development banks and export credit agencies, the development of financing packages (tailored financing instruments, subsidised interest rates, flexible repayment terms, guarantees etc...) that take into account the extended timelines and high costs typical of space projects. These

packages might include flexible repayment terms, risk-sharing initiatives, and guarantees tailored to the needs of space companies entering new regions.

6.2.2. Export Risk Mitigation Tools

Developing tools to mitigate export risks could help European space companies manage financial and geopolitical uncertainties when entering foreign markets, especially those characterised by political instability, regulatory complexity, and heightened exchange rate volatility.

- **Concrete Action:** ESA could work with European insurers, financial institutions, and export credit agencies in supporting the ideation of insurance products tailored to space ventures. These products might cover risks such as currency fluctuation, non-payment, and political instability, all linked to space, ensuring companies are better protected when operating in volatile environments.

6.2.3. Export Incentives Linked to Market Success

Export incentives tied directly to measurable market success could encourage companies to stay focused on international growth. These incentives might reward companies for reaching certain performance milestones within their domestic markets.

Concrete Action: European governments alongside European space institutions, could offer export incentives such as tax breaks, grants, loan forgiveness or tailored contract access for companies that achieve specific targets in their international markets. This could help drive sustained international expansion for companies already competitive in domestic and European markets.

7. Conclusion

The European space industry finds itself at a pivotal moment, with significant growth potential but also facing major financial and commercial obstacles. This white paper emphasises the urgent need for better export support and more efficient financing to help the sector realise its potential. While exports are key to driving organic growth, they require a strategic approach to navigate the complexities of the global market. Insights gathered from the European Center for Space Economy and Commerce event, which shaped much of this analysis, stress the importance of collaboration across the industry to tackle these challenges.

The white paper urges industry players, policymakers, and financial institutions to work together on implementing key strategies, such as boosting export credit support, strengthening public-private partnerships, and harmonising regulatory frameworks throughout Europe. Moving beyond analysis, the focus must shift to engaging with stakeholders and acting on their feedback to eliminate the barriers hindering the sector's growth.

Several key strategies were discussed during the ECSECO event, including setting up foreign subsidiaries, forming strategic alliances, and pursuing direct export strategies, all of which are essential for expanding Europe's footprint in international markets. These initiatives are not only crucial for securing the funding needed to scale up operations but also for ensuring that European space companies can effectively compete on the global stage.

Acknowledgement

The ECSECO Board would like to thank the contributor to this paper, including Dr. Gianluigi Baldesi and Mr. Jules Varma, members of ECSECO, and the speakers and participants to the special ECSECO event, supported by ESPI.

About the ECSECO Special Event



The European Centre for Space Economy and Commerce (ECSECO) held special event on May 22, 2024, at the European Space Policy Institute (ESPI) premises in Vienna. The event was designed to enhance the European space industry’s ability to access and succeed in global markets. This focus is particularly important given the limited capacity of the European market to fully support the rapidly growing space start-up ecosystem.

The event’s primary objective was to provide ECSECO members, along with key stakeholders—including investors from the ESA Investor Network, regulatory experts, and leaders from the space industry—a platform to discuss and explore strategies for entering foreign markets. The discussions tackled the challenges and opportunities that come with exporting European space technologies and services, and how international expansion can support the industry’s growth and long-term sustainability.

Three main panel discussions were held. The first panel focused on investors’ perspectives on global expansion, and the necessity and feasibility for European space companies. The second session delved into how European companies can navigate different global regulatory landscapes while maintaining their competitive edge. The final panel industry experts offered

insights on best practices in exporting, covering legal, financial, and support mechanisms available to European space companies.

Lessons learned from current space trade relations with the U.S. and other growing markets have highlighted the importance of capturing new opportunities for commercial expansion through exports to New Space ambitious nations, specifically in the Middle East and South-East Asia.