# EUROSPACE CONTRIBUTION TO EUROPEAN DEFENCE INDUSTRIAL STRATEGY (EDIS)

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| **Issue paper #1: Towards a European Defence Industrial Strategy: overall consultation paper** | | |
| **Headline 1:** Member States' defence spending has recently started to increase but their efficiency is still to be substantially improved. | | |
| 1.1 | How can we improve the predictability and visibility of the European demand for the EDTIB? | The three identified issues of the paper are also very much shared by the space sector, dual by nature, in a context where the functioning of economies, citizens and public policies increasingly relies on space-related services and data, including those in the field of security and defence.<br><br>Improving the predictability and visibility of the European demand is therefore also a must for the European space industry. An underlying challenge to this objective is the capability to increase the low-level of public investment currently limiting the ability of the European space industry to compete on equal footing with its competitors, particularly across the Atlantic, who benefit from a larger, more cohesive and captive domestic market. Despite recent progress, the limited scope and fragmented nature of the EU's internal market for military space remains a limiting factor for the development of a more robust and competitive |

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| | | European Defence and Technological and Industrial Base (EDTIB) fully able to address the strategic challenges notably highlighted in the EU Space Strategy for Security and Defence. The implementation of the European Defence Fund or IRIS² can therefore offer a new opportunity to boost institutional investment in strategic and military applications of space – the central pillar of American, Russian and Chinese space policies.<br><br>The EU Space Programme having been the first to assume a European preference (i.e., Article 24 on "Eligibility and participation conditions for the preservation of the security, integrity and resilience of operational systems of the Union"), a reinforcement of this European preference is needed to dynamise institutional demand. |
| 1.2 | How can we achieve a better coordination of defence spending at EU level, including by making best use of PESCO and CARD as well as of the EU budget? | Achieving the coordination of space spending at the EU level must first be based on a common vision and strategy for space and defence activities within the EU that would align with the goals and strategy of Member States and its national industry. This will encourage consolidation, with MS pooling resources at EU level to develop capabilities, infrastructures and services and avoid unnecessary duplication. |
| 1.3 | How can we further promote the use of joint procurement? Is there any concrete issues that need to be addressed within the defence procurement directive in times of high tensions? | Europe is currently lagging behind in its ability to develop and manufacture advanced materials with a high level of technological maturity and finally qualify them for use in space applications.<br><br>The resilience of the European space supply chain should include the capacity of the industry to recover from any disruption, especially disruptions in non-EU markets. Currently, many critical materials are procured outside from Europe (from rare metals to silicones or fibres). The market demand for space-grade materials in Europe is so small that only institutional funding could help sustain it.<br><br>There is indeed today no single platform which can focus on all aspects of the supply chain criticality; one possibility could be to promote the use of joint procurement by setting up Important Projects of Common Interest (IPCEI) for space or an equivalent of EDIRPA for space materials/technologies. |

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| | | In this respect, space missions, similarly, to defence, have sometimes significant number or requirements, one of them being high reliability, eliminating the risk of failure with fatal consequences. Therefore, good alignment between space and defence exemptions in EU's environmental regulations and protection of material and chemical sourcing and thereof of their use in Europe is essential, especially in the case of EU strategic space projects. |
| **Headline 2:** The protection of contested strategic domains requires massive and coordinated investments that exceeds the capacity of any Member State alone. | | |
| 1.4 | How to jointly identify European defence infrastructures and strategic enablers to protect the EU's free and unfettered access to and freedom of action in contested domains? | As called for in the EU Space Strategy for Security & Defence, the establishment of an annual analysis of space threat (that should encompass the three dimensions of to-space, in-space and from-space threats) is needed to identify European space/defence infrastructures and strategic enablers to protect the EU's free and unfettered access to and freedom of action in contested domains, as is the development of sovereign European Space Situational Awareness (SSA) capabilities.<br><br>The European space industry can actively contribute to this yearly analysis cycle by providing useful insights into the reality of day-to-day space operations, from the point of view of space manufacturers, operators or service-providers.<br>Such an assessment would help to avoid having sensitive capabilities (including skills, technologies, assets and building blocks) being acquired by potentially hostile countries or organisations. In addition, it would allow industry to:<br>• Work on new R&D priorities specific to already-known threats or a new type of threat that would be arising;<br>• Raise awareness among customers and institutional players of the need for preventive approaches;<br>• Define new standards for crisis response and mitigation measures;<br>• Exchange best practices between private and public players;<br>• Adapt approaches used to protect ground infrastructures to protect space ones. |
| 1.5 | How to ensure that strategic enablers required to ensure safe and unfettered access to contested domains are available at the EU level? | There is first the need to assess the space/defense capabilities of EU MS to identify gaps and areas where joint investment and collaboration at EU level can enhance overall capabilities. |

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| | | If focusing on the capabilities that no single MS could afford to buy or develop alone requires high level of investment and a de-risking approach, it also requires a long-term approach to try to identify the needs in a 15-20 years approach.<br><br>In a second time, ambitious investments in technology and capabilities are needed. Devising and implementing an ambitious and efficient R&D for space/defence (associated to a significant budget) shall aim at the following objectives:<br>• Maintaining the technological readiness of the EU-owned strategic infrastructures (EGNOS, Galileo, Copernicus);<br>• Preparing the development of the new components of the EU space programme (SST, Govsatcom, IRIS²);<br>• Support technological non-dependence in areas considered critical for European sovereignty and competitiveness;<br>• Establishing an efficient and sustainable common technology base for European space systems;<br>• Ensuring the necessary technological leadership to be able to compete on open markets |
| 1.6 | What could be the added value of EU support to these projects? Could they materialise into European flagship projects? | The EU support allows MS to pool their resources, both financial and technological, for large-scale projects. Supporting space & defence projects at EU level can therefore lead to more ambitious and effective initiatives that exceed the financial capacities of individual MS. In addition, the EU support ensures that projects are aligned with broader EU strategic objectives and priorities. This alignment enhances the overall coherence of efforts, making it easier to achieve common goals and address shared challenges. Finally, EU-backed projects can carry more weight on the international stage. The EU's collective economic and technological power, when focused on a specific project or initiative, can enhance the EU's influence and contribute to shaping international norms and standards in contested domains, as well as demonstrate European leadership in critical areas. |
| **Headline 3:** Nearly two years after the beginning of Russia's war against Ukraine, the EDTIB has still not fully undergone its necessary transformation. | | |
| 1.7 | How can we improve the industrial availability of defence products | Short term:<br>• Identify and address vulnerabilities in the supply chain to ensure short-term |

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| | manufactured by the EDTIB in the short, medium, and long term? | availability.<br>• Establish strategic stockpiles for critical components to mitigate the impact of sudden disruptions<br>• Streamline procurement processes to reduce bureaucratic delays<br>• Promote collaborative agreements with allied countries to share resources and capabilities.<br>• Develop mechanisms for rapid deployment and mobilisation of industrial capabilities during emergencies<br>Medium term:<br>• Increase investment in R&D to enhance the technological capabilities of the EDTIB<br>• Invest in training and skills development to ensure a qualified and adaptable workforce<br>• Facilitate the transfer of technology between space/defense and civilian sectors<br>Long term:<br>• Develop long-term strategic plans for the EDTIB, aligning space/defense industry priorities with national and EU-level security objectives. This includes forecasting future threats and adapting industrial capabilities accordingly.<br>• Seek opportunities to diversify the markets for space/defense products and enhance industry competitiveness. This could involve exporting products to allied nations or exploring dual-use technologies that have civilian applications. |
| 1.8 | How can we design and implement an effective security of supply regime within the Internal Market, in particular when a crisis occurs? | • Establish a systematic process for assessing and identifying potential risks to the security of supply. This includes identifying critical sectors, resources, and dependencies that could be affected during a crisis.<br>• Implement measures to protect critical infrastructure, including strategic industries and supply chains. This involves collaboration with private sector entities to enhance the resilience of key facilities and networks.<br>• Develop a strategic stockpiling policy for essential goods and resources. Maintain reserves of critical items preventing shortages and disruptions during crisis<br>• Collaborate closely with industries and businesses to understand their vulnerabilities and capabilities to better to enhance the resilience of supply chains and address challenges collectively.<br>• Encourage diversification of suppliers and supply chains to reduce dependencies on specific regions or entities |

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| | | • Invest in innovative technologies that enhance the efficiency and security of supply chains<br>• Conduct regular exercises to test the effectiveness of the security of supply regime |
| **Headline 4:** Mainstreaming a defence industrial readiness culture at EU and national levels is an imperative. | | |
| 1.10 | How can we improve the social recognition of the key role of the defence industry, for the resilience, security, innovation, and economy of the Union? | • Showcase the economic impact of the space/defense industry in terms of employment, EU trade balance contribution etc. As such the European space industry (strong of 57000 FTEs in 2022) generated a net surplus to the European trade balance worth 900M$ every year in the past decade.<br>• Emphasise the space/defense industry's role in driving technological innovation with advancements that have positive spillover effects in other sectors, showcasing the industry as a driver of progress.<br>• Communicate on the industry's commitment to environmental and social responsibility<br>• Education and outreach |
| 1.11 | How can we enhance the EDTIB's access to finance (including EU structural funds) and adequate skills? | • Explore ways to leverage EU structural funds for space/defense-related projects<br>• Promote PPPs to facilitate collaboration between the public and private sectors. These partnerships can attract private investment and provide financial support for space/defense projects<br>• Leverage and expand on the EDF to support collaborative space/defense projects.<br>• Strengthen coordination with national funding agencies to ensure that funding mechanisms are aligned and complement each other<br>• On skills, support industry-led certification programmes that validate skills relevant to the space/defense sector. This helps standardise skill requirements and ensures a qualified workforce. |

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| 1.12 | Are there regulatory hurdles at EU level hampering the EDTIB's ability to contribute to the EU defence readiness? If so, which ones? | • Regulatory fragmentation and divergence among EU MS<br>• Complex and lengthy procurement procedures |
| **Issue paper #2: Towards a European Defence Industrial Strategy: Investing better and together in defence capabilities and innovative technologies** | | |
| **Headline 1**: Identifying common needs at an early stage and ensuring transparency on demand | | |
| 2.1 | How to enhance and further support the identification of short-term to long-term defence product needs? How can we build upon the DJPTF's experience to aggregate demand and map production capacity to deliver upon it? | • Establishment of forums for discussion/collaboration gathering public and private actors<br>• Engagement with the space/defense industry for them to provide input on technological advancements, innovations, and potential solutions that can meet defense needs.<br>• This should include regular consultations and feedback sessions with end-users to gather input on their experiences, challenges, and evolving needs in different operational environments.<br>• Establishment of an annual analysis of space threats to identify European space/defence infrastructures and strategic enablers<br>• Wargaming exercises to assess the effectiveness of existing capabilities and identify potential gaps |
| 2.2 | How can we identify, based notably on the CDP, which long-term priorities should and could realistically result in EU European Defence Industrial projects of common interest? What role do we see for current and possible future EU defence initiatives, such as the European Defence Investment | See above (2.1) |

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| | Programme (EDIP)/European Defence Capability Consortium (EDCC) 13(for more details see below), PESCO and/or EDF in this regard? How to ensure and secure the commitment of interested MS for these projects? | |
| 2.3 | Could a consistent EU support for European Defence Industrial projects of common interest, starting with research through development up to joint procurement and potentially maintenance and upgrades, incentivise Member States to finally procure the final product? | Yes, it could, as:<br>• EU support can alleviate the financial burden on individual Member States by providing shared funding for research, development, and procurement phases. This can make space/defense projects more feasible and attractive for Member States.<br>• EU support can help mitigate the risks associated with large-scale space/defense projects. By sharing risks, Member States may be more willing to engage in collaborative efforts, knowing that the financial and technical challenges are distributed.<br>• EU-supported projects promote interoperability among Member States, enabling them to share and integrate space/defense capabilities seamlessly.<br>• Collaboration between industries can strengthen the industrial base and enhance the competitiveness of the European space/defense industry.<br>• Consistent EU support provides long-term planning certainty for Member States.<br>• EU support can facilitate the development of streamlined and standardised procurement processes. |
| **Headline 2:** Coordinating defence spending and procurement plans, including the harmonisation of requirements | | |
| 2.4 | How to simplify the launch and successful completion of cooperative defence programmes? | • Define clear and well-articulated strategic objectives for cooperative space/defense programmes. Ensure that the goals align with national and EU security priorities, fostering a shared understanding among participating entities.<br>• Secure strong political will and commitment from participating entities<br>• Establish a robust governance structure that outlines decision-making processes and responsibilities<br>• Streamline and standardise procurement processes to simplify the acquisition of common space/defense capabilities |

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| | | • Conduct regular assessments of programme progress, identifying potential issues early on. Implement feedback loops to ensure continuous improvement and make adjustments as needed.<br>• Conduct a comprehensive post-implementation review to capture lessons learned and best practices for future cooperative space/defense initiatives. |
| 2.5 | How to strengthen interoperability and interchangeability of defence products developed and procured by Member States? How can current and possible future EU defence initiatives and instruments, such as the EDF and PESCO projects, EDIP/EDCC (see below) or other EU tools contribute to standardisation and help to achieve interchangeability of consumables? | • Develop and adopt common standards and specifications for space/defense products<br>• Encourage collaborative R&D efforts to promote the use of common technologies and design principles, facilitating interoperability from the early stages of product development. |
| 2.6 | How to improve synchronisation of national budgetary provisions for cooperative programmes? How to ring-fence budget allocated to cooperative programmes in the national setting? Would Member States be ready to consider pooling national contributions in a wider EU scheme? | Ring-fencing the budget allocated to cooperative space/defense programmes in a national setting involves implementing measures to safeguard and clearly delineate financial resources dedicated to these specific programmes. This can be done via legislative measures explicitly designating a portion of the national space/defense budget for cooperative programmes, via Memoranda of Understanding (MoUs) outlining the financial commitments and obligations of each MS, and/or dedicated funding lines within the national space/defense budget specifically earmarked for cooperative programmes. |
| **Headline 3:** Aggregating demand through joint procurement | | |
| 2.7 | Is the complexity of defence procurement procedures an obstacle to the timely availability and supply of European made products? If so, to what extent and for which reasons, and how to reduce it? How to further facilitate the acceleration of | Several challenges exist:<br>• Lengthy and bureaucratic processes including multiple layers of approval and extensive documentation requirements<br>• Complex regulatory frameworks, both at national and EU levels<br>• Due to the sensitive nature of space/defense products, security and classification requirements are stringent. However, these requirements can contribute to delays, |

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| | defence procurement? What are the barriers to Member States' cooperation beyond common/joint procurement, e.g. in maintenance, procurement of spare parts and logistics? | particularly if there are challenges in obtaining necessary clearances.<br>• Divergent national standards and certification processes across European countries can complicate procurement<br>Facilitate the acceleration of space/defence procurement can be done via:<br>• Harmonisation of standards and certification processes across European countries<br>• Streamline approval processes by reducing unnecessary bureaucratic steps<br>• Leverage digital technologies to automate routine procedures<br>• Adoption of agile procurement practices that allow for flexibility and responsiveness to changing requirements |
| 2.8 | Could a one-stop-shop further incentivise joint procurement, especially for Member States lacking the relevant administrative capacity? Could potential EDCCs contribute to the aggregation of defence demand supporting the EDTIB's competitiveness, and how? | This would:<br>• Simplify the procurement process by consolidating administrative tasks, reducing paperwork, and offering a unified point of contact. This can be particularly beneficial for Member States with limited administrative capacity.<br>• Concentrate procurement expertise in a single entity can enhance efficiency and effectiveness<br>• Lead to cost savings by eliminating redundant administrative efforts<br>• Faster procurement timelines |
| **Issue paper #3: Towards a European Defence Industrial Strategy: adapting the Union's defence industrial base´to the rapidly changing security environment** | | |
| **Headline 1:** Improving the industrial availability of defence products manufactured by the EDTIB | | |
| 3.1 | How can we further address the current fragmentation of defence supply, in particular the lack of standardised products at Union level, so that they can meet Member States' requirements in time, scale and quality? | A comprehensive and collaborative approach across all stakeholders in the value chain is required to address the current fragmentation of defence supply. Developing common standards for space/defense products to ensure interoperability and compatibility across Member States is key. For instance, to achieve secure standardised products, a focus on secure software development procedures is essential. Collaborative efforts throughout the software development lifecycle are crucial for proactively identifying and mitigating security risks. This involves adherence to security standards, security validation, and rigorous testing, ensuring a security-by-design principle. |

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| | | A critical step toward overcoming the strategic challenges highlighted in the Space Strategy for Security and Defence involves the definition and approval of "Common European security standards." By establishing a normative framework and promoting the adoption of Common European security standards, the EU can foster a more integrated and cohesive defence supply chain. This approach not only addresses the current fragmentation but also sets the foundation for a more robust and competitive European defence industry, capable of meeting evolving security challenges. |
| 3.2 | How could we further de-risk productive investment along defence supply chains to facilitate the ramp up? Would there be merit in extending the ASAP logic beyond its current (temporal and/or material scope of application? What adaptations of the ASAP framework might be needed to support the ramp up of other systems manufacturing capacities? | Facilitating the ramp-up of productive investments along defence supply chains requires a strategic approach to de-risking and incentivising innovation within the European space sector. To ensure Europe's leadership in space, a robust domestic industry capable of designing, delivering and exploiting advanced space systems is essential. Investment in innovation today becomes the driver of tomorrow's competitiveness and EU funding in R&D plays a pivotal role in boosting European competitiveness and fostering innovation.<br><br>Addressing security risks in the space sector is welcomed, and protecting supply chains and procurement rules is vital. However, it is imperative that these actions be integrated into a coherent and Europe-wide industrial policy. To de-risk investments, institutions should explore initiatives that focus on reducing risks associated with products and markets. Rather than solely subsidising VCs to invest in a given sector, public support could be directed towards de-risking investments, such as providing support for R&D, enhancing maturity or creating direct business opportunities for companies.<br><br>Lastly, anchor tenancy emerges as an interesting approach to financially de-risk investment and development and to lead the way to operational services. Public investments will remain crucial for infrastructure providers as it will support the development of strategic and sovereign assets that enable the development of new services. Furthermore, future investments in riskier technological acquisitions, such as reusability of launchers, require continued public support, given the challenging nature of the space environment. Institutional |

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| | | partners play a critical role in this context, ensuring the sustained development and success of the European space sector. |
| 3.3 | How could we support industry in adapting to the demand cycles and in particular adapting to downturns? Would the support of ever-warm facilities be an option? | First and foremost, to further strengthen the industry against downturns, the EU should proactively increase its own domestic demand for space-related services. This can be achieved by implementing European preference for all institutional launches and significantly increasing the overall size of domestic launch demand. By doing so, the European space sector can maintain a more stable and self-sufficient position in the global market.<br>Encouraging public authorities to adopt space-based services is another key element. Norms, regulations and a service-oriented policy can play pivotal roles in permitting public sector uptake of space-based services. This not only creates a sustainable primary institutional market but also accelerates the emergence of profitable secondary commercial markets. It is important, however, to recognise the ongoing need for funding space infrastructures to enable the provision of these services. |
| 3.4 | How could the EU budget incentivise the availability of defence products and equipment? | EU budget is needed on the short, medium and long term.<br>Short term:<br>• Identify and address vulnerabilities in the supply chain to ensure short-term availability.<br>• Establish strategic stockpiles for critical components to mitigate the impact of sudden disruptions<br>• Streamline procurement processes to reduce bureaucratic delays<br>• Promote collaborative agreements with allied countries to share resources and capabilities.<br>• Develop mechanisms for rapid deployment and mobilisation of industrial capabilities during emergencies<br>Medium term:<br>• Increase investment in R&D to enhance the technological capabilities of the EDTIB<br>• Invest in training and skills development to ensure a qualified and adaptable workforce<br>• Facilitate the transfer of technology between space/defense and civilian sectors<br>Long term: |

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| | | • Develop long-term strategic plans for the EDTIB, aligning space/defense industry priorities with national and EU-level security objectives. This includes forecasting future threats and adapting industrial capabilities accordingly.<br>• Long-term budget visibility<br>• Seek opportunities to diversify the markets for space/defense products and enhance industry competitiveness. This could involve exporting products to allied nations or exploring dual-use technologies that have civilian applications.<br><br>One key concern is also the potential dismantlement of the space industry's skilled workforce in the event of insufficient workload. Given the extended timeframes required to develop space products, the loss of a skilled workforce poses a critical danger. Reassembling teams with unique competencies is a time-consuming process, and in a rapidly evolving landscape, this challenge is exacerbated as emerging space-faring nations close their “researchers' gap” with traditional space powers. |
| **Headline 2:** Reconciling the short and long terms through sustained coordinated efforts in R&D | | |
| 3.5 | How can we better target the most relevant R&D priorities to be supported by the EDF, given its limited budget? How to better link technology roadmaps stemming from OCT and funding instruments? | Targeting the most relevant R&D priorities can be achieved if the private sector is fully involved when it comes to defining the R&D areas where investments are needed. The rationale is very simple, if the EU has the political objective of supporting the space sector competitiveness, then it is a good idea to listen directly to the entities that are actually in competition and have a detailed knowledge of the expectations of the end-users.<br><br>Consistency should be ensured through common R&D roadmaps encompassing both civil and military needs to allow synergies and complementarity of the different sources of EU funding (EU Space Programme, Horizon Europe and EDF). It is key to avoid scattering of budget along 100 projects with small budget lines in favour of prioritising some urgent and important topics. The Co-Programmed European Partnership for Global Competitive Space Systems needs to focus on the most relevant and urgent needs of the industry to maintain its competitiveness. |

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| | | Technology roadmaps stemming from the OCT or the JTF need to be implemented by staying focused on “real” dependence items, meaning items that are only available (with the expected level of maturity, heritage, performance and price) from a non-European source and for which the source is considered “at risk” (i.e. there are restrictions to export/import), rather than extending towards any technology we may need at some point but don't have yet in Europe. |
| 3.7 | Is there a need for EU support beyond the R&D phase to ensure that EDF projects transform into industrial projects? Would a pilot project in the current MFF timeframe be appropriate to test such a scheme? | Adequate funding, especially in the later stages of development (TRL5 and above), is essential. Financial support should be aligned with the ambitious goals of the EU, particularly where space interacts with other strategic domains such as digital and cyber.<br>Regarding space, pilot projects present a unique opportunity to push for strategic capabilities that are building on R&D.<br><br>Two pilot projects are therefore outlined in the EU Space Strategy for Security & Defence:<br>• A pilot project on Space Domain Awareness<br>• A pilot project on EU Earth Observation Governmental service, expanding potential institutional users' needs. |
| 3.8 | How to further support Europeanisation of supply chains and the better cross-border market access of SMEs and mid-caps? | Supporting the Europeanisation of supply chains and improving cross-border market access for SMEs and mid-caps can be achieved through a combination of collaborative initiatives and policy measures:<br>• Implement a European preference policy with strict eligibility and participation conditions. This ensures that European-wide interests take precedence over national interests, fostering a unified approach;<br>• Develop and enforce eligibility criteria that prioritise European entities, including SMEs and mid-caps, in procurement processes related to security and defence.<br>• Establish a robust governance framework at the European level to devise and implement an effective space industrial policy. This policy should ensure that security and defence actors have access to the necessary capabilities and promote collaboration.<br>• Conduct thorough investigations and outreach among SMEs and space start-ups to understand their challenges and barriers. This information can help prioritise the removal of unnecessary barriers and contribute to a more favourable business environment for SMEs and emerging players. |

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| | | • Ensure fair access to procurement opportunities for all segments of the industry<br>• Collaborative forums such as the EU Space ISAC to foster cooperation between public and private entities. It would also enhance preparedness and response to various threats, providing expertise, advice and support for response, mitigation, and resilience initiatives. Additionally, it would actively involve SMEs and mid-caps by equipping them to participate effectively. |
| **Headline 3:** Ensuring that the EDTIB can master and protect critical technologies | | |
| 3.9 | How to mitigate the impacts of strategic dependencies? | • Prioritising EU strategic autonomy with a focus on capabilities that favour European-made solutions over national priorities. Such a shift necessitates a coordinated industrial policy geared towards delivering top-tier European capabilities.<br>• Another critical measure involves implementing strategies to enhance the resilience and protection of space systems and services within the Union. This includes supporting technological sovereignty and resilience in critical industrial value chains to ensure non-dependence. Industry participation is crucial for identifying dependence issues and proposing effective mitigation measures.<br>• To support the competitiveness of the European space industry, a key strategy involves reducing dependence. This strategy should not only focus on developing European alternatives but also ensure the sustainability of developed materials and chips from a commercial standpoint. An industrial policy with clear competitiveness requirements is essential.<br>• Furthermore, ensuring a single, agreed and shared repository of critical situations within the re-energised JTF is vital. Thus, the roles of the JTF and the EU Observatory of Critical Technology should be clarified to prevent duplication and ensure an effective process. Industry stakeholders should actively contribute insights into critical situations and dependencies.<br>• Lastly, harmonising exercises conducted by the EDA in the context of their Strategic Research Agenda with the work of the JTF would prevent parallel streams of actions that may address overlapping topics to ensure a coherent action in the domain of strategic dependencies. |
| 3.10 | What additional measures could be developed to support defence innovation in | Recommendations to support innovation include:<br>• Increased public investment in space as well as recognising that the appropriate |

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| | the EU and to reduce barriers for new entrants to access the defence sector? | dimension to guarantee the foundations of any space policy is European rather than national;<br>• Encourage uptake of space-based services by public authorities;<br>• Reform procurement approaches to allow European private entities to redefine their roles in system design, risk-taking and the financing of space programmes;<br>• Ensure that institutional programmes aimed at stimulating industry innovation and competitiveness are dimensioned proportionally to the target markets that can reasonably be expected;<br>• Eliminate unnecessary barriers, irrespective of the age or size of industrial actors, preventing fair access to the market and efficient support for developments. This includes mechanisms to support smaller entities in obtaining security accreditation and protecting them from foreign takeovers;<br>• Explore initiatives to de-risk products and markets as a means of promoting investments and consider creating specific financial tools to support strategic equipment suppliers and encourage their growth;<br>• Apply procurements for operational or pre-operational services to activities with predictability of commercial success and consider anchor tenancy as an approach to financially de-risk investment and development;<br>• Complement support instruments with tangible business opportunities for products and/or services to both scaling start-ups and more mature companies;<br>• Link profit more closely with risks on programmes;<br>• Consider rewarding subcontracting to incentivise the involvement of the entire supply chain in the space/defence industry. |
| **Headline 4:** Enhancing cooperation with the Ukrainian DTIB | | |
| 3.11 | Should we further support the current efforts to enhance cross-border cooperation between the EDTIB and the Ukrainian defence industry? | Supporting current efforts to enhance cross-border cooperation between the EDTIB and the Ukrainian defence industry is considered crucial for ensuring secure, sustainable and reliable use of space-based capabilities.<br><br>The IRIS² project, aiming to develop a reliable satellite-based internet system for European and allied use, could be a key enabler for the Ukrainian military. Given the limitations and potential geopolitical considerations associated with existing alternatives, such as Starlink, having independent and reliable alternatives like IRIS² becomes crucial for strategic |

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| **Headline 5:** Securing budgetary means in support of EU defence industrial readiness | | |
| 3.14 | Should the ASAP and EDIRPA models be expanded to other critical Defence industry areas? If so, which ones? | To space |
| 3.15 | What should be the level of ambition for EDIP? | The level of ambition for EDIP should be aligned with the overarching goal of enhancing the resilience and protection of space systems and services within the Union. Several key considerations and challenges can be outlined to achieve this ambition.<br><br>Firstly, the low-level of public investment currently limiting the European space industry's ability to compete globally should be considered. Adding to that, the fragmentation of the EU's internal market for military space pose challenges to the development of a robust and competitive space/defence industry. To unlock the EDTIB's potential on a structural basis, three main issues must be addressed:<br>• Identifying common needs and supporting the identification of short-term to long-term space/defence product needs and long-term priorities;<br>• Coordinating spending and procurement plans to simplify the launch and successful completion of cooperative space/defence programmes;<br>• Highlighting the importance of aggregating demand through joint procurement to achieve economies of scale and streamline the procurement process. |
| 3.16 | What should be the overall EU investment to match the needs identified to sustain the competitiveness of the EDTIB? | The overall investment to match the needs identified to sustain the competitiveness of the EDTIB should be at the level of the ambitions expressed by the EU for defence. With many new initiatives launched and the need to ramp up the industry's production capacity, such investment should be significant.<br><br>Regarding space only, and to be able to compete with other space powers such as the US or China, a significant increase of the budget for space in the next MFF is needed – to reach 30B€ over 7 years. |

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| **Issue paper #4: Enhancing our Security of Supply on the Internal Market** | | |
| **Headline 1**: Achieving the EDTIB's long-term ability to fulfil Member States SoS requirements | | |
| 4.1 | How can we build upon the experience of the EU in developing emergency frameworks and policy measures, notably in sectors like health or semi-conductors to improve the resilience of defence supply chains? | Europe's dependence on the supply of a number of components is detrimental to the competitiveness of the European space industry.<br><br>The technological non-dependence of the space sector is not guaranteed: on a number of critical technology areas, European programmes are fully dependent on a single supplier outside Europe. Those necessary imports to make European spacecrafts (and launchers) functional are subject to US export regulations (i.e. International Traffic in Arms Regulations – ITAR), but:<br>• It is often creating procurement delays;<br>• It is putting the European space industry in a situation of additional dependence in the short term.<br><br>It is thus necessary for the European public entities as well as the European space industry to ensure in the future that the technological non-dependence and the security of supply is fully covered. There are many challenges to be dealt with in the short/medium term:<br>• The need to replace or update existing technologies and products;<br>• The challenge to develop new ones; and<br>• The difficulty to maintain critical skills on a market with long programme cycles and highly fluctuating orders. |
| 4.2 | Building upon the lessons drawn from the DJPTF's work and other EU initiatives, how can we better anticipate potential bottlenecks and disruptions in defence supply chains in order to address them as swiftly as possible, hence supporting the resilience of defence supply chains? | The creation of a common conceptual framework will help better anticipate potential bottlenecks and disruptions in space/defence supply chains in order to address them as swiftly as possible. This conceptual framework should aim at selecting priorities for targeted actions and build itself around the following criteria:<br>• What is the criticality of the functions provided by the critical items?<br>  ○ How can it be assessed?<br>• What is the level of perceived risk?<br>  ○ Is the product at risk of short/medium/long term disruption?<br>  ○ What is the damage the disruption would cause?<br>• What is the readiness of a European alternative? Maturity, performance and cost. |

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| | | ○ Is the maturity of solutions a critical point?<br>○ Can we assess the timeline for risk reduction?<br>• What is the cost of the European solution?<br>○ What is the economic potential for a European alternative?<br>○ Economic sustainability shall be a criterion for prioritisation (but not the main one) |
| **Headline 2**: Enabling the prioritisation of Member States defence orders when required | | |
| 4.5 | How can we build upon the potential of the Internal Market framework to make sure that defence supply chains can access the inputs they need in times of crisis? Would a prioritisation mechanism of defence supply chains over civilian ones in times of crisis bring a significant advantage to the robustness of defence supply chains? | By implementing a European public space procurement policy that takes three parameters into account:<br>• The space strategies of our direct competitors. Each country has its own specificities but the objective of independence, or even domination, is commonly shared.<br>○ Moreover, the unequal situation of worldwide captive space markets creates a huge capability and technology gap between Europe and its direct competitors on the commercial and export market, and should be taken into account by the European public space procurement policy.<br>• The strategic aspects and the nature of space programmes. Indeed, they are by nature long-term and risky.<br>• The guarantee of continuity and quality of the services (when entered in operational phases). This must become a key criterion in addition to cost and “value for money”.<br><br>It is also of particular importance that the European Commission takes into account the needs of space systems in the “Chips Act” to develop components in critical dependency situations and to support the EU supply chains that are critical for European space missions, and in particular for the EU space programme (notably to contribute to the technological independence of IRIS²). |
| 4.6 | Should Security of Supply considerations be built into EDF development projects and/or in procurement programmes? | Yes |
| **Headline 3**: Ensuring that defence products can effectively circulate throughout the Internal Market during times of crisis | | |

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| **Issue Paper #5: Mainstreaming defence industrial readiness culture throughout all policy areas at EU and national levels** | | |
| **Headline 1**: Promoting a stronger culture of security and resilience in the EU and its Member States | | |
| 5.1 | How could the EU and the Member States further promote a culture of security, resilience and defence readiness in Europe? | The very first sentence of the Regulation of 28 April 2021 establishing the Union Space Programme and the European Union Agency for the Space Programme sets the tone: "*Space technology, data and services have become indispensable in the daily lives of Europeans and play an essential role in preserving many strategic interests.*"<br><br>Today, the European space sector tackles some of the most pressing challenges of our times, such as fighting climate change, helping to stimulate technological innovation, and providing socio-economic benefits to citizens. Institutions, business and citizens increasingly rely on space technology, data and services for communication, navigation and positioning systems, and Earth observation enabling to provide immediate information when disasters strike. With these services, space contributes to four of the EU's main ambitions that the Commission's President Ursula von der Leyen prioritised: "A European Green Deal", "A Europe fit for the digital age", "Supporting our European way of life" and a "Stronger Europe in the World".<br><br>Beyond the essential role of space activities for civilian uses, the defence and military dimension of our European space policy has recently been acknowledged both by J. Borell, High Representative of the European Union for Foreign Affairs and Security Policy, and T. Breton, Commissioner for the Internal Market. The strategic nature of space and the need to have a plan on how to enhance our resilience in and from space was embedded, as part of the Strategic Compass, in the publication in 2023 of the EU Space Strategy for Security & Defence.<br>This is the Strategy that the sector had probably been expecting since two decades; the issuing of this Joint Communication is a major and positive event for the sector as it is key to make Europe a real (unified) space power. Able to drive a culture of space security, space resilience and readiness, it must be implemented with ambitious means. |
| **Headline 2**: Facilitating Access to Finance for the EU defence industry, including SMEs and start-ups | | |

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| 5.2 | How could the EU and the Member States help incentivising and de-risking investments in the defence industry? | Institutions could investigate if promoting investments would not be facilitated first by increasing initiatives to de-risk products and markets. When a business case is solid, it usually finds investors by itself.<br><br>Service procurement (with, or without, anchor tenancy) is gaining traction for the provision of space programmes. In this scenario, the definition of service level agreements (SLAs) and high-level service requirements (including considering risks or liabilities within those service levels) should be the focus, rather than providing detailed specification of the system design perspective (this is true across the value chain – launch, data/service delivery, and product development).<br><br>Procurements for operational (or pre-operational) services could be applicable for instance for activities with a sufficient level of predictability of commercial success. Anchor tenancy is considered an interesting approach to financially de-risk investment and development, and lead the way to operational services. In the meantime, public investments will continue to be needed for infrastructure providers, to develop strategic and sovereign assets and infrastructures that can enable or incentivise the development of new services, as well as for future development/riskier technological acquisition (e.g., reusability of launchers, Human Spaceflight…) as space remains a harsh environment. Institutional partners keep a critical role in this regard.<br><br>There could also be a strategy of creating specific financial tools to support strategic equipment suppliers enabling growth and anchoring their presence in Europe; the European Investment Bank could establish a specific partnership fund to secure strategic long-term ownership (with presence at boards) with a view of achieving soft control over strategic suppliers. But suitable company screening is a must, because the majority of “Newspace” business cases are inherently very risky. |
| **Headline 3**: Better access to EU funds | | |
| 5.7 | How can we promote a more effective access of EU defence industry to relevant EU funds and instruments (e.g. ESIF, etc.)? Notably, how can it be ensured that the | Six promising lines of action to further assess and deepen have been identified for the EU to promote more effective access of EU space industry to additional sources of financing:<br><br>• The EU as a “prescriber”:<br>  ○ Prescribing” the use of satellite data can be done through regulation and |

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| | EDTIB needs are more systematically taken into account in the programming of these funds and instruments? | standardisation, it is even more true for what concern the data and signals generated by the programmes under its authority<br>• The EU as a driver to the emergence of sizeable markets:<br>  ○ There are most certainly several public policies, as well as several B2B and B2C markets, that could rapidly benefit from (existing or rapidly deployable) operational space capacities or services that are currently inaccessible because the initial investments exceed the financial and technical capacities of any single Member State and, a fortiori, of any single user:<br>  ▪ Therefore, mechanisms such as flexible and efficient "central purchasing organisations", or pre-commercial procurements, or risk coverage through European Fund for Strategic Investments (EFSI), can be better implemented at Union level, to "mutualise" the costs and the risks and allow these potential users and markets to benefit from space-based services.<br>• The EU as a facilitator of cooperation between different industrial sectors (e.g., logistics, agriculture) and companies that develop new solutions, for example those based on Copernicus data, but also on all other components of the EU Space Programme<br>• The EU as a promoter of innovation through its role as customer:<br>  ○ The European Commission has the possibility to use specific procurement procedures stimulating innovative industrial solutions and capable to encompass design and manufacturing phase in one single procedure.<br>• The EU as an enabler of sustainable industrial growth especially for non-prime space market suppliers with limited financial resources:<br>  ○ The European Commission has the possibility to install specific financing mechanisms enabling reduction of Capex investment risks for providers of critical space technologies for European Space programmes (e.g., IRIS²).<br>• The EU as a support to export:<br>  ○ EU institutions could work together to facilitate access to new markets by the active promotion of European capabilities and the development of a strong European economic diplomacy.<br>• The EU as a promoter of European strategic autonomy (as well as of safety and security initiatives)<br>  ○ The EU is a strategic actor in political terms, and this should be reflected in |

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| | | the way it stimulates the development of space entrepreneurship in the whole space sector, which is in turn a highly strategic sector. |
| 5.8 | What type of financial products would be most appropriate to improve access to finance for the defence sector (equity, debt, debt guarantees; direct or indirect financing etc…)? | Direct support to venture capital (VC) must be carefully assessed, because VC funding is often feeding off corporate strategies, it incites exaggerated build-ups, promotes too fast growth, and does not contribute to strategic long-term partnership for the elaboration of viable market cases. VC funding is the least favourable solution to support strategic sectors, and the recent flurry over space investments is probably not conductive to sensible reasoning, while the VC community is riding this frothy wave, its recommendations should thus be taken with cautiousness.<br><br>Funding growth and innovation through equity raising is a strategy that is not available to legacy and established players. Equity based support strategies are thus incomplete. Established players may benefit from other strategies, such as bonified loans, customer/export insurance and credit, and other such financial instruments, to facilitate the development of emerging business models, which they may develop and foster as much as start-ups. |
| **Headline 4**: Skills in the defence industry | | |
| 5.9 | What actions could be taken by different stakeholders, including the industry itself, to increase the diversity and the attractiveness of the EDTIB? | The space sector is seen as a desirable place to work. The attractiveness of the space sector is related to the possibility to work on innovative, sometimes ground breaking and high technological projects. Also, having a societal impact is seen as an important reason to apply for a job in the space sector.<br><br>However, space is in competition with the other economic sectors and some resources are in tension (welders, cyber security experts… to mention a few). Space companies have difficulties retaining young employees who are very mobile, while it takes years if not decades of experience to successfully develop new programmes. This issue is of course strongly linked to the issue of low industry profitability in Europe.<br><br>Industry profitability is one of the key indicators, alongside cash generation, of its financial health, of the sustainability of its activities and of the ability to support growth since it |

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| | | supports its capability to invest in their future (e.g., creating innovation through R&D, and setting up new industrial infrastructures and processes) to be competitive on the global market, and, ultimately, to attract and/or sustain the motivation of investors and shareholders and new employees.<br><br>The European space industry therefore recommends a target level of at least 8% profit for all actors of the EU/ESA programmes supply chain company of the European space industry (from LSIs to Midcaps and SMEs). |
| 5.13 | How to ensure stronger partnerships between defence industry and educational providers? Which role could and should be played by Member States? Could a dedicated defence community within the European Institute of Innovation and Technology (EIT) and Knowledge and Innovation Communities (KICS) be an option? | A Knowledge and Innovation Community (KIC) for the space sector is not seen as a key priority. If it would provide additional/complementary funding to existing RDI goals/projects and enable drawing space funds from Pillar III of HEU it could adversely influence the budget allocation to space in Pillar II (already very low). In addition, it is seen as a duplication of other existing instruments of ESA (e.g. Business Incubation Centres (BIC) and Innovation Triangle Initiative (ITI)) and would involve major efforts for preparation, application, setting up and conduct (high administrative burden). Number of participating entities would be limited due to KICs' competition rules. |
| **Headline 5**: Regulatory Environment | | |
| 5.14 | Are there any specific aspects of the EU regulatory environment which hamper the EDTIB's ability to contribute to the EU defence readiness? Please describe those regulatory hurdles in detail, with specific examples, and indicate why the consequences are specific to the defence industry (and not general in nature). | Regarding materials and processes, the increasing scope of regulatory initiatives, such as the wide-scope restriction proposal for per- and polyfluoroalkyl substances (PFAS) and the concurrent regulation of sustainability aspects beyond chemical safety (such as the Sustainable Products Initiative/Ecodesign for Sustainable Products Regulation "ESPR") present big challenges and concerns for the space sector, with regard to the continued availability of critical materials and processes and our global competitiveness.<br><br>The precise legal requirements are often complex, not clear and sometimes inappropriate for space products (e.g. SCIP notification including for products which do not result in waste for treatment on Earth/in EU, therefore not being part of the Circular Economy). Furthermore, a number of important aspects (such as the guarantee of technical performance in extreme |

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| | | conditions, economic feasibility, long-term planning while facing shorter term regulatory constraints) have to be conciliated.<br><br>Substances to be phased out under EU REACH authorisation and restriction initiatives are often key technology enablers for space applications, and consequently there is frequently a lack of alternatives to their use of. Recent analyses have been made for PFAS and lead metal. The impact is not limited to specific uses, but spreads across a myriad of applications in different space systems. Space companies are not able to solve these challenges alone, but are dependent on their suppliers and resources to be available for substitution R&D. As a small volume sector, space is also very vulnerable to commercial obsolescence in these cases, where critical materials are withdrawn from the market by suppliers due to the lack of profitability/high costs. |
| 5.16 | How could those possible regulatory hurdles be overcome to facilitate the EDTIB's ability to contribute to the EU defence readiness, while, at the same time, not jeopardising other EU common objectives? What solutions could there be apart from regulatory exemptions? | Therefore, there is a need for proportionate regulation with prior impact assessments and upfront exclusions for essential uses from EU REACH authorisation and restrictions. Space specificities (such as very confined use inside controlled areas, closed systems and outer space outside Earth) should be taken into account – and harmonised - consistently across different pieces of EU environmental legislation. |