#69

THE EUROPEAN DEFENCE FUND AND SPACE: ADDED VALUE AND PRIORITIES

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Policy Paper



ABSTRACT

Initially approached in a purely civilian way at the European level, space programmes and assets are increasingly seen as strategic enablers thanks to their dual-use nature. With the European Defence Fund (EDF) being formally adopted and implemented as of 2021, the question of funding the development of military space capabilities by the EDF is getting more and more attention.

Because of their collaborative nature, European space programmes can bring a true added value to European defence policy, if their dual-use nature is exploited to its fullest extent. Given the limited means of the EDF, a priority shall be then given to synergies between the EU space policy, the EDF and other relevant EU policies as it is advised by the Commission. Such a seeking for synergies will require to ensure coherence across the different policy domains beyond the sole blending of funding. This shall have consequences on the very structure and governance of space and defence programmes. The current Multiannual Financial Framework (MFF) and the European Defence Fund may offer interesting avenues for such synergies. In particular, the recent announcement of a European Security Connectivity project by the European Commission could be a perfect test case in this regard.

Keywords: Space, Defence, EDF, PESCO, Synergies, Galileo, Copernicus, GovSatCom, Sovereign Cloud.



INTRODUCTION

Historically, space for Europe was first based on the pooling of scientific and technological excellence and on the positive values of science. It is thus not by chance that the European Space Agency, founded in 1975, took the form of a research institution exclusively dedicated to the peaceful uses of outer space. The major European programs, the famous "flagships" Copernicus and Galileo, also had the initial vocation of projecting Europe into the preservation of the planet and economic prosperity. From the beginning, Galileo was conceived as a tool for European autonomy, with the aim to become more independent from the US GPS. Both projects gradually evolved to be considered as crucial for the security of the European Union.

It should be remembered that on May 19, 1998, the European Commission, in the wake of the concerns about the environment attested to in 1997 in the Kyoto Protocol, produced a manifesto inviting Europe to set up a global capacity for observing and monitoring the environment, involving the use of all available technical means with a particular role for satellites. For the Commission, this call for ideas must cover natural risks, but also risks related to industrial activities, and even more broadly and simply human risks. The Manifesto, entitled "Global Monitoring for Environmental Security: A Manifesto for a New European Initiative", addresses first and foremost environmental security. But in a 1999 document submitted to the SAG (Space Advisory Group), the title evolves to "Global Monitoring for Environment and Security", manifesting the intention to broaden the scope of GMES to the whole field of security problems. The relationship between environmental problems and international conflicts is explicitly underlined in the text:

"environmental problems can lead to such serious difficulties that they may, firstly, endanger the security of both individuals and nations and, secondly, lead to international conflict."

In addition to the strong political ambition of becoming a key player in the global management of the environment, the text underlines the idea that Europe that should develop its capacity to assert itself as a global power while promoting its political and strategic autonomy.



For its part, Galileo was first created as a joint project between ESA and the European Commission. While ESA was responsible for the R&D part, the Commission took responsibility of the overall political oversight. Eventually, an attempt at a fully-fledged public private partnership proved unsuccessful and the Commission took the sole responsibility for the project. Largely supported by Brussels, the objective of setting up a completely autonomous European system in 2008 was therefore part of a truly European approach, in reality a dual use EU capability even though coined politically as purely civil. After years of debate, Galileo, and especially its Public Regulated Service (PRS) have come to be accepted as a central pillar for ensuring the robustness of its institutional uses, including military, at the level of the Member States and the Union.

In this respect, the space policy side of the European Union activity may be considered as revolutionary in that it is one of the first sectors where the EU owns and manages its own infrastructures and delivers services, especially for these two programmes, while it is also applying them across various policy fields. One must also add to these precursor programmes the new Space Surveillance and Tracking Service run by an 8-European Member States consortium (EU SST consortium¹). This consortium allows putting in common national capabilities for delivering different services destined to increase the safety and the security of EU orbital assets, especially in the field of conjunctions alerts and anti-collision services where it has recently proved its fully operational character².

Space is now acknowledged as a strategic enabler in virtue of its dual-use dimension. The level of EU space spending has benefitted from an increase in the last MFF showing the rising importance of space in the European context. With \notin 14,8 Bn in current prices for the next 7 years, the EU spending amount in this field represent 1,2 % of the actual MFF to be compared to 1% in the last MFF. Under the new MFF, it concentrates on the consolidation of the 2 flagships Galileo/Egnos and Copernicus (with respectively \notin 8 and \notin 4.8 Bn. The amount of money earmarked for the new projects like activities devoted to SSA/SST/STM and GovSatCom, the projected European Governmental Satellite Communications Satcom system (intended for EU and member States' security and safety critical missions) remains rather limited with ca. \notin 500 Mio stretched over 7 years.

² Most recently, in March 2021, the EU SST consortium delivered a collision risk alert for a Galileo satellite allowing the system to perform collision avoidance in orbit.



¹ The EU SST consortium initially established in 2015 is including as of now France, Germany, Italy, Poland, Portugal, Romania, Spain and the UK as a founding member.

This state of play invites to explore the need and the chance to investigate other financial tools such as EDF, Horizon Europe or the EU recovery fund. This of course remains very much linked to the ability of the European Union to develop a defence vision able to act as a geopolitical entity.

WHAT NEEDS TO BE DONE TO FULLY AD EFFECTIVELY INCORPORATE SPACE IN THE DFENCE UNION?

Obviously, this evolution will require mutual incremental adjustments and space again may be well-placed to act as a bridge between Member States' needs and the Commission's ability to generate significant support for defence-oriented space programmes.

Enhancing EU strategic thinking

The EU's self-understanding as a strategic actor must improve given the fast-evolving geopolitical situation. The EU is and has accepted to be seen as a global actor in the triangle Washington, Bejing and Brussels. It benefits from 450 Mio people sharing the biggest market in the world and is well-poised for the new security paradigm requiring a combination of soft and hard power. For decades already, space has been given a key role by some of the major powers in the transformation of their defence systems and for developing information superiority policies. Whether in the US or in China, the strategic link between space and information has become a strategic feature with wide-ranging effects on defence and security but also with a possible long-lasting impact on technological superiority and industrial competitiveness. New developments in the field of satellite constellation and data handling and processing go hand in hand to prefigure complex architectures that will offer more resistant and more resilient capabilities both militarily and commercially.

In this respect, Galileo, an EU-owned space infrastructure, is beneficial to all Member States. It rapidly made sense to build it from scratch as a European Union programme since no Member State had the resources to develop and manage it on its own. Copernicus, the second EU flagship programme, provides another example of the EU's ability to complements national capabilities while progressively replacing these national space assets with European ones.



Military activities are deeply rooted in national cultures and systems of national governance and this has explained an understandable reluctance to go "European" in defence. The history of European integration has shown the difficulty to Europeanise whereas MS structures and national capacities are often well-established since centuries. Europe is faced with a very dynamic situation where, notwithstanding nationalistic impulses, the framework of cooperation is expanding the possibilities to access and transmit data through space technologies, thus answering the growing need for modern network centric operations.

Border enforcement provides an example of EU-added value complementing national competence over border management. Whilst borders remain national borders first, 10 000 EU border guards wearing EU uniforms are complementing national efforts to protect them. The EU coast guards also remain under national instruction in operation, but they also complement national efforts.

Obviously, enhancing the role of the European Union in the field of defence remains a touchy issue for most of the Member States until today. For example, a recent proposal made by a working group of the social democratic party (SPD) in Germany in November 2020 proposing the "EU army" as a 28th army³, was quickly rejected as unrealistic by the party authorities. Yet, an initiative like the EU SST consortium, involving the use of space national assets, some military, for common services, is already well alive. This may in fact epitomise the enduring European spirit that has presided since the EU's inception such as, for example, President Delors' idea to create trans-European networks which would add something to existing national networks. **This constant and coherent effort to reinforce a common vision of European security and well-being may after all find in space an efficient vehicle and because of the very collaborative nature of space undertakings and effects, many new initiatives in this domain can help enhance a common strategic view better than more top-down declarations.**

³ <u>https://www.welt.de/politik/deutschland/article220139618/Verteidigungspolitik-Revolutionaerer-Schub-fuer-eigenstaendige-Europa-Armee.html</u>



Linking defence and space: The European secure connectivity project as an ideal case study⁴

The recent announcement of a European secure connectivity project by Commissioner Breton⁵ may play a seminal role in materialising the link between space and defence in the context of genuine EU space effort.

While a satellite constellation blended with terrestrial capabilities as a new flagship programme may present for Europe a positive perspective for future space developments, it is important to make sure that it will benefit from a supportive environment; both politically and economically. In other terms, there is a need to make the case for such a European project. Looking at existing "models" of such large constellation outside Europe, it is evident that a three-legged architecture may be required to guarantee its development.

In the U.S., this three-legged structure has appeared quite clearly:

- The first necessary component is a space industry committed to the mass production of satellites designed for their performance but also for their controlled production cost. In this case, beyond the capacity to invest in large-scale satellite production, the industrial effort is part of an overall vision that also relies on a radical modernization, in some cases disruptive, of the entire satellite implementation chain, including through the reuse of launch stages as allowed by SpaceX's Falcon 9 launchers. This environment is obviously not neutral and should immediately encourage us to broaden our view when we talk about very large-scale constellations.
- A second prerequisite is the existence of a "downstream industry" capable of developing the use of these space resources at a high level. In this case, the GAFAMs represent sufficiently integrated players and leaders on their market on a global scale to see in this type of constellation simple communication

⁵ Speech by Commissioner Thierry Breton at the 13th European Space Conference, 12 january 2021 (https://ec.europa.eu/commission/commissioners/2019-2024/breton/announcements/speech-commissioner-thierry-breton-13th-european-space-conference_en)



⁴ From a paper by Pasco (X), "*Faire converger Spatial et Numérique : Quels enseignements pour la constellation satellitaire européenne*" published by Fondation pour la Recherche Stratégique (www.frstrategie.org), April 2021 (https://www.frstrategie.org/publications/defence-et-industries/faire-converger-spatial-numerique-quelsenseignements-pour-constellation-satellitaire-europeenne-2021).

infrastructures in which to invest. But above all, the advent of the Cloud, which is now a major part of the business activity of these companies, seems to bring a new opportunity that contrasts radically with the sole network economy imagined until now for satellite constellations. It was no surprise to see the signing in late 2020 of a partnership agreement between Microsoft (specifically its Microsoft Azure cloud branch) and SpaceX for its Starlink constellation. The combination of Starlink and Microsoft came as Microsoft Azure won a major public contract against Amazon in October 2019, the JEDI (for Joint Defence Enterprise Initiative) contract, which is expected to result in a \$10 billion investment over ten years to cover the bulk of the Pentagon's cloud needs. Microsoft confirmed that defence was among the preferred customers for this new development. The initial investment generated by a public contract of this size makes it possible, at the very least, to initiate an activity over a significant period of time, which must then be brought to commercial fruition. The advantage of such a prime boost is obviously key in the competition between New Space players, as well as those in the digital industry.

• To what extent can this downstream activity alone support these projects, at least while waiting for real growth drivers in the longer term? And how can these projects be made viable when the telecommunications business remains so competitive in mass markets? The answer to these questions requires the intervention of a third player: governments. In the case of the U.S., the government has been an essential player that provides the necessary resources to make this transition phase possible. Military requirements are both a very specific market (high consumption of a geographically dispersed Cloud) and relatively stable over the long term (ten years specified in the case of JEDI). The particularities of this type of contract allow manufacturers to avoid too much competition with terrestrial infrastructures.

Thus, in recent months, a three-player scheme has been set up in the United States, in which the pooling of interests is undoubtedly one of the most stable formulas today for the viable development of satellite constellations. Further analysis developed in the paper quoted above also shows that in China, there are signs of a similar set-up emerging, notably with the recent announcement of major constellation projects of up to 13,000



satellites and the rise of the BATX, the major Chinese players in the information sector (and particularly in the Cloud) with Alibaba and Tencent. In this case, the space sector seems well established with a central position of State companies which have the necessary resources and skills to develop such space systems, including a proper low-cost launch system. China does also have a downstream industry that can leverage this type of investment. The BATX (Chinese GAFAMs) have recently been noticed for the growth of their Cloud services (and more broadly for their increased presence in information technology, at least on a national scale). Although still in the making, these fast-growing players therefore have visibility, at least on the Chinese market, which de facto prepares them for long-term investment. Of course, these efforts can be supported by clear government interest as attested by the massive presence of state-owned companies in these projects.

Faced with these models, Europe will have to demonstrate its ability to produce highperformance orbital platforms and payloads at reduced cost and on a truly industrial scale. No doubt Europe has the industrial excellence that predisposes it to produce this type of constellation in a modern way with proven reliability. It will also have to demonstrate its ability to place enough satellites in orbit at a cost and pace that will guarantee the real feasibility of the project, while competition is raging. This of course raises the question of launchers in Europe, their evolution and the indispensable alliance of national energies that will be required to make this constellation a technically realistic and financially affordable objective. The potential of new innovative space players will be as well beneficial for the project.

But beyond that, the European Union must develop the means to develop this infrastructure. The challenge here is to identify a structuring downstream activity that can find in a satellite constellation the means for its own development. This is where the interest lies in closely associating space actors and information technology actors to create the necessary synergies. In a sense, this proximity has been reflected in the participation of the operator Orange in a Commission's industrial study launched at the beginning of 2021. But the discussions on this subject will have to be expanded further and involve all the major European digital players in the most coherent way possible. It is true that this "downstream sector" in Europe does not currently have the size of players comparable to those in the United States or China. It will therefore be necessary, beyond



a single preliminary study, to know how to stimulate and support a broad downstream reflection over time through long-term objectives in the definition of which the European Union will have to play its part.

Sustainable support for such a constellation can only come from a shared sense that it is a long-term commitment to guarantee European sovereignty. The idea of a European Sovereign Cloud and the need to have secure access to satellite communication have often been mentioned in recent months⁶ and seem to be able to fulfil this role. In any case, it can be seen as an element of comparison with the synergies identified in the United States and perhaps in China. The theme of the Sovereign Cloud has indeed found a certain echo among Europeans. The new impetus given by the Commission to the need for investment in defence and security technologies through the launch of the European Defence Fund is clearly a favourable environment for this type of concept.

If we push the analogy, the key question becomes: How can this sovereign cloud be matched in Europe with such a clearly identified defence need? We must be able to think in common about defence and security needs. As we know, few European Union member states today have first-rate defence ambitions and capabilities. External operations remain the prerogative of very few countries. Only France today has the will and capacity to project military forces on a global scale and is investing on a large scale, for example in the active fight against terrorism in the Sahel. Other defence programs underway in Europe may require this increased integration of ground and space segments and bring all their legitimacy to the announced investments. Thus, the FCAS (Future Combat Air System, the air combat system of the future), a true ensemble connected around the mobile communication nodes that will be constituted by the latest generation of aircraft, or the MGCS (Main Ground Combat System), a Franco-German project for the tank of the future that also relies on network intelligence, can underpin the coherence to better align space and digital competencies while guaranteeing a sufficient level of public investment to set in motion a true long-term strategy. Europe can thus find the three "pillars" capable of bringing together industrial, space and digital skills.

Thus, the future European constellation can be seen as a real test of the European Union's ability to mobilize large-scale European funding for a program with multiple industrial,

⁶ See, for instance, Air and Space Academy, Avis sur les communications européennes sécurisées, avis n°12, mai 2021 (https://academieairespace.com/wp-content/uploads/2021/05/AAE_Avis12_FR_WEB.pdf)



economic and military benefits. A difficult balance will have to be maintained between a strong community dynamic that gave the initial impetus and more national reflexes which alone can justify the development of a large-scale infrastructure at the intersection of the space sector and the digital sector.

PROMOTE POLICY COHERENCE & INSTRUMENT BLENDING:

As demonstrated by this example, space is dual by nature. More and more diversified applications will derive from common space-based infrastructures, with public or private users as well as civilian or military ones. In light of these evolutions, the European Union will have to blend its financial instruments accordingly. It will mix research and innovation tools with their respective EU funds beyond the sole EDF, such as the Connecting Europe Facility and the Framework Programme for Research, Development and Innovation, Horizon Europe. Intelligent blending of financial sources would allow the mobilisation a critical mass at the level of the Union. In support of this imperative, the European Commission has recently published a communication (The Action Plan on Synergies⁷) calling for maximising cross fertilization between defence, space, and security to ensure that funding through EU programmes is complementary by nature:

"In a challenging international environment, where the EU needs to maintain its technological edge and support its industrial base, the EU Multiannual Financial Framework 2021-2027 (MFF) significantly scales up investment in technologies for defence or related civilian use, such as security, mobility, health, information management, cyber and space. Relevant MFF programmes cover research, development, demonstration, prototyping and deployment (procurement of innovative products and services) in a complementary fashion. The pervasiveness of emerging and disruptive technologies across civil, defence and space industries creates new opportunities for synergies among EU programmes and instruments. A structured approach, establishing appropriate processes and mechanisms among these instruments while taking into account their specific purposes and limitations, will lead to more impactful funding, reduce duplication risks and maximise added value for EU taxpayers. (...) Fostering synergies among relevant EU-funded instruments and facilitating

⁷ Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, Action Plan on synergies between civil, defence and space industries, Brussels, 22.2.2021 COM (2021) 70 final, (https://data.consilium.europa.eu/doc/document/ST-6407-2021-INIT/en/pdf).



civilian-space-defence cross-fertilisation (spin-ins and spin-offs) can enhance European economic growth, further develop the Single Market and improve security for European citizens."⁸

What will become of this Action Plan remains to be seen. However, it is interesting to note that it is the General Secretariat of the Commission which is driving the exercise and coordinates other DGs' inputs and actions. The plan itself, however, offers only a roadmap and it is, at the time of writing, still unclear how this roadmap will translate into tangible action (funding, policy alignment...).

Furthermore, having defence industry activities and space activities and their respective financing under one single administrative and political hat within the European Commission (the newly created DG DEFIS) offers new perspectives. Policy, money and legislation can go hand in hand. The EU space programme⁹ is a sort of fundamental law for the next decade bundling all EU space activities under one roof.

WHAT WAY AHEAD FOR MATERIALIZING THIS EU INITIAL EFFORT IN THE LONG RUN?

Starting from there, a number of remarks and questions can be raised:

The EU budget for defence industries and space under the current MFF will increase to \notin 25 bn over the next 7 years starting in 2021. Current \notin 7bn budget level for the EDF may not be enough and the question of the real budgetary needs remains intact. However, the agreement of the EDF sends a sound political signal by itself. Obviously, the development of space capabilities needs to be an integral part of EU defence planning. Within a few years and as part of the 2016 EU Global Strategy, a number of proactive initiatives have been launched to improve joint planning, development, procurement and operation of capabilities, such as for instance the 2016 EU Space Strategy¹⁰ or the EU-ESA Joint Statement on Shared Vision and Goals for the Future of Europe in Space¹¹. A few examples

¹¹ European Commission & European Space Agency, Joint Statement on Shared Vision and Goals for the Future of Europe in Space by the European Union and the European Space Agency, 26 October 2016 (http://www.esa.int/About_Us/Corporate_news/Joint_statement_on_shared_vision_and_goals_for_the_future_of_Euro pe_in_space_by_the_EU_and_ESA)



⁸ <u>Idem</u>, p. 1-2.

⁹ Regulation of the European Parliament and of the Council establishing the space programme of the Union and the European Union Agency for the Space Programme, adopted on April 28, 2021.

¹⁰ Communication from the Commission, A Space strategy for Europe, 26 October 2016, COM(2016) 705 (https://ec.europa.eu/transparency/documents-register/detail?ref=COM(2016)705&lang=EN)

are the Coordinated Annual review on defence (CARD), the Permanent Structured Cooperation (PESCO), but also a renewed version of the EDA Capability Development Plan (CDP) as well of course as the EDF which have all contributed to the emergence of an institutional framework able to structure this new approach. The alignment of these instruments is now required in order to make them complementary and powerful enough to deliver tangible results. So far, the process does not seem to be sufficiently capabilitydriven and remains too dependent on national industrial priorities. In particular, if the European Defence Fund (EDF) is destined to become a real tool for supporting the EU defence effort, it needs to be better articulated with EU planning instruments such as CDP & CARD. It will also need to achieve greater synergies with other policies, in particular space, but also security. This means that the military users will have to be involved right from the beginning in the design of the associated projects without precluding the mixing of civil and military requirements to be injected as well into the initial phase of such projects¹². Lessons should be drawn from Galileo where security and defence requirements were progressively injected at a later stage resulting in delays and higher costs.

Standardization must become another key word to overcome the natural tendency to national fragmentation. The EU has expertise in standardization, but military developments remain too often subject to insular industrial, development and planning practices. It should be reminded that Europe has 12 different types of battle tanks or 29 different types of destroyers and frigates... regarding space, ESA retains a genuine European engineering capability. However, this capability does not mean that a European engineering capability for defence and military space exists. ESA is a world class space agency which could in theory be entrusted with military R&D missions on behalf of some MS or on behalf of the EU. Indeed, the ESA convention states that it shall promote European cooperation in space research and technology and their space applications "for exclusively peaceful purposes" which, *stricto sensu*, do not preclude military activities if political will exists. The participation of the UK in ESA would not even necessarily have to be an obstacle as ESA could reform itself in such a way to better align with the EU interest. In passing, the UK and the EU will probably one day again cooperate in the fields of

¹² One can think about the project of an EU Cloud that may present key characteristics of a dual project with large consequences, including for supporting a future EU satellite constellation as mentioned earlier in the text.



security and defence once the political dust has settled. But, so far ESA as an institution can only defend the interests of its 21 Member States and a better mixing of ESA and EU visions may not be quickly in reach, although the recent letter by Messieurs Aschbacher and Breton show promising signs of institutional *rapprochement*. The main question then becomes: if Member States cannot agree on what would become an enlarged ESA mission, can such an engineering capability for space defence be institutionalized and developed within the EU, starting with a centre of competences in the field of military space for example? The process which ended up with the EU cyber strategy proposed by the Commission in December 2020 may serve as an example about how to establish progressively such EU "space and defence" capabilities. The European 'community' framework (as opposed to 'classical' intergovernmental set ups) could help building the trust among Member States that lacked and led to the failure of the cooperative MUSIS programme in the early 2010s.

Such a scenario can only take shape if is entrusted by the European Union public opinion. Today some 75% of the EU citizens support the EU defence and Security effort. The development and consolidation of a European strategic culture will require sustained democratic participation and a constantly renewed legitimacy. As more assertive political positions have recently shown, for example in openly addressing China's more offensive diplomatic and military posture, progress has been made to better harmonize common parliamentary positions on a key international defence and strategic issues. The Subcommittee on Security and Defence of the European Parliament (SEDE) has indeed been increasingly visible and was able to bring out coherent declarations on the need for the EU to get equipped with procurement funds for defence equipment, declaring its intent to monitor the progresses in this domain. This will prove even more important when political legitimacy will be needed to implement future development phases of the EDF. However, this more active involvement of the EU Parliament can only guarantee an EU level political legitimacy, but its efficiency will clearly depend on the level of legitimacy such projects will have won at Members States levels, as most of the current political deadlock on those issues can be explained by the reluctance coming from Member States capitals who are in the drivers' seat for the implementation of EDF.



THE NEED TO IDENTIFY THE RIGHT PRIORITIES FOR THIS MFF

The EU's political objective is to achieve strategic autonomy in a rapidly evolving geopolitical environment:

- The first step would be **to identify which space military capabilities are needed to achieve this goal**, less on a case-by-case basis but via a systematic mapping of existing capabilities followed by additional capability needs (closing the gap), emerging technologies, future innovation options.
- These EU needs, once identified, need to be prioritised. Key capabilities areas first which are critical for the EUs freedom to decide and to act. To be commonly acknowledged, these capabilities must support objectives that are better achieved at the level of the EU than at a national level. This necessitates an active interaction between those entities responsible for the capability planning and those in charge of administering the spending at EU level.
- A list of good candidates to be financed can be established that would include under the EDF space window programmes such as SSA/SST, GovSatCom, the military applications of Galileo and the new secure connectivity. SSA has already been supported via two projects financed under the EDF precursor EDIDP: early warning capabilities and space command and control to process and exploit SSA data. New services also deserve to be considered for further support such as On-orbit services, allowing a dynamic management of satellites and satellite constellations as well as satellite so-called life-extension missions. Galileo military grade receivers and military grade optical payloads for small satellites have also received EDIDP financing in 2020 by EDIDP while PESCO, benefitting from a 10% bonus under EDF financing has identified two space related projects: European military space surveillance awareness and EU Radio navigation solutions. In addition, projects which fit into other EU priorities (synergies) deserve to be considered, for example a European cloud for military space activities to be embedded into the larger EU project of secure communication also based on the project of secure satellite constellation.



Obviously, defence thinking remains largely intergovernmental and, no surprise, EDF is comitology-led which means Member States are largely present. In particular, approval of member States MoDs will be key in financing projects but also in identifying common needs which will justify the common engagements. However, with these new tools at hand, it is time for EU to be more creative and proactive and not rely alone on what Member States are bringing to the Brussels table. This does not have to be seen as a zero-sum game, but it must be proposed as an original approach that will bring about mutually beneficial effects. In this spirit, the European commission should start a process on which sort of military space capabilities and technologies are needed for the next 25 years at the European level for a European interest. The result of such a reflection should guide the next work programmes for space and defence.

Such a process does not have to be necessarily naïve, and the risk remains to see Member States use the money on top of their national priorities or even worse to fill the gap they cannot finance on a national level. For this reason, a well-thought strategy leading to positive results for the Eu and for the member States should be transparent to all and declared as a priority. In the same spirit, a delicate balance will need to be established between the traditional space minded Member States, looking for EU to first support their bi-or trilateral space cooperative projects and the smaller ones rightly asking, "what's in for me".

A POLICITAL IMPERATIVE FOR THE EU: ANTICIPATE THE NEXT MFF

In 2024 when the preparation of the next MFF starts real tangible European results will have to be visible, with convincing cases demonstrating the need for increasing the defence fund in 2027. Space can become such a driver. The next EU projects, SSA/SST/STM, GovSatCom, secure connectivity will pave the way to credible EU governance for EU space capabilities used by national and EU security and defence forces.

But a 'European defence union' needs not only goals but means as well. The reliance of the EU on national space defence capabilities can work for a while but, when projected over a 2030-2035 horizon, new technology can provide the means to collectively organize and make the best of a genuine EU investment. The sheer size of EU investment



capabilities may prove to be the only vehicle at hand for facing the mounting international competition and the scaled-up resources devoted to space by the major powers.

Why not starting to invest EU money in technology needed for the next generation of these satellites using the PESCO vehicle first? The next generation of military satellites may need new technology, more resilience, more protection, more cyber resistance, innovative materials, fields which go beyond satellites and where all MS can benefit from. Of course, this sort of "military space Europeanisation" needs to go hand in hand with a robust security and defence governance at the level of the Union. Strategic defence culture is still missing at the level of the EU. May be the Strategic compass initiative will prove to be a chance in this context and will accompany a more than needed change of mindset.



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The Armament Industry European Research Group (Ares Group) was created in 2016 by The French Institute for International and Strategic Affairs (Iris), who coordinates the Group. The aim of the Ares Group, a high-level network of security and defence specialists across Europe, is to provide a forum to the European armament community, bringing together top defence industrial policy specialists, to encourage fresh strategic thinking in the field, develop innovative policy proposals and conduct studies for public and private actors.

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