



# **Future of Transatlantic Security: Interdependence not Autonomy in Space and Defense**

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## Recommendations

- The asymmetry in Transatlantic relations between the dominant US and weak Europe remains the main source of its political, strategic and technological weakness. Instead of aiming for illusionary autonomy, the EU should strengthen the Transatlantic relationship on all fronts by building up indispensable defense capabilities to convince Washington of the utility of the partnership.
- European strength must be based on a solid consolidated defense and industrial policy. The EU has to ensure the defense integration initiatives and funding remain inclusive for weaker Eastern European countries and their strategic and industrial preferences. This will inter alia require a clear division of labor and synchronization between the EU and NATO in all aspects of defense planning, capability development, and military objectives.
- Europe needs to improve defense spending, technological weakness, and capacities as well as to follow industry trends and growing reliance on commercial actors. Investments in dual-use and civilian technologies and research within the EU single market can provide better economic and political rationalization for spending growth.
- In the context of growing space ambitions, space assets reliance and the weakening of NATO, the EU should utilize space policy to deepen cooperation and interdependence and move the Transatlantic bond into the 21st century.
- The proposed EU Agency for Space Program should integrate, with appropriate funding all space security aspects including SST, Space Debris, Space Weather and NEOs, to avoid inefficiency and duplication of the national inter-governmental model.
- The EU space security policy and capacities should be based on Transatlantic coordination and interdependence to improve effectiveness and to create a new standard for space security international cooperation.



## Introduction

There is no need to rehash the long list of developments that have undermined European security in the last few years and led to the expansion of European integration into this sensitive area. What is, however, needed is a constant reevaluation of the direction the European foreign and security policy takes. This text does not aim to offer an exhausting dive into the many complex issues it touches on, but rather it hopes to connect them in a narrative pointing to the main obstacles in strengthening Transatlantic security – its asymmetrical nature, **European weakness and fragmentation.**

For that purpose, this paper will first discuss the overall dynamic of Transatlantic relationships, including European East-West division in industrial and defense policy terms and the EU-NATO synergy (or rather lack of it) in planning and division of tasks. Secondly, it will discuss industrial and warfare trends and their impact on defense spending. Finally, in line with future warfare trends, this paper will discuss the growing dependency on space assets for defense and its impact on European and Transatlantic security.



# 1. Transatlantic Asymmetry and European Weakness

The European security infrastructure based on NATO is weakened. The technological, strategic and political superiority of the Alliance is deteriorating<sup>1</sup>, a worrying trend that could be blamed on its unequitable relationship, a militarily weak and divided Europe and the absence of synchronization between NATO and the EU in defense terms.

Politically, low European defense spending, inequitable contributions and overall complacency as an unaddressed issue were easily hijacked by Donald Trump's disrupt-and-see foreign policy to politically weaken the Transatlantic bond. The first two years of his presidency under the stable guidance of the Atlanticist trio of generals John Kelly, H.R. McMaster and James Mattis morphed into a more radical unilateral foreign policy with the entrance of Mike Pompeo and John Bolton into the White House. This development has solidified Europe's unease over its reliance on the United States, which has granted a justification for the interpretation of the EU's Global Strategy goal of Strategic Autonomy as independence from Washington. Politically, these efforts were conflated with the growing popular demand for security exerted by the Russian-Ukrainian war, the migration crisis, instability in the Middle East and North Africa and terror attacks in Western Europe. However, **the dominant narrative of autonomy that now serves to build European capacities can also be very dangerous and harmful to the future of Transatlanticism.** The Transatlantic bond remains the strongest political, economic and security partnership in the world. If Europe wants to preserve it, it ought to pick up the slack and improve the relationship instead of escaping to utopian visions of its full autonomy in times when the US dares to question its utility. The Transatlantic partnership is not a given to the geographically protected United States that has historically been rather isolationist. **The old continent must find a way to make its case for Transatlanticism more appealing to Washington.**

We should be able to recognize that while Trump's assault on multilateralism does constitute a threat to the Europe Union, an entity based internally and externally on this principle, it is also partially a symptom of the troubled NATO relationship. **Europe is the weak link in a partnership that needs a renaissance.** Technologically, European weakness is lowering the credibility of NATO's deterrence policy, especially in the face of Russian Anti Access/Area Denial (A2/AD)<sup>2</sup> capacities and the overall local battlefield advantage in the Baltics. Further, the inability to quickly transport Alliance follow up forces to the Eastern flank is undermining the deterrence even more.<sup>3</sup> The way towards lowering Transatlantic asymmetry lies in overcoming European fragmentation without the illusion of autonomy and finding a working EU-NATO framework.

## 1.2 East-West Division

The ongoing task of strengthening the European pillar is unlikely to be achieved without joint and united efforts. However, the oft-repeated East-West division in the EU in regards of political capital, wages, economic convergence or food quality

<sup>1</sup> Sylvie Matelly, Christian Mölling and Trevor Taylor. The Future of Transatlantic Strategic Superiority. Washington: German Marshall Fund of the United States, 2018, 4.

<sup>2</sup> Capacities to prevent an adversary from occupying or traversing an area of land, sea or air.

<sup>3</sup> Petr Boháček, Jakub Kufčák. Strong NATO through strong Europe: Space and lasers as possible Czech contribution. Prague: Association for International Affairs (AMO), 2018, 5. [http://www.amo.cz/wp-content/uploads/2018/08/AMO\\_silne-NATO-skrze-silnou-evropu-vesmir-a-lasery-jako-mozny-cesky-prispevek-2.pdf](http://www.amo.cz/wp-content/uploads/2018/08/AMO_silne-NATO-skrze-silnou-evropu-vesmir-a-lasery-jako-mozny-cesky-prispevek-2.pdf)



has also seemingly spread into the defense area from a policy and industrial perspective, further constraining the European defense capacities build up.

Only two of the initial 17 Permanent Structured Cooperation (PESCO) projects were led by a newer EU member state (MS).<sup>4</sup> The second wave of PESCO projects, which is due in November 2018 and is being discussed between MS and the European Defence Agency, shows a similar trend. As a majority of Eastern European countries tend to look for an explicit and credible focus on the Eastern flank in the EU defense policy, their failure to gain support for their projects could cause them to deem EU defense initiatives futile. **Without EU projects reflecting their strategic interests (i.e. to deter Russia) their influence on EU defense, industrial and planning efforts would be thus lowered.**

The EU defense initiatives, especially the €13 billion European Defense Fund (EDF), offer an immense opportunity to support the industrial defense sector. However, while PESCO is decided on by unanimity<sup>5</sup>, the EDF projects will be awarded by the Commission.<sup>6</sup> The EDF money is open to competition and not allocated according to national specifics like cohesion funds. Eastern small and medium enterprises (SMEs) as remnants of formerly vast Warsaw Pact industries thus need to go out and compete for this big pool of money with more successful Western counterparts. This carries the **risk that most of the funding will flow to bigger Western defense conglomerates at the expense of Eastern European SMEs** that do not possess sufficiently big lobbying and political power.

In general, national governments in Eastern Europe seem to struggle with being proactive and providing sufficient political assistance to garner support across Europe, whether for PESCO or EDF. It is not only of their own making. The French pro-European defense integration is sometime accused of being used as a great tool to push forward Paris' industrial interests through the EDF, European Defence Agency or PESCO. This Western dominance has the potential to result in stronger anti-Brussels rhetoric stemming from frustration over the weakness of the Eastern European voice in the EU in comparison to their experienced Western states. Meanwhile, the alternative to simply rely on the US to provide security and assuring it via the bilateral Buy American approach (mastered especially by Poland) is weakening attempts to focus defense spending into the single European defense market to build up a consolidated European industrial base and develop indigenous defense capacities.

To offset this trend, national industrial capacities ought to be incorporated into the EU-wide industrial base to survive. National demand on its own won't be sufficient to resurrect former Warsaw Pact capacities. EU acquisition synchronization would arguably reduce costs, ensure interoperability and help to substitute old Soviet equipment, through long-term sustainable investment, into the European single market. On the industrial level, this can mean an integration of small SMEs into EU-wide supply chains and a resurrection of specific dual-use industrial, scientific and research capacities to justify growth in defense and research and development (R&D) spending. This process, however, requires policy planning. Beyond terrorist attacks and migration (the main security concerns of European citizens in the last few years), EU defense ambitions continue to be formed mainly by France and thus limited to crisis management (meaning North Africa). Eastern Europe should be able to use EU defense initiatives to contribute to NATO's deterrence policy on the Eastern Flank. An effective division of such strategic tasks requires bringing NATO and the EU together.

<sup>4</sup> Council Decision (CFSP) 2018/340 of 6 March 2018 establishing the list of projects to be developed under PESCO.

<sup>5</sup> Council Decision (CFSP) 2017/2315 of 11 December 2017 establishing permanent structured cooperation (PESCO) and determining the list of participating Member States.

<sup>6</sup> Regulation of the European Parliament and of the Council establishing the European Defence Fund, 13.6.2018, Brussels, 2018/0254(COD).



### 1.3 EU-NATO Planning Issues

NATO remains the main guarantor of European security, ensuring collective defense of member states in the case of a “big war”. The ambitions of EU defense cooperation are fundamentally different from those of the Alliance. Even the last EU initiatives stress crisis management, conflict resolution, peacekeeping missions and overall security outside of Europe. **Division of labor and effective synchronization between the EU and NATO are thus problematic.**

A key question remains as to what type of capabilities their defense planning processes will produce. Considering their **different political-military goals**, any synchronization and coordination of the timing and outcomes of the two respective planning processes would be problematic. Questions also hang over the ambition of PESCO to develop capacities for the EU's Common Security and Defence Policy (CSDP) while ensuring dual deployability for both the EU and NATO. For small and medium-sized countries, such synchronization can be highly complicated in a situation where the two organizations require different capabilities (crisis management in the EU vs. collective defense of NATO). The overlap between what military functions the EU and NATO aim to develop is only partial. Coordination and planning requirements for PESCO together with the big demands of the NATO Defense Planning Process (NDPP) could force understaffed and underfinanced defense ministries to choose which to honor.

Another issue is **different systemic approaches to defense planning** engrained in the characteristics of each organization. The US-dominant NDPP is a cyclical four-year and top-down process with a politically-decided catalog of required capabilities while the EU's Capability Development Plan (CDP) is sequential, and consensus-based.<sup>7</sup> The CDP is evolving into the main tool for arbitrating short-term and long-term needs and setting up capability requirements for PESCO, EDF and CARD.<sup>8</sup> Such a process is more time consuming, based as it is on a clear consensus and the motivation of each country. While the EU reached an agreement to allow participation of third countries in PESCO,<sup>9</sup> the question remains whether a PESCO-built capability involving non-NATO members can be deployed or used for NATO purposes. A reversed Berlin Plus deal of 2002, which allowed the EU to use some military structures and capacities of NATO, seems needed here.

One of the main challenges of the CDP as the lead agenda-setting tool for EU defense plans will be to balance short-term military capability requirements (with the risk being quick purchases of non-European off-the-shelf products to satisfy the needs) and long-term development of the European defense industry reflecting trends in future warfare.<sup>10</sup> Establishing what these trends and future requirements are, will be critical in striking the balance within the EU as well as between the Union and the Alliance.

<sup>7</sup> Zdeněk Petráš, “Analysis of NATO and EU Approaches to Capability Planning Process,” *Vojenské rozhledy* 26, no. 1 (2017): 5.

<sup>8</sup> Daniel Fiott. *EU Defence Capability Development Plans, Priorities, Projects*. Paris: EU Institute for Security Studies (EU ISS), 2018, 7-8.

<sup>9</sup> Jacopo Barigazzi, “UK and US will be allowed to join some EU military projects,” *Politico*, October 2, 2018.

<https://www.politico.eu/article/pesco-military-uk-and-us-will-be-allowed-to-join-some-eu-military-projects/>

<sup>10</sup> Daniel Fiott. *EU Defence Capability Development Plans, Priorities, Projects*. Paris: EU Institute for Security Studies (EU ISS), 2018, 8.



## 2. Future Trends for Transatlantic Security

The shifting weight of world politics away from the West is accompanied by field-changing trends in technology. Among these is the empowerment of non-state actors, the transformation of the technological and scientific monopoly or an overall decreasing hi-tech dominance of Western militaries that used to offset the quantitative advantage of their adversaries. All these shifts have implications for the way we think about defense and security.

The CDP process comes out of four different strands including current shortfalls in achieving the Level of Ambitions (A), assessing CSDP's lessons learned (D), identifying collaborative opportunities between Union members based on existing capacities and plans (C) while Strand B, developed by the EDA, includes long-term planning for the 2035+ period, detecting future capability requirements, technology trends and research activities. Besides increasing global instability, higher demand for raw materials and shifting boundaries between war and peace, these trends include an aging population and increasing costs of social welfare that will put a strain on public finances with likely impact on defense spending.<sup>11</sup> Finding new ways to invest more in technologies with defense value will be important in years to come. To address this, the following chapter will firstly look into the relationship between civilian and defense technology and then point to growing defense reliance on space assets.

### 2.1 Reversing the Relationship between Defense and Civilian Technology

In the past, the United States Defense Advanced Research Projects Agency (DARPA), the Research and Development Corporation (RAND), and other military research institutions as well as massive investments nearing 5% of all spending for the space program provided the source of knowledge for the commercial technology boom epitomized by the internet companies, Silicon Valley and the technological dominance of the American economy. Military technology, including the space program as the handmaiden of the US armed forces<sup>12</sup>, as a side-effect provided massive progress and benefits for civilian society. However, this relationship has flipped as **market forces and commercialization have become the main movers of the economy and innovation globally**. The research and development budgets of many private companies are bigger than those for defense in many European countries. It is no longer the civilian sector that is dependent on military technology, but militaries who are instead growing more dependent on private technology and commercial providers.<sup>13</sup> In the space sector, the reusable launch vehicles with extensively increased payloads are granting SpaceX an extremely valuable capability that can provide strategic superiority over adversaries in space.<sup>14</sup> This is described as a spin-in effect in which the dynamic changes from the militarization of civilian space technologies to an **increasing dependence of the military on these civilian technologies**.<sup>15</sup> Further, the CDP 2035+ outlook

<sup>11</sup> RAND Europe. Exploring Europe's capability requirements for 2035 and beyond, prepared for EDA. 2018, 13.

<sup>12</sup> A central idea of Neil de Grasse Tyson, *Accessory to War: The Unspoken Alliance Between Astrophysics and the Military* (W. W. Norton & Company, 2018).

<sup>13</sup> RAND Europe. Exploring Europe's capability requirements for 2035 and beyond, prepared for EDA. 2018, 28-25.

<sup>14</sup> SpaceX COO Gwynne Shotwell confirmed that the company would launch space weapons to defend the United States at the Air Space Cyber 2018 symposium on September 17, 2018. <https://spacenews.com/spacex-president-gwynne-shotwell-we-would-launch-a-weapon-to-defend-the-u-s/>

<sup>15</sup> Ulrika Mörth, "Competing frames in the European Commission – the case of the defence industry and equipment issue," *Journal of European Public Policy* 7, no. 2 (February 2011): 173-189.



describes how commercial integration is connected to the increasing prevalence of modular design or a system-of-systems approach over the traditional platform-centric approach.<sup>16</sup>

All these trends present new challenges for education, research or defense planning and financing approaches to supply the role historically exclusive to government institutions. Defense capabilities are thus not solely defined by the size of defense spending but, based on the aforementioned, increasingly by a complex interplay between industrial, research, investment and acquisition strategies across civilian and commercial spheres. That is also why the client relationship between the US and Europe now proves ineffective. With the new unilateral US administration, **the key benefit of the Transatlantic security partnership is moving from its geopolitical and value bond to the sale of American weapons to European partners, ultimately weakening its utility. The Buy American approach** (strongly promoted by the Trump administration) adopted to cater to these trends, however, **reduces the economic rationale** of defense spending and presents obstacles to the consolidation of European defense industrial base.<sup>17</sup> Also, US equipment frequently comes up as more expensive and with many unequal offset policies, which might make evolving Chinese, Russian or other alternatives more attractive. Moreover, technology transfers are highly unfavorable for Europe as the US offset policies are strictly bilateral with restrictions on use and production. This ultimately hampers the creation of a European industrial policy, a precursor for Europe becoming indispensable for US security.

## 2.2 Growing Importance of Space Assets

Disruptive technologies dominate the debate on future warfare development, ranging from artificial intelligence to biotechnology, cyber robotics or social weapons. Next to air-to-air refueling interoperability and airlift capabilities EU ISS analyst Daniel Fiott points to the need for the development of intelligence, surveillance and reconnaissance (ISR) capacities as key EU capability shortfalls.<sup>18</sup> NATO has also repeatedly highlighted the dependency of NATO operations and missions on space-based assets for the ISR systems, including for Synthetic Aperture Radar (SAR), Infrared (IR), Electro-Optical (EO), ELINT and SIGINT satellite data and services,<sup>19</sup> but also for the overall functioning of military equipment.<sup>20</sup> The CDP's Strand B on future needs anticipate growing demand for ISTAR (Intelligence, Surveillance, Target Acquisition and Reconnaissance) to provide quick and effective decision-making, requiring access to a resilient network of military, civilian and commercial satellites or other communications nodes for global reach and use of space-based assets. The need for improved physical hardening, mobility and cybersecurity for space-based assets, including the use of clusters of micro- and nanosats, and new launch technologies to ensure European access to space is also mentioned as one of the identified requirements by the CDP.<sup>21</sup>

This reliance makes space security a critical area. However, space security traditionally implies mainly non-military Situational Space Awareness (SSA) that

<sup>16</sup> The ineffectiveness of the platform-approach, meaning the reliance on a specific fleet of tanks, aircraft or vehicles purchased every 15-20 years, originates in its difficult employability, adaptation, automation, integration, and communication.

<sup>17</sup> Jean Belin, Jean, Keith Hartley, Sophie Lefeez, at all. *Defence Industrial Links Between Eu and Us*, ARES, 2017, 44.

<sup>18</sup> Daniel Fiott. *EU Defence Capability Development Plans, Priorities, Projects*. Paris: EU Institute for Security Studies (EU ISS), 2018, 4.

<sup>19</sup> NCI Agency. *NATO BiSC Space Working Group Report on NATO's Approach to Space*. 13.3. 2014.

<sup>20</sup> Report SCI-238-SM Specialists Meeting on NATO Space Dependencies (AC/323(SCI-238)TP/544). Science and Technology Organization, 10. 1. 2018.

<sup>21</sup> RAND Europe. *Exploring Europe's capability requirements for 2035 and beyond*. prepared for EDA, 2018, 15.





includes topics such as orbital space debris, space weather, space surveillance and tracking (SST) or near-earth objects (NEO). From a policy, technical and practical perspective these issues are inseparable. Capacities to monitor, track, catalog and in the case of NEOs or space debris, remove, deflect or destroy, items in space for safety would be a military asset providing strategic superiority. SST can be used to track ballistic missiles or reentry of space objects to Earth for air defense systems or substitute the sensors of the AWACS system.<sup>22</sup> However, both the European Space Agency and the European Commission authorities have signaled that **all civilian systems could be used for defense**.<sup>23</sup> Spacecraft with tools to remove orbital debris including unfunctional satellites would logically be also able to remove any other civilian or non-civilian satellite. Further, any technology powerful enough to deflect a potentially hazardous object (asteroid/comet) would have similar game-changing military applications. But **in its original purpose, all space security is civilian**. This further underlines the importance on investment into civilian assets and technologies to ensure security. Further, the dual-use approach can be helpful in overcoming national sensitivities in the defense sector and in allowing for a deepening of cooperation. It could also be a good tool to address European defense spending impotency, deterioration of defense capacities and rising strain in public finance.

Reflecting on the growing reliance on space-based assets and EU ambitions, **the NATO Summit in July 2018 has as one of its outcomes delivered an agreement to develop a NATO Space Policy**.<sup>24</sup> Further, the European Union 2016 Space Strategy and its growing space budget in the Multiannual Financial Framework very much put the Transatlantic space policy on the security agenda.

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<sup>22</sup> Philippe Brunet, Statement at the Security and Defense Subcommittee at the European Parliament, 15. 5. 2018.

<sup>23</sup> Thomas Hoerber, "Framing in European Space Policy," Space Policy 43, no. 22 (February 2018): 3.

<sup>24</sup> NATO Brussels Summit Declaration, Brussels, 11.7.2018.



### 3. European Space Ambitions

In the space domain the EU has been increasingly keener on security as well as autonomy. However, some inefficiencies within Europe and between NATO and the EU have already arisen. Further, the non-military nature of space threats and dual-use of space security assets require an approach which expands beyond the defense sector.

The 2016 Space Strategy under the guidance of Commissioner for Internal Market and Services Elzbieta Bieńkowska, whose Directorate-General has been one of the main drivers of the ongoing EU defense integration through the multi-billion-euro EDF, cemented security of the Union and strategic autonomy as two of its main objectives. Further, an initiative to provide EU members with secured government satellite communication (Govsatcom) is expected to be finalized with the European Space Agency and EDA in the 2020s. The data from the EU's staple Galileo (global navigation system) and Copernicus (earth observation) systems are used to provide remote sensing for border control or high-resolution images and information from crisis zones or conflict areas and could be even included in missile guidance systems.<sup>25</sup> While Galileo does have an encrypted, secured and government-only format,<sup>26</sup> Copernicus data are expected to be secured in a similar way under the EU Govsatcom. Copernicus contributes to the most valuable of EU security space assets - the European Union Satellite Centre (EUSATCEN) that provides a 24/7 geospatial intelligence capability with space images and intelligence products using space assets for the European External Action Service and other intel and military units of the Union to support CDSP and CSFP (Common Foreign and Security Policy) goals.<sup>27</sup> Meanwhile, Copernicus' defense value is reflected in its nearly €6bn budget allocation in the current MFF 2021-2027 to further enlarge its security functions.

The biggest ambition so far has been the **European Commission proposal to develop its own European Union Agency for the Space Programme (EUASP)** in June 2018. The Agency, which would succeed Prague's European Global Navigation Satellite Systems Agency (GSA), is planned to enlarge its portfolio with tasks in the space sector linked to security and defense in support of the European Union Global Strategy and European Defence Action Plan.<sup>28</sup> Strategic autonomy, promotion of the EU's global leading role, secure space-related data and enhancement of security of the Union are mentioned as key objectives of the program that is dominantly civilian and focused on helping the EU economy. Next to the Galileo and Copernicus programs, Space Surveillance and Tracking (SST), Govsatcom and space weather/near-earth objects programs and close cooperation with the EUSATCEN would be on its agenda.<sup>29</sup> The upcoming Multiannual Financial Framework for the first time allocates some **€500 million specifically for space security**. Albeit a rather minuscule number, as some MEPs and the EP transportation committee call for €700 million more,<sup>30</sup> it signals an increasing emphasis on the security of EU space assets. The 2016 EU Space Strategy also emphasizes Space Surveillance and Tracking (SST) as a key capability for

<sup>25</sup> Pascal Legai, testimony of the director of EU SATCEN at the EP Security and Defense Subcommittee on 10.10.2018.

<sup>26</sup> The Galileo Public Regulated Service (PRS) is restricted to government-authorized users.

<sup>27</sup> Monitoring of Russian forces in Ukraine or in Syria, illegal migration or SLBM deployments in North Korea are among the main examples of the EUSC work whose products' use by EU MS has increased 24 times since its founding according to the testimony at the EP Security and Defense Subcommittee by Pascal Legai, the director of EU SATCEN, on 10.10.2018.

<sup>28</sup> Legislative proposal of the EC to establish the space program of the Union for the period 2021-2027 and the European Union Agency for the Space Program, COM (2018)0447, 6.6.2018.

<sup>29</sup> Ibid.

<sup>30</sup> Massimiliano Salini, "Draft Opinion of the Committee on Transport and Tourism for a regulation of the EP and of the Council establishing the space programme of the Union and EU Agency for the Space programme," EP, 2.8. 2018.



development. Further, the proposed EU Agency for Space Program is expected to set up a network of national capabilities for monitoring and detecting near-earth objects, with the Commission being proposed as the coordinating body responsible for a response to such hazards.<sup>31</sup>

Yet, the growing EU space ambitions are shifting the traditional framing of European space activities from purely civilian to dual-use. The benefits of European space policy have been rationalized differently to different European stakeholders, whether it is the defense industry - emphasizing security - or private businesses - emphasizing data uptake and commercial use.<sup>32</sup> The European Parliament 2016 resolution clarified the use of civilian space capabilities of the EU as ensuring security and achieving CSDP goals.<sup>33</sup> As in the defense sector, the rising European ambitions are matched with questions of effective coordination in the Transatlantic sphere.

### 3.1 Coordinating Transatlantic Space Policy

The utility of space assets for defense and the growing space activity of the EU carry additional requirements for cooperation in this field. This is complemented by the interconnected nature of the space domain and the dual-use or civilian nature of such technologies. Resultingly, Transatlantic space efforts display several inefficiencies on the European and Transatlantic levels.

The first issue is the **complex relationship between the EU and the European Space Agency (ESA)**, an independent inter-governmental body. With an increasing reliance on space capabilities for defense, any systematic dependence on Russian Soyuz launchers in the European Space Agency could become a security concern - technically from falling reliability of Russian space assets and geopolitically due to persisting tensions and Europe's rising reliance on space for defense. This matches other **ESA-EU issues, including lack of political accountability due to no formal links with the European Parliament or a complex inter-governmental financing model** in contrast with the EU's single 7-year MFF.<sup>34</sup> And while the EU space security focus is seemingly being answered by the ESA's new Security and Safety program<sup>35</sup>, the new ESA-EU cooperation framework that is to be negotiated is so far aiming to address only some of the above-mentioned issues.<sup>36</sup>

Further, the inefficiency surrounding the use of the EUSATCEN, arguably the most space-empowered EU defense tool, is one of them. As a Council entity, it is constrained by its direct reliance on Member States' funding that only amounts to some €26m per year<sup>37</sup>. However, the service is expected to provide critical tools for the execution of activities with strong MFF funding such as border protection (€33.9bn), EU defense capacities (€13bn) or peace facility missions (€10.5bn). The lack of cooperation with other intelligence fields (HUMINT, OSINT, SIGINT) and national intelligence bodies limits its effectiveness. Furthermore, it is linked to the lack of EU-NATO synergy in the space area. NATO has in the past declared satellite

<sup>31</sup> The Commission proposal clearly indicates that the EC "may coordinate" while recent amendments from the EP suggest the legally-binding verb "shall coordinate".

<sup>32</sup> Thomas Hoerber, "Framing in European Space Policy," Space Policy 43, no. 22 (February 2018): 2.

<sup>33</sup> European Parliament resolution on space capabilities for European security and defence, P8TA(2016)0267, 8.6. 2016.

<sup>34</sup> ESA programs are decided every 2-3 years at ministerial meetings and are split between mandatory and voluntary with 95% of funds for the latter guaranteed to be spent in the contributing nation's industry.

<sup>35</sup> Resolution providing strategic guidelines for the preparation of Agency programs and activities, ESA 25.10.2018

<sup>36</sup> Europe in Space: Roadmap towards a coordinated space policy for Europe; Joint Position Paper of the Austrian Presidency of the Council of the European Union and the Spanish Presidency of the ESA Council at ministerial level. Madrid: 25.10.2018.

<sup>37</sup> Numbers mentioned at the European Parliament Security and Defense Subcommittee meeting by Pascal Legai, the director of EU SATCEN, on 10.10.2018.



image intelligence as one of its needed capacities that was picked up by the Czech Republic, which established an appropriate Satellite Centre to provide NATO with imagery intelligence analysis.<sup>38</sup> However, its satellite images will be provided by a third-party commercial entity and managed by the Czech military intelligence, while several blocks from its Prague HQ the GSA (future EU Agency for Space Programs) is expected to manage and further develop EU-funded, owned and secured satellite constellations, which already feed a plethora of data to the EUSATCEN based in Spain.

The recently formed EU SST Consortium that comes out of an original Commission initiative of 2014 aims to provide a framework for ensuring safety on crowded and dangerous Earth orbits. However, within the EU SST, **each country operates and controls its own sensors**, including 33 sensors, radars, telescopes and laser-ranging stations.<sup>39</sup> Moreover, SST falls within the new EU space budget but it will remain **managed by individual member states** due to nations' perceptions of space as a sensitive national security issue. A similar approach applies to NEO. All of this contributes to the lack of unity and fragmentation of EU and Transatlantic efforts. Among the EU ambitions in this field is the creation of its own catalog of space objects and the creation of autonomous SST capacities. Bleeding into the pure defense area, a recently proposed Italian PESCO project puts forward a network for SSA. However, the US possesses the main capabilities in SST which they provide in an open and free framework. Meanwhile, the EU hopes to have its own autonomy by monitoring objects up to 35 cm. There is no complete EU database and **Europe depends on the US data of different quality and accessibility for 97% of the low earth orbit and 78% medium earth orbit/geosynchronous earth orbit.**<sup>40</sup> Developing indigenous EU capacities in this field seems time-consuming and financially and industrially challenging to say the least.

Deepening the move towards autonomy, the 2016 Space Strategy calls for EU efforts to address the US Third Offset strategy and the large technological gap in the likes of the defense sector. Recent amendments and discussions in the European Parliament on the topic brought an emphasis to autonomous access to space to ensure the security and geopolitical independence of the Union and thus, its strategic autonomy. Proposals span from a guarantee of the use of EU-made launch vehicles and a Buy European Act to warrant purchases of European satellites, launchers and other systems.<sup>41</sup>

With the US SST or NEO sensors and data gathering being unmatched, for Europe to duplicate them to become autonomous seems unfeasible in regard to budgets, capacity or time. Further, removal of space debris, planetary defense from NEOs, space weather or global tracking and management of all orbital objects cannot be done by a single entity in an area including all actors. **Division of roles, cooperation and effective interdependence not only on the Transatlantic but also on the global level** are imperative to address these issues in the domain legally defined as a heritage of all humankind. And as both the 2016 Strategy and the recent EC proposal for the 2021-2027 space budget including the establishing of the EUASP highlight the need for cooperation with the United States, Europe needs to bring something to the table to strengthen Transatlantic relations in this sector. This will need a functioning system on the continental level first. The starting discussion on NATO Space Policy could be an opportunity to start a new mutually interdependent and beneficial bond between Europe and North America, where the two work together to address space threats.

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<sup>38</sup> Jiri Kominek, "Czech MoD to launch IMINT centre," IHS's Janes, February 23, 2018.

<sup>39</sup> Ibid.

<sup>40</sup> Report from the Commission to the EP and the Council on the implementation of the Space Surveillance and Tracking (SST) support framework (2014-2017), COM/2018/256.

<sup>41</sup> As proposed by Christelle LeChevalier and Angelo Ciocca of the Europe of Nations and Freedom Group in 2018/0236(COD).



## 4. Build European, Strengthen Transatlantic, Think Global

It took two world wars before American isolationism transformed into building the Transatlantic partnership. The bond is not at all self-sustainable. Europe must make itself indispensable to the United States if it wants democratic values to have global weight. This requires a united European approach.

To bridge the divide in the EU, Eastern Europe must be able to secure its own PESCO projects and the benefits of the EDF. This will help to build true EU-wide industrial and defense policy and strengthen NATO's deterrence capabilities by honoring the need to secure the Eastern flank. To achieve this, the EU and NATO ought to find ways to synchronize their different planning processes and military ambitions into a system that is interdependent, mutually beneficial and does not require states to choose between commitments to one or the other. Investing into the single European market and industrial base can also help justify defense spending rather than relying on the simple Buy American approach for security guarantees.

Yet, building stronger capacities goes beyond defense spending. Military assets are increasingly dependent on commercial and private providers for products but also for innovation and development. Stronger defense capabilities are increasingly dependent on investments into civilian research, education and dual-use technology. The growing reliance on space for defense exemplifies these trends and further, the non-military nature of the main threats to space assets calls for more cooperation to confront them.









Following up on these trends, the European Union is zeroing in on utilizing its space assets for their defense value. But copying the defense sector, the growing ambitions raise questions about an effective division of tasks and an effective and coordinated cooperation between European players but also across the Atlantic – an issue concerning civilian and military space activities.

Connecting these themes discussed throughout the text is a lack of Transatlantic sync. Its source can be tracked to an asymmetrical relationship based on European weakness. Finding a united and consolidated industrial and policy model is a necessary step to making Europe a strong and indispensable Transatlantic partner. Another prevalent dynamic points to the importance of civilian technological development but also the non-military nature of threats. As all security, not only in space, becomes more and more global, avoiding the illusion of autonomy or independence will be important in finding ways to build a new mode of international cooperation in light of the deteriorating liberal world order. There is no reason to think that Europe isn't fit for finding such new transnational cooperative models.



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