### EU CP vs Space Assets Aff

#### Multilateralism solves the aff---Our evidence assumes all deficits.

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4.3. External action

We are today witnessing a return to a more realist vision of the world, driven by geopolitical considerations, where global and even regional powers try to maximise their weight and challenge the established international order using both 'soft' and 'hard' power tools. The EU and the Member States are committed to multilateralism, in a world where some actors are beginning to reject it. This gives greater value to the EU's action in support of multilateralism, a concept that remains key to world peace and security. The EU must continue to rely on a wide range of 'soft power' tools – crisis management, sanctions, development or trade – that need to be strengthened. However, in order to be able to stand up for its values and interests in the world, the EU also needs to develop 'hard power' tools. Only through a mix of 'soft' and 'hard power' tools would the EU be able to act autonomously at any given time.

4.3.1. A renewed approach to multilateralism

Multilateralism and the rules-based order were challenged even before the outbreak of the Covid-19 pandemic.73 Recent years have been marked by the waning commitment of major countries to multilateralism, an issue which is of major concern to the EU.74 In the area of security, this, among other things, is jeopardising the survival of important nuclear arms-control treaties, with potentially direct implications for Europe. The unilateral withdrawal of the United States from the JCPOA, a landmark agreement to ensure the peaceful nature of Iran's nuclear programme, over allegations that Iran was violating the spirit of the agreement, and the February 2019 announcement that both the USA and Russia would suspend their obligations under the 1987 Intermediate-Range Nuclear Forces (INF) Treaty, are cases in point. The INF eliminated and prohibited ground-launched intermediate ballistic and cruise missiles with ranges between 500 and 5 500 km; its suspension leaves Europe potentially exposed to Russian intimidation.75 More recently, the USA announced its withdrawal from the Open Skies Treaty, which permits unarmed observation aircraft to fly over the territories of its parties to observe military forces and activities, increasing trust and transparency. 76 However, the crisis of multilateralism extends beyond traditional notions of security, with the USA having also withdrawn from the landmark agreement on climate change, the Paris Agreement, the United Nations Human Rights Council and, in May 2020 announcing its withdrawal from the World Health Organization in mid-pandemic. Beyond the world's major power's policy changes, the crisis of multilateralism is embodied in challenges faced by some of the most established international organisations, most notably the World Trade Organization, as multilateral consensus becomes harder to reach. As UN Secretary-General António Guterres emphasised to the UN Security Council the observed rise in nationalism and protectionism is having detrimental effects for transnational trust and multilateralism.

For the EU, the promotion and protection of the multilateral rules-based order is a fundamental goal of its external action. Multilateralism lies at the core of the EU's identity, and of its strategy to promote its values and defend its interests. In the words of the former HR/VP Federica Mogherini: '…we achieved security through cooperation. We built peace with multilateralism. […] This is the strength of the European Union experience'. As an example of multilateral cooperation itself, the Treaty on European Union stipulates that the EU 'shall promote multilateral solutions to common problems, in particular in the framework of the United Nations' whenever possible (Article 20(1) TEU). The first ever comprehensive European Security Strategy (ESS) – formulated in 2003 – made 'strengthening the United Nations, equipping it to fulfil its responsibilities and to act effectively' a European priority and placed advocacy of 'effective multilateralism' at the centre of the EU's strategic goals. The 2016 EU Global Strategy reiterates the EU's dedication to the promotion of 'a rules-based global order with multilateralism as its key principle and the United Nations at its core'. At the same time, it emphasises that 'the format to deliver effective global governance may vary from case to case', citing policy areas ranging from cybersecurity (where states, international organisations, industry, civil society and technical experts are actors to consider) and maritime policy (the UN, UN specialised agencies, NATO, strategic partners, and the Association of Southeast Asian Nations (ASEAN)), to humanitarian, development and climate policy (the UN, G20, new donors, civil society and the private sector). Where multilateral processes already exist, the strategy envisions strengthening them, and at the same time expanding fledgling international regimes in areas such as disarmament and international criminal law. 77 Biodiversity and artificial intelligence are also areas where nascent formats of multilateral governance can be observed.

Importantly, the EU Global Strategy acknowledged the need to reform multilateral structures and to address their weaknesses, while at the same time bolstering the spirit and practise of multilateral cooperation. It follows that for the EU, strategic autonomy is synonymous with a greater capacity to defend a principled commitment to multilateralism, rather than the aspiration to act unilaterally. The efforts to bolster the EU's credibility as a geopolitical actor with strategic autonomy should be seen as prerequisites to sustain multilateralism as a constitutive principle of 'a renewed vision of international order that is suited to today's world' – a world, in which the US-led liberal order, that encouraged multilateral cooperation on issues ranging from security to trade, is in crisis. 78 In the wake of major geopolitical and geo-economic shifts, countries like the USA or UK, who have done much to construct this post-war international order,79 have quit multilateral formats, while competing powers may seek to weaponise them. This complex situation, where multilateralism is thwarted and contested80 can represent an opportunity for European influence in the context of strategic autonomy. Despite internal divisions and structural problems, 'the EU remains the most consistent and best-resourced supporter of a strong multilateral system in the world today'. A united EU, defining and pursuing its strategic interests, can work towards a renewed approach to multilateralism as an alternative European model of global cooperation vis-à-vis American and Chinese leadership.81

In her political guidelines, Commission President von der Leyen highlighted the intention to 'uphold and update the rules based global order' through assertiveness and a strategic approach, with the Union using its normative power to uphold multilateral decisions in both trade and climate through its own legislation. Furthermore, within its 'stronger Europe in the world' priority, the Commission already announced its intention to launch an initiative on WTO reform in the context of the trade policy review planned for the fourth quarter of 2020.

The coronavirus pandemic has arguably been considered a wake-up call for multilateralism, and experts have suggested that it will provide the necessary push for much-needed reform and reinvigoration of multilateral cooperation. As a 2019 European Parliament report on the implementation of the Common Foreign and Security Policy (CFSP)states, it is for Europe to defend multilateralism and international law. In the wake of the pandemic, in a hearing at the SEDE subcommittee, HR/VP Borrell stated that: 'The world has never needed multilateral and cross-border cooperation so much, but unfortunately we do not have enough of it'. A strategic and autonomous EU would be able to leverage the partnerships needed in this effort. As Parliament has stressed, 'the EU should switch from a responsive to an anticipatory approach and the importance of teaming up with like-minded EU strategic partners, in particular NATO and emerging countries, in order to defend the global rule-based order that is founded on international and humanitarian law and multilateral treaties'.

#### The Counteplan solves space.

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Future of SSA/STM

While SSA/STM has traditionally sat within a military setting, particularly in the US, in recent years it has become associated with a more diverse set of providers. Private companies now supply commercial data to operators. This change has also been recognized at government level. In June 2018, President Trump signed Space Policy Directive-3, which proposes to shift the responsibility for providing SSA data to satellite operators from the DoD to the Department of Commerce (DoC).28 The DoC would therefore be responsible for handling the information warning satellite operators of potential collisions. There are a number of benefits that could be felt from this change in policy. First, it will allow the DoD to focus its efforts on national security considerations and not deal with the increasing day-to-day activities resulting from the rising number of satellites and operators. Second, this move creates an opportunity for the DoC to engage with international partners in a way that the DoD was unable to as the data will no longer be behind a military firewall and it has a commercial focus, which alters the opportunity landscape for the EU.

The difficulty in understanding exactly what the impact of this move will be on international STM cooperation is that there is still no firm decision as to how this will be organized in the US. While the proposal is for the work to move to the DoC, the Federal Aviation Administration (FAA) is also fighting for the authority over civil STM, and the debate over which organization will ultimately be successful is still ongoing.29 Either way, it is unlikely that the DoD will continue to be the main point of contact for STM data. It is also important to recognize the difficulties that could arise during the military-to-civilian transition, particularly in terms of communication and continuity of service over an extended transition period.

Over the next few years there is likely to be an increase in SSA/STM activities by states that are beginning to play a major role in space, whether through the number of satellites in orbit and/or through commercial launch services. An example of such a state is India. In February 2017, India launched 104 satellites on the Indian Space Research Organisation’s (ISRO) Polar Satellite Launch vehicle,30 and as a result it is now one of the leaders in the provision of commercial space launches. It is essential that India and other states entering this arena are included in global SSA efforts and acting responsibly. There are opportunities for Europe to lead in engaging with these actors. Commercial companies operating in this sphere will also continue to grow. Many of these will be looking to increase their geographical coverage to ensure their data is as accurate as possible and could look to partner with European states or companies. The EU could foster an environment that makes such cooperation easy, partnering with both other states and commercial providers to supply more comprehensive SSA. While a European ambition to further SSA cooperation with the US is welcome, this should not be seen in isolation or to the detriment of a move towards a more global coalition of SSA providers. With the US potentially less willing to explore partnership agreements, the EU could act as an intermediary and driver of political will for further international cooperation.

Scenarios for EU–US cooperation

The broad landscape of SSA activities and their importance for orbital sustainability, as well as the changing operators and policy, mean that there are a number of opportunities for EU–US cooperation, and for the EU to increase its capabilities and become a key player in leading the responsible use of space.

The one area in which potential opportunities will be very limited, if not impossible, is military SSA activities. International involvement in the US CSpOC is limited to the UK, Canada and Australia, all members of the Five Eyes community, as well as France and Germany. Any possible involvement of additional European countries would only occur as the result of a larger intelligence and information sharing partnership, although US Air Force Chief of Staff General David Goldfein has stated that he expects the CSpOC to continue to grow.31 The EU should therefore focus on the civilian aspects of SSA and the changing landscape of providers.

It has been suggested by a number of experts that SSA needs to become a civil mission with the military augmenting and supporting national security programmes as their mission. That will need a significant shift in US operations (which is happening slowly) and a greater sharing of data. Data integrity and data trust are essential. The concept of the EU SST as a civil programme should provide the required momentum to help with this paradigm shift. However, some important issuesneed to be addressed to support this. First, the civil programme should be the primary goal. Second, EU funds need to be focused on developing sensors, capabilities and experience that complements and contributes to existing activities rather than replicating what is currently available. For Europe that means not spreading funds and resources across a number of countries but focusing on only one or two to support the rest of Europe. Third, sensors dedicated to STM are essential, as one of the difficulties in space tracking for the military is that many of its sensors are primarily focused on missile defence. Fourth, cooperation among EU contributors needs to improve and this must be rectified before Europe can provide an effective support mechanism for global SSA. As a multilateral organization, the EU SST framework also comes with its own set of challenges in cooperation and information integration between member states. It can look to the EU Satellite Centre (Satcen)32 in Torrejon, Spain, as an example of understanding and dealing with the sensitive nature of aggregating national derived data and distributing it among EU member states

Nevertheless, the EU’s tradition of support for openness and civil society means that it is well placed to fill the gaps in the other extant SSA systems by being independent, open and free at the point of service. An EU-led open system, with the option for other providers to feed in their data if they wanted to, could rapidly supersede the US SATCAT as the system of choice by virtue of its open availability, and with relatively modest investment. Such a system could also be best placed to increase international cooperation with countries such as Japan and India as well as smaller countries looking to responsibly operate their limited assets and contribute to broader space sustainability. The EU can also look to support and promote initiatives such as the Space Data Association (SDA)33 and the DARPA-led Consortium for Execution of Rendezvous and Servicing Operations (CONFERS),34 which provide forums for international operators to exchange data and cooperate to avoid collisions.

One question that Europe needs to address is cooperation with the UK following Brexit. There should still be opportunities to collaborate between the EU and the UK. One aspect that needs to be looked at is any potential UK involvement in the EU SST programme. In whatever way this plays out, Europe should look to the UK for its experience and expertise, and perhaps also to its ability to act as a bridge to the US. Both the UK and EU member states could host commercial sensors. In the UK, radars or passive radio frequency reception sites like Goonhilly Earth Station,35 a facility in Cornwall that provides commercial tracking in LEO and MEO, are most likely, as the weather is not ideal for optical facilities. It is currently unclear how the transition of space tracking from the US Air Force to DoC in the US will affect the data flows from sensors such as RAFFylingdales. Currently, data from that radar cannot be shared worldwide due to the provisions of the UK–US treaty (the station is operated under the UKUSA Agreement), which also prevents it being optimized for space tracking. For example, it would be possible to implement a new focused tracking mode at Fylingdales to detect and track smaller objects than it currently sees (albeit with the need for cueing data from the Space Fence) but this is not allowed under the treaty.

There is a need for mutual exchange of STM data between the EU and the US, but there is a problem regarding the classification and accessibility of data (this is largely a problem on the US side). A multilateral data-sharing agreement between the US and one or more EU member state would greatly help, but the US is often reluctant to implement multilateral agreements. This may change with moves to commercialize STM in the US, but with militaries globally increasing their orbital activities, there is likely to remain a significant portion of data that is not considered releasable. Nevertheless, the EU could contribute independent sources of information on all trackable resident space objects and events. As noted above, one of the major problems with SSA is that rarely, if ever, does a single hypothesis explain the evidence. This implies ambiguity on inferred quantities and events and thus clouds or hinders informed and meaningful decision-making. Global SSA data harmonization is therefore critical for curating the required high quantity and diversity of data and information. The EU could help or even lead in this effort.

The broader definition of SSA allows for additional scenarios for collaboration. The first of these is around the issue of space weather. The EU can support and promote the provision of operational weather services as foreseen in the proposed EU space programme. A major space weather event could potentially cause more damage to satellites and ground stations than the other threats and hazards and would render other aspects of SSA obsolete. At present, both NASA and ESA, as well as other international actors, have mechanisms for monitoring solar activity, although current prediction capabilities are limited and there is a need for more missions that increase the ability to understand solar activity and provide longer prediction times. It is also important in this regard to ensure exchange of scientific research outputs and data related to warnings so that all satellite operators, regardless of location, receive the necessary information. A major space weather event could potentially cause more damage to satellites and ground stations than the other threats and hazards and would render other aspects of SSA obsolete.

The second area is intelligence. As European states increase their military assets in space there is a need for intelligence gathering regarding the intentions and capabilities of potential adversaries such as Russia and China. While cooperation in this regard will have the same difficulties as that of military STM activities, if Europe increases its space intelligence capabilities it may prove useful to the Five Eyes states to reach an information-sharing agreement. An increase in European SSA capabilities provides states with additional intelligence and the ability to better track and classify objects that are considered to be a potential danger. As the US and Europe continue close military cooperation, particularly through NATO, possible future EU monitoring of adversarial space activities is likely to be a welcome contribution to SSA by its allies

A further area of SSA is the security of ground stations that operate satellites as well as the security of manufacturers and the supply chains on which they depend. Even if there is an optimum situation in tracking space objects and a complete, shareable catalogue, if ground stations are at risk from intentional attack or natural hazards the dangers to satellites are still present. Similarly, satellite supply chains are often very complex, and problems with just one component could affect the operations of satellites, creating an additional level of uncertainty. The EU can look to lead the way or partner with others such as the US to ensure adequate levels of security for ground stations of satellite operators and strong regulation of the space industrial sector. This could be done by promoting the best practices of large, multinational corporations that work in both the US and Europe and, often through military contracts, have experience in incorporating such measures. Putting this issue front and centre will help to ensure that ground stations, particularly those run by commercial operators, are aware of the potential risks as well as the mitigation measures that they can put in place.

Overall, there are a number of potential scenarios for collaboration. However, it should be understood that not all within the SSA community see the future of these activities as being state-led. The preferred option of many is that industry, academia and other interested parties lead the work. This is in part because of the timescales involved in government negotiation and decision-making. One suggestion is therefore to build a solution from the bottom-up, forming a consortium to harness and produce transdisciplinary SSA that takes advantage of a broad range of knowledge and expertise. This could be done through the formation of a growing coalition of the willing to demonstrate incremental capability and added value. The EU could play a key role in fostering an environment that would allow such development and advocate a truly international effort that includes the US.

Conclusion

Taking into consideration the anticipated developments in space over the short- to medium-term, it is clear that there are opportunities for increased cooperation between the EU and the US in SSA and that such collaboration is needed. The EU has publicly noted its intention to act as a leader in promoting the responsible use of space, for example through its proposal of an International Code of Conduct for Outer Space Activities.36 Cooperation mechanisms between the US and the EU would not only improve the individual SSA capabilities of each and the global effort but also act as a blueprint for cooperation with other partners, such as the Five Eyes community, Japan and India.

Cooperation is also essential when considering the possibility that SSA capabilities, rather than space assets, could become a target of adversarial action with the aim of decreasing a state or operator’s ability to track objects or otherwise affect their knowledge in such a way as to put their assets in danger. For example, it is possible that that an adversary of the US would target its SSAcapabilities to gain an advantage by ‘blinding’ the US to what is happening in orbit. International cooperation in SSA among global partners, which could provide orbital information if it is lost by one partner, would add a layer of resilience to SSA capabilities.

There are obvious challenges to EU–US SSA integration. The first is the issue of secrecy. In this area Europe and the US may not be as far apart as might be initially thought as most state space actors have some military aspect within their capabilities. The key will be to find ways to encourage cooperation in the commercial and civil spheres while allowing individual states to operate and monitor their classified assets as they see fit – sharing what information they are willing to and able to depend upon the military or civilian nature of future EU member state tracking capabilities. As already described, changes within the US government’s SSA policy may provide the best mechanism for such activity to move forward. Secondly, the US always wants to be the leader in everything in the space domain rather than be an equal partner. This is becoming even more obvious through the rhetoric of many US military and government leaders, with talk of the need to dominate and lead in space as a reaction to the activities and perceived threats of Russia and China. Therefore, the EU needs to prove its value as a partner in space and advocate for international cooperation as the best way for both parties to achieve state goals and maintain the stability of orbit. Finally, it is important for there to be a cohesive understanding of how EU SSA programmes will cooperate both with member states and with ESA.

The EU needs to increase its capabilities, either through activities that plug existing gaps or through using its geographical situation to augment the activities of other states. This approach will provide it with a platform to become a leading player in this regard and prove it can add value to the global SSA effort. The US will then see it as an indispensable partner in ensuring the sustainability of the near-Earth environment over the coming decades.

### EU CP – Solvency – SSA

#### EU Solves SSA.

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The Space Surveillance and Tracking segment of the European SSA is arguably contributing to preventive action on the issue of space debris. In terms of outer space security, while preventive security measures may be oriented towards threats with an ‘objectively given existence’ [40], the element of surprise is still important. Whereas the measures included within the Code are directed at reducing future debris generation, the monitoring of existing debris clouds and the contributions to a European debris catalogue by the Space Surveillance and Tracking segment serve to provide detailed orbital trajectory information to satellite operators with the objective of forewarning operators of impending collisions, enabling them to make avoidance manoeuvres should they feel the need to do so. It could be argued that, in terms of anticipatory security, the Space Surveillance and Tracking segment is seeking to enhance the statistical calculability of the danger posed by the existing space debris population. The focus then is on securing the present through the mitigation of surprise, although there may be further applications in the future should feasible space debris remediation technologies be developed and deployed. The second SSA area involves the forecasting and monitoring of space weather events. These include solar flares, Coronal Mass Ejections and Solar Energetic Particle bursts that can cause significant damage to terrestrial and extra-terrestrial infrastructures. The largest recorded space weather event, known as the Carrington Event, took place in September 1859 and began with a ‘solar flare so strong that it could be seen with the naked eye’ [69]. The solar flare was followed by a huge Coronal Mass Ejection which disrupted telegraph systems on Earth, to the extent that ‘[o]perators were able to disconnect their batteries and continue to send messages using only this induced current’ [70]. More recently, in 1989, a notably severe CME caused a failure of the power grid in Quebec, leaving around six million people without electricity for 9 h, whilst transformers in the UK and the US were also damaged [71,72]. The space weather segment of the European SSA contains both preventive and preemptive elements. On the one hand, it involves the forecasting of imminent extra-terrestrial phenomena produced by solar activity in order to warn satellite operators of fluctuations in the solar and near-Earth environments, making it a reactive security mechanism enabling calculable probabilities based upon pre-existing solar activity. However, there is a preemptive aspect to its operations insofar as the solar activity which produces space weather events cannot be predicted. Moreover, the segment includes research undertaken into significant space weather events for which there is little historical data. A number of studies have considered the effects that a severe event on a similar scale to, or larger than, the Carrington Event might have on terrestrial and extra-terrestrial infrastructures [73]. In addition, and although not strictly part of the SSA Space Weather segment, sensors have also been placed on board the Galileo satellites to monitor radiation levels in Middle Earth Orbit. As well as contributing to the development of more robust satellites, this research is also serving to condition those working with vulnerable infrastructures to the possibility and danger of a severe space weather event, improving their resilience if faced with an event of similar magnitude to the Carrington Event. These studies and practices are contributing to the development and refinement of imaginaries concerned with the impact of future significant space weather events. Nothing can be done to prevent or stop space weather phenomena, but increased levels of awareness amongst those who deal with the consequences may lead to more effective damage limitation and recovery. In terms of critical infrastructure security, space weather acts as a pertinent example of the need for resilience as well as protection. If a space weather event were to disable active space objects e overcoming the component hardening and shielding that some satellites carry e the capability to resume operations rapidly through redundancies becomes vitally important. The third area of the European SSA is focused upon the detection of Near-Earth Objects. These are natural hazards such as asteroids with the potential to cause significant terrestrial damage. The risk of these objects hitting the Earth is arguably one of the more widely-known extra-terrestrial environmental factors, with visible geological evidence of historical events and numerous films using the scenario as a foundation. Although there is very little risk of asteroids or meteoroids causing damage to satellites, the segment of the European SSA dedicated to the detection of these astronomical phenomena is nonetheless reflective of an anticipatory security logic and thus worthy of inclusion within this discussion. Of all the segments of the SSA, the area devoted to near-Earth objects is the most preemptive in nature. The risk of an asteroid colliding with the Earth is relatively small, yet there is substantial financial and political backing for the detection of these astronomical phenomena. To this end, the near-Earth object segment of the European SSA is charged with searching for objects with a trajectory which may lead to them impacting the Earth, as well as contributing to the research and development of methods to deflect them [74]. The development of deflection technologies is particularly preemptive, as it deals with a threat that will remain unclear until a near-Earth object is identified as being on a collision course with the Earth. The European SSA is a preventive and preemptive anticipatory security mechanism; the Space Surveillance and Tracking and space weather segments are predominantly oriented towards forewarning of imminent threats posed by space debris and space weather through the use of statistical probability calculations. In this manner, they work to mitigate the element of surprise caused by unanticipated collisions or radiation by informing satellite operators of significant risks, allowing them to make avoidance manoeuvres if necessary. Regarding preemptive measures, although research is being undertaken into the possibility and consequences of cascading debris generation or large-scale space weather events, it does not appear to be a central component of the European SSA. This said, space surveillance is intrinsically a passive security mechanism focused upon imminent dangers and, until the technologies and governance structures are in place for space debris remediation, the Space Surveillance and Tracking segment will have limited application in terms of preemptive actions. It is feasible that SSA programmes will be able to identify particularly hazardous debris if and when space debris remediation becomes viable but until then, it will remain a security mechanism dedicated to providing collision warnings and monitoring debris populations

### EU CP – Solvency – Cyber

#### Solves Cyber threats

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4.4.4. Strengthening EU resilience on security and defence

Resilience in foreign and security policy is a central element of the EU Global Strategy, which has identified a number of non-conventional threats, including terrorism, hybrid and cyber. Most Member States' strategic documents mention these threats, which are likely also to be reflected in the upcoming EU Strategic Compass. 136 The majority of Heads of State or Government who took part in the Future of Europe debates in the European Parliament plenary recognised terrorism, cyber-attacks and disinformation as common threats to both the EU and the Member States and have called for a joint response, mindful of their dual internal and external dimension. In a joint letter addressed to their colleagues, the Ministers of Defence of France, Germany, Spain and Italy stressed that the pandemic had shown the 'relevance of a close coordination' and that EU Member States 'have to improve significantly their ability to counter hybrid-, disinformation or cyberattacks', to enhance communication networks as well as 'cyber-interoperability, security and resilience'.

To enhance resilience in facing hybrid threats, in the June 2020 Council Conclusions on Security and Defence, the EU committed to work towards an EU 'security culture' and to protect critical infrastructure. It has also committed to preserve its decision-making from 'malicious activities', thus enabling the Union to ensure it acts autonomously and remains fully operational at any time. The coronavirus outbreak challenged the EU and its Member States with a crisis of an unprecedented scale, which called upon their unity, tested their resilience and led them to consider building strategic autonomy as a way to overcome growing vulnerabilities and counter exposure to hybrid threats, including disinformation. President von der Leyen notably pointed to the spike in online disinformation activities and hospital-related cyber-attacks originating from China and linked to the coronavirus outbreak. Consequently, the European Commission published a joint communication on disinformation, in which it clearly indicated China, alongside Russia, to be among those actors promoting misleading narratives, related, for example, to the EU's support for third countries. 137 Early in the crisis, the European Council recognised that fighting disinformation with fact-based communication is a key element that allows it to 'reinforce the resilience' of European societies. Already prior to the pandemic, the European Council had regularly considered disinformation, 138 at that time mainly originating from Russia, and stressed that there was a need for a coordinated EU response in implementing the joint action plan on disinformation, which inter alia calls for a clear mandate and sufficient resources for the strategic communication teams within the EEAS. This requires rapid action and resources if the EEAS is to expand its strategic communication activity – so far mainly focused on Russia, the Western Balkans, the Middle East and North Africa and the Gulf States – to cover, in a more comprehensive manner, China.

Bolstering resilience to hybrid, cyber and terrorist activities is a key element of EU-NATO cooperation. Academics stress that 'collective defence' is and will remain the core task of NATO, but that the EU could and should play an enhanced role in the hybrid, cyber or counter-terrorism response. 139 The NATO summit in London displayed the diverging views of the different leaders on the future of the alliance; some of them, including French President Macron, being of the opinion that a stronger European pillar within NATO would strengthen both the EU and NATO and help share the transatlantic security burden. Analysts concur to say that staff-to-staff cooperation on technical aspects, including on hybrid and cyber aspects, is running smoothly and that the implementation of the 2016 Warsaw EU-NATO Joint Declaration and of the 2018 Brussels EU-NATO Joint Declaration led inter alia to progress on crisis preparedness, joint training and information exchange. Nevertheless, in the long-term, unless the current political blockage is overcome, it might have a negative impact on the implementation of the two joint declarations. Resilience, defined as the ability to renew, resist and be 'crisis-proof' when faced with both internal and external threats, not only relates to non-conventional, but also to conventional threats.140 One of the leading initiatives in building EU resilience in response to conventional threats is military mobility.

### EU CP – Solvency - Momentum

#### EU is already shifting towards space autonomy.

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4.3 Protecting critical infrastructure and supply chains

A third area that deserves attention at the EU level is the protection of critical supplies and supply chains. Indeed, strategic autonomy in space relies on the safety and proper functioning of space and terrestrial infrastructure (e.g. satellites and ground stations). Equally important is the need to ensure that there is no disruption to supplies of technologies, components and materials. The EU is steadily recognising that supplies and infrastructure are vital components of the Union’s resilience and autonomy. Overseeing programmes such as Galileo has had the effect of alerting the EU to the need for critical infrastructure and supply safeguards. In this respect, there is a need to recognise that flagship programmes such as Galileo or any future satellite constellation may integrate non-EU technologies and this may in some cases pose a potential dependency. Control of technology and IPRs are an essential feature of strategic autonomy (autonomy to and autonomy from).

### EU CP – Solvency – Autonomy

#### Counterplan spurs EU space engagement---that’s key to strategic autonomy.

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5 Conclusion and recommendations

Space is one of the domains where the EU has achieved a degree of strategic autonomy. This is because the EU had a clear vision for space, it has invested financial resources and it has launched ambitious projects. Overall, the EU has been able to specify why it wants autonomy in the first place (autonomy for), what resources it requires to achieve it (autonomy to) and how it intends to use this autonomy to lower dependencies on external factors and actors (autonomy from). In this sense, the first of three questions posed at the start of this study can be answered by saying that the EU recognises that space is vital for its economy and security. The second question, which asked if space had contributed to the EU’s strategic autonomy, can be answered with a qualified yes. Indeed, the third question on what more is needed to enhance the EU’s autonomy in space is a key one that poses many challenges and difficult choices. The EU’s positive actions in space should not breed complacency. Strategic autonomy is not something that can only be achieved, for it can also be lost over time too. A priority for the EU, therefore, is to tend to its existing degree of strategic autonomy in space with further investments that harness emerging technologies and support the European space market. None of this is really possible, however, without a strong degree of political will from EU governments.

This study has shown how any discussion about EU strategic autonomy in space has to contend with two trends. First, space is a geopolitical realm and, while most space-faring nations claim to be invested in the peaceful use of space, the reality is that countries such as the US, China and Russia are moving at some speed to develop space capacities for their military power. This current geopolitical context demands that the EU reframes how it sees its role in space. If indeed outer space is an additional domain for geopolitical tensions to be played out (and if it is a domain that contributes to geopolitical competition back on earth), questions about the EU’s readiness and willingness to engage in the space domain from a defence perspective are legitimate. For the EU, this implies that while it wants to adhere to international legal obligations it will exist alongside countries that may actively blur the line between space and defence for geopolitical reasons.

Second, space is a technological frontier and the space sector is presently subject to rapid technological shifts, but it could also be one where the line between space systems designed for peaceful and military purposes is increasingly blurred. In the present period of economic crisis due to the pandemic, the risk of underinvestment in the civil and defence sectors may spill-over into the space sector – and the European space sector itself is in need of sustained levels of investment. This is a crucial time for the technological advancement of the European space sector and there should be a strong recognition that EU strategic autonomy in space can only be achieved with the technical know-how and innovation of Europe’s space industry.

#### Space is uniquely key to EU autonomy

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3 The EU as an autonomous space actor

Now that a definition of strategic autonomy in space has been provided, and before looking at areas where the EU is still lagging behind, this chapter focuses on the ways in which it has attained a level of strategic autonomy in space. In this respect, we will see how the EU fares when it comes to the three forms of strategic autonomy outlined in the previous chapter. It should be said that the European space sector is an essential feature of the EU economy and its strategic autonomy. Europe can already boast to being a leader in space exploration with the Rosetta and BepiColombo programmes showing that the continent has the technological means for critical space missions. It is also true that Europe is developing next generation launch capabilities such as Ariane 6 and Vega C77, which should reduce the cost of space launches while offering more attractive payload set-ups and shorter lead times for production. It should also be noted that a number of European launcher and satellite companies are genuinely transnational and bring together leading space companies from across Europe.

3.1 “European” or“EU” strategic autonomy?

It is important to make a distinction between “Europe’s” space efforts and the “EU’s” specific capabilities and programmes in the context of any debate about strategic autonomy. From a technical point of view the EU’s core space capabilities Galileo, EGNOS and Copernicus are European programmes because they rely on EU and member state funding and the technical expertise of non-EU bodies such as the ESA and the European Organisation for the Exploitation of Meteorological Satellites (EUMETSAT). This poses a point of reflection of what is actually meant by “strategic autonomy” and “Europe” when discussing space. For example, while it is true that the EU is one of the major public institutions financing the space sector, it relies on the technical expertise of bodies such as national space agencies, the ESA and EUMETSAT to technically develop launch and satellite technologies and these bodies in turn work with industrial and research partners across Europe. Space cooperation in Europe therefore represents a mix of supranational and intergovernmental actors and structures.

78 Together, Galileo, EGNOS and Copernicus offer the EU a high level of strategic autonomy as it allows it to observe earth, protect transport networks, sustain digital networks and the security of trade routes and much more. While Galileo, EGNOS and Copernicus do not yet fully cover all of the tasks illustrated in Figure 4, the future applications provided by these programmes is potentially far reaching.

#### Space key 2 spaceautonomy

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4 Advancing EU autonomy in space

In the last chapter we focused on areas in which the EU had advanced its strategic autonomy in space, but it also started to detail some of the challenges facing the EU’s ability to maintain and extend its autonomy in space in the future. In this chapter we analyse further some of the key areas that the EU needs to focus on in the future. As we have seen, space is too important to neglect from a security and defence perspective and it is a sector experiencing momentous technological shifts. We have so far stressed the importance of continued investment in the European space sector, but it is equally necessary to spell out the key areas where the EU needs to focus in the coming years. In particular, industrial competition will be intense but a comprehensive EU approach to space is required that grapples with issues such as connectivity, technological developments, critical infrastructure protection and security and defence.

4.1 Promoting space and connectivity

One of the aspects of space that is becoming increasingly obvious is its role in promoting the EU’s “digital sovereignty”. Today, the EU is concerned with the digitalisation of its economy and this implies the integration of a range of economic sectors and technologies.93 Yet there is a need to understand how space can facilitate a wider EU connectivity strategy. As one example shows, the drive to ensure complete satellite broadband coverage across the EU, lay the foundations for 6G and accrue the benefits of the Internet of Things (IoT) demands close collaboration between the space and telecommunications sectors. European Commissioner Thierry Breton has already floated the idea of developing a global constellation of satellites that could help the EU move from data collection from space to data processing.94 A flagship EU programme focused on developing a “connectivity constellation” would lower its dependence on third states and allow it to collect and process data without fear of external interference. In this sense, any flagship project of this nature would require a strong underlying security logic that protects signals, data transfers and communications links.

The same underlying logic that saw Galileo take off could advance the EU’s broadband satellite ambitions. At present, public and private companies in China and the US are moving at some speed to develop LEO and Medium Earth Orbit (MEO) internet global coverage constellation programmes. The EU cannot fall behind in this domain as any market lead by China and the US will potentially damage the EU’s autonomy in space and in the digital domain, with growing dependencies on constellation systems not owned by EU private actors or public authorities. It would be a strategic error to not seize on the potential of satellite broadband, and it would to some degree echo (and even address) similar security concerns related to non-EU 5G networks and providers that are linked too closely to third states authorities and potential political disruption. Even here there would be a security and defence dimension, as EU armed forces would benefit from having secure blanket broadband coverage for operations and missions. Reliance on a third state system would only increase the risk of internet blackouts, which would be potentially hazardous for EU armed forces.

4.1.1 Learning from Galileo

Accordingly, greater EU connectivity and digitalisation rests on political ambition and investment, but initiatives below the public radar can have an important effect on connecting space with the EU economy. Firstly, it is important to scope out how each EU policy area would benefit from greater space-enabled connectivity. Learning from the early experiences of Galileo, more should have been done to mandate EU institutions and services to use the global positioning and navigation system in their areas of work. In this regard, an important lesson has been learned during the pandemic as the EU’s response to Covid-19 has relied on Galileo to ensure the proper functioning of the “Green Lane” initiative which ensures the free passage of freight transportation across borders (e.g. there is a Galileo Green Lane app). Copernicus has also been used by EU institutions to monitor air pollution during the pandemic. Consequently, no ambitious EU connectivity initiative can succeed without comprehensive public outreach that explains to citizens the benefits of space. Connectivity will increasingly be an important feature of the EU’s diplomacy in regions such as Asia.

Connectivity will rely on greater symbiosis between policy sectors. One set of sectors that can be synergised to ensure greater connectivity are the civil, space and defence domains. Not only would a connection between these policy areas stimulate the integration of dual-use technologies into space development programmes, but it could lead to greater technology transfers between space and defence. Of course, such a step will not be challenge free and in fact it is difficult to create technology commonalities between space and defence at the higher readinesslevels of technology (TRLs). What is required instead is a focus on lower TRLs to ensure cost reductions and greater technology diffusion, and to avoid a misalignment of civil, space and defence Intellectual Property Rights (IPRs).96 This is specifically critical for the space sector, which has ‘very low production volumes’ but high capital intensity and start-up technology costs.97 In essence, therefore, connectivity is about connecting policy domains, space and terrestrial technologies and R&D processes.

#### Counterplan key to EU strategic autonomy.

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4.4 EU space, security and defence

The fourth area of the EU’s strategic autonomy that requires greater attention is the link between space and defence, although in this area much will depend on the political willingness of EU member state governments.116 By link, we do not mean here just industrial or R&D links but operational and capability ones too.

4.4.1 Enabling the ability to act

If the EU is to ensure that it has the capacity to act on earth as a credible security and defence actor, then it needs to ensure that EU space initiatives meet the needs of European armed forces. Space is not a place where actors win wars, but they may well lose them on earth should space not be harnessed effectively as a strategic enabler. Today, the defence of space systems and earth-based capabilities that are dependent on space are particularly vulnerable to electronic warfare that can effect signals communications and orbital calculations and data sensing. We know that there is a need for the EU to stay abreast of technological developments such as the potential future use of sophisticated electronic warfare capabilities and other disruptive technologies in space. It is also true that Europe’s armed forces are increasingly dependent on earth observation (earth imagery, weather, intelligence and missile warning), telecommunications (secure narrow and broad bands and data secure communications) and PNT capacities in order to perform their duties.

While most of the answers to these questions will be provided by industry and technology, this should not discount the importance of strategic space-defence planning. Indeed, space is mentioned by the EUGS and the Implementation Plan on Security and Defence (ISPD), and such documents have aided the initiation of several EU space-defence capability and technology projects. What is missing, however, is a more focused understanding of how the EU could treat space from a military perspective. This may sound like a taboo subject, but the EU is, after all, funding space-defence technologies. PNT and SST are vital components of the EU’s ability to react militarily but yet the EU has not developed an overarching concept for the way it understands the links between space and security and defence. In this regard, the forthcoming “Strategic Compass” could be an ideal opportunity to integrate space into CSDP and EU security and defence more broadly. There is not one basket under the Strategic Compass – crisis management, resilience, capability development and partnerships - that is not relevant to or affected by space.

The need for a strategic vision for space and defence is not simply theoretical. For example, it is worth asking how space should be thought of in light of some important EU Treaty provisions such as the mutual assistance117 and solidarity118 clauses. At first glance, one might argue that Article 42.7 does not really apply to space because the clause refers to an ‘armed aggression’ on the ‘territory’ of a member state. Stricto sensu it may be argued that the word ‘territory’ effectively rules out space as the Treaty specifically references attacks on land or within maritime boundaries and airspace. However, acts of armed aggression on the territory of an EU member state can be supported from space and any destruction of EU space infrastructure could disable terrestrial defences. As far as Article 222 is concerned, space should not be neglected as part of any joint action to assist a member state in case of a terrorist attack or natural or manmade disasters.119Of course, because NATO has declared space an operational domain it is necessary for the alliance to assess how space-based threats could be covered by Article 5 of the Washington Treaty and collective defence.120

Additionally, we should not overlook the important role that space can play in the EU’s diplomacy, partnerships and support for multilateralism. In particular, the Space Task Force should be recognised as a core hub through which the EU can promote space partnerships and space diplomacy. It plays a key role vis-à-vis the HR/VP who in turn brings together the EEAS, EDA and SatCen. With the correct level of resources, the Space Task Force would be in a better position to promote the responsible use of space internationally and it could build on its positive contributions to the 2030 Space Agenda and the UN Committee on the Peaceful Uses of Outer Space (COPUOS). What is more, the Space Task Force plays a vital role alongside SatCen in promoting the Union’s geospatial awareness and intelligence with partners. To date, SatCen’s services have been promoted by the Task Force with partners such as the African Union (AU), the OSCE and the International agency for Atomic Energy (IAEA). There is scope for the Task Force to advance space issues within the context of the EU’s Strategic Partnership Agreements (SPAs) and EU-NATO cooperation, however, it requires greater resources in order to conduct more ambitious EU space diplomacy.

Yet, EU Space Diplomacy is only as strong as unity between EU member states. In this respect, there are notable divisions between member states on how to utilise and view space. Such divisions leave the Union exposed to “divide and rule” strategies by third states. The October 2020 Artemis Accords highlight the problem well. The Accords are a US initiative to forge a common position on the use of space and they take a controversial approach by prefiguring potential activities on the Moon, Mars, comets and asteroids that have no firm consensus in multilateral fora or international legal interpretations. The current US administration has opted for bilateral space agreements as a way for the US to export norms and policies that are designed to push America’s competitive advantage and vision for space.121 To date, the US and two EU member states have bilaterally signed the Accords (rather than the EU as a whole). While the Artemis Accords are not legally binding, they have exposed EU member states’ divisions on space use and this makes it incredibly difficult for the Union to forge a common space diplomacy or ensure its strategic autonomy.

4.4.2 Space defence capabilities

To say that the EU is not working to develop space-defence technology needs is false. For example, space has already been integrated into the EDA’s Capability Development Plan (CDP) and in 2018 it designated the following areas as capability priorities from a defence perspective: earth observation, PNT, SSA, satellite communication, information superiority and management, ISR and cyber defence. To fill these capability gaps, the Agency has initiated R&T programmes that model and simulate micro-satellite clusters (i.e. the Miracle II project), develop geospatial information support (e.g. the GISMO project) and it has even been mandated to study the requirements and business case for military PNT by 2020.122 Such efforts are being taken up through other mechanisms such as PESCO and the EDF, and there is an opportunity for the EU to enhance greater awareness of space-defence matters and to better plan for the development ofspace-defence capabilities. It should also be noted that the EDA’s Coordinated Annual Review on Defence (CARD) offers a good opportunity to focus member state investments in space and defence. Furthermore, the Agency’s work on Key Strategic Activities (KSAs) and the space-related Technology Building Blocks(TBBs) under the Overarching Strategic Research Agenda (OSRA) have already stressed the importance of technologies for space situational awareness and communications encryption.

To date, in PESCO there are three specific space-related projects focusing on radio navigation (“EURAS”), military space awareness (“EU-SSA-N”) and space early warning and interception (“TWISTER”). The EURAS project seeks to benefit from Galileo’s PRS by promoting the development of EU military PNT capabilities. For its part, EU-SSA-N adds to the civilian nature of the EUSST by ensuring that the Union has the means to protect member state space defence assets and services. The preparatory mechanisms under the EDF are supporting space-defence capability development. The PADR is supporting R&D projects for quantum secure communication and navigation and a defence positioning system in GNSS denied areas (see the “Quantaquest” and “Optimise” projects). The EDIDP is financing 3 specific projects including: 1) a persistent earth observation from space capability that fuses automated data processing, AI and real time processors and sensors (i.e. the “PEONEER” project); 2) a cost-effective and very high resolution optical capability for small satellites (i.e. the “OPTISSE” project); and 3) a project to benefit from Galileo’s PRS for defence-specific requirements (i.e. the “GEODE” project). This last project is linked to the EURAS project within PESCO.

What is noticeable is that each of these PESCO and EDF (PADR/EDIDP) projects work with and adapt to existing EU space initiatives such as Galileo and EUSST. In this sense, PESCO and the EDF have been effective in allowing member states to develop defence-relevant capabilities together despite the civil nature of existing space projects. This presents an opportunity to avoid duplication and costs. This type of logic undergirds the EU member states’ approach to Government Satellite Communications (GovSatCom) too, as access to secure communications is a prerequisite for armed forces that operate in hostile environments. Developing EU GovSatCom is important because the US, China and Russia are developing, refining or modernising military intelligence and communications systems. First announced in 2013 and then referred to in the EUGS in 2016, there is a consensus that developing a GovSatCom capability would contribute to the EU’s strategic autonomy in space, security and defence. So far, the EDA has brought GovSatCom forward by identifying civil-military user needs, demonstrating the business case for the system for governments and CSDP users and conducting an impact assessment along with the Commission and ESA. Since this time, GovSatCom has been included in the EUSP and it is foreseen that an initial capacity will draw on private and member state capacities until 2025 in order to gauge government demand. The fact that such a project will be financed by the EU is a significant step in enhancing the secure communications of European armed forces.

4.4.3 Geospatial intelligence

Another key aspect of the EU’s space-defence capability set relates to geospatial intelligence. It is true that a number of EU member states have their own military grade earth observation systems (e.g. CosmoSkyMed, Hélios, SAR-Lupe, etc.), but there is no guarantee that national geospatial intelligence will be shared. This is why SatCen remains relevant, as it provides such intelligence for the EU as a whole. Indeed, the Centre provides a range of EU, national and international consumers with high quality intelligence of satellite imagery. It plays a key role in CFSP and CSDP and it informs decision-makers with tailored intelligence products. While it is true that a range of commercial firms can provide satellite imagery, SatCen is unique in being able to provide institutional and political authorities with sensitive and classified analysis. Without SatCen, there would be no other central EU body to provide sensitive analysis in support of crisis management tasks, border management, the delivery of EU humanitarian aid, disaster monitoring, etc. We should not forget that SatCen plays a vital role within EUSST, which contributes to the security of European space assets in orbit.

Clearly, many see the Centre as a key enabler of strategic autonomy as demand from the EU member states and the EEAS has increased steadily since 2014 and in 2019 the Centre delivered a total of 3,080 products compared to 478 in 2009.123Yet, the SatCen must be supported in its role. A major priority is to ensure that the Centre is placed on a sound financial footing, but in a way that it can grow to accommodate greater demand and to seize the opportunities of the “new space” evolution and technological advances. At present, the SatCen budget is provided by national contributions but it might be necessary to consider new financial arrangements to ensure that the Centre has the resources it requires. While SatCen will remain an intergovernmental body, it is worth exploring whether resources from the EU budget could not be made available in future. However, such a move should be accompanied with an expansion of the Centre’s role as the EU experiences a wider array of security challenges in space and on earth. Keep in mind that several internal security tasks could benefit from SatCen’s expertise, and it should not be overlooked that the Centre could play a vital role in case either the EU’s mutual assistance or solidarity clauses are invoked.

### EU CP – Net Benefit – Laundry List

#### Net benefit turns the case.

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4.4. Security and defence

The current risk landscape is multidimensional and characterised by both conventional and novel threats: 107 from transnational crime networks and terrorism to the corrosion of arms control regimes, cyber-attacks and hybrid warfare, the scale and complexity of threats to peace and stability is such that none of the EU Member States 'has the strength nor the resources to address these threats' alone. In this context, the European Union's ability to independently and autonomously make effective decisions regarding the security of its Member States and its citizens, grows in importance. Building strategic autonomy on a mix of 'soft' – sanctions, development cooperation, trade – and 'hard' power tools, which still need to be politically agreed, could allow the EU and its Member States to respond to the threats and risks with which they are commonly confronted.

4.4.1. Contributing to global peace and stability

In an already volatile international context, the impact of the coronavirus outbreak is likely to lead to increased instability and to the multiplication of regional conflicts close to Europe and around the world. This will impact conflict areas disproportionately, increasing the vulnerability of afflicted populations and prolonging conflict in areas like the Middle East. It may also act as a 'conflict multiplier', as contestation over resources expands to include securing access to vital medical supplies, among other factors. 108 The pandemic is also likely to strain social relations and statesociety relations, potentially leading authoritarian governments to increasingly undemocratic measures in reaction to social disorder. 109 Great power competition, redistribution of global power and uncertainty about the future relevance of multilateralism will impact security and instability across the world, as discussed in previous sections of this study, potentially threatening global peace.

In this context, the promotion of peace – one of the main goals of the EU's external action as enshrined in Articles 3.5 and 21 TEU – becomes even more challenging. It is in the EU's security interest to strengthen its capacity to act credibly as a global power. It can do so by developing capabilities, allocating resources, cooperating with partners or setting standards. Over recent years, the EU has embarked in a range of important reforms to develop strategic autonomy. It has been working to strengthen its ability to address critical developments in its neighbourhood and worldwide more coherently and to mobilise the required financial, civil and military resources. With various bilateral action plans, financial instruments, and over 37 operations and crisis management missions on three continents, the EU could be considered an experienced global contributor to peace and stability. However, as the European Parliament has stressed in one of its resolutions, the challenge for the EU is to take a 'proactive rather than responsive approach to global affairs', including in areas pertaining to EU Common Security and Defence Policy (CSDP).

4.4.1.1. Strategic planning and responsiveness

The effectiveness of the CSDP has been a subject of debate since 2016. Recognised weaknesses included: 1) the planning process for missions and operations which remained 'cumbersome and slow'; 2) the institutional setting of the EEAS which exhibited redundancies; and 3) the lack of centralised military planning and conduct structures which hampered the capacity for crisis response.110 Since then, the political momentum to address these problems has led to several institutional reforms, such as the establishment of a permanent Military Planning and Conduct Capability (MPCC) in the EEAS in 2017.111 In 2019, the EEAS further integrated its 'conduct pillar', that combines the responsibilities for the civilian and military planning capabilities (CPCC and the new MPCC), and its 'policy pillar' (concerning PESCO, or cyber security) into the Directorate for an Integrated Approach for Security and Peace, coordinated through the Joint Support Coordination Cell (JSCC). These reforms, among others, have the potential to further strengthen and streamline planning and coordinate activities. 112 In 2018, to assist in the efforts to promote peace and stability then HR/VP Mogherini and the Council proposed the establishment of an off-budget European Peace Facility, which could receive €5 billion for 2021-2027. The European Parliament has called for proper parliamentary control over the Facility and regular briefings on related decisions and on its implementation, assuming the proposal is taken forward.

Beyond institutional, operational and financial innovations HR/VP Borrell has argued that the EU still 'lacks a common strategic culture' as an international actor. It has been suggested that strategic autonomy would provide this essential 'glue' to the EU's action for peace and security.113 One proposal, which among other things would boost the EU's capacity to formulate coherent and rapid responses to global and regional crises is the creation of a European Security Council (ESC). An ESC would act as a governing body with authority over common positions, operations and strategy in CFSP, contributing to strategic readiness.114 The extension of qualified majority voting on CFSP issues, including the deployment of CSDP civilian missions in response to crises, would be part of the move towards strategic autonomy, and could also contribute to readiness and effectiveness in this area. The more recent launching of the Strategic Compass process, to be taken forward by the German Presidency in the second half of 2020 – aiming to also produce a shared threat assessment among EU Member States – holds significant value for the future of the EU's action in countering threats and promoting peace. In a strategically autonomous EU, effective decision-making regarding global peace must also be backed by consequential and proportionate operational capabilities. In his parliamentary hearing, HR/VP Borrell stressed 'we have to be more operational on the ground. We have to deploy forces, starting with our neighbourhood'.

The EU's capacity to prevent crises, address ongoing conflicts and disasters, and provide postconflict stability depends not only on an integrated approach towards crisis management, but also on agreement on the EU's long-term strategic goals and access to autonomous and independent foresight capacity, which would prepare the Union's instruments for evolving and complex scenarios. 116 The pandemic has made the relevance of anticipatory governance and preparedness more evident than ever before, as it has illustrated the compounding effects that a non-traditional threat can hold for the deterioration of peace and stability. The Commission acknowledged the increasing importance of strategic foresight to equip 'ourselves with the best possible knowledge on emerging risks' in its 2020 work programme and by creating a Foresight portfolio in the new Commission, held by Commissioner Maroš Šefčovič.

#### Counterplan solves nuclear prolif.

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4.4.3. Addressing the future of non-proliferation and nuclear deterrence

The world has entered a 'new nuclear age' 127 that is very different from the Cold War, both in terms of characteristics and challenges. Two nuclear superpowers, Russia and the USA, still possess the vast majority of nuclear weapons (see Figure 10). The greatest challenge still lies in saving the bilateral agreements between them that have led to a very significant reduction in nuclear weapons over the past 30 years. However, the number of nuclear-armed states that determine whether and when nuclear weapons will be used has grown to include China, India, Israel, Pakistan and North Korea, and may soon comprise Iran. Pakistan and North Korea rank high on the list of fragile states (25th and 30th respectively). In this overall climate, where multilateral arms control has effectively been declared '(almost) dead', 128 Europe is at particular risk that any renewed arms race between Russia and the USA will play out on European soil. Moreover, even though the probability is considered low, there is a persistent risk that a non-state actor may steal and detonate a nuclear weapon or seek to manufacture an improvised nuclear device. 129

Figure 10 – Nuclear weapons worldwide Source: SIPRI, 2019. [Figure excluded]

The recent demise of the INF Treaty, 130 a bilateral arms control agreement between Russia and the USA, may lead to the redeployment of intermediate-range missiles and put Europe once more in the line of fire of strategic nuclear weapons, for the first time since 1991. The EU called on both parties to save the agreement, but these efforts failed. The last remaining bilateral strategic nuclear arms control agreement between the USA and Russia, the 2010 New Strategic Arms Reduction Treaty (New START), will expire in 2021, unless both parties agree to extend it as part of negotiations that started in June 2020. New START has been critical to continuing the trend of gradual reduction in the nuclear arsenals of the USA and Russia that started in the 1990s. Its demise could trigger a renewed nuclear arms race between Russia and the USA. At the same time, all nuclear weaponpossessing states continue to modernise their nuclear arsenals. The USA and Russia are investing large sumsin the overhaul of their nuclear weapons systems131 and are working on introducing 'low yield nuclear weapons' with a lower threshold for use. To make matters worse, the Nuclear NonProliferation Treaty, the cornerstone of the global non-proliferation and disarmament regime, is under threat, including from tension between supporters and opponents of the Treaty on the Prohibition of Nuclear Weapons (the Ban Treaty).

Based on the Global Strategy for the European Union's Foreign and Security Policy, the European Union Strategy against the Proliferation of Weapons of Mass Destruction and their Delivery Systems and the New Lines for Action, the guiding principle of the EU in the fight against the proliferation of weapons of mass destruction (WMD) continues to be effective multilateralism. This includes safeguarding the centrality and the promotion of the universality of the global non-proliferation and disarmament architecture, through diplomatic action and financial assistance to third countries and international organisations. EU Member States are signatories to the international treaty regime of non-proliferation conventions concerning nuclear, chemical and biological weapons. In addition, the EU actively promotes the universalisation of these conventions. However, the EU's effectiveness in maintaining and shaping the future of the international non-proliferation and disarmament architecture has been weakened due to internal divisions over the role of nuclear weapons. France is fully committed to step-by-step nuclear disarmament but considers nuclear weapons to be an essential part of its security strategies for now. A further 20 EU Member States are NATO members and covered by NATO's commitment to nuclear deterrence. These include four hosts to US tactical nuclear weapons (Belgium, Germany, Italy and the Netherlands) and 16 that are covered by NATO's 'extended nuclear deterrence pledges', including all the central and eastern European Member States. In contrast, Austria, which is not a NATO member, was one of the key drivers behind the Humanitarian Initiative, which led to the adoption of the Ban Treaty. Among EU Member States, only Austria, Cyprus, Ireland, Malta and Sweden voted in favour of the Ban Treaty, only Austria and Ireland signed it, and only Austria has ratified it. Consequently, there is no agreed EU position on the Ban Treaty, reflecting long-standing division on nuclear disarmament. The EU will have to overcome internal divisions over the role of nuclear weapons if it wants to regain the ability to speak with one voice in international non-proliferation and disarmament fora, give new impetus to the mission of the EU Special Envoy for Disarmament and Non-proliferation, and be able to act autonomously in an international environment characterised by an increased assertiveness from both global and regional powers.

The EU has been part of several global initiatives at the political level. This includes the adoption of UN Security Council Resolution 1540, which establishes legally binding obligations on all UN Member States to have and enforce appropriate and effective measures against the proliferation of nuclear, chemical, and biological weapons. It also includes the setting up of the Global Initiative to Combat Nuclear Terrorism (GICNT), the creation of the G7 Non-Proliferation Directors' Group and Global Partnership, and the convening of the Nuclear Security Summit. To strengthen regional cooperation against proliferation of WMD, the EU launched the EU Chemical Biological Radiological and Nuclear Risk Mitigation Centres of Excellence Initiative in 2010. The EU also pursues close cooperation with individual countries to strengthen the international non-proliferation regime. An increasing number of the EU's bilateral relationships include a non-proliferation component. The EU has also contributed to promoting the highest standards and practices in nuclear safety applied in the EU in third countries, and continues to promote alignment with EU policies and priorities in the field of nuclear safety in non-EU countries. These efforts have certainly contributed to reducing the risk of non-state actors acquiring nuclear devices or the nuclear materials needed to manufacture them. However, the EU will not be able to prevent nuclear-armed states from sharing their nuclear technology and material with friendly states, as the USA did with India and Iran, China did with Pakistan, the former Soviet Union and China did with North Korea, and France with Israel. Both Turkey and Saudi Arabia have expressed an interest in acquiring nuclear weapons and nuclearpower competition among the USA, Russia and China may make it easier for both countries to procure the necessary technology.

To prevent the proliferation of WMD, the EU also controls the export of dual-use goods. Certain goods and technologies have legitimate civilian applications but can also be used for military purposes; 'dual-use' goods are subject to EU's export control regime. EU export controls reflect commitments agreed upon in key multilateral export control regimes such as the Australia Group, the Wassenaar Arrangement, the Nuclear Suppliers Group and the Missile Technology Control Regime. The regime is now being revised, 132 mainly to take account of significant technological developments and to create a more level playing field among EU Member States. The EU is currently considering expanding the definition of dual-use items to include 'cyber-surveillance technologies' – which have been used in connection with serious human rights violations – and to create a new EU autonomous list of cyber-surveillance technology subject to export control that would be more restrictive than existing multilateral export control regimes.

### EU CP – AT Depenpency Deficit

#### Dependency is descriptive of the squo---only strategic autonomy resolves it.

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3.1. Reducing existing dependencies

The EU is part of a globalised environment characterised by interdependence, which is at the heart of its multilateral action, and therefore, of its foreign policy action. Disruptions that transform interdependencies into dependencies lead to imbalances and could be countered through the building of an effective 'strategic autonomy'. The greater the dependency in specific strategic policy areas the more vulnerable and unable the EU is to pursue its interests and defend its values. One example is the trade relationship with China, which, in the words of President von der Leyen, is characterised by 'asymmetry' in market access and dysfunctionalities as regards the level playing field. A more robust EU industrial policy and foreign direct investment screening are toolsthat could contribute to remedy this asymmetry. They could raise the EU's capacity to act autonomously, not only in relation to China but also to other partners.

The coronavirus outbreak highlighted some of the EU's dependency on China for health equipment and medicine supply. It has shown how vulnerable the EU could be when it comes to a strategic domain such as the health sector. As argued previously in this study, the pandemic could offer a unique opportunity to build political consensus on 'strategic autonomy' and place it at the centre of the recovery process. This makes it important to act, not only on health policy, but also concomitantly on climate and energy, industrial policy, foreign policy, development, economic affairs, monetary policy, defence, international trade, transport, infrastructure, artificial intelligence, research or intellectual property rights. Each of these domains is of strategic importance for an EU that, unless it builds its capacity to act autonomously, risks being caught in the middle of the game of global powers at a crucial juncture.

Reducing dependencies is not an easy exercise; it requires maintaining and renewing the existing political consensus. Quick legal or institutional solutions might be tempting, but these solutions only represent the means of reducing dependency and must come second – as a way to implement political will. In practice, the European Council has first to reach, and then to maintain, a political consensus on the formulation and implementation of policies, to ensure that the Member States fully adhere to the whole process. An interesting example is the EDF, the creation of which would have been impossible without a prior political consensus forged at the European Council on the need to share the burden of transatlantic security and address the growing risk of technological obsolescence in Europe. The EDF – a dedicated instrument intended to boost European defence research and defence industry – can only prove its added value and contribute significantly to the building of the EU's strategic autonomy21 if it is provided with sufficient resources in the years to come (see also section 4.4.2).