

Geopolitical framework: the necessity of intelligence to determine priorities within the Strategic Compass

In 2009, the Lisbon Treaty established a European foreign policy that had already been set more than fifteen years earlier, within the Maastricht Treaty. Since then, the Common Security and Defence Policy (CSDP) has focused on multilateralism, strategic autonomy, and the participation in global governance with unity of action inside the European Union. This priority is explored in different internal forums, as well as in many external scenarios in which the EU is participating, such as the relations with NATO, as an essential partner.

This theoretical concept of autonomy is not always easy to develop. In the words of High Representative/Vice-President Josep Borrell, Europe needs to build a common narrative to strengthen our common vision, since we ‘Europeans don’t have the same understanding of the world, [...] do not share the same history, the same culture, even though the same geography or the same neighbours. We do not have the same perceptions of threats. We must build a common understanding of the world to have a common perception of the threats to be able to have a common answer to these threats’¹.

This lack of common vision produces, somehow, misunderstandings and internal disagreements in EU the decision-making processes. The situation sometimes turns into challenging situations that makes difficult to prolong ongoing operations or to create new ones. For example, Operation EUNAVFOR MED Sophia was substituted by Operation IRINI, whose main task —to combat migrant smuggling in the Central Mediterranean—, changed into the implementation of United Nations arms embargo on Libya.

The requirement to have autonomous and common policies involves any matter related to security and affects the daily life of all European citizens. For instance, the possibility of having a common vision in health security matters has been discussed lately, during the pandemic COVID-19. The urgent need for a quick answer to the evolution of the disease has led to different national policies, and the main agreements came only after long negotiations. Besides, during the first months of the crisis, the dependence on third countries due to commercial relocation turned into a shortage of essential health products. To avoid the existing gap between capabilities and needs, it is necessary to

¹ Live Streaming TV interview (1-12-2020) by EEAS: “The UE in a changing world. Staying on course in troubled waters”. Available at: https://www.youtube.com/watch?v=GqvUvdGmW_I

establish strategic priorities in order to analyse risks and challenges the EU must face. A fundamental tool to classify them is a solid intelligence production capacity.

From Javier Solana to Borrell, all the High Representatives of the Common Foreign and Security Policy (CFSP) have contributed to build a stronger and more coordinated Union. In the current EU Global Strategy, approved in 2016, Federica Mogherini emphasizes the need to have a ‘strong Union, [...] that thinks strategically, that shares a vision and act together’². Also in its 2019-2024 strategic agenda, the European Council highlighted the ‘need for the EU to pursue a strategic line of action and increase its capacity to act autonomously’³. Nevertheless, the lack of a common vision and mutual understanding at the political level has turned into a decrease in the number of CSDP operations⁴.

In this sense, ‘the more complex global environment calls us to be more united, coherent, focused, and better leverage our collective Team Europe strength’⁵. One of the main goals of Josep Borrell is to be capable of having agreements within the EU nations and to advance into a common vision and strategy for Europe. In the last year, and coming from a German initiative, a new effort has been done to ‘promote mutual understanding between the EU and the Member States on challenges and threats, to increase the EU’s capacity to act internationally, and to improve European defence initiatives’⁶.

This initiative has turned out into a new concept: the Strategic Compass or *Boussole Stratégique*. It is born with the goal of harmonizing decisions on foreign matters within the EU. It will highlight common aspects for all countries within the EU security policy, such as threats or development of joint military capabilities⁷. This ambitious project should be ready in 2022 and will pinpoint ‘specific goals and objectives in areas such as crisis

² A Global Strategy for the European Union’s Foreign and Security Policy: Shared Vision, Common Action: a Stronger Europe.

³ “A new strategic agenda for the EU”, *European Council*, Brussels, June 2019.

⁴ PUGLIERIN, Jana. “La Boussole stratégique de l’Union européenne”, *European Council on Foreign Relations*, 2021. Available at: <https://ecfr.eu/paris/article/la-boussole-strategique-de-lunion-europeenne/>

⁵ A renewed multilateralism fit for the 21st century: the EU’s agenda. European Commission, February 2021. Available at: https://ec.europa.eu/commission/presscorner/detail/en/ip_21_622

⁶ The German Presidency of the Council of the EU and the Future of Transatlantic Security. Strategic Compass: Guiding EU Security and Defense into the Future. Available at: <https://www.aicgs.org/2020/12/the-german-eu-council-presidency-and-the-future-of-transatlantic-security/>.

⁷ KOENIG, Nicole. “The EU Strategic Compass for security and defense: just another paper?”, *Hertie School* (Jacques Delors Centre), July 2020. Available at: <https://www.delorscentre.eu/en/publications/detail/publication/the-eus-strategic-compass-for-security-and-defence-just-another-paper>

management, resilience, capacity building and partnerships with partners and allies⁸.

The Strategic Compass will cover four areas: crisis management, resilience, capability development and partnerships, all of them interconnected⁹. These ‘baskets’ will determine the priorities of the EU as a global actor. The first of these areas will determine in which type of crisis the European Union should be involved, as well as geographical preferences. Again, it is necessary to have a common vision, which overcomes the different national approaches and strategies, to establish the European priorities to achieve efficient answers¹⁰.

To achieve a priority list based on threats and areas of interest, the more accurate inputs should be acquired, so it is necessary to use a wide range of information sources. One of the main pillars of this acquisition data to give a complete analysis consists of geospatial intelligence. The combination of satellite information with other technological methods – such as big data or artificial intelligence – gives a deep vision of the geopolitical worldwide situation. In this sense, the EU relies on a strong tool able to acquire information from the space: The European Union Satellite Centre (SatCen), capable of collecting and processing a great variety of information, including defence matters, migratory flows, critical infrastructures, or arms smuggling. Besides, this agency constitutes an example of joint EU efforts that enhance the organisation’s strategic autonomy, as the 75 % of the data and images used come from European satellites¹¹.

The European Union Satellite Centre directly contributes to the forthcoming Strategic Compass. In relation to Crisis Management, the Centre’s core mission is to support EU crisis management through its geospatial analysis. In addition, the Centre strengthens European space awareness as reflected in its ‘Front Desk’ role for the EU Space Surveillance and tracking (EUSST) activities. Regarding partnerships, the agency helps to reinforce EU partnerships through the mandated support for third party partners like

⁸ SATUÉ DE CÓRDOVA MINGUET, Ángel. *The ‘Strategic Compass’ of the European Union’s defence. Common understanding and strategic negotiation*. Opinion Paper 47/2021. Available at: http://www.ieeee.es/publicaciones-new/documentos-de-opinion/2021/DIEEEO47_2021_ANGSAT_Orientacion.html

⁹ Questions and answers: Crisis Management basket – a background for the Strategic Compass. Available at: https://eeas.europa.eu/delegations/ecuador/97895/questions-and-answers-crisis-management-basket-%E2%80%93-background-strategic-compass_en

¹⁰ MOLLING, Christian and SCHUTZ, Torben. “The EU’s Strategic Compass and Its Four Baskets”, *DGAP Report*, 2020. Available at: <https://www.egmontinstitute.be/the-eus-strategic-compass-and-its-four-baskets/>

¹¹TVE interview to Ambassador Sorin Ducaru (14 July 2021)

the UN, OSCE (Organization for Security and Co-operation in Europe) or OPCW (Organisation for the Prohibition of Chemical Weapons). Lastly, SatGen continuously invests in capability development concerning both internal analysis and procedures and external collaboration with EU agencies, projects, and frameworks.

Theoretical framework: Geospatial intelligence and new technologies

A possible definition for geospatial intelligence is the ‘exploitation and analysis of imagery and geospatial information to describe, assess, and visually depict physical features and geographically referenced activities on the Earth’¹². It has a huge variety of applications, such as map design, geospatial location or geomarketing. But it is also used in fire prevention, climatology prediction or to determine soil fertility. In specific terms of security and defence, it is essential in the targeting process to establish strategic priorities. Its influence affects not only the highest level of decision-making, but it is also important at the tactical level as an instrument for monitoring ongoing operations in the short term. For instance, it is a very valuable tool to precisely determine the location of possible threats, the position of enemy troops, or the state of readiness of insurgent forces.

To collect a series of data, any Geographic Information System (GIS) is based on aerial or satellite remote sensors for data acquisition, and it can examine changes on Earth¹³. The basic principle of operation is to measure the unique distribution of electromagnetic energy radiation of any element. The quantity of energy will precisely determine the type of element, its shape, its size, and its physical and chemical properties¹⁴.

The intelligence process includes the information obtained by satellite and aerial sources, but it is also completed through other methods – such as databases, maps, or statistical analysis. This integration produces a final product accessible to the user. The different parts of intelligence are interconnected, so that geospatial intelligence is combined with SIGINT¹⁵ or HUMINT¹⁶, to obtain a better final product, which covers a higher number of

¹² National system for Geospatial intelligence. Geospatial intelligence (GEOINT) Basic Doctrine. September 2006.

¹³ “What is GIS?”, *Earth Data*. Available at: <https://earthdata.nasa.gov/learn/gis>.

¹⁴ AGGARWAL, Shefali. “Principles of Remote Sensing”, *Wamis*. Disponible en: <http://www.wamis.org/agm/pubs/agm8/Paper-2.pdf>

¹⁵ Signal Intelligence.

¹⁶ Human Intelligence.

factors. The stage of development of this technology is such that it is impossible to imagine a world without all the technological tools that have become indispensable in modern world. In the era of computers, these improvements are producing crucial changes in the whole information acquisition and analysis process. Artificial intelligence and big data, for instance, allows the analysis of huge quantity of information, with their automatically recognition of data patterns. The use of modern techniques allows to analyse larger surface areas faster, and more accurately¹⁷.

The relevance of geospatial intelligence is increasing every day, as ‘at least 80% of the 2.5 Exabyte of big data generated daily is geographic’¹⁸. Supranational organizations and single States are not the only actors involved, and there are private enterprises specialized in the geospatial business. All kind of companies – not only large corporations, but also small and medium sized – are taking advantage of the increasing data analysed. The geointelligence market is used to improve benefits and to obtain better performances. For example, uses relating to the environment are common, used by agencies specialized in fire prediction or environmental protection. However, the uses of this technology have spread to other areas, such as evaluation of online sales, or studies about tourism and real estate markets. In the current pandemic context, the analysis of epidemiological processes has also been studied. The transmission of SARS-CoV-2 has been monitored to establish geographical and climate spread factors, age ranges of infected people or social distance depending on different cultures¹⁹.

The process of data collection is turning into an automatic mechanism that is providing to humans with more resources to validate and analyse the acquired data. Besides, as most of the process is done automatically, humans have more time to evaluate non standardised data. Therefore, the machinery pinpoints big data, while the individual focuses mainly on two types of data: the one that is not included in standardised algorithms, and the specific one that needs human intuition due to its peculiarity.

¹⁷ National system for Geospatial intelligence. Geospatial intelligence (GEOINT) Basic Doctrine. September 2006.

¹⁸ MAZZOLA, Martín Ignacio. “Aplicación de la Inteligencia Artificial Geoespacial a la epidemiología medioambiental”, *Universidad de Málaga*.

¹⁹ Ibid.

Operational framework: intelligence capabilities from the space through the EU Satellite Centre

The European Union is developing a technological modernization and a digital transformation during the last years. This renewal includes initiatives such as the development of artificial intelligence, a new European data strategy, or the establishment of a law regarding digital services. The combination between the technological revolution and the necessity to be a global and autonomous actor has resulted in the development of internal capabilities. Intelligence acquisition is one of the fields in which both autonomy and technology comes together. For this aim, and as a part of the Common Security and Defense Policy, the EU can rely on SatCen²⁰. 'The space, for Europe, is a strategic issue, and nowadays it is the biggest enabler to activities on the ground'²¹.

The centre is a fundamental actor in geointelligence process within the EU. It can obtain data mainly through space sensors, from EU Member States or private sources, and transforms it into intelligence ready to be used in the decision-making process. Security and defence issues constitute its principal working areas, with goals such as the development of military capabilities, critical infrastructures protection, the identification of the location of weapons of mass destruction, or border control. SatCen products are used on a wide spectrum, from political planning to operational decision making to determine the status of ongoing conflicts, or the evaluation of possible future crises. For instance, satellite detection systems can determine flows of people displaced due to humanitarian crises, as it happened recently in the Tigray crisis and the massive exodus from northern Ethiopia to Sudan.

²⁰ General information regarding the EU Satellite Centre has been obtained from its webpage: <https://www.satcen.europa.eu/>

²¹ TVE interview to Ambassador Sorin Ducaru (14 July 2021)



Figure 1. Crisis situation monitoring: Civilian Distress call detected in Misurata, Libya. Source. ©SatCen.

It can also help to identify the status of insurgent activity via the evolution of satellite photography, such as in the Arab spring, the jihadism or, nowadays, the Taliban rise to power in Afghanistan. Regarding the general crime and security surveillance issues, the Centre is involved in border control, the eradication of illegal trafficking, or the verification of compliance with treaties.



Figure 2. Monitoring Border Crossing Points between Colombia and Venezuela. Source. ©SatCen.

In this sense, it supports EU military operations, such as Operation ATALANTA or Operation IRINI (former Operation SOPHIA) to find out the position of smugglers and pirates. The Agency cooperation is fundamental to respond quickly, to avoid the commission of crimes and in critical situations, to save human lives.

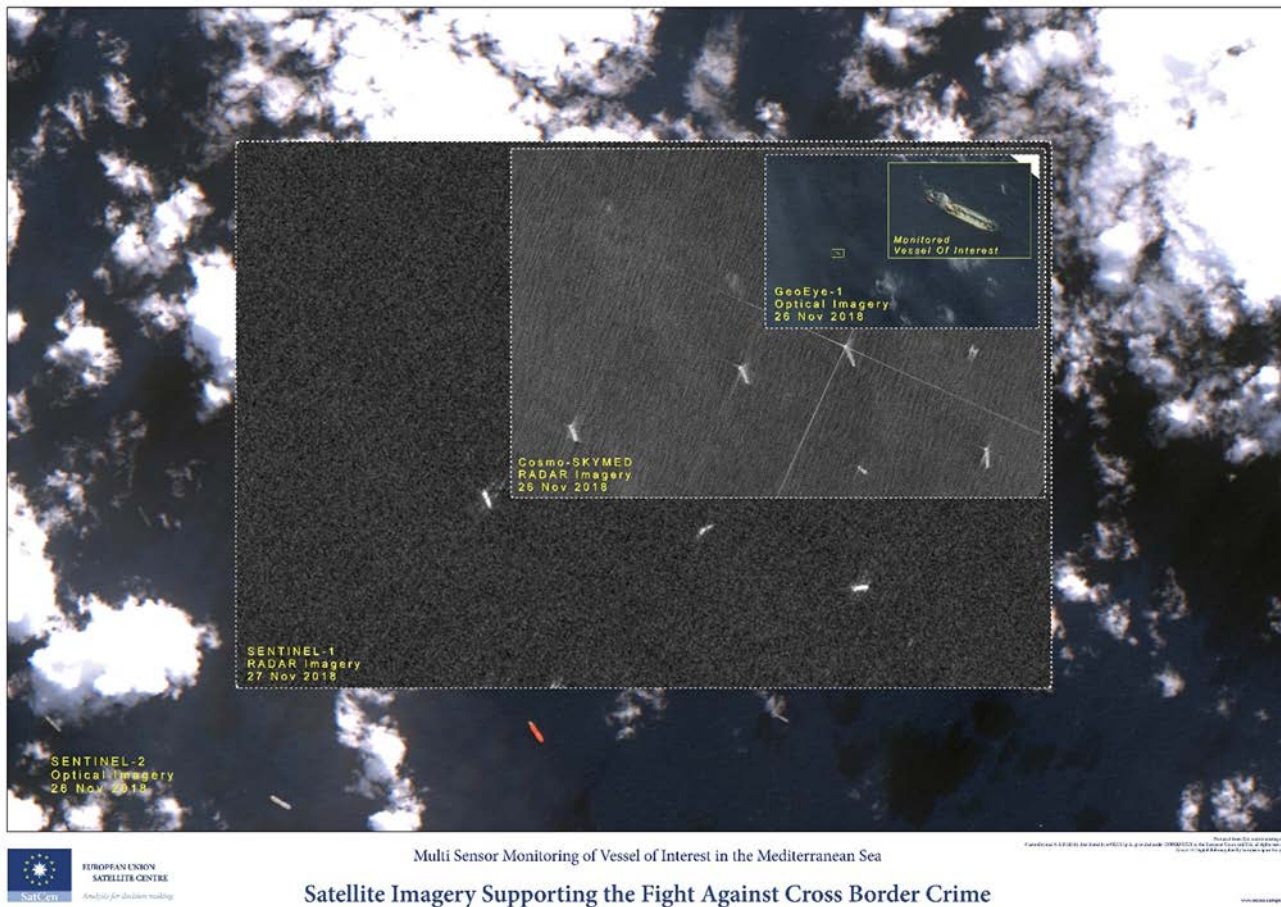


Figure 3. Multi Sensor Monitoring of Vessel of interest in the Mediterranean Sea. Source. ©SatCen.

Apart from these security specific issues, SatCen participates in different EU spatial projects, turning this agency into a multi-role centre. The Copernicus project constitutes one of its main activities. Through its own satellite system (Sentinel), the Copernicus program can provide information regarding environmental issues, mainly in the field of global warming, natural resources, or environmental disasters. SatCen also plays a primary role in space security within the EU via the project SSA²². This system has the capacity of predicting the movement of artificial space objects, avoiding collision risks that would affect the European society, in this technological era. SatCen has been working for the past 10 years on SSA/SST, due to its strong institutional links with EU Member States and its long-standing experience on service provision and security matters. As the EU

²² Space Situational Awareness.

SST 'Front Desk', SatCen works closely with the Consortium and is the main contact point for the provision of three SST services: Collision avoidance, Re-Entry Analysis and Fragmentation Analysis.



Figure 4. Visit by HR/VP Josep Borrell to the EU SST Front Desk, February 2020. Source. ©SatCen.

Conclusions

The European Union is looking for a foreign policy common vision that strengthens its Common Security and Defence Policy. High Representative/Vice-President, Josep Borrell is developing a new concept, the Strategic Compass, to pinpoint strategic issues that need a specific and global answer from the EU. This new vision will allow the political level to determine the course of actions in crisis management. In order to achieve this ambitious goal, the EU needs to be able to acquire and develop intelligence by its own means. With a variety of information sources, the EU will continue to face the risks and challenges that threaten the European society.

One of the pillars to support this capacity to obtain and process data is geospatial intelligence. Its contribution to the security field includes the determination of adversary military capabilities, enlistment of insurgent forces, or troops positioning in the battlefield. It is combined with other technological advances, such as big data or artificial intelligence, in order to increase the amount of data analysed. This process turns into a statistical interpretation of all security issues, as it happens with epidemiological transmission patterns in the current global pandemic environment. With this automatic data interpretation, the human operator can focus on specific data that requires a non-standardized analysis, based on human intuition. Besides, the SatCen has been very active during the pandemic, because as it was less movement on the ground, analysis based on space actives has been higher²³.

The European Union Satellite Centre, now approaching thirty years of operational activity, is a good example of strategic autonomy achievement and technological advances within the EU. Its relations with third States and international organisations also illustrate the search for effective multilateralism. In its daily work, the agency can obtain and analyse information from space sensors, combining this with databases and other ground-based sources. Its products are used mainly to determine military capabilities of potential adversaries, to protect critical infrastructures, or to control borders in order to prevent illicit smuggling. Its participation is fundamental to evaluate future crisis, and to analyse ongoing conflicts as well. In addition, the development of projects related to the environment or space security turns the SatCen into a multi-role centre with a strategic relevance for the European Union.

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²³ TVE interview to Ambassador Sorin Ducaru (14 July 2021).