



# Future Combat Air Systems (FCAS) – Truly the Future of European Strategic Autonomy or Selling old Wine in new Bottles?



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**Amid** the changing landscape of European security relations, Europe remains split into two camps. The ones that believe in an autonomous Europe that addresses its own security challenges and the ones that are placing their bets on the U.S.'s protection. While the U.S. sought to reduce transatlantic responsibilities before the Ukraine conflict, Moscow's aggressive moves have underscored the need for Europe to address security challenges autonomously. The debate focuses on the tension between the dependency on the United States security umbrella and "European strategic autonomy." The former, rooted in Cold War perceptions, inaccurately overemphasises the U.S., while the latter currently downplays Europe's dependence on American capabilities. Representatives of the autonomist camp have engaged in many initiatives to reduce European dependency on U.S. weapon technology. Most recently, the Future Air Combat Systems (FCAS) project has emerged. Therefore, the following study will attempt to answer whether projects like FCAS genuinely contribute to the future of European strategic autonomy or simply selling old wine in new bottles?

The study focuses on the FCAS because it is an ambitious project. In tune with the times, not only attempting to develop a sixth-generation fighter jet but also connecting man and machine through collaborative combat warfare. The aim is to explain the importance of this innovative project for Europe and the challenges that lie in its implementation. This inquiry is of practical interest as it covers crucial political and economic processes. It is a project that today is more futuristic than vi-

sionary because it is too modern to be put in place until much later, given the urgent needs of the present. What is more, the diversity of the players involved facilitates dissent. However, examining the benefits the U.S. derives from this complex situation will also lie at the core of this paper. Adapting the project to NATO standards and maintaining industrial agreements is blocking European strategic autonomy.

Beyond the policy realm, the FCAS plays an interesting role in the ongoing scientific debate surrounding European Strategic Autonomy. It represents an effort to coordinate defense capabilities between European nations. It is a European project but not an EU project. Transatlantic cooperation is possible but not the goal of the project. Developing a next-generation combat air system underscores the continent's aspiration to play a more active role in its security and defence. The project raises questions about the extent to which Europe can develop independently of the United States. In the broader debate, FCAS reflects the evolving nature of transatlantic relations, with European nations seeking a balance between partnership with the United States and establishing autonomy.

To determine whether the FCAS initiative is truly a case of European Strategic Autonomy, the following paper will operationalise the theory of European Strategic Autonomy into verifiable factors. The analysis will draw from relevant literature, independent media coverage, and statements and speeches from European officials. Thus, a qualitative content analysis of primary and secondary sources on the FCAS initiative will be employed to determine whether the involved actors act according to the theory.

Firstly, the study will examine the FCAS as a possible embodiment of European strategic autonomy. Secondly, the study will look at the complex dimension of the project and its weaknesses. Here, the article will focus on what is hindering the implementation of the FCAS. Finally, the ambivalent relationship between FCAS and NATO is examined. The paper will attempt to shed light on the necessary balance between European strategic autonomy and NATO cooperation on the issue of European defence. In doing so, overcoming the opposition between Atlanticists and Autonomists is essential. European security must not be conceived as a break with NATO if it entails balanced and modulable cooperation with NATO.

### European Strategic Autonomy:

European strategic autonomy refers to the European Union's goal of developing the capability to act independently in matters of defence, security, and foreign policy, without relying solely on the military capabilities of non-European partners. It involves strengthening Europe's capacity for decision-making, crisis management, and defence operations while fostering a more integrated approach among EU member states. The concept aims to ensure that Europe can protect its interests and contribute to global stability with a greater degree of self-reliance.

## 1 - FCAS: The Embodiment of European Strategic Autonomy

First, the FCAS embodies a European desire to ensure its military security. The old continent would then cut its strategic ties with the new world. Here, European players are coming together around a project that is in tune with the times, in which they are mobilising

their know-how to create a versatile, multi-terrain system.

### 1 - A Project that brings European Players together

The FCAS project is made in Europe. To achieve this, it brings together three major European powers: Germany, France, and Spain. Recently, Belgium joined the FCAS as an observer and will probably join in 2025 (Samama, 2023). The project's prime contractor is the French giant Dassault Aviation, working in collaboration with Safran Aircraft Engines, Thalès and MBDA on the French side, as well as MTU Aero Engines on the German side and Indra Sistemas on the Spanish side (Le Gleut & Conway-Mouret, 2020). One of the project's coordinators is Airbus Defense and Space, an aerospace company (Airbus, 2023). Indeed, Airbus itself is the fruit of a European partnership. The implementation of the FCAS is organised into several pillars (Camelot, 2023). Within each pillar, implementation is entrusted to companies from the three founding nations (Camelot, 2023). Furthermore, beyond the "made in Europe" aspect, the FCAS project results from a comprehensive cooperation between political, military, and industrial players. Given the diverse nature and strategic visions of these categories of players, their cooperation within the framework of the FCAS would give the world the image of a powerful and sovereign Europe in the field of defence. The project brings together public and private players with a wide range of expertise and experience.

### 1-B - The Embodiment of Future Warfare in the Centre of the Modern Era

The FCAS also embodies the latest know-how required for modern warfare. It is a project that rethinks operational capability and

operates on several dimensions. FCAS will not only revolutionise the 'physical' point of view, with the sixth-generation fighter aircraft and the machines that go with it, but also from the cyberspace point of view, with the combat cloud and the use of artificial intelligence.

The project is organised into seven pillars: The sixth-generation fighter aircraft (NGF), the engine, the remote carriers, the tactical or combat cloud, the simlab (the simulation of

an environment that enables the system to be tested and evaluated), the sensors and stealth (Camelot, 2023; MBDA, 2020). What makes the FCAS a futuristic project is its use of a combat cloud to frame the system and the incorporation of artificial intelligence (Airbus Defence and Space, 2020). This means that operational forces can be brought together in all relevant operational domains to deal with threats on a new scale.

Pillar	NGF	Engine	Remote Carrier	Combat Cloud	SimLab	Sensors	Stealth
Main contractor	Dassault Aviation (FR)	EUMET* (FR)/(GER)	Airbus (GER)	Airbus (GER)	Several co-contractors	Indra Sistemas (ESP)	Airbus (ESP)
Industrial partner	Airbus (GER) Airbus (ESP)	ITP Aero (ESP)	MBDA (GER) MBDA (FR) SATNUS (ESP)	Thales Group (FR) Indra Sistemas (ESP)	Dassault Aviation (FR) Airbus (GER) Indra Sistemas (ESP)	Thales Group (FR) FCMS (GER)	Dassault Aviation (FR) Airbus (GER)

\*EUMET is a joint venture between Safran (FR) and MTU Aero Engines (GER) (Vogel, 2020) (Vogel, 2020; Camelot, 2023)

In particular, artificial intelligence will be used in new UCAV (Unmanned Combat Aerial Vehicle) drones, which are suited to high-intensity combat, unlike MALE (Medium Altitude Long Endurance Remotely Piloted Aircraft System) drones (Camelot, 2023). The latter are unsuitable for dealing with armoured targets, defending themselves, or accompanying an NGF, mainly because of their lack of speed (Camelot, 2023). MALE drones are better suited to surveillance than attack functions (Defense-Zone, 2023). In contrast, UCAVs can accompany the fighter and be deployed from the air (Camelot, 2023). They can then take the lead in the theatre of operations and strike first, even before the NGF goes into action (Camelot, 2023).

As already mentioned, all this will be managed by the Multi-Domain Combat Cloud (MDCC) (Airbus Defence and Space,

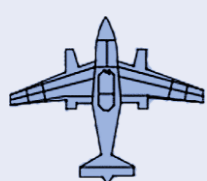

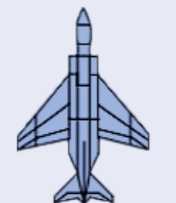

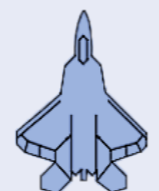

2023). This cloud is the very organ that will enable collaboration between manned and unmanned aircraft, with quick and efficient data transmission and decision-making (Airbus Defence and Space, 2023). The FCAS also features innovations in deep tech, such as Big Data processing, cybernetics and the artificial intelligence mentioned earlier (Airbus, 2023). These are essential skills for an increasingly automated future. Owned by European companies, they also reflect an innovative future made in Europe.

### 1-C - Versatile and Multi-terrain System

Given the interdependence between air, land, and maritime security, the FCAS also enables interconnection between the different forces in each environment (Breton & Portier, 2019). In France, the FCAS is presented as a

"system of systems" organised in two circles (Breton & Portier, 2019). The first circle, which would be the inner circle, is the system itself, i.e. a set of devices such as MALES drones accompanying the new generation fighter aircraft or, more generally, Remote Carrier drones (reusable and expendable), com-

panion UAVs (Unmanned Aerial Vehicle) that can be deployed in flight (Breton & Portier, 2019). The second circle, which would be the outer circle, comprises forces that are not just airborne but also maritime and land-based, communicating with space and cyberspace systems (Breton & Portier, 2019).

1 <sup>st</sup> generation	2 <sup>nd</sup> generation	3 <sup>rd</sup> generation	4 <sup>th</sup> /4+ generation	5 <sup>th</sup> generation	6 <sup>th</sup> generation
<p><b>c. 1945</b></p> <ul style="list-style-type: none"> <li>• <b>Jet propulsion</b> (Cenciotti, 2011)</li> </ul>  <p>e.g. Me-262</p>	<p><b>c. 1955</b></p> <ul style="list-style-type: none"> <li>• <b>Swept wings</b> (Cenciotti, 2011)</li> <li>• <b>Range-finding radar</b> (Hollings, 2021)</li> <li>• <b>Infrared-guided missiles</b> (Hollings, 2021)</li> </ul>  <p>e.g. MiG-15</p>	<p><b>c. 1960</b></p> <ul style="list-style-type: none"> <li>• <b>Supersonic speed</b> (Cenciotti, 2011)</li> <li>• <b>Pulse radar</b> (Cenciotti, 2011)</li> <li>• <b>Able to shoot at targets beyond visual range</b> (Cenciotti, 2011)</li> </ul>  <p>e.g. McDonnell Douglas F-4 Phantom II</p>	<p><b>c. 1970</b></p> <p><b>4<sup>th</sup> generation :</b></p> <ul style="list-style-type: none"> <li>• <b>Pulse-doppler radar</b> (Cenciotti, 2011)</li> <li>• <b>Look-down/shoot-down missiles</b> (Cenciotti, 2011)</li> </ul> <p><b>4+ generation :</b></p> <ul style="list-style-type: none"> <li>• <b>Sensor fusion</b> (Cenciotti, 2011)</li> <li>• <b>Reduced radar signature</b> (Hollings, 2021)</li> </ul>  <p>e.g. F-16</p>	<p><b>c. 2005</b></p> <ul style="list-style-type: none"> <li>• <b>Stealth</b> (Hollings, 2021)</li> <li>• <b>Integrated avionics</b> (Cenciotti, 2011)</li> <li>• <b>Supercruise</b> (Cenciotti, 2011)</li> </ul>  <p>e.g. F-22</p>	<p><b>c. 2040?</b></p> <ul style="list-style-type: none"> <li>• <b>Extreme stealth</b> (Cenciotti, 2011)</li> <li>• <b>Highly networked</b> (Cenciotti, 2011)</li> <li>• <b>Manned or unmanned</b> (Cenciotti, 2011)</li> <li>• <b>Very sensitive sensors</b> (Cenciotti, 2011)</li> </ul>  <p>e.g. NGF, Tempest</p>

Air forces in the second circle include early warning aircraft, tankers, electronic warfare aircraft, transport aircraft and helicopters (Breton & Portier, 2019). Maritime forces in this circle include new-generation aircraft carriers, anti-aircraft frigates and multi-mission frigates (Breton & Portier, 2019). Land forces include ground-to-air defence systems, close air support or Tactical Air Control Party (TACP), and special forces (Breton & Portier, 2019). These forces work together using space technologies such as communications, intelligence satellites, and cyberspace technologies. Hence, the combat cloud is the enabler that effectively and efficiently exchanges data between forces in both circles.

In addition, Remote Carriers will certainly be able to receive orders from the air with tactical aircraft, from the sea with a naval fleet or from the ground with a land brigade

commander (Camelot, 2023). They can be used in packs or swarms (Camelot, 2023). In the first case, they support the NGF directly and elect a leader who will be the head of the pack (this may be the fighter or a Remote Carrier) (Camelot, 2023). In the second scenario, the machines can be used in swarms (swarming) (Camelot, 2023). In this case, they do not elect a leader because they operate collectively, and this multiplication of individual forces puts the adversary in difficulty.

The FCAS project, therefore, enables all operational forces to be brought together, regardless of their environment, to strengthen the system as a whole. Overall, the mutual consolidation of these forces allows European forces to act more efficiently and comprehensively by truly revolutionising collaborative combat.

## 2 - Complex Implementation Challenges

Secondly, the FCAS is also complex. This complexity results from the fact that it involves a wide range of players and technologies. The countries involved, each with their strategic vision, need to be able to select a leader who will be the main project manager and who will be able to coordinate the actions and decisions of the other players. In addition, the lack of transparency in the cooperation between the industries slows down the whole FCAS design and construction process. Finally, the project is too visionary for our present situation, which needs quick answers, which is a problem given the current context of tension in the world.

### 2-A – Who leads FCAS, and what is its Strategic Vision?

The FCAS is an international project that brings together countries with different strategic visions. In order to avoid disputes, the election of a leader and project manager could make sense. However, states are sometimes blinded by their national sovereignty and own interests. In such cases, we need to move towards a degree of European sovereignty, even if, let's not forget, Europe is in no way a State in itself. In this sovereignty on a European scale, questions of national sovereignty must be merged to benefit the collective interest.

In this way, it is also necessary to jointly lead a single European project and avoid creating intra-European competition. The FCAS does, however, have a competitor: TEMPEST, also known as the Global Combat Air Programme (GCAP) since 2022 (Bezatz, 2022). This project is led by the UK, Italy, and Japan (Sweden recently left the programme). Italy chose

to join the BAE Systems-led project because it believes it can play a "bigger role" in it than in the FCAS, which is already in the hands of a few European industrial giants (Newdick, 2021, para. 6). TEMPEST is not an ideological competitor to the FCAS, as TEMPEST does not claim European autonomy. TEMPEST also features non-European participants such as Japan and potentially Saudi Arabia (Jolly, 2023). However, despite lacking ideological competition, the programs are industrial competitors because they sell similar products.

In order to unify Europe's air defence ambitions, proposals have already been made to merge the two projects. According to General Luca Goretti, the Chief of Staff of the Italian Air Force, it would be impossible to finance two projects with such big budgets (Newdick, 2021). The budget for the FCAS is between 50 and 80 billion euros, and that for the TEMPEST has not yet been definitively set, but Italy, for example, has invested almost 8 billion euros to date (Le Gleut & Conway-Mouret, 2020) (Neumann & Rasio, 2023). TEMPEST and FCAS would then be forced to move closer together. However, others believe the divisions between different state players and political and industrial leaders will make this rapprochement difficult (Tytelman, 2022). It is, therefore, necessary for industrialists from the same country to agree with their political authorities and to designate a leading state. This state will then be able to draw up a guideline to speed up the project.

Airbus, Dassault Aviation, Indra Sistemas and other partners keep on promoting FCAS as a significant contributor to European strategic autonomy. However, cooperation with non-European players cannot be considered for a project that must enable European stra-

tegic independence and will make convergence towards a single project difficult. Yet it is important to bring together as many European players as possible behind a single project, provided they work together in an organised and effective way. These players must also work towards a common strategic vision for the times to come. The future of Europe must be built on new foundations, starting now.

## 2- B - Lack of Industrial Cooperation

Another obstacle that the FCAS is facing is the difficulties surrounding industrial cooperation. Industrial players are defending their own interests in a system that puts them in competition with each other. Indeed, the project was launched in 2017 but has remained in the shadows for several years due to industrial conflicts over the sharing of tasks and the selection of the leader for each of the seven pillars (Möhring, 2023; Machi, 2022). Industrial differences then contradict the great promises of cooperation made by politicians, which can lead to general discouragement. A partnership between states with pronounced national interests is not an easy thing to achieve. France, and Dassault in particular, is often criticised for blindly positioning itself as a leader, thereby over-

shadowing its European partners (Möhring, 2023; Machi, 2022). In fact, the French champion was competing with the German subsidiary of Airbus for phase 1B of the project, which was about the work on the NGF. The prototype should be presented in 2027 (Machi, 2022).

The lack of cooperation between the various industrial players is also reflected in the choice of agreements with non-Euro-

pean third countries. Germany, for example, continues to supply its armed forces, particularly its air force, with products made in the United States. By continuing to procure F-35s, Germany is adapting to American standards, which have a financial, technical, and ideological impact on the FCAS (Möhring, 2023). Therefore, it seems that all the actions taken

by the partner countries are not yet coordinated, and this could create further dissension. In contrast to the German authorities, the Spanish authorities took the decision, when they signed the "Halcon" agreement in June 2022, to replace their fleet of F/A-18s with 20 Eurofighter Typhoons (White, 2023). They are thus gradually turning more towards the European market, a symbolic gesture for European strategic autonomy that should delight the French authorities,

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who have long promoted the idea of "European sovereignty" in all areas.

National decisions taken outside the FCAS can also have an impact on dialogue within the project itself. France's refusal to participate in the European Sky Shield Initiative (ESSI), a German missile defence initiative, is an example (Vincent, 2023). Some see France's decision as a sign of misplaced national pride. But this project, which claims to be European, is, in fact, tapping into the American and Israeli markets by including weapons from these two countries (Vincent, 2023). France had hoped to be able to integrate its medium-range ground-air defence system, the Mamba, manufactured in cooperation with Italy (Vincent, 2023). But discussions with Berlin were inconclusive. Such a situation increases mistrust between industrial players and sustains intra-European competition, which cannot be beneficial to emerging joint initiatives. These disputes are also having an impact on discussions within the FCAS framework, which does nothing to improve the situation and may even further delay the completion of the project.

## 2-C - A Project too Visionary for a Present that Needs Quick Actions?

FCAS's timeline poses arguably the greatest challenge to the project. It is not due to replace the Rafale, the Eurofighter Typhoon and the EF-18 Hornets until 2040 (Vincent, 2023; Möhring, 2023). In fact, the project is too visionary for a present that needs quick actions. With ever more conflicts appearing around the world, Europe seeks to adapt. Especially since they were not prepared beforehand to deal with the threat of interstate wars. Moreover, the difficulties in implementing the project mentioned above suggest that the FCAS could be operational much later

than 2040 (Riou, 2023). But time is running out, and Europe urgently needs it.

It is therefore necessary to find solutions such as using FCAS components that could be used immediately. Initiatives are also being taken to strengthen current air forces. France wants to equip its fighters with combat drones, already simulating FCAS's collaborative combat warfare approach. Dassault is, therefore, taking its inspiration from the Neuron, a drone built in the 2010s in collaboration with five other countries. The company wanted to work on a new Unmanned Combat Aerial Vehicle (UCAV) based on the Neuron, which would accompany the Rafale F5 in flight by 2035. This is an intermediate solution to complement the FCAS, as these UCAVs will not have the same skills as the RCs, which could fly in packs or swarms (Camelot, 2023).

Practising collaborative combat warfare, Dassault Aviation has also announced the modernisation of the Rafale models F4 and F5, with the integration of artificial intelligence (AI). This will enable soldiers to continue military operations despite scrambled communications, as well as having greater computing and data-sorting capacity, making it easier for the fighter pilot to make the final decision (Riou, 2023). Advances in artificial intelligence can thus be used before the arrival of the FCAS, which is still some way off.

On the other hand, the collaborative combat on which the FCAS is based is nothing new. It is a combat configuration in which there is a link between the different aircraft during a raid, enabling them to be connected to each other. This effective connection multiplies their strike force and decision-making speed (Riou, 2023). In this way, the FCAS draws on pre-existing elements of air combat and modernises them.

### 3 - FCAS/NATO: A Dichotomous Relationship?

The relationship between the United States and European Strategic Autonomy has undergone a complex evolution, with a balancing act of the world power to reduce commitments on the one hand but not lose influence on the continent on the other hand.

#### 3-A - The United State's View on European Strategic Autonomy

During the Cold War era, the U.S. showed a robust commitment to the defence of Western Europe, considering the region a central theatre for its foreign policy. This commitment was underpinned by a significant military presence and a leadership role within the North Atlantic Treaty Alliance (NATO). The U.S. saw itself as the unquestioned leader, expecting European support in countering the Soviet threat. However, frustrations emerged over their allies' capabilities and burden-sharing, leading to a consistent U.S. desire for increased European defence contributions (Martin & Sinkkonen, 2022).

In the post-Cold War era, there was a recalibration of U.S. interests, marked by a reduced military presence in Europe. While the U.S. did not abandon Europe, a certain disengagement occurred, particularly in the assumed absence of existential threats. Despite the European Union's commitment to greater defence integration, U.S. support for European autonomy remained ambivalent. The George H.W. Bush administration even displayed hostility towards European military aspirations, fearing the potential undermining of NATO (Martin & Sinkkonen, 2022). Subsequent administrations, including Clinton, maintained an ambivalent

stance—accepting European defence initiatives under specific conditions but only framing it as a fairer burden-sharing rather than autonomy from NATO. The George W. Bush administration, while planning to reduce the U.S.' commitments to Europe, was also openly hostile to European initiatives (Martin & Sinkkonen, 2022).

Since then, the U.S. slowly but surely reduced its security commitments in Europe after having pointed out that overwhelming NATO defence delivered an incentive to free-ride on U.S. security for some European allies. Culminating with the Obama administration's 'Pivot to Asia' and its focus on addressing the military rise of China, redistributing resources away from Europe (Engelbrekt, 2022). This was manifested by the anti-European rhetoric and actions taken by the Trump administration. Addressing China was the priority of U.S. security policy, emphasising that Europe should defend itself (Martin & Sinkkonen, 2022).

Today, with its multilateralism and competition with China, the U.S. continues to grapple with its approach to European Strategic Autonomy, displaying a larger than-ever support for European strategic autonomy. The Biden administration and recent comments by U.S. officials suggest that they are hoping for a Europe that can address its own security challenges without any major transatlantic efforts. Even though the 2022 Russian invasion of Ukraine in late February 2022 prompted a brief re-engagement of the U.S. in Europe in the short term, the most recent financial aid blockage by the U.S. Congress and the upcoming 2024 U.S. presidential elections paints a grim picture for both Ukraine and the transatlantic partnership (Engelbrekt, 2022).

Thus, the United States' approach to European Strategic Autonomy has undergone multiple shifts, most recently by the Biden administration's active pursuit of a redefined transatlantic relationship. However, Russia's invasion of Ukraine has added complexity to this transformation. On the one hand, the Biden administration seeks mutual adjustments between European and American allies, emphasising a robust political commitment to European security (Engelbrekt, 2022). On the other hand, the rise of China prompts a reassessment of responsibilities. The U.S. Armed Forces are envisioned increasingly as a last-resort asset in the European theatre, with forces stationed in Europe potentially lacking the newest and most advanced equipment needed for the Asia-Pacific region (Engelbrekt, 2022). The terminology used in transatlantic debates, with concepts like autonomy and burden-sharing, remains mainly unchanged since the beginning of the Cold War. The notion of strategic autonomy gains prominence within the European Union, with efforts to increase European defence spending and strategic capabilities. However, the question of the feasibility of a self-reliant Europe remains highly debated, given the present dependence on American capabilities.

The tension between fostering European responsibility and signalling premature independence is noted, emphasising the need for a new transatlantic relationship. Financial equity, deterrence, and sub-strategic theatre dimensions are identified as critical in reshaping roles and responsibilities. It is unlikely, and even unwise, for Europe to become independent from the American deterrence apparatus. However, in the current geopolitical landscape, Europe needs to

develop its independent strategic and financial capabilities. Therefore, looking beyond terms like burden-sharing and autonomy (Engelbrekt, 2022).

#### 3-B - The Risk of Being a European-looking Brick in an American Wall

In order to view FCAS from a U.S.' perspective, it is important to consider that FCAS is not a transatlantic project, its members have actively decided on a European initiative without any U.S. involvement. However, there are a few factors that indicate an American footprint on the project. The concept of collaborative combat warfare, integrating artificial intelligence in a comprehensive defence apparatus, is based on the American vision for such a system (Möhrling, 2023). Interestingly, collaborative combat warfare, like integrating AI into the military apparatus, is something that is even viewed as rather controversial in Europe, especially in Germany. The same counts for UAV drones. Establishing AI and drones in the European national militaries will cause political debates, and its implementation will also require the support of some European national parliaments (Szymanski, 2022).

On the other hand, the U.S. has long been advocating for collaborative combat warfare as a strategic approach to enhance military effectiveness, situational awareness, and overall warfighting capabilities. Here, as an alliance focused on achieving high levels of interoperability, NATO plays a crucial role. By adopting common standards and technologies, NATO seeks to create a seamless and interconnected military environment (Tolk & Diallo, 2013). This collaborative approach not only strengthens

the alliance's collective defence posture but also aligns with the broader trend of leveraging advanced technologies to maintain a competitive edge in modern warfare.

Unsurprisingly, the relationship between FCAS and NATO is marked by the question of adherence to common standards and interoperability. As European nations embark on projects like FCAS, a key consideration is ensuring that the advanced combat capabilities developed align with NATO standards. Interoperability, the ability of different military systems to operate seamlessly together, is a cornerstone of NATO's collective defence strategy. FCAS, initiated by a consortium of European states, is designed to complement rather than undermine NATO's objectives (Mickel, 2019). By adhering to shared standards, FCAS aims to facilitate coordination with NATO forces, reinforcing the alliance's ability to conduct joint operations effectively. NATO's emphasis on interoperability encourages member states to align their defence projects with common guidelines. FCAS, with its cutting-edge technologies and envisaged capabilities, is likely to contribute to the broader goal of strengthening NATO's defence capabilities (Mickel, 2019). Nevertheless, while FCAS recognises the importance of collaborative security efforts within the NATO framework, it also represents a step towards European strategic autonomy. By establishing an independent and advanced defence capability within Europe, FCAS also contributes significantly towards Europe's independence.

FCAS represents a step toward boosting European strategic autonomy by fostering an independent defence capability within Europe. One of the challenges hindering

European autonomy is the fragmentation among European weapon industries. FCAS plays a role in overcoming this challenge by encouraging collaboration and joint development among EU member states. By promoting a shared technological and operational framework, FCAS aims to enhance Europe's ability to reduce reliance on external suppliers and foster a more coordinated European defence effort (Mérand, 2008).

Most importantly, FCAS is much more than a new fighter jet. The envisioned combat cloud aims to fully connect the fighter jet with the UAVs and the AI in fully comprehensive collaborative combat warfare. Information will be made available to each component of the network in real time (Henrich, 2023). In an interview with the Senate Foreign Affairs, Defense, and Armed Forces Committee, the CEO of Dassault Aviation spoke about the future of FCAS. During the hearing, the CEO clearly differentiated between the notions of 'cloud souverain' (sovereign cloud) and 'cloud de confiance' (trusted cloud). A sovereign cloud is a cloud infrastructure subject to the laws and regulations of a specific country or region, emphasising data storage and processing within that region's jurisdiction, ensuring data sovereignty. A trusted cloud focuses on building trust through security measures and compliance standards, regardless of legal jurisdiction, to ensure the reliability and protection of cloud services (Riou, 2023). The latter implies the inclusion of technologies from non-European countries, like the United States. Dassault Aviation has committed to developing a sovereign cloud in collaboration with Dassault Systèmes, highlighting the interest of Europeans in doing so (Riou, 2023). Ulti-

mately, Airbus is leading the development of the FCAS combat cloud, which claims that 'Airbus is already shaping the future of C2 in multinational and NATO frameworks' on its 'Multi-Domain Combat Cloud' webpage.

There are a few indicators that suggest that the FCAS project is truly a cornerstone of European strategic autonomy, while others suggest it is simply a defence product of European NATO members. Essentially, FCAS's contribution to European strategic autonomy might not depend on what it delivers but on what its member states intend to use it for. The essential issue remains at the strategic level in Berlin and Paris. While Germany is set on manifesting a strong European pillar within NATO, France dreams of a European Union independent of the U.S.' protection. In its flexibility, FCAS can contribute to both of these things, but it cannot decide for them.

### **3-C - A European Project, compatible with NATO Norms**

In the context of the FCAS, European Strategic Autonomy and NATO burden-sharing are not mutually exclusive. Instead, they can complement each other, fostering both European independence and transatlantic collaboration. The evolution of U.S.-European relations, as outlined, indicates a historical tension regarding autonomy and burden-sharing. FCAS, as a European initiative, can play a crucial role in reconciling these dynamics. Firstly, FCAS represents a stride towards European autonomy by developing a sixth-generation fighter jet and combat cloud, reducing reli-

ance on American suppliers for advanced military capabilities. This aligns with the European Union's push for greater strategic autonomy. Simultaneously, the project recognises the importance of adhering to NATO standards, ensuring interoperability and collaboration with transatlantic partners. By embracing advanced technologies like AI and drones, FCAS aligns with the U.S. vision for collaborative combat warfare, albeit with a distinctly European approach. The project's dual commitment to innovation and cooperation positions it as a bridge between European autonomy and transatlantic collaboration, addressing concerns about being a mere component in an American meta-system. Furthermore, FCAS tackles challenges hindering European autonomy, such as the fragmentation of European weapon industries, by fostering collaboration among EU member states. The project's emphasis on a shared technological and operational framework enhances Europe's ability to coordinate defence efforts independently, in line with the objectives of European Strategic Autonomy. In the broader geopolitical landscape, where global rivalries prompt a reassessment of responsibilities, FCAS emerges as a nuanced solution. It allows Europe to develop its strategic capabilities while maintaining collaborative ties with the United States through NATO. The project's flexibility accommodates varying strategic goals within European member states, providing a platform for both those seeking a strong European pillar within NATO and those envisioning greater independence from U.S. protection.

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