DEFENSE INDUSTRY COOPERATIONS BETWEEN TÜRKİYE AND ITALY: RISING MILITARY TECHNOLOGY PARTNERSHIPS

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The cooperation between Türkiye and Italy in the field of defense industry has gained a more strategic and multidimensional character under the influence of regional security dynamics and technological developments. While both countries are members of NATO, they have been deepening their partnership in line with policies that aim to reduce mutual dependence in defense technologies and promote domestic production. Projects developed particularly in the fields of unmanned aerial vehicles (UAVs), air defense systems, naval platforms, and electronic warfare systems not only enhance military capacity but also enable sustainable cooperation in technology transfer, joint production, and R&D activities. The balance established between Italy's advanced engineering expertise and Türkiye's growing production capacity creates strategic complementarity for both sides. In this context, license agreements, technology-sharing protocols, and joint ventures encompass not only the technical dimension of defense industry cooperation but also the strengthening of economic and diplomatic relations. This rapprochement in defense is likely to have significant implications for European security and stability in the Mediterranean. Furthermore, these partnerships, shaped in line with the national defense industry strategies of both countries, have the capacity to influence not only bilateral relations but also defense integration processes in Europe. These partnerships between Türkiye and Italy are considered a contemporary example of intergovernmental technological convergence and defense diplomacy. This study provides a comprehensive analysis of this process, based on agreements and exemplary projects.

Keywords: Defence Industry, Military Technology, NATO, Security, Italy, Türkiye.

Introduction

The end of the Cold War marked a significant transformation in the understanding of security, prompting states to reshape their defense industry policies. Changes in the global and regional security environment, combined with the rapid development of military Technologies, have made defense industry cooperation a vital element of interstate relations. Entering the second quarter of the twenty-first century, defense diplomacy has evolved beyond being a mere

instrument for enchancing military capacity. It now serves as a means of strengthening economic and political relations through technology transfer, joint production and research and development collaborations. Within this framework, Türkiye and Italy reinforce the shared security perspective derived from their NATO membership by deepening bilateral strategic partnerships in the defence sector.

Türkiye's recent 'national and indigenous defense industry' vision, copuled with Italy's advanced engineering expertise, has allowed cooperation between the two countries to assume a mutually complementary character. In this context, the joint projects carried out-covering critical technological domains such as unmanned aerial vehicles, air defense systems, naval platforms and electronic warfare systems-create new opportunities both in bilateral relations and within the European security architecture. Accordingly, the agreements signed and the partnerships developed are not limited to technical and industrial dimensions but also hold significant importance in terms of strenthening diplomatic relations and promoting defense exports to third contries.

This study aims to examine the defense industry cooperation between Türkiye and Italy from strategic, technological and diplomatic perspectives. The primary objective of the study is to identify how the defense policies of the two countries complement each other, to assess the impact of this cooperation on the European securtiy architecture and to outline potential future dşrections. Furthermore, it seeks to demonstrate that evolving partnership in the defense industry generate multidimensional interactions not only in terms of technological progress but also in the fields of foreign policy, security and international cooperation. In this regard, the study aims both to analyze the current Dynamics and to develop an academic and strategic perspective on the sustainability of Türkiye-Italy defense cooperation.

The first chapter establishes the theoretical framework by addressing the fundamental Dynamics of defense security and the securitization process of military Technologies through the lens of the neoclassical realist approach. The second chapter explores Türkiye's defense industry vision and its technology-oriented foreign policy approach, while the third chapter evaluates Italy's military industrial structure and international cooperation strategies. The fourth chapter focuses on the rapidly advancing defense partnerships between Türkiye and Italy analyzing concrete examples such as the SAMP/T air defense system, helicopter production and the TF-X Project. The fifth chapter discusses the future prospects and expectations of Türkiye-Italy defense industry relations, evaluating the Dynamics of cooperation in terms of political alignment the NATO framework and industrial capacity. Finally, based on the findings obtained the study highlights the importance of Türkiye-Italy defense industry partnerships for European security and regional stability concluding with a section presenting the main findings and implications.

1. Theoretıcal Framework: Neoclassıcal Realism, Defense Security And Securitization

Neoclassical realism emerged in the field of International Relations as a theoretical approach seeking to bridge the gap between structural realism and foreign policy analysis. According to Gideon Rose's (1998: 146) conceptualization, states foreign policy behaviors are determined not only by the distribution of power in the international system but also by domestic political factors, leaders perceptions and bureaucratic structures. This multilayerd perspective provides

a valuable analytical tool for examining issues such as defense security where international and domestic elements interact simultaneously.

Defense security is directly linked to states efforts in building military capacity, pursuing technological advancements and establishing securit partnerships. In Kenneth Waltz's (1979: 91) structural realism, security is derived from the anarchhic natüre of the international system, whereas neoclassical realism seeks to explain how this structure is perceived by states and how it is mediated by internal factors. Therefore, the defense industry cooperation between Türkiye and Italy the case study of this article can be analyzed not only through NATO's security concerns but also within the framework of each country's national objectives and economic capabilities (Lobell, Ripsman and Taliaferro, 2009: 24). In this regard, neoclassical realism allows for a nuanced understanding of state defense strategies shaped by both systemic constraints and domestic dynamics.

According to the theory states defense strategies are understood through the balance between policymakers threat perceptions and national capacities. Tükiye's national and indigenous defense industry vision can thus be interpreted not only as a response to international threats but also as a tool for economic development and national identity constucrion (Kara, 2022: 74). Italy, on the other hand integrates its defense policies within the framework of the European Union with its advanced engineering expertise, aiming both to fulfill international obligations and to maintain internal political equilibrium (Groenendijk, 2019: 100). Hence, the defense cooperation between the two countries aligns closely with the neoclassical realist thesis that explains state behaviour in a multilayered manner.

The rapid advancement of military Technologies has increasingly elevated the role of technology in defense security. Neoclassical realism conceptualizes technology not merely as an instrument to enhance military capability but also as a factor that stregthens the domestic legitimacy of decision-makers and provides greater maneuvering space in foreign policy (Kitchen, 2010:122). For instance, technological projects such as unmanned aerial vehicles and air defense systems not only enhance deterrence but also enable states to gain competitiveness in international markets and deepen relations with their allies. In this context, Türkiye-Italy cooperation produces significant economic and diplomatic effects.

Moreover, neoclassical realism emphasizes that explaining states military cooperation solely through threat perceptions is insufficient. According to this approach, alignment with allies, gaining advantages in regional power balances and securing domestic legitimacy are equally significant factors (Ripsman, Taliaferro and Lobell, 2016: 31). From this perspective, Türkiye-Italy defense industry partnerships contribute to NATO's security policies while simultaneously serving as instruments that reinforce the national interests and political legitimacy of governments in both countries. Thus, defense cooperation transcends its military dimension and evolves into a multidimensional foreign policy instrument.

From the standpoint of neoclassical realism, defense security encompasses not only the military dimension but also diplomacy, economy and technology. Therefore, technology transfer agreements, joint production initiatives and licensing protocols signed between Türkiye and Italy shoul be understood not merely as technical collaborations but also as indicators of how foreign policy objectives are aligned with domestic political considerations (Taliaferro, 2006: 472). Consequently, defense industry partnerships reflect both the structure of the international security architecture and the strategic priorities at the national level.

Overall, neoclassical realism provides a comprehensive framework for understanding states defense security strategies. By analyzing both the structural constrains imposed by the international system and the political, economic and societal factors at the domestic level, the multidimensional natüre of defense industry cooperation between Türkiye and Italy can be better comprehended. Therefore, neoclassical realism offers and appropnate theıretical foundation for examining military technology partnerships between the two countries.

1.1. The Securitization of Military Technology: Discourses, Agreements and Risk Perception

In the field of International Relations the concept of securitization has gained significant theoretical depth, particularly through the contributions of the Copenhagen School. Securitization refers to the process by which an issue is moved into the political sphere and presented as an existential threat that necessitates the adoption of extraordinary measures (Buzan, Waever ve De Wilde, 1998: 25). The securitization of military Technologies, therefore, generatres substantial implications not only at the national security level but also on the international stage, influencin the trajectory of interstate realtions. In this context, discourses produced aroun advanced military technologies and the agreements signed in this domain constitute key factors shaping the perception of risk.

Military technologies especially those involving artificial intelligence supported systems, unmanned aerial vehicles and missile defense mechanisms have become central to securitizing discourses. These technologies are viewed not only as deterrent instruments but also as tools with the potential to reshape regional power balances. Air defense systems developed within the NATO framework or technological projects emerging from the European Union's pursuit of strategic autonomy reflect the institutional dimension of this securitization process (Fiott, 2020: 42). This demonstrates that miltary Technologies are not merely technical instruments but have evolved into political components siuated at the very core of international security.

Discourse plays a critical role in the process of securitization. When leaders, policymakers or institutions present military Technologies as indispensable tools in the face of existantial threats they directly shape both societal and international perceptions of these technologies. For example, when air defense systems are defined not merely as technical capacity enhacements but as essential elements for preserving national sovereignty, the securitization discourse becomes concretized (Williams, 2003: 518). Such discourses function as powerful mechanisms that legitimize defense policies and justify state actions in the securtiy domain.

Agreements and international protocols constitute another significant dimension of the securitization of military technologies. Bilateral or multilateral defense agreements, technology transfer arrangements and joint production protocols ensure that military technologies not only address national needs but also occupy a central place on the international security agenda. The defense industry protocols signed between Türkiye and Italy after 2023 represent a concrete example of this dynamic. Through technology sharing and joint R&D activities these agreements institutionalize the process of securitization (Marrone, 2021: 67).

Risk perception is another critical factor determining the outcomes of the securitization of military technologies. State evaluate the proliferation of new military technologies not only in terms of the potential strategic disadvantage it might pose vis-a-vis their rivals but also regarding its capacity to destabilize the global security architecture. Consequently, the export

of advanced defense systems to third countries is often perceived as both an opportunity and a threat (Krause, 1992: 115). In this regard, projects developed within the framework of Türkiye-Italy cooperation hold importance not only as indicators of technological advancement but also as instruments that contribute to the redefinition of regional security risks.

In this framework, the securitization of military technologies emerges as a multidimensional process shaped by discourse, agreements and risk perception. Advanced technologies not only enhance military capabilities but also contribute to the reconfiuration of power dynamics within the international system. Therefore, the defense industry cooperation between Türkiye and Italy represents a contemporary reflection of this securitization process, producing significant implications for both bilateral relation and regional stability.

2. Türkiye's Defense Industry Vision And Technology-Oriented Foreign Policy

Türkiye's defense industry vision has accelerated significantly since the 2000s and has become central to its national security strategy. The growing geopolitical competition on a global scale, regional threats and the desire to reduce external dependence have directed Türkiye toward the goal of developing indigenous and national defense technologies. This vision serves not only to enhance military detterence but also to achieve autonomy and strategic flexibility in international politics (Yılmaz and Yorulmaz, 2023: 10). In this context, the defense industry has been positioned as an effective instrument of foreign policy rather than being limited to domain of national security.

Türkiye's progress in the defense industry has been particularly shaped by high-technology prodcts such as unmanned aerial vehicles (UAVs) and defense software systems. The international success of aerial platforms such as Bayraktar TB2 nad Anka has increased Türkiyr's technological capacity, making the country more visible and influential in foreign policy (Kasapoğlu, 2021: 45). This development demonstrates that defense products are utilized not only as military assets but also as diplomatic tools. Türkiye's export of UAVs to various countries has strengthened bilateral security cooperation and created new spheres of influence in its foreign policy.

Among the leading institutions in Türkiye's defense industry, ASELSAN plays a crucial role in developing electronic systems, radar, communication, command-control and electronic warfare solutions. As a 2025, ASELSAN ranks 43rd on the Defense News Top 100 list, with defense revenues of approximately 3,54 billion USD, positioning it among the world's majör defense companies (Defense News, 2025). TUSAŞ (Turkish Aerospace Industries) is another strategic institution contributing to Turkes's 'indigenous and national' production goals in aerospace and defense Technologies. Through projects such as Hürjet the National Combat Aircraft (KAAN) and Gökbey, TUSAŞ strengthens Türkiye's aviation and defense capabilities (Presidency of the Republic of Türkiye Directorate of Communications, 2025).

ROKETSAN operates in the fields of guided missile systems, rocket Technologies, and munitions development while HAVELSAN represents the digital dimension of defense Technologies with its expertise in software, simulation and cybersecurity solutions. On the private sector sie, BAYKAR has significantly increased Türkiye's global defense visibility through its achievements in UAV production. As of 2025, the presence of five Türkiye companies in the world's top 100 defense firms demonstrates both the qualitative and quantitative growth of Türkiye's defense industry capacity (Anadolu Ajansı, 2025).

The progress Türkiye has achieved in the defense industry over the past two decades reflects a multidimensional transformation. Unmanned aerial vehicles, radar systems, electronic warfare Technologies, naval platforms and indigenous helicopter and fighter aircraft projects have formed the backbone of this transformation. The international success of systems such as BAYRAKTAR TB2, AKINCI and AKSUNGUR illustrtes that defense products serve not only military purposes but also function as diplomatic tools (Kasapoğlu, 2021). The rise of Türkiye defense companies in global rankings aligns with Türkiye's technology-oriented foreign policy vision and strategic autonomy objectives (Erşen, 2022). These developments reinforce Türkiye's claim of being not merely a regional security actor but also a global player capable of producing and exporting advanced technology.

The integration of defense industry vision with a technology-oriented foreign policy furter strengthens Türkiye's aspiration to act as an autonomous actor in international relations. Although Türkiye remains a NATO member, its efforts to reduce dependence on Western defense systems reflect its pursuit of strategic autonomy. The crises surrounding the S-400 and F-35 programs with the United States have heightened Türkiye's motivation to enhance its own defense capabilities (Aslan, 2024: 750-750). Consequently, the technology-based foreign policy approach provides both a greater degree of independence and an opportunity to reshape Türkiye's relations with global actors.

Türkiye's technology-oriented vision has been limited to the development of defense products. Space Technologies, cybersecurity and artificial intelligence-based defense applications have also become integral components of this vision. The establishment of the Turkish Space Agency and the strengthening of cyber defense units demonstrate that Türkiye's understanding of security now extends beyon conventional military instruments (Yılmaz and Yorulmaz, 2023: 12). In this regard, Türkiye approaches its defense industry not only from the perspective of national security but also within the broader framework of technology diplomacy.

In conclusion, Türkiye's defense industry vision and technology-oriented foreign policy have gained increasing influence at both regional and global levels in recent years. The expansion of indigenous defense Technologies has provided Türkiye with military autonomy and strategic maneuverability while simultaneously opening new avenues for diplomatic coopertion. These developments underscore Türkiye's growing ambition to be not only a regional security actor but also a global power capable of producing and exporting cutting-edge technology.

3. Italy's Defense Industrial Structure And International Cooperation Strategies

Italy, as one of Europe's leading military-industrial actors, occupies a significant position within te NATO and EU security architecture. The country's defense industry which was restructed after the Second World War, developed substantially during the Cold War through alliance relations established with the Western bloc. Today, Italy possesses a robust capacity in the production of land, air and naval defense systems, utilizing this capability both to meet its national security needs and to pursue its export-oriented strategies (Nones and Marrone, 2016: 27). The defense sector is also regarded as a strategic pillar contributing to Italy's economic growth.

At the core of Italy's defense industrial structure lies Leonardo S.p.A., one of Europe's largest defense companies which stands out in the production of helicopters, avionics systems, radar Technologies, cybersecurity solutions and space Technologies (Leonardo, 2022a: 15).

Alongside Leonardo, Fincantieri's expertise in the construction of submarines and warships makes a significant contribution to Italy's maritime military capacity. These companies not only serve national security interests but also strengthen Italy's position in the global defense market by producing competitive, export-oriented products.

Italy attaches great importance to international cooperation as a means to develop its defense industry, joint defense projects conducted within the NATO framework have enhanced Italy's military capacity while facilitating the Exchange of technological konw-how. Italy's participation as a majör production center in the F-35 Joint Strike Fighter (JSF) program has consolidated its role in transatlantic defense relations (Petrelli, 2020: 14). Such programs not only accelerate military modernization but also integrate the Italian defense industry into the global value chain.

Italy's defense industry projects are primarily shaped by high-technology production activities carried out by leading firms such as Leonardo S.p.A. and Fincantieri. In recent years, Leonardo has become a key player in Europe's defense modernization efforts through its participation in the Global Combat Air Programme (GCAP), a sixth-genertion fighter jet project developed in collaboration with the United Kingdom and Japan (Leonardo, 2024). Additionally, Leonardo's AW249 attack helicopter Project designed to replace the Italian Army's curren A129 Mangusta fleet incorporates advanced Technologies such as avionics systems, sensor fusion and autonomous targeting. The company also seeks to strengthen its reconnaissance and intelligence-gathering capabilities through the development of the Falco Xplorer, a next-generation unmanned aerial vehicle (UAV) thereby consolidating its competitive position in Europe's UAV market (Leonardo Annual Report, 2023).

In the maritime domain, Fincantieri leads Italy's naval shipbuilding industry. Under the FREMM (European Multi-Mission Frigate) program, the company produces both anti-submarine warfare and general-purpose frigates for the Italian Navy (Fincanteri, 2024). Moreover, Fincantieri plays a key role in the construction of Constellation-class frigates fort he U.S. Navy, a Project that enhances Italy's presence in the global defense supply chain (U.S. Navy, 2023). Furthermore, the Doha-class corvettes and U212 NFS (Near Future Submarine) programs exemplify Ialy's high engineering capacity in submarine and naval defense systems (Naval-Technology, 2025). These initiatives underscore Italy's active contribution not only to the European security architecture but also to the international naval defense market.

At the European Union level, Italy plays an activ role in initiatives such as the Eurpoean Defence Fund (EDF) and Permanent Structured Cooperation (PESCO). These collaborations contribute to the integration of Europe's defense industry which lies at the heart of debates on strategic autonomy (Fiott, 2108: 39). Italy's participation in these programs reflects not only its aim to enhance military capabilities but also its strategy to assume a more prominent role in the European security framework.

Italy's defense industry also operates within an expot-oriented vision. The export of defense products to markets in the Middle East, Asia, and Africa has become one of the tools of Italy's foreign policy. Through defense diplomacy, Italy integrates its economic interests with its security policies (Ignazi et al, 2012: 74). In this regard, defense exports serve not only as a source of economic gain but also as a means to establish and deepen strategic partnerships.

In recent years, Italy's military-industrial structure and international cooperation strategies have evolved in response to uncertainties in the global security environment. NATO's collective defense commitments, the EU's pursuit of strategic autonomy and the demands of international markets have led Italy to adopt a flexible and multidimensional strategy. Within this framework, Italy continues to strengthen its defense collaborations both transatlantically and within Europe while enhancing the competitiveness of its industrial base in global mrkets.

Italy's defense industrial structure and its strategies for international cooperation also provide an important foundation for understanding its defense partnerships with Türkiye. Collaborative initiatives such as the SAMP/T air defense system and the TF-X fighter jet Project illustrate how Italy's vision of technology sharing and joint production aligns with Türkiye's rapidly expanding production capacity. Through these partnerships, Italy's international strategies become more visible and tangible at the bilateral level, reinforcing both countries roles in the evolving global defense ecosystem.

4. Türkiye-Italy Defense Industry Cooperation: Samp/T, Tf-X and Helicopter Projects

Defense industry cooperation between Türkiye and Italy has gained strategic significance not only at the bilateral level but also within the broader context of the European security architecture. As NATO allies, the two countries have increasingly prioritized technology transfer and joint production-based initiatives in response to evolving regional security Dynamics. These collaborations can be viewed as a contemporary from of defense diplomacy and contribute to the reshapin of inter-state strategic dependencies (Biscop, 2021: 112).

4.1. Technological Innovation and R&D Cooperation in the Defense Industry

Technological innovation in the defense sector has become one of the key determinants of both the military and economic capabilities of states in the contemporary international system. For NATO members suc as Türkiye and Italy, defense-related reseach and development (R&D) activities constitute not only a guarantee of national security but also a primary driver of their strategic autonomy objectives. In this context, the joint R&D projects developed between the two countries-particularly in radar systems, autonomous platforms, and artificial intelligence-based defense Technologies-accelerate mutual knowledge transfer and joint production processes. Mechanisms such as the European Defence Fund (EDF) and NATO's Defence Innovation Accelerator fort he North Atlantic (DIANA) provide an institutional framework for Türkiye-Italy cooperation, thereby supporting the development of innovative defense solutions (European Commission, 2023). Accordingly. R&D collaboration between Türkiye and Italy strengthens not only technological capacity-sharing but also the strategic autonomy ambitions of both states. As a result, innovative defense solutions help create a lasting foundation of trust and mutual interdepence.

At the core of technological innovation lies the interaction between universities, the private sector, and governmental institutions within the defense industry ecosystem. Türkiye's recent R&D -focused investments-carried out through institutions such as ASELSAN, TUSAŞ nad ROKETSAN-have generated significant synergy with Leonardo S.p.A. in Italy through jointly conducted projects. These collaborations have enhanced both production capacity and the integration of indigenous technologies into international standards. For instance, the incorporation of certain electronic subsystems developed by Leonardo into the TF-X National Combat Aircraft project constitutes a concrete example of the innovative partnership between

the countries (Leonardo, 2022b). Consequently, R&D-based defense cooperation not only enhances the military capabilities of both states but also contributes to the establishment of a sustainable, technology-driven strategic partnership. This dynamic reinforces an understanding that prioritizes complementarity rather than competition within the defense sector.

Another crucial dimension of defense R&D is digital transformation and artificial intelligence applications. Autonomous systems, decision-support algorithms, and cybersecurity Technologies are regarded as key innovation domains shaping the future battlefield environment. Türkiye's 'National Technology Initiative' and Italy's 'Defence Technological and Incdustrial Baser (DTIB)' strategy share common objectives in this regard. Both countries seek to reduce foreign dependency in defense technologies, strengthen domestic innovation capacity, and secure a stronger position within global defense supply chains (Beraud-Sudreau and Giegerich, 2020). In line with these objectives, the establishment of joint R&D centers, the sharing of technological patents and active cooperation in innovation-oriented defense fairs (IDEF, EUROSATORY) stand out as notable developments. Ultimately, defense-related R&D cooperation between Türkiye and Italy not only enhances the technological capabilities of the two countries but also contributes to shaping the future of the Euro-Atlantic security architecture.

4.2. SAMP/T, TF-X and Helicopter Projects

One of the most prominent projects in Türkiye-Italy relations is the SAMP/T air defense system. Developed through the Eurosam consortium (MBDA and Thales), a French-Italian partnership, this Project emerged as a significant alternative to meet Türkiye's long-range air defense requirements. In 2018, Türkiye officially joined the program by signing a Lette of Intent (Lol) with Eurosam, ASELSAN and Roketsan fort he joint development of the system (Eurosam, 2017). This cooperation aims to modernize the system in line with Türkiye's defense needs and integrate it into the European production chain. Particularly in the post-2023 period, Ankara's emphasis on this Project-within the framework of both its NATO commitments and national defense vision-demonstrates the role of European partnerships in Türkiye's defense industry strategy (Adar, 2025: 12-13). In this regard, the SAMP/T partnership represents not only a technical Project but also a process of aligning security perceptions.

Another strategic initiative highlighted in bilateral relations is the potential Italian contribution to Türkiye's national combat aircraft Project, TF-X(KAAN). TF-X constitutes the core of Türkiye's ambition to develop a fifth-generation fighter jet, and in this process, the technical support of experienced European partners is considered critical. The Project was initiated in 2016 by the Presidency of Defense Industries and Turkısh Aerospace Industries (TAI) and in the same year acoopeartion agreement was signed with the UK-based BAE Systems regarding technological and engineering support (BAE Systems, 2017). Italy's aerospace engineering expertise-particularly in avionics, engine technology and aerodynamic design-may play a complementary role for Türkiye. It also provides the possibility of contributing to TF-X with European-standar technological input, thereby reinforcing the multinational production chain (Clarke, 2022a: 211). In subsequent years, cooperatiın negotiations with Italy's Leonardo S.p.A. and Avio Aero were held in the fields of engine Technologies, aviınics systems and aerodynamic design (Clarke, 2022b: 211). In this context, the TF-X partnership has the potential to create strategic synergy in advanced technology fields within bilateral relations.

Helicopter production and modernization constitute another dimension of the strategic cooperation between the two countries. Joint projects maintained between Italy's Leonardo and Türkiye's TUSAŞ provide opportunities for technology transfer in multi-role helicopters and avionics systems. In particular, the T129 ATAK helicopter was produced under license in Türkiye based on the Italian A129 Mangusta platform and equipped with domestically developed subsystems. This development is considered a significant milestone in the capacity-building of Türkiye's defense industry (Gürcan, 2020: 98). Through this Project, Türkiye achieved the ability to produce a high-maneuverability attack helicopter with export potential fort he first time. Furthermore, in the Gökbey general-purpose helicopter project, the engineering experience derived from Leonardo's motor and rotor Technologies contributed indirectly to the domestic production process (Leonardo, 2022: 32). Advancing this cooperation to further stages increases Türkiye's competitiveness in regional markets.

The ATAK project, based on the A129 Mangusta platform developed by the Italian AgustaWestland, was redesigned by TUSAŞ with a significant national engineering contribution (Yılmaz and Demirtaş, 2020: 25-26). This process played a decisive role in enabling Türkiye to acquire not merely assembly capabilities but also original production capacity. Additionally, the licensing dependency of the engines used in ATAK exports prompted Türkiye to initiate domestic engine development programs through TAI (TUSAŞ Engine Industries) (Kasapoğlu, 2022: 67). Thus, helicopter projects constitute a critical example with respect to both technological deepening and reducing external dependency in the defense industry.

Today, new-generation cooperation opportunities such as the Gökbey general-purpose helicopter are also being discussed between Leonardo and TUSAŞ. Leonardo's experience in dynamic systems, transmission, and rotor technologies, combined with TUSAŞ's capabilities in composite materials and software development, creates a foundation for sustainable technological partnership between the two countries (Leonardo, 2023). These collaborations not only involve platform production but also encompass training, maintenance and logistics, supporting Türkiye's transformation into a regional helicopter production center. This multi-layered cooperation in the helicopter field not only increases production capacity but also reinforces Türkiye's autonomy and international competitiveness in defense technologies.

Another noteworthy dimension of Türkiye-Italy defense cooperation is that projects encompass not only production phases but also export and marketing strategies. Accessing third-country markets through joint projects provides both economic and diplomatic advantages. This reflects a typical example of using defense industry cooperation as an instrument of foreign policy (Fiott, 2020: 67). Therefore, bilateral cooperation represents not merely technical projects but areas in which foreign policy and security strategies are integrated. In this framework, Türkiye-Italy partnerships constitute a multidimensional field of cooperation materialized through the SAMP/T air defense system, the TF-X project, and helicopter production initiatives.

4.3. Dynamics of Cooperation: Political Alignment, the NATO Framework and Industrial Capacity

Understanding the development of defense industry partnerships between Türkiye and Italy requires an examination of the underlying cooperation dynamics. In this context, political alignment, collaborations within the NATO framework, and the industrial capacities of the two countries can be identified as three key dimensions.

Political alignment between the two states emerges as a fundamental element for ensuring the sustainability of defense industry cooperation. Türkiye's multi-dimensioanl foreign policy and Italy's EU and Mediterranean-oriented strategic priorities create overlapping areas of interest (Santoro, 2022: 78). Particularly in the fields of security, migration and energy in the Mediterranean, the existence of common interests strengthens the political foundation of defense industry collaborations. This reinforces not only the technical aspects of defense projects but also their diplomatic dimensions.

Within the NATO framework, Türkiye and Italy both significant members of the alliance carry out joints projects. The coordination of the two countries in systems developed within the scope of the alliance's deterrence and collective defense objectives is noteworthy (Varwick, 2021: 115). For instance, the integration of the SAMP/T system, jointly developed by Italy and France, with Türkiye represents an example consistent with NATO's spirit of multinational cooperation. Such projects entail not only technological Exchange but also the harmonization of military standards.

From an idustrial capacity perspective, Italy's possession of globally influential defense companies such as Leonardo enhances opportunities for cooperation with Türkiye's rapidly developing defense firms. A complementary relationship exists between Italy's technological expertise and Türkiye's production capacity (IAI, 2012: 5). This complementarity creates cooperation potential in various fields, including helicopter production, radar systems and unmanned aerial vehicles. In particular, technology transfer and joint production models servet the long-term strategic interests of both countries.

Moreover, cooperation Dynamics are not limited to existing projects. The growing convergence between Türkiye and Italy in defense industry also brings forward joint export strategies targeting third countries. Thorugh jointl developed systems supported by co-production and licensing agreements, the two countries aim to reach markets in Europe, the Middle East, and Norht Africa, strengthening their positions in global defense industry competition (Fiott, 2021: 64). This provied not only economic benefits but also enhances the two states influence capacities in foreign policy through defense diplomacy.

In conclusion, a cooperation model emerges in which political alignment provides diplomatic grounding, NATO offers an institutional framework, and industrial capacity enables practical implementation. Thus, Türkiye-Italy defense industry relations become not only a bilateral partnership but also an important component of the regional and international security architecture.

4.4. The Dimension of Compliance with International Law in Defense Industry Cooperation

Defense industry cooperation between Türkiye and Italy is shaped notonly at the technical and industrial levels but also within the framework of international law and multilateral agreements. In particular, NATO obligations, the EU's Common Security and Defence Policy (CSDP), and United Nations Security Council resolutions constitute the legal foundations of these relations (Buzan, Waever and De Wilde, 1998: 25). In this context, inter-state cooperation must comply not only with bilateral agreements but also with norms and rules recognized within the international system. Therefore, the validity and sustainability of agreements between Türkiye and Italy largely depend on their compatibility with this international legal order.

Türkiye's defense industry cooperation agreements, especially those concluded after the 2000s, draw attention with their provisions on technology transfer, joint production, and licensing arrangements. These agreements allow the parties not only to enhance their military capabilities but also to diversify their foreign policy instruments (Krause, 1992: 47). The memoranda of understanding and defense cooperation protocols between Türkiye and Italy are concrete indicators that the national security strategies of both states are being aligned with international norms. This elevates defense industry cooperation from a purely commercial undertaking to one that also encompasses a normative dimension.

From Italy's perspective, the legal and regulatory dimension is particularly significant within the EU framework. The Italian government aims to pursue defense industry cooperation in accordance with both the EU's strateic autonomy vision and NATO obligations (Fiott, 2018: 19). This approach ensures that the partnershipsh Italy develops with Türkiye are not confined to the bilateral level but are also designed to contribute to the European security architecture. Thus, for Italy, international law functions not only as a binding set of rules but also as a domain that expands opportunities for cooperation.

The international law dimension in Türkiye-Italy defense cooperation plays a critical role in long-term trust-building and predictability. The agreements between the parties shape not only current prjoects but also potential future cooperation models. A strong legal basis renders cooperation more resilient to political fluctuations and ensures the continuity of joint programs (Clarke, 2022a: 211). This demonstrates that Türkiye-Italy defense relations contribute not only to regional security but also hold the potential to support global security.

5. Future Perspectives And Expectations For Türkiye-Italy Defense Industry Relations

Defense cooperation between Türkiye and Italy has gained strategic significance not only in terms of military production and technology sharing but also within a period in which the regional security architecture is being reshaped. Increasing geopolitical competition in the Mediterranean basin strengthens the need for both countries to act jointly in defense industry initiatives and in their broader foreign policy visions (Biscop, 2021: 41). This dynamic reinforces their roles within NATO and enables them to assume mutually complementary positions within the European security structure.

From a forward-looking perspective, defense relations between Türkiye and Italy are gradually evolving toward a technology-oriented trajectory. Joint projects to be developed in fields such as artificial intelligence-supported systems, unmanned aerial vehicles, submarine Technologies, and radar systems will enhance both national security and regional defense capacity (Kasapoğlu, 2021: 52). Such collaborations contribute to the creation of a sustainable innovtion ecosystem within the defense industries of the two countries, elevating joint production and knowledge-sharing to a strategic level. In this regard, cooperation between Türkiye and Italy transforms defense Technologies into a diplomatic domain based not only on production but also on the transfer of knowledge and expertise.

Form Italy's standpoint, future relations in the defense sector cannot be considered dependently of the EU's strategic autonomy policy. The Italian government aims to balance NATO and EU defense frameworks while aligning cooperation with Türkiye to Europe's security priorities (Marrone, 2021: 17). This balancing strategy grants Italy political felxibility in areas where Türkiye plays an active role in Mediterranean security. At the same time, it provides Türkiye

with an opportunity to contribute to European security strategies and expand its network of regional partnerships.

Another factor shaping the future of defense relations is economic sustainability and industrial capacity. Joint production agreements, licensing arrangements, and export-oriented business models maket he defense industries of both countries more reilient in the face of global competition (Leonardo, 2022: 28). These developments contribute not only to defense industry revenues but also to the promotion of domestic technological production.

Looking ahead, it is expected that joint projects concerning next-generation air and naval platforms will come to the forefront. These include deepening subsystem cooperation within the TF-X fighter jet program, joint initiatives fort he modernization of FREMM-class frigates and collaborative Al-based R&D projects in unmanned surface vehicles (USVs) and unmanned aerial systems (UAS) (Defence Türkiye, 2024). Furthermore, it has been reported that preliminary consultations continue between the defense ministries of the two countries regarding cooperation in radar Technologies, air-defense sensors, and satellite surveillance systems (Anadolu Agency, 2025). In this context, Türkiye-Italy defense partnerships are expected not only to remain limited to the production of existing systems but also to advance within a shared vision focused on the development of innovative defense technologies.

The future of Türkiye-Italy defense relations will be further strengthened through the institutionalization of existing joint projects and the deepening of mutual strategic turst. This process provides the foundation fort he establishment of a new security partnership based on reciprocal interdependence in forign policy, in addition to enhancing military capacity. Thus defense cooperation progresses in alignment not only with short-term interests but also with long-term regional stability objectives.

Conclusion

Defense inudtry cooperation between Türkiye and Italy has acquired a more strategic, multidimensional and institutionalized character. As demonstrated throughout this study, three core elements have been decisive in shaping the evolution of these partnerships: the state-centric yet domestically sensitive perspective offered by neoclassical realism; the foreign policy preferences shaped by the national defense industry visions of both countries; and the institutional framework provided by international organizations, particularly NATO. Combined with the securitization processes surrounding defense Technologies, these elements have emerged as the primary dynamics guiding bilateral cooperation.

Türkiye’s recent technology-oriented foreign policy vision and its defense strategy prioritizing indigenous production intersect with Italy’s advanced engineering capabilities on a complementary ground. This convergence is significant not only for bilateral projects but also for European defense integration and Mediterranean security. Notably, the T129 ATAK helicopter project-conducted jointly by Leonardo and Turkish Aerospace Industries (TUSAŞ)-has contributed substantially to Türkiye’s attack helicopter capacity through a licensed production model.

Additionally, the T625 Gökbey utility helicopter Project has benefited from Italian engineering support and knowledge sharing in rotor technology. Furthermore, technical consultancy and component production cooperation continue regarding helicopter engine development, particularly through Leonardo’s AW139 model. Alongside the SAMP/T air defense system and

the TF-X fighter aircraft initiatives, these efforts not only enhance the military capabilities of both states but also generate mutual economic and diplomatic gains through technology transfer, joint R&D, and export strategies targeting third countries.

In the context of the securitiation of defense Technologies, discourses, agreements and risk perceptions play a determining role. The joint policies of Türkiye and Italy in this domain function not merely as mechanisms for protecting national security but also as instruments of diplomacy that reinforce their positions within the international system. In this sense, defense diplomacy increasingly occupies a central role in shaping both bilateral relations and regional balances.

The balance established among political alignment, the NATO framework and industrial capacity constitutes a strategically complementary foundation fort he sustainability of the partnership. Through this triad, Türkiye and Italy possess the potential to contribute not only to the defense industry but also to European security and stability in the Mediterranean. The analyses presented id this study indicate that future cooperation will not remain confined to existing projects; rather, it may generate new opportunities encompassing economic, diplomatic and security dimensions across a broader geography.

In conclusion, bilateral relations that originate in the field of security have the potential to evolve into more advanced forms of cooperation over time, in line with the propositions of interdependence theory. The establishment and enhancement of such relations between states play a crucial role in achieving both regional and global security. In this regard, the development of defense industry cooperation between Türkiye and Italy two countries that share geographical and societal similarities can be considered mutually beneficial for buth sides.

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Authors' Contributions

Levent Yiğittepe conceptualized and designed the study, was the primary and corresponding author of the manuscript. Hilal Küçüktoçu contributed to the study design and provided critical revisions during the manuscript preparation. All authors reviewed and approved the final version of the manuscript.