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THE TURKISH DEFENSE INDUSTRY AND FUTURE STEPS IN THE FACE OF REGIONAL AND GLOBAL THREATS AND OPPORTUNITIES

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Introduction

Amid the pendulum of conflicts and the emergence of a new regional geopolitical order, Türkiye finds itself in a Middle East where nearly every corner is engulfed in instability. Despite certain vulnerabilities and shortcomings, Türkiye continues to display a relatively stable outlook thanks to its dynamic economy and social structure. In this environment, one of the most important factors enhancing Ankara's regional influence is the Turkish defense industry, which has been attracting increasing attention both regionally and globally.

But Türkiye's security and stability can remain only relative rather than absolute while its region is aflame. In particular, the presence of powers in the immediate neighborhood—such as Israel—that appear to pursue regional hegemony underscores the need to further strengthen Türkiye's defense industry and its broader security ecosystem. To elevate this ecosystem to the next level, steps must be taken domestically, regionally, and globally.

This policy brief examines the systems that the Turkish defense industry must develop in response to emerging security threats—particularly in light of Türkiye's rise as a global actor in military technologies and the heightened regional tensions following 7 October 2023. It also evaluates the cooperation opportunities

that arise from these developments.

The primary aim of this brief is not only to identify the weapons systems, platforms, and technological solutions that Türkiye must develop to ensure its own security and that of its partners, but also to outline the political, social, economic, and trade policies that could enhance Türkiye's domestic stability, prosperity, and international influence. It should be emphasized that the purpose of this report is not to advocate war, but rather to develop deterrent capabilities that would prevent the surrounding region from descending further into a cycle of conflict.

Strengths of the Turkish Defense Industry

The Turkish defense industry has demonstrated numerous strengths in recent years. First, there are the large companies established under state leadership beginning in the 1970s and later brought together under the Turkish Armed Forces Foundation (TSKGV): ASELSAN, TUSAŞ/TAI, ROKETSAN, HAVELSAN, ASPİLSAN, and İŞBİR. Meeting the needs of the Turkish Armed Forces through institutions that function almost as extensions of the military has provided an alternative to import-dependent procurement while also allowing defense nee-

ds to be developed somewhat insulated from the harsh competitive pressures of the global market¹

Second, the establishment of the Undersecretariat for Defense Industries in 1985 (today the Directorate of Defense Industries, SSB), together with Türkiye's economic integration with Europe during the 1990s and the production experience gained through the F-16 program with the United States, generated significant industrial and commercial expertise. Additionally, NATO membership provided valuable training, doctrine, planning principles, and operational experience. Combined with the ability of the private sector to operate in international markets, these factors paved the way for the expansion of the Turkish defense industry following the 2001 economic crisis. Defense exports, which surpassed \$1 billion for the first time in 2012, exceeded \$10 billion in 2025.²

Perhaps the most important contribution to this growth has been the role of TSKGV companies and TÜBİTAK-SAGE as a training ground for skilled personnel. Engineers and specialists trained in these institutions have gone on to contribute to private companies such as Baykar, Kale, Nurol, FNSS, Alp Havaçılık, DEARSAN, and METEKSAN, transforming their experience into high-value products and services.

Third, in today's environment—where the distinction between conventional warfare and asymmetric conflict has increasingly blurred—Türkiye has leveraged operational experience gained during internal security operations and cross-border anti-terror missions in the 1990s and 2000s. For instance, during the

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In this context, Türkiye has also emerged as a pioneer in the “high-tech / low-tech” hybrid approach discussed in military circles worldwide. The ability to scale cost-effective solutions alongside high-technology platforms represents a major strength. The simultaneous deployment of medium- and high-altitude UAVs together with micro and mini drones exemplifies this approach. Similar strategies are expected to emerge in land and naval systems as well.

At the same time, TUSAŞ is developing the Hürkuş and Hürjet aircraft to train Turkish Air Force pilots while also exporting these platforms, thereby strengthening Türkiye's position in global defense markets. The sale of 30 Hürjet aircraft to Spain, an important NATO ally, represents a particularly significant achievement.

Systems Under Development⁴

A detailed analysis of all systems currently under development within the Turkish defense industry lies beyond the scope of this policy brief. Nevertheless, a brief overview of several key systems helps illustrate both the progress achieved and the steps that must still be taken in cooperation with international partners.

Türkiye continues to debate the negative consequences of being removed from the F-35 program following its acquisition of the S-400 air defense system. Yet this development has also produced certain positive outcomes. For example, the National Combat Aircraft, MMU KAAN, is being developed as an advanced fighter aircraft combining features associated with both the F-35—such as low radar observability, sensor fusion, and advanced electronic warfare—and the air superiority capabilities

of the F-22.⁵

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Although challenges remain regarding Türkiye's aging F-16 fleet, these will be addressed through several initiatives: Baykar's Kızılelma unmanned combat aircraft, TUSAŞ's ANKA UAV series, the potential acquisition of Eurofighter Typhoon aircraft, and the ÖZGÜR modernization program for existing F-16s. Beyond combat aircraft, Türkiye also aims to secure its airspace through the development of the Steel Dome (Çelik Kubbe) integrated air defense architecture, which will incorporate layered air defense and eventually anti-missile defense capabilities.

At sea, the MILGEM program has generated significant momentum. Beginning with the 2,400-ton Ada-class corvettes, Türkiye has progressed toward the development of the İstif-class frigates, Hisar-class frigates, and offshore patrol vessels. In the near future, the TF-2000 air defense destroyers are expected to enter service. Following the joint Turkish-Spanish construction of the amphibious assault ship TCG Anadolu, the steel-cutting ceremony for Türkiye's National Aircraft Carrier (MUGEM) project has already taken place. Combined with the Reis-class submarines and the MİLDEN (national submarine) project, the Turkish Navy is gradually evolving from a "green-water navy" into a true blue-water naval

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force capable of operating far from its home waters.⁶

On land, however, the Turkish Armed Forces—traditionally a land-heavy force—still faces major modernization requirements. Alongside the delayed Altay main battle tank program, armored platforms such as Arma, Pars, and Tulpar—which have already proven successful in export markets—must be inducted into service in much larger numbers and at a faster pace. Additionally, greater emphasis should be placed on robotic and unmanned land systems that reduce the risks faced by soldiers on the battlefield.

Geopolitical Risks and Needs in Türkiye's Region

Recent developments—particularly Israel's strategic choices and the responses of regional states—are likely to shape the future of

Türkiye's neighborhood. Two broad scenarios emerge:

- 1) Allowing Israel to maintain and potentially abuse its "qualitative military edge" to threaten the broader region.
- 2) Strengthening Türkiye and assisting other regional countries in order to encourage Israel to exercise greater restraint.

The goal here is not to threaten Israel, but rather to establish credible deterrence that discourages destabilizing actions capable of plunging the region into further conflict. Weakness invites challenges; strength encourages mutual respect and peace. Regional measures—such as improved air defense systems, electronic warfare capabilities, cyber and communications security, and public resilience against intelligence operations—would contribute to a regional environment that encourages responsible behavior.

The objective is not war with Israel but the establishment of a just and sustainable peace, including the creation of a Palestinian state based roughly on the 1967 borders with East Jerusalem as its capital.

Iran's position must also be addressed. For years Tehran sought the leadership of the Islamic world (even though Muslim countries did not call upon Tehran to lead) while relying heavily on proxy organizations, often contributing more to instability than stability. Its military experiences during the February–March 2026 war with the United States and Israel offer important lessons.

By prioritizing ideological preferences over the modernization of its conventional armed forces—particularly its air force—Iran invested disproportionately in the Revolutionary

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Guard and proxy networks. The costs of this imbalance became evident during the conflict. As defense analyst Arda Mevlütoğlu noted: “For a country whose air power is weak relative to its regional rivals, it effectively means having no air power at all.”⁷

In this context, Türkiye must accelerate the deployment of the land, naval, and air systems mentioned above while also developing operational concepts, training programs, and doctrinal frameworks that can support regional partners.

Measures Türkiye Should Take Domestically and Internationally

The measures that Türkiye should take in the short, medium, and long term—both within its national, regional, and global defense-security ecosystem and defense industry, as well as in the political, social, and economic spheres—can be summarized as follows:

Short Term (within 5 years)

1) While continuing projects under the motto of “local and national” production, Türkiye should be more open to burden-sharing with other countries in research and development and production activities in the defense and security sectors, since the development of future technologies will require increasingly capital-intensive initiatives.

Türkiye has already adopted a highly flexible and rational approach in this regard. For example, in the Hürjet project Spain has been allowed to participate in the development of the platform as part of a purchase agreement. There are also reports of potential partnership discussions with Saudi Arabia regarding the KAAAN fighter program. Similarly, under the MILGEM project, the Ada-class corvettes developed for Pakistan have been further improved under the name “Babür,” with two ships being built in Türkiye and two in Karachi for the Pakistani Navy.

But it will be necessary to go beyond these steps. In particular, Türkiye should play a leading role in transferring its experience in the defense industry and broader defense-security sectors to partner countries—especially in the Middle East and North Africa—helping them strengthen their own capabilities in these areas and enabling joint R&D and production in certain sectors.

At the same time, external partners should be reminded that developing a defense-security ecosystem is a very long process. It should be emphasized that Türkiye itself attempted such efforts in the 1920s and 1930s but was only able to begin building globally competi-

tive defense companies starting from a relatively modest level in the 1970s.

2) It would be appropriate to suspend the e-commerce restrictions introduced to protect large importing companies in Türkiye—at least for defense and technology firms and young entrepreneurs—and to facilitate the import of subcomponents for start-ups and small and medium-sized enterprises.

When entrepreneurs are forced to pay far above the normal cost for something as basic as a motherboard or a chip, this harms the spirit of entrepreneurship and innovation not only in the military-security sector but also in civilian industries.

If the goal is to encourage “local and national” production, this should be done by financing the substitution of imported products. Such subsidies should be limited to periods of ten years. More generally, incentives should be directed toward components that can realistically and rationally be produced in Türkiye rather than toward areas where domestic substitution is not feasible.

3) Another feature Türkiye should further develop is the “permeability” and “symbiotic relationship” between defense industry companies and civilian technology firms.

For example, advances in military communications technologies could also strengthen the country’s mobile and fiber-optic communication networks. Similarly, research conducted in the field of military medicine could, over time, benefit civilian hospitals, particularly in fields such as emergency medicine, orthopedics, and traumatology.

Domestic 4G and 5G solutions developed through the civilian subsidiaries of Türkiye’s

The decision taken at NATO’s 2025 Hague Summit to raise defense spending to 5 percent of national income will require Türkiye to increase its current defense-security budget—already exceeding \$50 billion—to at least \$75 billion, and possibly up to \$100 billion when urgent needs are taken into account.

major defense firms would help reduce the foreign exchange burden of expanding mobile communications infrastructure while also strengthening national communications security.

Short-to-Medium Term (within 5–10 years)

4) Improving public finances, bringing exchange-rate and monetary policies to a rational footing, and encouraging savings in both the public and private sectors will be among the most necessary—yet also most difficult—steps Türkiye must take in the medium term.

Through these measures, the current account deficit could be reduced, allowing capital accumulation and enabling Türkiye to move away from its long-standing dependence on short-term capital inflows (“hot money”).

Türkiye must already increase its defense and

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security budget due to its NATO obligations. The decision taken at NATO’s 2025 Hague Summit to raise defense spending to 5 percent of national income will require Türkiye to increase its current defense-security budget—already exceeding \$50 billion—to at least \$75 billion, and possibly up to \$100 billion when urgent needs are taken into account.⁸

5) Once liquidity constraints have been overcome, the Turkish economy should be able to offer favorable credit and financing conditions—through the banking sector—to countries wishing to purchase Turkish defense industry products.

Under OECD rules, member countries’ Exim-banks are generally not allowed to provide export credits for weapons systems. That is

one reason why the United States sells weapons through the Foreign Military Sales (FMS) program to its allies and partners.⁹

6) Since the purpose of this policy brief is to make our region safer through Türkiye’s defense industry and defense-security ecosystem, it is also necessary to briefly address the political dimension of the issue.

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Long Term

7) Investing in human capital

a. The national education system should be designed so that all young people—regardless of their academic specialization—could gain competence in the technologies required by the modern age.

Per this approach, pedagogical programs should ensure that students inclined toward the social sciences and humanities gain competence in STEM fields—particularly in areas such as optimization theory—while those who are strong in STEM fields acquire foundational knowledge in the social sciences and humanities.

In this context, it is worth noting that some countries have adopted a “return to analog” approach in education, removing personal tablets and smartphones from classrooms.¹¹ The aim is to help children develop their lear-

ning and reasoning abilities without technological assistance, and only afterwards enhance these abilities with technology—thereby ensuring that technological tools are used according to human needs. Indeed, smartphones and tablets have ceased to be merely tools used by children and young people; instead, they increasingly allow the companies that produce them to turn children and young people into instruments serving their own technological ecosystems.

To implement what is often called a “digital detox”, school schedules and class durations should be carefully reconsidered in order to create more space for sports, debates, and social interaction in schools.

b. The marching slogan “Every Turk is born a soldier,” once proudly proclaimed in military drills, has become inconsistent with shortened military service periods and practices such as paid exemption from service. This situation, however, also creates an opportunity. Modern military platforms and the art of warfare have become extremely complex and technology-intensive. When service duration is less than two years, it is evident that such service provides limited benefit either to the individual performing military service or to the Turkish Armed Forces.

For this reason, policymakers should seri-

ously consider a system in which mandatory conscription is abolished while maintaining pathways for voluntary professional military service, alongside the introduction of a civilian form of compulsory national service lasting approximately one year. Such a system should apply not only to male citizens but also allow women to perform civilian national service, thereby contributing to the strengthening of social order and the expansion of individual rights and freedoms.

In an increasingly insecure world, countries such as Switzerland continue to refuse to abolish mandatory military service, while some states are even reintroducing it. Türkiye, given its large population, may not require universal military service. However, it must still instill in its young people a sense of duty expressed in the idea: “I have served my country.”

c. Perhaps the most important form of investment in human capital would be improving the salaries and benefits of military personnel and security forces, as well as re-establishing a comprehensive healthcare system specifically accessible to them. This issue must be addressed urgently by the legislative and executive branches, and implemented through carefully designed and well-prepared policy plans.

Endnote

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Notes



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