



WHAT IS THE PERCEPTION OF DEFENCE INDUSTRIAL PARTNERSHIPS WITH THE EDTIB BY NON-EU COUNTRIES?

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The Case of South Korea

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June 2024



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The Armament Industry European Research Group (Ares Group) was created in 2016 by The French Institute for International and Strategic Affairs (IRIS), who coordinates the Group. The aim of the Ares Group, a high-level network of security and defence specialists across Europe, is to provide a forum to the European armament community, bringing together top defence industrial policy specialists, to encourage fresh strategic thinking in the field, develop innovative policy proposals and conduct studies for public and private actors.

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ABSTRACT

In 2024, the European Commission introduced the European Defence Industrial Strategy, designed to transform Europe's defence industry into a more competitive, innovative, and efficient sector. This transformation will be facilitated through the European Defence Fund and various cooperation programs. Similarly, South Korea's defence policy underscores the importance of strengthening supply chains through innovation and international collaboration, thereby enhancing its global stature. Although European-Korean defence cooperation has historically been limited, the European Defence Technology and Industrial Base's (EDTIB) emphasis on innovation, coupled with South Korea's substantial investments in defence technology, may foster new collaborative opportunities. Given the protracted recovery of supply chains post-COVID-19 and ongoing financial challenges, South Korea's established manufacturing base in Europe positions it as a viable alternative.

Keywords: South Korea | Defence Industry | EDTIB | Partnership

RECENT GLOBAL DEFENCE INDUSTRY ENVIRONMENT AND NATIONAL RESPONSES

The war initiated by Russia's invasion of Ukraine has accelerated the onset of a new Cold War, prompting nations worldwide to bolster their national security. This shift has led to significant changes in the defence industry.

Firstly, there has been a sharp increase in the global demand for defence materials. World military expenditure reached \$2.24 trillion in 2022, a 3.7% increase from the previous year¹, marking an all-time high. As the conflict continues, this trend in armament expansion is escalating rapidly, with defence spending in 2023 projected to rise by 6.8% to \$2.44 trillion². This increase is the steepest since 2009, and growth is expected to persist. Notably, NATO has committed to spending 2% of GDP on defence by 2024, with two thirds of its member countries already meeting or exceeding this target³. Additionally, NATO is allocating approximately 28%⁴ of its defence expenditure to invest new weapons, indicating a significant rise in the demand for advanced weaponry.

Secondly, perceptions of the defence industry are shifting. Traditionally viewed for safeguarding national security, the defence industry is now increasingly seen as a crucial asset for protecting democracy. In response to the Russia-Ukraine crisis, the U.S. and Europe are expanding investments to strengthen their defence industrial bases, implementing policies to enhance industrial capacities through regulatory relaxation and cooperation with allied nations. This change is most evident in Germany, which previously adhered to a policy of minimal government intervention in the defence sector. Following the crisis, Germany has recognised the strategic importance of its defence industry, fostering cooperation within the EU and reorganising its industrial base, including the establishment of a special fund worth €100 billion⁵. As countries strengthen their defence industrial base, in 2024, the European Commission announced a new defence industrial strategy, the European Defence Industrial Strategy, based on the European Defence Technology and Industrial Base (EDTIB). This policy aims to transform Europe's defence industry to become more competitive, innovative, and efficient. Key aspects include expanding investment through the European Defence Fund and

¹ Dr Nan Tian, Dr Diego Lopes da Silva, Xiao Liang, Lorenzo Scarazzato, Dr Lucie Béraud-Sudreau and Ana Assis (2023), *Trends in World Military Expenditure, 2022*. SIPRI Fact Sheet, p1.

² Dr Nan Tian, Dr Diego Lopes da Silva, Xiao Liang, Lorenzo Scarazzato (2024). *Trends in World Military Expenditure, 2023*. SIPRI Fact Sheet, p1.

³NATO (2024), "Defence expenditures and NATO's 2% guideline". Retrieved May 1, 2024, from https://www.nato.int/cps/en/natohq/topics_49198.htm

⁴ Janes (2023, December), *Janes Defence Budgets Annual Report 2023. Intelligence Briefings*, p. 16.

⁵ The Federal Government (2022). "100 billion euros for a powerful Federal Armed Forces". Retrieved May 2, 2024, from <https://www.bundesregierung.de/breg-en/news/special-fund-federal-armed-forces-2047910>

promoting various cooperation programs among European countries to share technologies and enhance intra-regional procurement.

SOUTH KOREA'S RECENT DEFENCE INDUSTRY POLICY

South Korea's recent defence policy emphasises enhancing the robustness of its defence industry by fostering an innovative ecosystem and promoting international cooperation.

Firstly, the Korean government has identified space, semiconductors, artificial intelligence (AI), robotics, and drones as the five burgeoning defence sectors, with a concerted focus on fostering core technologies within these realms. Companies entrenched in these sectors will garner recognition as innovative entities and receive comprehensive support encompassing research and development, marketing, and beyond. Moreover, the government is fortifying its framework to entice enterprises specialising in advanced technologies such as semiconductors, batteries, and AI to contribute to the defence sector. An exemplar of this endeavour is the inception of the fast-track acquisition initiative. This initiative is meticulously crafted to expedite the procurement process, facilitating the seamless integration of cutting-edge technologies into defence applications. Its principal aim is to engineer prototypes of weapon systems imbued with 15 state-of-the-art technologies, including AI, hyper-connectivity, and cloud computing, within a concise two-year timeframe.

The Korean government is also working to elevate the international status of its defence industry. Among the most proactive nations in responding to the global demand for weapons triggered by the Russia-Ukraine war, Korea has experienced one of the fastest growth rates in arms exports over the past five years⁶. The range of export destinations and the magnitude of contracts have expanded significantly, spanning from Eastern European countries such as Poland, which urgently requires weaponry, to nations like Australia and the UAE. Numerous factors contribute to the international acclaim of Korea's defence industry. The distinctive security landscape of the Korean Peninsula has propelled the sector's growth, bolstered by unwavering government support and substantial investments. These strategic initiatives have positioned Korea to cultivate a robust foundation for manufacturing a diverse array of weapon systems. Furthermore, the evolution of ancillary manufacturing sectors—such as machinery, shipbuilding, aviation, and electronics—has been instrumental in Korea's ascendancy within the defence domain. Korean defence products are esteemed for their technical prowess and operational effectiveness, boasting notable advantages in interoperability with NATO weapon systems. Sustaining production lines dedicated to export products enables Korea to fulfill

⁶ South Korea had the largest increase in export volume (74%) in 2018-22 compared to the 2013-17 period (Pieter D. Wezeman, Justine Gadon and Siemon T. Wezeman (2023), *Trends in International Arms Transfers, 2022*. SIPRI Fact Sheet, p.3.

delivery schedules promptly, a pivotal factor contributing to recent export triumphs. Building upon this export momentum, the Korean government aspires to transition beyond mere exportation, striving to emerge as a prominent global collaborator in defence industry cooperation. Initiatives encompass revising internal regulations to actively pursue international joint development ventures with major nations and initiating discussions on a Reciprocal Defence Procurement agreement with the United States.

SOUTH KOREA-EUROPE DEFENCE INDUSTRY COOPERATION AND CHALLENGES

Defence industry cooperation between Korea and European countries began in the 1990s when Korea started importing weapons from Europe. Korea acquired various platforms, such as submarines and helicopters, from Germany and the UK using a licensing production method that facilitated the accumulation of initial defence industry technology. In the 2000s, under the banner of self-reliant defence, the Korean government invested heavily in independent weapon development, sourcing key components like engines and transmissions for the K9 self-propelled howitzer and K2 tanks from German companies MTU and RENK. Airbus' contribution to South Korea's helicopter development has been significant. Korea Aerospace Industries and Airbus began collaborating on the Korean Utility Helicopter Surion and have since successfully developed Light Civil and Armed helicopters, which are now in series production. Recently, Korea has expanded its supply chain by procuring avionics and radar components from European defence companies such as the UK's BAE Systems and France's Safran.

However, Korea's entry into the European market has been relatively recent, with significant efforts starting only about ten years ago. Before this, the competitiveness of Korean-made weapons was not high. With the establishment of the Defence Acquisition Program Administration⁷ and the government's active export expansion policies, Korea has successfully exported various weapon systems, including K2 tank technology to Türkiye, logistics support vessels to the UK, and the K9 self-propelled howitzer to Türkiye, Norway, Finland, Estonia, and Poland.

Despite these efforts, Korean companies face challenges in establishing a strong presence in the European defence market. From a supply chain perspective, European companies have a long history of collaboration from development to production, with national supply chain

⁷ DAPA is a South Korean government administration in charge of improving the defense capabilities of the nation, providing military supplies and fostering the defense industry.

cooperation being a common practice. It is expected to take considerable time for Korea to establish local partnerships. Although efforts are anticipated to expand the European supply chain following the large-scale export to Poland last year, it will take time to identify and stabilise these partnerships.

Another challenge is the lack of strong alliances. While Korea has signed Defence Industry and Logistics MOUs with various European countries, it is still difficult to assert that Korea's position and status in Europe have reached the level of a strategic alliance. Currently, cooperation between companies is being discussed, such as the collaboration between Poland's PGZ Group and Hanwha Aerospace on local production. However, cooperation within the larger framework of the security council, not just from an economic standpoint, is essential for Korean companies to expand their partnerships with European countries.

EXPLORING POTENTIAL COLLABORATION: SOUTH KOREAN DEFENCE INDUSTRY AND EDTIB PARTNERSHIP

The EDTIB aims to drive technological innovation by promoting collaboration among European nations to secure advanced technologies. The primary objective of this cooperation within the EDTIB is to cultivate effective and efficient defense industries through the exchange of technology and resources. To achieve EDTIB's goals while distributing the risks associated with technology development and alleviating financial pressures, it is essential to consider expanding outreach to third countries beyond Europe.

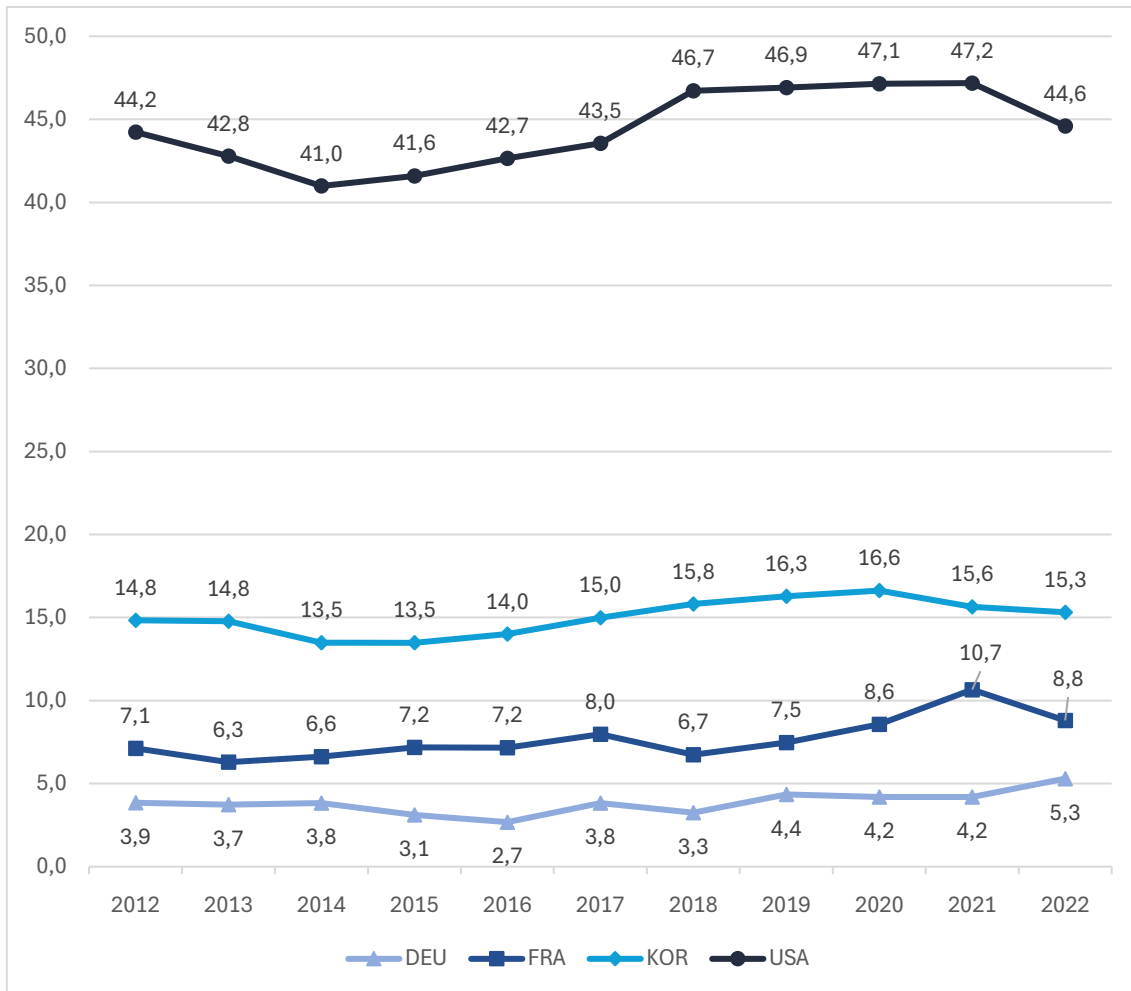
Co-development on cutting-edge technologies

Korea presents itself as a valuable partner, offering the potential for meaningful contributions to the shared objectives of technological advancement and resource optimisation within the European defence sector. Korea demonstrates a keen interest in advancing technologies that align with the objectives of European nations, with the Korean government actively investing in this domain. As of 2023, Korea's defence expenditure stands at \$47.93 billion, ranking 11th globally⁸, with approximately 30% allocated towards acquiring new weapons and research and development. In 2022, South Korea's defense R&D budget constituted 15.3% of the government's total R&D budget, second only to the United States. This substantial government investment in R&D has enabled Korea to develop state-of-the-art conventional weapons systems, including the T50 advanced trainer, the K9 self-propelled howitzer, and the K2 tank. The KF-21 Boramae fighter jet, currently under development, holds the potential to

⁸ SIPRI (2024), "SIPRI Military Expenditure Database". Retrieved May 4, 2024, from <https://www.sipri.org/databases/milex>

evolve into a fifth-generation fighter. Additionally, Korea continues to advance its work on guided weapons that incorporate cutting-edge technology.

Figure1. Percentage of Government R&D budget allocations for Defense (%)



Note: OECD (2024), Main Science and Technology Indicators. Retrieved June 9, from <https://data-explorer.oecd.org/>

Furthermore, Korea has recently unveiled policies aimed at expanding research and development efforts focused on emerging defence sectors such as space and semiconductors, with plans for active collaboration with several advanced countries in these domains. To facilitate these endeavors, the Defence Acquisition Program Administration has established the International Cooperation Business Development Team. This specialised unit is tasked with forging cooperation channels with both domestic and international organisations and companies, as well as orchestrating forums dedicated to identifying and advancing international cooperation projects. In a recent development, Airbus inked an MOU with the Korean government to establish a Defence and Aerospace Research and Development Center, known as the International Technology Center. Such research and development

infrastructures are poised to catalyse vibrant exchanges between companies hailing from both Korea and Europe, fostering robust collaboration and innovation within the defence industry.

Cooperation for Supply Chain Recovery

The global supply chain, disrupted by COVID-19 and further strained by the Russia-Ukraine conflict, faces an extended recovery period. Given the protracted pace of this recovery, allocating substantial funds exclusively to the defence industry poses a challenge, underscoring the importance of seeking cooperative partners with a robust manufacturing base. In the wake of last year's sizeable export contract with Poland, major Korean defence companies are poised to make significant local investments to establish defence material production capabilities. By laying the groundwork for in-region weapons production rather than solely exporting finished products, Korea aims to deepen cooperation within Europe. Illustratively, Korea previously contributed to the development of the Polish Krab turret onto the K9 self-propelled howitzer chassis. With Korea's extensive capabilities in producing both conventional and advanced weaponry, the nation could assume a pivotal role in addressing pressing security concerns within Europe. Meanwhile, Korean companies must demonstrate their reliability as suppliers in the European market by establishing a track record of successful exports to Poland.

CONCLUSION

Although Korea is not a member of the EU or NATO, its rapid production capability of weapon systems and sustained government investment in advanced weapon technologies make it an attractive collaborator for European entities. While Korea may not prioritise cooperation within Europe, its significant capacity for rapid weapon systems production, along with ongoing government investment in advanced technologies, highlights its appeal as a potential partner for collaboration. By engaging in joint efforts with European firms to locate weapon system manufacturing and provide comprehensive follow-up logistics support and maintenance, Korean companies have the potential to greatly enhance Europe's responsiveness to rapidly evolving security challenges. Such collaboration holds promise for expediting the recovery and stabilisation of the defence industry supply chain, effectively addressing both immediate and long-term security imperatives within the region.

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