

New Realities in Europe and the Middle East: Europe's Defense Realignment and Opportunities for Cooperation with Israel

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The attack by Hamas on October 7, 2023 has fundamentally changed the security situation in the Middle East. Terrorists were able to break the security fence between Gaza and Israel, enter villages, and brutally murder and kidnap hundreds. Simultaneously, thousands of rockets were fired towards Israel from Gaza. The attacks pose fundamental questions about the future of peace in the region and Israel's security promise towards its own citizens.

Against this backdrop, Chancellor Olaf Scholz promised the Israeli government any support that is needed. Initially, the requests by the Israeli Defense Forces (IDF) were limited. Two Heron Unmanned Aerial Vehicles (UAVs) that were used for training purposes by German soldiers at the Israeli base Tel Nof were handed over to the IDF after an Israeli request. Additionally, large quantities of medical supplies were provided.¹

Since the October 7 Hamas attack, German arms exports to Israel have multiplied. Between 2022 and 2023, they increased more than tenfold. The total turnover amounted to 32 million euros in 2022, while the exports authorized in 2023 (until November 2) equaled around 303 million euros.² Of the 218 individual authorizations, 185 were granted after the start of the war. To prioritize Israeli requests, a special panel has been created by the Federal Foreign Office, the Federal Ministry for Economic Affairs and Climate Action, and the Federal Office of Economics and Export Control in Germany. Of all German arms exports to Israel, weapons of war only constitute six percent (or 19 million euros). The rest include other armaments like armored vehicles, safety glass, and military transporters. Parts of missile defense systems and communication technologies are also reported to be a large

part of the deliveries. Furthermore, goods that do not need a special authorization, such as safety gear or medical supplies, are also among the exports.³

In Europe, the Russian attack on Ukraine from February 24, 2022 led to a wide-ranging reorientation of defense policies in Germany and Europe. In 2022 alone, the German government invested more than 50 billion euros in the German Armed Forces (Bundeswehr) and continues to provide additional 100 billion euros for military equipment through a special fund set up specifically for this purpose (Sondervermögen).⁴

In the long term as well, Europe's security is under threat. Experts estimate that Russia will need between five and ten years after an end to its war against Ukraine to restore its military in a manner that poses a serious threat to Europe. The procurement timeframe that determines Europe's defense capabilities within this timeframe starts now.⁵ Already today, Israel provides answers to tomorrow's challenges. This briefing analyzes the current realities and opportunities of cooperating with Israel to close existing gaps in German and European defense capabilities as quickly as possible.

Priorities in German and European Defense Policies

From the German perspective, strengthening the Bundeswehr, including its air defense capabilities, is the highest priority. Bureaucratic rules in procurement procedures are supposed to be removed and the special fund set up for this purpose provides a massive investment of 100 billion euros. In addition to the procurement of new technologies, such as F-35 fighter jets, restocking ammunition reserves after years of depletion is being prioritized. Produc-

MEMBER STATES OF THE EUROPEAN SKY SHIELD INITIATIVE

Founding member states
(since 2022)

New member states
(since 2023)

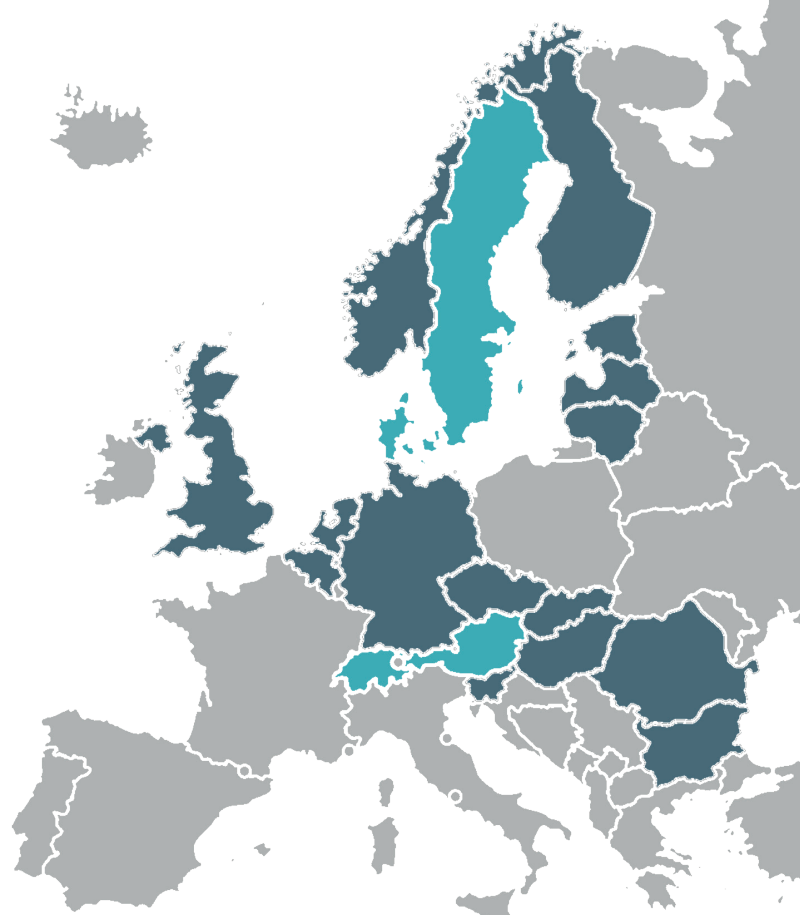
tion capacities are increased by collaborating with domestic and foreign industry.

In particular, improvements have been made in air defense. The European Sky Shield Initiative (ESSI), which was created following an initiative by the German government, aims to improve European air defenses and create “political, financial, and technological synergies.”⁶ So far, nineteen European states have joined the initiative.

As part of ESSI, Germany is purchasing Israeli Arrow 3 missiles with a range of up to 2,400km. Polls show that this step is welcomed by a significant share of the German population.⁷ The systems are supposed to provide protection against Intermediate Range Ballistic Missiles (IRBMs), including those leaving the atmosphere. Arrow 3 complements the existing Patriot systems that have a range of up to 68km.⁸ The Israeli systems have proven their effectiveness against continuous missile attacks by Hamas. The “sister system” to Arrow 3, Iron Dome, reportedly intercepted 95 percent of the rockets.⁹ As part of the ongoing war, Arrow 3 was used in combat for the first time ever on November 9, 2023. The system intercepted a long-range missile over the Red Sea. Heading towards the Israeli city Eilat, the missile is suspected to have been fired by the Yemeni Houthi rebels.¹⁰ According to Israeli reports, this was the first instance of an interception in space.

The ESSI member states currently do not own systems capable of protecting against similar threats. The integration of Arrow 3 into the existing NATO infrastructures is in need of an extensive transfer of knowledge and technology.¹¹ By doing so, it paves the way for further successful cooperation between the Israeli defense sector and NATO members.

However, the initiative does have its critics. The French government argues against ESSI and the



purchase of Arrow 3 with reference to European sovereignty. The procurement of Israeli technology is thus taken to create problematic dependencies. It is debatable whether this issue really exists. Israel’s interests as the only democracy in the Middle East are closely aligned with those of its western partners. The quick availability of Arrow 3, which will provide initial capabilities from the end of 2025, is another argument in favor of the purchase.¹²

Cooperation Regarding UAVs

In addition to air defenses, there are more areas for possible German-Israeli cooperation in the defense sector. These include concrete weapon systems, cyber security, as well as research and development cooperation such as in the field of UAVs. The current war in Gaza confirmed the relevance of UAVs for modern warfare, where both sides use UAVs in their operations. The October 7 terror attack began with a UAV attack targeting an Israeli Merkava tank. Other UAVs destroyed IDF communication infrastructure, hindering the coordination of the defense forces. Since the beginning of ground operations in the Gaza strip, Israeli soldiers are faced with UAV attacks that pose a particular challenge in the urban environment.¹³ The IDF are using both armed UAVs and unarmed reconnaissance UAVs. On November 3, 2023, the Pentagon confirmed that the US are using MQ-9 Reaper

UAVs above Gaza to locate the hostages still held by Hamas.¹⁴

Germany has been cooperating with Israel regarding UAV technology for a long time. Since 2010, the Bundeswehr has been leasing Israeli Heron UAVs and used them, among other operations, in Afghanistan. The Bundestag Budget Committee approved the lease of larger Heron-TP UAVs from Israel in 2018. On April 6, 2022, the same committee voted in favor of arming the UAVs for the first time against the backdrop of the Zeitenwende Chancellor Scholz proclaimed after the Russian invasion of Ukraine.¹⁵ Following this decision, Germany procured ammunition worth around 160 million US dollars from the Israeli armaments manufacturer Israel Aerospace Industries (IAI).¹⁶

Cyber Security: Israel as a Role Model in a Crucial Area of Defense Policy

Iran and its proxies have targeted Israel with cyber attacks for a long time.¹⁷ The attacks on October 7, 2023 were accompanied by intensive cyber attacks. For instance, apps warning against missile attacks were targeted and gave incorrect information to users. This included the false notification that a nuclear missile had been fired.¹⁸ In subsequent weeks, cyber attacks targeted non-Israeli infrastructure as well. States that are seen as supporters of the Jewish state suffered increasing attacks.¹⁹

Luckily, Israel's governments of the last decades have taken the threat seriously early on, and created an efficient cyber security infrastructure. In particular, the Israeli private sector and research institutions are responsible for much of the progress in cyber security: Israeli universities offer comprehensive cyber security programs, including the first doctoral program in the world that focuses exclusively on cyber security issues.²⁰ In addition, the country has been creating ideal surroundings for the establishing of startups over the last decades.²¹

Israel's National Information Security Authority (NISA) was created in 2002, working towards the security of public and private cyber infrastructures. A decade later, the Israel National Cyber Bureau (INCB) came into being. The INCB wrote the first national strategy and later established the National Cyber Security Autho-

riety (NCSA). Since its creation, the NCSA has been in charge of the operative management of cyber security activities. In 2017, NCSA and INCB were joined in the Israel National Cyber Directorate (INCD) – the central coordination body for cyber security matters. Behind the complex Israeli cyber security infrastructure stands the intention to properly prepare the country for current and future challenges.

The German government considers the conversion of cyber security infrastructure to be a political priority as well.²² This has been reaffirmed in the National Security Strategy published by the government in June 2023.²³ To do so, the Federal Office for Information Security (BSI) is set to be expanded into the “central point of contact for cyber security.” Improving the coordination of responsibilities is a crucial part of the cyber security agenda presented by Federal Minister of the Interior Nancy Faeser in July 2022.²⁴ Using Israel as a role model here could be beneficial to Germany.

Another relevant factor is the popular understanding of cyber security. While awareness is often missing in Europe, it is prevalent in the Israeli society. One reason for this are the cyber courses the IDF provide for conscripts, increasing awareness for the topic among the population. To gain successful and overall cyber security, Germany too must find ways to educate and create awareness in the civil society.

Possible Cooperation Regarding Military Innovation and Artificial Intelligence

Israel is a small country with a large army. Due to the relative size of economy and the armed forces, innovation is key for the capabilities of the IDF. These special conditions create an ideal environment for innovation. Without them, Israel would not have been able to persist against numerically superior adversaries in the past.²⁵ In the current war as well, military innovation help the IDF in fighting Hamas. The concept of “Qualitative Military Edge” vis-à-vis enemy forces defines the Israeli approach.²⁶

A system under current development is the missile defense system Iron Beam. It is supposed to add to the existing layers of Israeli air defense and tackle threats from a close range. Iron Beam is based on laser technology and is supposed to neutralize rockets,

missiles, artillery and mortar shells, as well as UAVs within a range of several hundred meters up to seven kilometers. The system was successfully tested in 2022 and is the first laser system of its kind, able to intercept different kinds of aerial threats.²⁸ The first systems, developed by DDR&D and the Israeli armament manufacturer Rafael, are supposed to be delivered in 2024. Even though Europe is concentrating on long-range missiles in the context of the Arrow-3 procurement, laser systems could become interesting for Israel's European partners in the long term. After all, the costs of laser-based systems are only a fraction of systems like Iron Dome.²⁹ This is relevant not least because Russia pursues strategies with Iranian UAVs similar to those Hamas or Hezbollah use against Israel: attacks with cheap technology necessitate expensive air defense systems, thus binding resources and diverting from other areas. Such a scenario would be possible in Europe as well.

Artificial intelligence (AI) and its military potentials add to the innovation of concrete weapon systems. The rocket defense system Iron Dome is already using AI to determine the ideal interception point of enemy rockets. The IDF are using AI in other areas, too. For example, an AI-based system helps the Israeli Air Force (AIF) to determine targets. To do so, software evaluates large quantities of data (e.g. pictures taken by UAVs) and suggests targets to military commanders. The software Fire Factory works in a similar way, helping to plan military operations. The system evaluates data about preselected military targets, calculates the needed amount of ammunition, and proposes schedules. Furthermore, it assigns targets and military priorities to planes and UAVs. Thereby, processes are shortened to a few minutes that would take hours if done manually. In both cases, final decisions are taken by humans. Nevertheless, the systems simplify the involved soldiers' task and, in the ideal scenario, help to minimize civilian casualties.³⁰ At the beginning of November 2023, the IDF confirmed the use of AI-based systems to determine military targets in the current war against Hamas. These included applications used for the first time.³¹ For example, 150 tunnels used by Hamas were identified and destroyed



within a short time with the help of these tools.³²

For Germany and Europe too, the military use of AI is a future priority. In 2022, the Bundeswehr tested an AI-based reconnaissance system.³³ The Bundeswehr Joint Situation Centre Cyber and Innovation Space (GLZ CIR) uses AI to create situation pictures.³⁴ In the Laboratory for AI, located at the Battalion for Electronic Warfare 912, the soldiers' digital competences are improved.³⁵

Although of late there has been progress in the AI sector, Europe still has a lot of catching up to do. The cooperation with Israel holds a lot of potential here, too. Modified versions of technologies that are already used by the IDF could be used by European armies. Projects in this vein are already being tested and are supported by the European Defence Fund, among others. The fund has been provided with almost eight billion euros for the period between 2021 and 2027 to support joint European defense projects.³⁶ Here, cooperation with Israeli partners could be useful.

Summary

Since the Russian invasion of Ukraine, Europe is facing a new threat level. Germany has understood that the European defense infrastructure must be realigned accordingly. In addition to the military support of its partner Israel, the German government also implements this through the European Sky Shield Initiative (ESSI) and the procurement of the Israeli missile defense system Arrow-3. However, the gaps in the German and European defense capabilities persist in many other areas as well. Here, cooperation with Israel offers the prospect of overcoming the challenges of tomorrow in five to ten years.

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