



From REARMing to SAFETY: Defence Capability Development Trends of the V4

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Introduction

The escalating aggression of Russia against Ukraine has significantly deteriorated the security environment of the Visegrad countries (V4), triggering an intensification of defence capability development in the region. Even the V4 are heterogeneous in this regard: Poland has been conducting continuous modernization of its armed forces since 2013, with intensifying periods after 2014 and 2022 (Lipka & Czub, 2024; Marcinek & Boston, 2025); Hungary began its comprehensive armed forces modernization program in 2016, not specifically triggered by Russian actions (Csiki Varga, 2024); while Czechia (Rod, 2024) and Slovakia (Katuška, 2024) mostly reacted after 2022, the full-scale Russian invasion of Ukraine. This analysis focuses on how the V4 countries advance the development of their armed forces after 2022, to identify synergies and highlight divergencies based on available empirical data. As the European Union has been ramping up its political, institutional and financial support for strengthening defence capabilities across the Union, the assessment also highlights the extent to which the V4 have been relying on the levers of ‘Europeanization’ of defence in terms of funds and frameworks for defence industry development. This aspect gains real significance by early 2025, when the Security Action for Europe (SAFE) national programs submitted to the European Commission for joint loan-funding will be evaluated and funding will be awarded for joint production, research and development projects across European and partner defence industries.

The research and analysis presented here build on two primary sources beyond the relevant literature: official datasets, and background expert interviews. Data were retrieved from the IISS Military Balance+ database reflecting the November 2025 situation, as well as the latest iteration of official datasets provided by NATO and the European Defence Agency (EDA). These are reliable comprehensive data sources based on individual countries’ data provision and aggregated by independent experts and international staff members. Interviews with professionals and stakeholders in European defence institutions and at the V4 countries’ defence establishments were conducted between October and December 2025, based on the Chatham House rule. (The list of anonymized interviews is provided at the end of the paper.) This is the most direct form of accessing and assessing primary insights of respective countries’ defence policy-making practices and the lessons learnt from the past four years.

This paper offers a data-driven assessment of the main triggers of defence modernization, and is organized as follows: Firstly, the military assistance extended to Ukraine, particularly in terms of major defence equipment, highlights the services and types of (legacy) equipment that require immediate replacement. Secondly, an analysis of the major procurement agreements signed by the Visegrad countries during the 2022-2025 period allows for conclusions to be drawn not only regarding the replacement of equipment transferred to Ukraine but also concerning the extensive defence modernization that has occurred. This analysis reveals the extent to which these procurements are motivated by the objective of contracting within the European Defence Industrial and Technological Base (EDTIB), the opportunities they present for interoperability among the V4—whether intentional or incidental—and the degree to which the localization of production and the development of national defence industries were considered during the negotiation of these deals. As a third pillar, the defence spending trends of the V4 are examined to demonstrate how resources support modernization efforts. Fourthly, an overview of the PESCO and EDF projects, with respective V4 participation, provides insight into the extent to which national defence industries have been able to engage in EU-driven multinational capability-development projects. This may indicate the potential realization of the SAFE defence industrial projects submitted by 30 November 2025, in terms of absorption capacity and lessons learned regarding time and cost overruns. Finally, policy recommendations highlight how the processes of continued defence modernization in the respective countries could be brought closer even in the near future. Even though major, comprehensive ‘V4’ production or development projects remain absent in the coming years, several bi- or trilateral projects underpinned by SAFE funds could – and should – be

realized.

Military support to Ukraine

One of the main triggers of defence modernization by the V4 is directly related to the Russian aggression against Ukraine: Soviet – Russian legacy equipment that was most compatible with the Armed Forces of Ukraine’s inventory had been transferred to Ukraine in significant quantities since early 2022, creating a need for replacement. Even though there is no full transparency for political reasons and to aid military operational effectiveness, we can get a glimpse of overall trends through the unique collection of verified data by Oryx, which highlights that the three Visegrad countries have taken a proportionately large share from equipment transfers, even with Hungary completely abstaining from providing direct military support to Ukraine, as shown in Table 1.

	Equipment provided total (pieces)	Equipment provided by V4 (pieces)	Share of equipment provided by the V4	CZE	POL	SVK	HUN
Aircraft	81+	27	33%	-	14 MiG-29	10 MiG-29AS/UBS, 3 MiG-29A/UB	-
Helicopters	71	29	41%	8 Mi-24V	12 Mi-24V, 2 Mi-8, 1 Mi-2AM-1, 1 Bell 412-HP	1 Mi-2, 4 Mi-17	-
Tanks	939+	452	48%	98 T-72M(1)*	280 T-72M(R), T-72M(1), 14 Leopard-2A4, 60 PT-91	-	-
Infantry fighting vehicles	14030	1036	7,4%	1 BPzV Svatavas, 50 BVP-1, 56 Pbv 501A, 25 unknown IFVs, 70 Roshel Senator	10 BRDM-2, 295 various types of AFVs, 250+ BWP1, 200 KTO Rosomak, 60 MT-LB, 19 AMZ Dzik-2	-	-
Artillery	789	375	47,5%	13 DANA 77 152mm, 30 DANA M2 152mm; 20+ RM-	10 D-44M 85 mm anti-tank guns, 112 2S1 Gvozdika, 108 AHS	24 Zuzana2 155mm***	-

				70 122mm**	Krab 155 mm, 24 M120 Raks 120mm, 34+ BM-21 Grad 122mm		
Anti-aircraft guns	375+	n.a.	n.a.	12 9K35 Strela- 10M, 2 2K12M2 Kub- M2****	n.a.	1 S- 300PMU	-
Air-to-air missiles	500+	n.a.	n.a.	-	-	n.a.*****	-

Table 1: Major equipment donated or transferred to Ukraine by the V4 countries in international comparison, 2022-2025. (Source of data: Oryx, 2025)

*: CZE: +90 T-72EA purchased from various sources with Dutch or American financial assistance, restored/upgraded in Czechia and delivered to Ukraine

** : CZE: +unknown number of 155mm D-20 purchased by Czechia from Bulgaria and delivered to Ukraine; + unknown number of 2S1 Gvozdika, unknown number of BM-21 Grad purchased by Czechia from Bulgaria and delivered to Ukraine, unknown number of RM-70 Vampir 122mm multiple rocket launchers

***: SVK: Zuzanas purchased by Ukraine (8), Germany, Norway, and Denmark (16)

****: POL: unknown number of Zu-23 2CP, ZSU-23-4 Shilka, Hybernet, S-125 Nawa SC, 9K33 Osa-AK(M), Osa-AK-P1

*****: SVK: unknown number of R27R1, R-73E, R-60MK air-to-air missiles for Su-27 and MiG-29 aircraft

We need to point out not only the significant ratio of V4 support compared to the overall international arms transfers to Ukraine (48% of tanks, 47.5% of artillery, 41% of helicopters, and 33% of aircraft), but also the sheer number of equipment transferred compared to the armed forces inventory of many European states. Even though most of the equipment was legacy and (soon) to be retired or in reserves for emergency scenarios, providing full squadrons of aircraft, hundreds of tanks, artillery, and more than a thousand armoured vehicles would even exceed the total active inventory of continental great powers.

Defence modernization

The second primary impetus for defence modernisation has been the military lessons learnt gained from the war, underscoring the necessity of state-of-the-art technology and the resilience of the armed forces (Halem, 2024; Slusher, 2025; Watling & Reynolds, 2025). Building on these insights, the V4 countries have accelerated their military modernisation efforts, with Poland leading as the most dynamic and successful, followed by Hungary's early accomplishments. Czechia and Slovakia have responded somewhat later, to the escalating violence, albeit with more limitations due to resource constraints. In the following, the most current data and information from the Institute for International Strategic Studies' Military Balance+ database will provide detailed overviews of these national procurement programs (IISS 2025).

Czechia

Czech procurements have focused on the air and land domains, with overseas (U.S., Brazil) purchases of air assets and European (Germany, Sweden) purchases of land assets. Similar to Hungary, the modernization of the air force was the first trench in Czechia, followed by land force modernization:

- Following an earlier purchase of AH-1Z Viper attack and UH-1Y Venom light transport helicopters from the United States (12 pieces in 2019), another deal was signed (eight pieces, with matching conditions and equipment) in 2022.
- The most significant – and expensive – procurement is the purchase of 24 F-35A Lightning II. fighter ground-attack aircraft and associated AIM9X Sidewinder and AIM-120C-8 AMRAAM air-to-air missiles, as well as GBU-53/B and BGU-31 JDAM guided bombs from the U.S (January 2024).
- Two KC-390M Millennium medium transport aircraft were procured from Brazil (October 2024).
- The modernization of Czech land forces will be underpinned by various purchases of land vehicles from Germany: 44 Leopard 2A4 tanks and Bpz-3 Büffel armoured recovery vehicles contracted in three trenches (November 2022, July and December 2024), as well as 44 Leopard 2A8 main battle tanks (September 2025).
- The land forces will also receive 246 CV9030 infantry fighting vehicles (May 2023) from Swedish prime and Czech subcontractors.
- Domestic production is also represented through the purchase of four L-39NG (Aero Vodochody) and eight Z-242L and Z-243L (Zlin) training aircrafts, as well as 18 Jackal 3 armoured utility vehicles (LPP) and 24 Titus protected patrol vehicles (ELDIS Pardubice).

We can observe an intensification of defence modernization in terms of new contracts signed over the years, even though 2022 does not represent a strong demarcation with some procurements – such as the purchase of 62 CAESAR 8x8 155mm self-propelled artillery from France and an unknown number of Spyder-MR surface-to-air missile systems from Israel – dating back to 2020-2021 (IISS 2025).

Hungary

As the Hungarian Defence Forces' comprehensive modernization started in 2016, most procurement agreements predated the 2022 escalation of the Russia – Ukraine war, both regarding air and land forces. Among these early procurements, that the KC-390 Millennium medium transport aircraft (from Brazil), Leopard 2A4, and A7HU main battle tanks (from Germany) were contracted, offering a higher degree of interoperability with regional allies such as Czechia. Procurements since 2022 include the following (IISS 2025):

- Twelve L-39NG training aircraft (Aero Vodochody, in Hungarian ownership since 2021) were contracted in April 2022.
- Hero loitering ammunition was contracted by Germany's Rheinmetall and Israeli UVision Air (July 2023).
- Skyranger 30 point-defence anti-air gun/missile systems were contracted from Rheinmetall Air Defence (December 2023).
- As a forward-looking project, Hungary joined the design, research, and development of Rheinmetall's KF51 Panther main battle tank project, in which Italy also participates (December 2023).

Both Hero and Skyranger should be considered as add-ons for the land forces' Lynx infantry fighting vehicles and Gidran protected patrol vehicles currently being manufactured. In sum, recent procurements have favoured European producers (over the U.S.) with systemic integration with the land segments of the German defence industry.

Poland

Defence modernization in Poland represents a different scale than the other Visegrad countries, with 43 high-value procurement contracts signed since 2022 with international and national manufacturers. Moreover, defence modernization has been continuous since 2013, materializing in a highly capable equipment inventory that also has a potential of ‘mass’. In this regard, Russia’s full-scale invasion in 2022 was not a demarcation but rather a catalyst. Given the large quantity of Polish orders for certain equipment types, some deliveries will reach the early 2030s, if fully realized, but significant amounts are already being delivered. Major procurements since 2022 encompass the air, land, sea, and space domains, with the most important ones summarized as follows (IISS 2025):

- 188 CAMM surface-to-air missile systems (April 2022, October 2022 and September 2023) produced by Polish defence industry.
- 96 Pilica point-defence anti-air gun/missile systems and the upgrade of 36 systems (October 2022) produced by the Polish defence industry.
- 48 M903 Patriot PAC-3 long-range surface-to-air missile systems (September 2023) procured and co-produced by Lockheed Martin, Northrop Grumman, and the Polish industry.
- FT-5 and BSP-U Gladius intelligence and surveillance light UAVs (May 2022), produced by the Polish Defence industry.
- 4 MQ-9A Reaper intelligence and surveillance heavy UAVs procured from General Atomics (October 2022); 3 MQ-9B Sky Guardian intelligence and surveillance heavy UAVs procured from General Atomics (December 2024)
- 2 Pleiades intelligence and surveillance satellites ordered from Airbus (December 2022); 4 MIKROGLOB intelligence and surveillance satellites ordered from Polish defence firm Creotech Instruments (December 2024); 3 MikroSAR intelligence and surveillance satellites ordered from Polish – Finnish company ICIEYE with further Polish industrial involvement (May 2025).
- Two Saab 340 Erieye airborne early warning and control aircrafts were procured from Saab (July 2023).
- 32 AW149 multi-role helicopters manufactured by the multinational company Avio Aero in Poland (July 2022) and eight AH-64D Apache Longbow attack helicopters leased from the U.S. (February 2025) and a further 96 ordered from Boeing to be delivered between 2028-2032 (November 2025).
- 48 FA-50 Fighting Eagle fighter ground-attack aircrafts manufactured by Korea Aerospace Industries (September 2022).
- 48 F-16 aircrafts will be upgraded to the equivalent of the F-16V (Block72) version, realized in Poland by the early 2030s in cooperation with Lockheed Martin (August 2025).
- 180 K2 Black Panther main battle tanks ordered from Hyundai Rotem and produced locally by PGZ and other Polish companies through technology-sharing (July 2022), with a further 180 K2 Black Panther tanks ordered for co-production mostly locally in Poland (August 2025).
- 250 M1A2 SEPv3 Abrams (August 2022) and 116 M1A1 Abrams (January 2023) main battle tanks manufactured by General Dynamics Land Systems.
- 221 Rosomak armoured personnel carriers and infantry fighting vehicles to be manufactured and further 87 to be upgraded and modernized under nine contracts (2022-2025) by Polish firms and partners.
- 111 Borsuk infantry fighting vehicles to be manufactured in Poland (by March 2025).
- 212 K9A1 Thunder 155mm self-propelled artillery to be manufactured by Hanwa Defence (August 2022), with a further 162 K9PL models contracted (December 2023).
- 290 K239 Chunmoo (Homar-K) 239mm multiple rocket launchers to be co-produced by Hanwa Aerospace and Polish firms (November 2022).
- 134 Krab 155mm self-propelled artillery to be manufactured in Poland in two trenches (September 2022 and December 2024).

This comprehensive picture shows that Polish defence modernization is significantly based on foreign procurements, while also strongly relying on national defence industrial capacities both as prime contractors and co-producers with foreign partners through technology sharing and the localization of production.

Slovakia

Defence modernisation in Slovakia witnessed a significant boost in 2022, with large-scale and high-value land-system procurements (IISS 2025):

- 76 Patria wheeled armoured personal carriers were manufactured in the co-production of Finland's Patria and Slovakia's EVPÚ (August 2022).
- 15 Leopard 2A4 tanks were purchased from Rheinmetall (November 2022).
- 152 CV9035 infantry fighting vehicles were manufactured in co-production by Swedish and Slovak defence companies (December 2022).
- 12 C-RAM MANTIS 35mm towed air defence artillery were procured from German government surplus in February 2023.

However, this momentum slowed down later, with several other procurement plans on the table, but not yielding signed agreements by 2025. two projects were prepared but then halted with U.S. manufacturers in 2023-2024: the possible sale of 12 Bell AH-1Z Viper attack helicopters, and 192 M1278A1/A2 Heavy Gun Carrier Joint Light Tactical Vehicles (JLTV) manufactured by Oshkosh. Ongoing negotiations with Poland include acquiring 36 Piorun man-portable air defence systems (MESKO), the Polish version of the K2 main battle tank, and the production of 155mm calibre ammunition and an armoured personnel carrier based on the Rosomak, fitted with the Slovakian Turra 30 turret system. Plans also include procuring one set of Barak MX medium-range air defence systems from Israel's IAI (IISS 2025). If these are realized, further steps in interoperability with Czechia and Poland will be achieved.

Common features of the procurement trends observable among the V4 since 2022 include:

- Apart from Hungary, most new procurements serve to replace the legacy equipment donated to Ukraine, particularly in the land and air defence domain.
- The strong emphasis on land forces also encompasses a generational upgrade to 21st century cutting-edge technology.
- Apart from Poland, most procurements prioritized European procurements over American or other procurements (Republic of Korea). Among European partners, Germany stands out, with significant contributions from the Swedish and Finnish industries. Israel is a meaningful contributor to air and missile defence.
- Procurement agreements mostly go beyond traditional offsets and directly establish the localization of co-production with foreign partners, sometimes also encompassing technology-sharing and R&D&I initiatives.

Besides modernization through large-scale procurements, the V4 armed forces themselves also expanded in terms of troop numbers (Figure 1) – by 23% in Hungary, 36% in Slovakia, 50% in Czechia and 236% in Poland between 2014-2025, according to national data reported to NATO (2025). The increasing trend since 2022 remained consistent, with 15, 8, 40, and 29% respectively in four years, reflecting the goal of creating more 'mass' and (modestly) strengthening territorial defence capabilities.

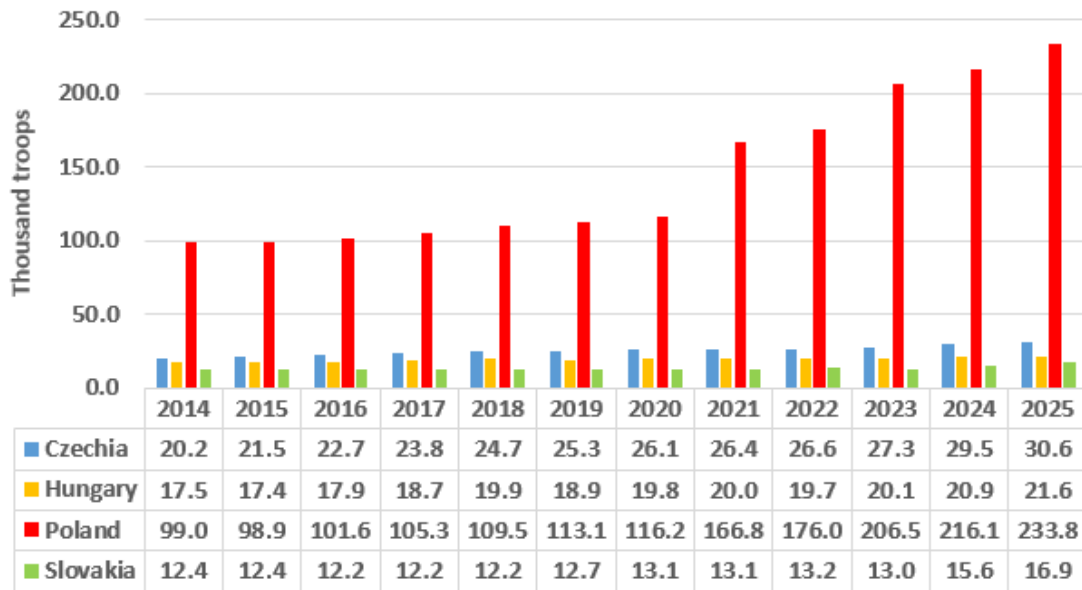


Figure 1: Increasing troop numbers in the V4 armed forces, 2021-2025* (thousand troops). Source of data: NATO, 2025.¹

Despite the increase in official figures, expert interviews highlighted that personnel concerns remained fundamental in future planning regarding both active and reserve forces, as equipping them, providing competitive salaries for the professional elements, and training manpower for the new generation of equipment create a significant burden on the defence establishments. In a broader sense, the willingness of the V4 population to fight and defend their countries, as well as allies, varies, as the latest Globsec trends also highlight. Compared to previous years, the trend has been positive, with an increasing willingness to actively participate in defence tasks. For example, in Poland, 89% said that voluntary forms of military service should be extended, as did 80% in Czechia, 68% in Slovakia, and 65% in Hungary. In Poland, 84% of the people were ready to defend their country, 81% in Czechia, 78% in Hungary, and only 49% in Slovakia. Collective defence commitments are supported by 89% in Poland, 88% in Czechia, 86% in Hungary, and 62% in Slovakia (GLOBSEC, 2025). Efforts to increase awareness, active participation, and commitment of the people should therefore be sustained.

¹ *: The data for 2025 is an estimate.

Defence expenditures

The effect of a destabilising security environment, especially highlighting the Russian challenge to the European security architecture by the full-scale invasion of Ukraine in 2022 is also visible in defence spending trends. Long-term NATO datasets show a dynamically increasing trend in real terms (Figure 2) and in terms of the GDP (Figure 3).

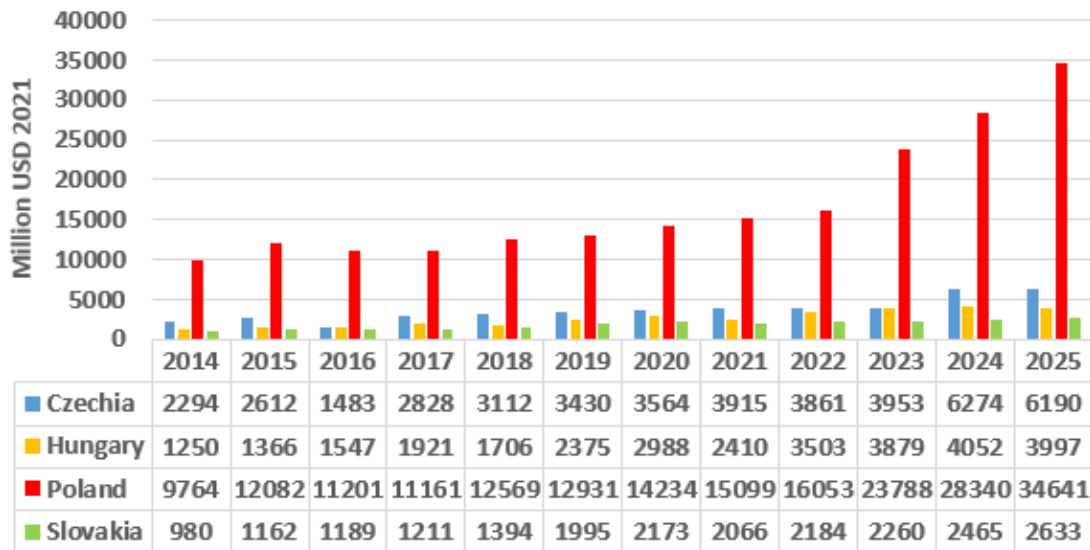


Figure 2: The defence expenditure trends of the V4 countries, 2014-2025* (at constant 2021 prices and exchange rates). Source of data: NATO, 2025.²

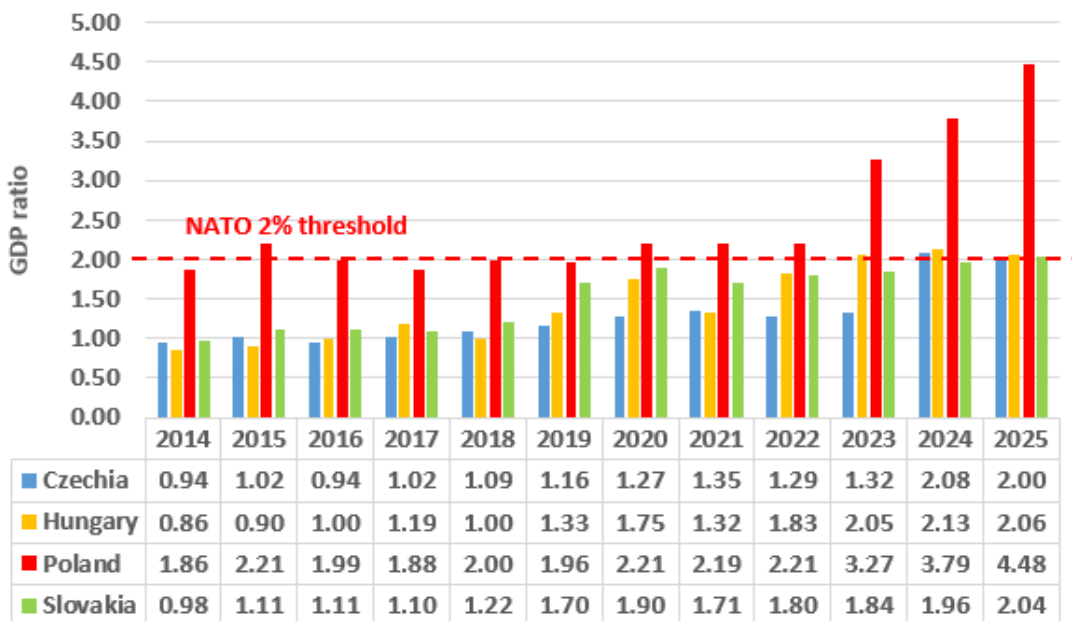


Figure 3: The defence expenditure of the V4 countries in terms of GDP, 2014-2025* (at constant 2021 prices and exchange rates). Source of data: NATO, 2025.³

² *: The data for 2025 is an estimate.

³ *: The data for 2025 is an estimate.

In real terms, Czech and Slovak military expenditures increased 2.7-fold, Hungarian 3.2-fold, and Polish 3.5-fold, making it possible to fulfil the Wales defence pledge of spending at least 2% of GDP on defence by 2024 and temporarily accommodating U.S. expectations in this regard.

The internal distribution patterns of defence spending (Figure 4) reflect the modernization drive that has generally been proportionate (above 20%) in Poland since 2014 and has shown dynamic modernization since 2021 (above 30%), reaching outstanding levels by 2025 (beyond 50%). In Hungary, dynamic modernization began in 2019 with a jumpstart, and equipment expenditures have remained high, mostly above the 40% threshold. In Slovakia modernization expenditure increased in 2019, similar

to Hungary, and remained at around 30%, while Czechia built up its acquisitions gradually. Parallely, as a general trend, personnel expenditures have significantly decreased from 50-70% to 30-40% despite the increasing number of troops in the national armed forces (NATO, 2025).

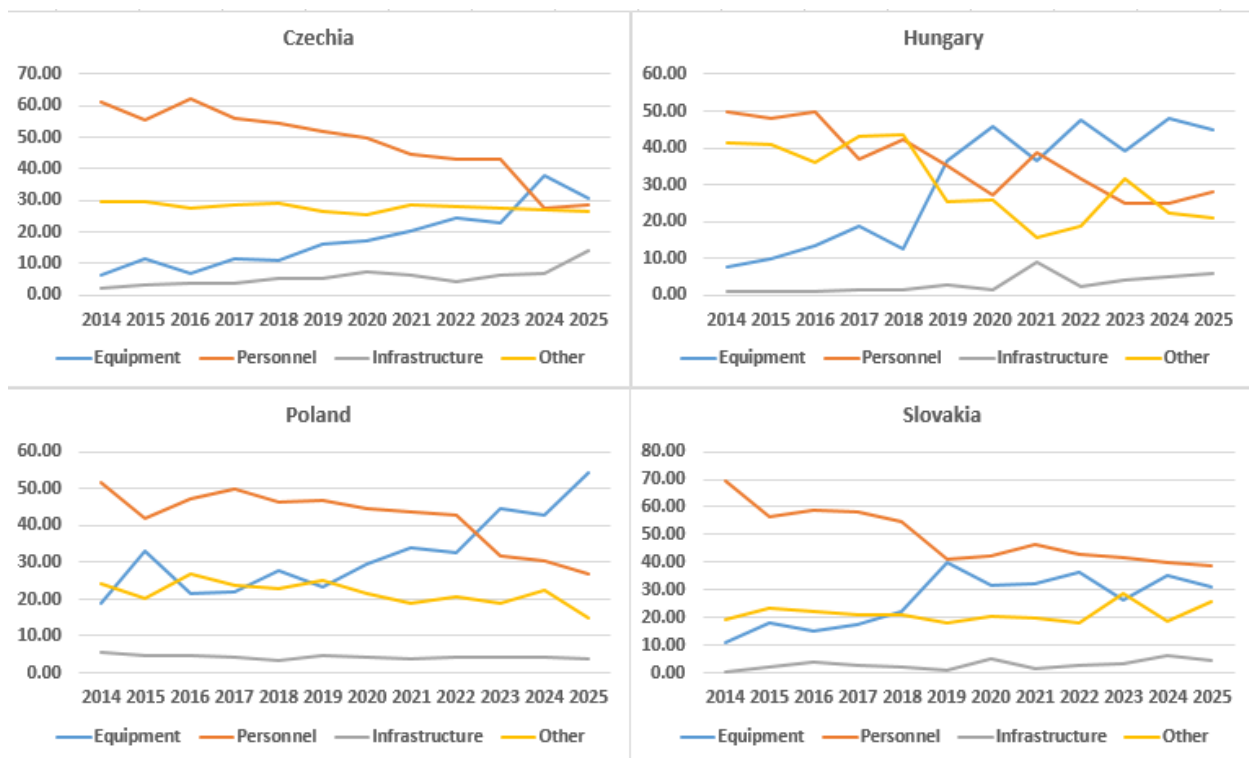


Figure 4: The internal distribution of defence expenditures of the V4 countries, 2014-2025* (ratio within the annual defence expenditure). Source of data: NATO, 2025.⁴

As the European Commission has been working on catalysing European defence industry development, extending production capacities, and providing sustained support to Ukraine beyond 2025, the V4 countries prepared meaningful plans within the SAFE framework. Tentative allocations based on EU member states' requests by 30 July showed that Poland aims to use 43.7 billion Euros, Hungary 16.2 billion Euros, Slovakia 2.3 billion Euros and Czechia 2.06 billion euros from this preferential loan scheme. The final decisions on project funding by the Commission are scheduled to be announced in Q1 2026.

⁴ *: The data for 2025 is an estimate.

Relying on EU frameworks for defence capability and industrial capability development

As the SAFE national plans, submitted by 30 November 2024 are not made public during the evaluation period, studying EU defence capability development frameworks from recent years offers insight into the technological potential and absorption capacities of V4 defence firms for participating in collaborative projects. Four such frameworks have been developed to address capability gaps and production shortfalls in Europe: Permanent Structured Cooperation (PESCO), European Defence Fund (EDF), Act in Support of Ammunition Production (ASAP), and European Defence Industry Reinforcement through Common Procurement Act (EDIRPA). While qualitative analysis on a case-by-case basis would directly help identify best practices and lessons learned, such comprehensive research is currently lacking. Nevertheless, an overview of participation in terms of scale and technological areas reveals V4's priorities, potentials, and limitations. To date, 75 PESCO projects have been initiated in six waves, with the V4 participating as follows (PESCO, 2025):

- Czechia has been a project member in 10 projects (two of which had been closed) and led one project (Electromagnetic Warfare Capability and Interoperability Programme for Future Joint Intelligence, Surveillance and Reconnaissance). These 11 projects focused on training and facilities (1), land, formations systems (3), Air systems (3), Cyber, C4ISR (1), and strategic enablers and force multipliers (3).
- Hungary has been a project member in 13 projects (three of which had been closed) and led one project (Integrated European Joint Training and Simulation Centre – EUROSIM). These 14 projects focused on training and facilities (3), Land, formations, systems (2), Air systems (3), Cyber, C4ISR (2), strategic enablers and force multipliers (4).
- Poland has been a project member in 12 projects (one had been closed) and led one project (Special Operations Forces Medical Training Centre – SMTC). These 11 projects focused on training and facilities (1), Land, formations, systems (1), Maritime (2), Cyber, C4ISR (2), Strategic enablers and force multipliers (4), and Space (2).
- Slovakia has been a project member in five projects (one of which has been closed) and has led one project (Indirect Fire Support Capability – Euroartillery, closed). These six projects focus on Training and facilities (1), Land, formations, systems (1), and Strategic enablers and force multipliers (3).

This pattern shows that all four countries put relatively greater emphasis on strategic enablers and force multipliers, which should ideally be the focal point of PESCO projects, while projects in the field of training and facilities, as well as Land, formations and systems are also much addressed. This is the consequence of two factors, as expert interviews revealed: Collaboration in training, along with the exchange of experiences in training and simulation, is regarded as a relatively straightforward opportunity. This is because it is facilitated by software and networks, relying less on the development and testing of new hardware. Cooperation regarding land formations is a shared interest and focus for the V4 as their respective defence modernisation programs also extensively focus on land forces' capabilities.

A closer look at the V4 countries' EDF participation patterns reveals some capacity constraints, particularly for Slovakia and Hungary (Table 2). Out of the 41-62 projects approved for funding annually, Poland has been participating to the greatest extent, signalling stronger research and development potential, while Czech participation has remained steady, Hungarian participation has become rather limited, and Slovak participation remains limited. Background interviews referred to the potential causes as limited political appetite and, particularly, capacity constraints regarding companies employing cutting-edge defence or dual-use technology able to join multinational projects.

	2021 (out of 61 projects)	2022 (out of 41 projects)	2023 (out of 61 projects)	2024 (out of 62 projects)
Czechia	13	6	8	8
Hungary	7	6	2	4
Poland	31	14	18	21
Slovakia	2	1	3	3

Table 2: The V4 countries' participation in EDF collaborative R&D projects, 2021-2024.

Source of data: European Commission, 2022, 2023, 2024 and 2025a.

Within ASAP, launched as an interim solution for boosting ammunition production to support Ukraine and replenish national weapons stocks, Hungarian and Slovak companies were awarded explosives production contracts, Czech and Slovak companies for gunpowder production, Czech, Hungarian and Polish companies for shells production, and a Slovak company for testing and reconditioning certification for artillery ammunition (European Commission, 2025b).

Out of the five EDIRPA-funded projects, there are two in which V4 companies participate: in the common procurement of MISTRAL very short-range air defence systems Hungary, while in the collaborative procurement of different types of 155mm ammunition Poland participates (European Commission, 2025c). Participation both in ASAP and EDIRPA primarily depended on available production capacities. In many cases, the companies involved are multinational or joint ventures, as in the case of Rheinmetall subsidiaries active in many European countries and benefitting from numerous contracts.

Conclusions and policy recommendations

This policy paper addressed the question ‘How did the V4 countries realize their armed forces development after 2022?’ through a data-driven assessment of the main triggers of defence modernization. The goal was to map synergies and point out divergencies based on available hard data and add an explanatory qualitative dimension through expert interviews conducted in October – December 2025.

The analysis indicates that, notwithstanding Hungary's abstention, Czechia, Poland, and Slovakia have extended substantial military support to Ukraine. This support includes full squadrons of aircraft, hundreds of tanks, artillery, and over a thousand armoured vehicles. Such contributions are particularly significant given that Soviet-Russian legacy equipment aligns most compatibly with the inventory of the Armed Forces of Ukraine, especially during the initial phases of the conflict. Collectively, these three Visegrad countries have accounted for a considerable proportion of equipment transfers, comprising 48% of tanks, 47.5% of artillery, 41% of helicopters, and 33% of aircraft. Thus, the replacement of transferred (legacy) equipment became one of the main triggers of defence modernization.

An overview of the major procurement agreements of the Visegrad countries signed in the 2022-2025 period based on the Military Balance+ database offers a picture of the extensive defence modernisation that is taking place. We can conclude that, apart from Hungary, much of the new procurement serves to replace the legacy equipment donated to Ukraine, particularly in the land and air defence domain. New contracts put a strong emphasis on land forces development with a generational upgrade to 21st century cutting-edge technology. Apart from Poland, most procurements prioritized European procurements over others (i.e. from the U.S. or the Republic of Korea). Among the European partners of the V4, Germany stands out, along with significant shares from the Swedish and Finnish industries. Israel is also meaningful contributor to air and missile defence. It is important to note that procurement agreements mostly go beyond traditional offsets and directly establish the localization of co-production with foreign partners, sometimes also encompassing technology-sharing, as well as R&D&I initiatives. In terms of these modernization projects, some synergies among the V4 can be identified (i.e. servicing Leopard-2 tanks, CV9030/9035 infantry fighting vehicles and KC-390M Millennium medium transport aircraft), but these are rather by chance, not by design, as procurements had not been planned in a coordinated manner, but strictly along national preferences. In this regard, nothing has changed throughout the past fifteen years, since ‘more coordination and more cooperation’ among the V4 has continuously been heralded. The data analysis also highlights that beyond force modernization through large-scale procurements, the V4 armed forces themselves also expanded significantly in terms of manpower: by 23% in Hungary, 36% in Slovakia, 50% in Czechia and 236% in Poland between 2014-2025. Furthermore, an expansion is planned by 2030, contingent upon favourable service conditions and the populace's willingness to actively engage in defence.

Defence spending trends underpin these efforts. In real terms, Czech and Slovak military expenditures increased 2.7-fold, Hungarian 3.2-fold, and Polish 3.5-fold in the past decade, creating fiscal room for major procurement projects and defence industry capacity expansion, as well as making it possible to fulfil the Wales defence pledge of spending at least 2% of GDP on defence by 2024. The internal distribution patterns of defence spending reflect these processes, with modernization expenditures increasing to 40% and beyond, and in parallel, personnel expenditures decreasing from 50-70% to 30-40% despite the increasing number of troops in the national armed forces.

For 2026 and beyond, extra funding for collaborative projects in the defence industry within the SAFE framework is expected, with tentative allocations for Poland at 43.7 billion Euros, Hungary at 16.2 billion Euros, Slovakia at 2.3 billion Euros and Czechia at 2.06 billion Euros. As the national plans submitted by 30 November 2025, are not public, the final decisions on project funding by the Commission scheduled for Q1 2026 will determine some of the most important and well-funded defence industry capacity development and production projects realized within EDTIB.

Regarding to the participating capabilities and absorption capacities of the V4, recent collaborative patterns in EU-funded defence industry development and production frameworks are indicative. Within PESCO, out of 75 projects, the V4 participates in 40 (sometimes more than one country, but not in a V4 constellation in any project), dedicating relatively greater attention to strategic enablers and force multipliers, training and facilities, as well as land, formations, and systems. Within the EDF, Poland plays the most dynamic role among the V4, signalling stronger research and development potential, while capacity constraints are observed, particularly for Slovakia and Hungary. Participation in both ASAP and EDIRPA projects primarily depends on available production capacities, relevant for all four countries, but mostly in multinational consortia or through leading international firms' local subsidiaries. Regarding all frameworks assessed, V4 coordination appears to be only incidental, and all-inclusive 'V4' production or development projects are missing.

Keeping in mind that the current environment – extensive pressure for strengthening defence capabilities, defence industrial output and European production autonomy, increasing the innovation edge, and dynamically increasing funding provided for these purposes – seems to offer favourable opportunities, experts have identified three main obstacles to join project development and deeper collaboration. First, political tensions and the lack of trust underpinning long-term commitment among national governments undermine cooperation and working relations. Second, the conventional logic of fiscal and economic nationalism, which strongly favours national development projects, remained fundamental at the time of relative abundance of resources. Third, in many cases it is exactly the constrained industrial capacities, technological know-how and innovation potential that make the identification of cooperation options and practical engagement difficult, because all four countries are looking outwards for technologically advanced partners (such as American, German and Israeli companies) that can provide incentives for innovation through technology transfer and existing production schemes, as well as access to international markets. In other words, the scope of what the V4 can offer each other in terms of defence industry development is currently limited.

Based on the results summarized above, and the input from expert interviews, the following policy recommendations are offered for the V4 governments and expert communities, as well as members of the defence industrial ecosystem:

1. Enhance the exchange of best practices regarding outreach and engagement models with citizens in the context of defence. This would be crucial for ensuring sustained commitment to defence modernization and capability development. This approach aims to foster a comprehensive understanding and support for investments in the defence industry.
2. Intensify expert cooperation on identifying synergies among the V4’s defence modernization programs, as well as defence industry development, also in a V4+1 format (the U.S., Germany, etc.).
3. Create a V4+Ukraine defence industrial forum.
4. Develop and disseminate a comprehensive V4 defence industry ecosystem stakeholder and competence map to identify potential collaborative partners, with a particular emphasis on Tier-2 and Tier-3 defence and related enterprises.
5. Share experiences on funding early-stage R&D projects (i.e. venture capital) for SMEs.
6. Create an online V4 defence and dual-use start-up meeting place for SMEs and start-ups.
7. Strive to re-energize the MoD and armed forces’ working group-level exchange of knowledge on defence among the V4.
8. Provide reasonable transparency in using SAFE funds.
9. Provide high visibility for cooperative projects funded by SAFE funds to set a good example.
10. Share lessons learned from the SAFE process with allies.
11. Intensify national participation in the PESCO, EDF – soon SAFE – evaluation and review processes to gain and share best practices. Conduct case-by-case qualitative analysis through focus-group interviews to identify best practices and lessons learnt,

The list of (anonymized) expert and stakeholder interviews

06 10 2025	Senior defence policy expert, Brussels
07 10 2025	Defence industry expert, Brussels
07 10 2025	Senior EU policy expert, Brussels
07 10 2025	Member of DG DEFIS, Brussels
08 10 2025	Senior military expert, Brussels
08 10 2025	Senior military officer, Brussels
08 10 2025	Senior EU ISS analyst, Brussels
09 10 2025	EDA representative, Brussels
09 10 2025	EDA representative, Brussels
10 10 2025	Senior defence policy expert (HUN)
14 10 2025	Defence industry expert (POL)
16 10 2025	Senior EU policy expert (Brussels)
28 11 2025	Defence industry expert (CZE)
01 12 2025	Defence industry expert (HUN)
03 12 2025	Defence industry expert (SVK)

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