



Will the Eastern Flank be Battle Ready?

Deterrence by 2030

GLOBSEC Future Security and Defence Council

Final Report

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Executive Summary

Deterrence has long been a key mission for NATO members of the eastern flank, but the eastern flank has evolved considerably since the Cold War, not least because of the historical and economic diversity of the region that now characterises it. Whereas the eastern flank comprised frontline states like Turkey, Italy, West Germany and Denmark during the Cold War, it now stretches from Finland (with Sweden likely to join soon), the Baltic countries of Estonia, Latvia and Lithuania, Poland, Czechia, Slovakia, Hungary, as well as Bulgaria and Romania.

The post-Cold War eastern flank has a more varied geopolitical landscape, with new member states having different historical experiences, threat perceptions and defence priorities. Moreover, significant disparities characterise the military capabilities of these countries. Overcoming these inequalities and differences in order to secure adequate defence capabilities of the eastern flank should be one of NATO's top priorities.

During the Cold War, the eastern flank was exposed to the Soviet threat. The eastern flank today is now threatened by Russian revisionism that is plainly evident in Ukraine. Whilst waging the war in Ukraine is proving costly to Moscow, Russia may yet find a way to reconstitute its military power by 2030.

NATO and its eastern flank members must therefore identify what measures they need to adopt now so that they can field the necessary capabilities in time to deter effectively against the Russian threat. Already eastern flank members have increased their defence spending, and as many of them have been draining their Soviet legacy stocks to aid Ukraine's defence, they now have the opportunity to recapitalise their militaries.

The purpose of this report is to identify the necessary eastern flank capabilities and readiness levels for a credible conventional deterrence by 2030. Credible conventional deterrence means

maintaining and deploying military forces, such as ground troops, air power and naval assets, that can effectively counter and repel potential conventional attacks.

Our focus on conventional deterrence does not diminish the importance of nuclear deterrence, economic and diplomatic pressure, or a willingness to defend but rather provides an in-depth perspective on building operational capabilities. Other identified components of deterrence, such as nuclear deterrence, will be studied closer in separate papers of the series on Re-learning deterrence under the **GLOBSEC Future Security & Defence Council**.

To bolster the eastern flank's deterrence capabilities, we recommend:

1. NATO's Ultimate Test: Members Must Meet Their Commitments

Fulfil commitments to expand battlegroups to brigade-level and help transition from rotational to permanent presence where needed. While upgrading battle groups may take time, maintaining the Madrid goal as a benchmark ensures readiness and capability assessment.

2. Stockpiling Power: NATO Needs a Game-Changer in the East

Ramping up production to pre-position equipment and ammunition across the eastern flank to bolster readiness and deterrence, while at the same time continuing to deliver capability to Ukraine.

3. Sink or Swim: Lack of Procurement Cooperation is a Security Risk

Build on successful initiatives of partnerships and joint strategies for procurement of equipment. This would help address gaps in coverage and delivery times which ultimately enhances regional security. Estonian – Latvian air defence partnership is a positive example.



4. Missile Defence Gap: A Wake-Up Call for Action

Prioritise investment and foster stronger regional cooperation in missile defence. Existing joint initiatives are a good step forward but are not enough to ensure effective countering of missile threats. More cooperation and more focus are needed to safeguard security.

5. From Legacy to Interoperability: Retaining Soviet Legacy Equipment is not an Option

Maintain and upgrade existing Western supplied platforms to extend their life and make them available for transfer to other nations. AI can be used as a capability enabler to fill in the gaps and promote modernisation and standardisation. Buying new is not the only path to achieve interoperability.

6. Unified Logistics: National Borders Are an Obstruction for Defence Planning

Prioritize logistics as another crucial area for cooperation. To enable swift troop and equipment transportation, aligning infrastructure is necessary.

7. Russia is a Rogue State: Outdated Agreements Should Be Discarded

Russia's actions, including crimes against Ukraine and territorial annexation speak for themselves. By upholding the NATO-Russia Founding Act, NATO limits its presence on the eastern flank and loses the advantage of deploying permanent forces.

8. The Peace Dividend Was an Illusion: Beware the Sleeping Bear

Remain vigilant of Russia's military capabilities, despite its losses in Ukraine. Russia should still be treated as a significant threat to the eastern flank and the countries should therefore

address their acute vulnerabilities to retain an effective deterrent.

9. Breaking the Chains: Energy Independence or Bust for the Eastern Flank

Reduce the energy dependency on Russia. This holds a strategic importance for the Alliance and should be one of the top priorities.

10. Invisible Warfare: Enhancing Cyber Defences for a Long-term Cyber Conflict with Russia

The eastern flank faces daily cyber-attacks from Russia. The countries need to update their cloud storage, engage with cyber industry leaders and seek support from NATO's Innovation Fund to enhance their defence capabilities.

11. Public-Private Dialogue: Enhancing Interoperability Through Defence Industries

Eastern flank countries need to foster close public-private dialogue with defence industries to fully enhance interoperability and deterrence capabilities by 2030.

Introduction

Russia's decision to launch a full-scale invasion of Ukraine in February 2022 was a transformative moment for European security. Although Russia has already seized Ukrainian territory since early 2014 to varying degrees of success, the magnitude and intensity of the fighting shocked most European countries, moving them to adopt measures that were previously unthinkable. European countries imposed massive sanctions on Russia and made serious strides towards reducing their dependency on Russian hydrocarbons.¹ Sweden and Finland applied to join NATO.² Military assistance to Ukraine expanded considerably.³ For its part, Ukraine put up fierce resistance, repelling and reversing Russian military advances on Kharkiv, Kherson and Kyiv.⁴

1 "In focus: Reducing the EU's dependence on imported fossil fuels", *European Commission*, 20 April 2022.

https://commission.europa.eu/news/focus-reducing-eus-dependence-imported-fossil-fuels-2022-04-20_en.

2 "Ratification of Finland and Sweden's Accession to NATO", *NATO Parliamentary Assembly*. <https://www.nato-pa.int/content/finland-sweden-accession>.

3 C. Mills, "Military Assistance to Ukraine since the Russian Invasion", *UK House of Commons Library*, 12 May 2023.

<https://researchbriefings.files.parliament.uk/documents/CBP-9477/CBP-9477.pdf>.

4 S. Jones, R. McCabe and J. Thompson, "Mapping Ukraine's Military Advances", *Center for Strategic & International Studies*, 22 September 2022.

<https://www.csis.org/analysis/mapping-ukraines-military-advances>.

Russia still has scored successes in its invasion, however. It managed to seize large swathes of territory in Ukraine's southern and eastern regions. As of writing, fighting remains fierce, especially in the Donbas. Russia has been able to use its artillery advantages to devastating effect. Crucially, although Russian ground and airborne forces have experienced serious attrition throughout the military campaign, the invasion has revealed how Russia is willing to take extraordinary risks and absorb massive economic and personnel costs in the pursuit of its international objectives. Russia's aggression against Ukraine reveals such hostile intentions as to make one wonder whether NATO can truly practice deterrence in the foreseeable future.

Deterrence had already returned to the top of NATO's agenda after Russia's capture of Crimea in 2014. However, since February 2022, the ongoing Russo-Ukrainian War has allowed for a new assessment of deterrence along NATO's eastern flank. To deter a potential adversary requires making it believe that the costs of attack outweigh its benefits. At its simplest, deterrence can involve either discouraging an adversary from undertaking such unwanted actions through significant retaliation (deterrence-by-punishment) or complicating the ability of the adversary to achieve its war aims through fighting (deterrence-by-denial).⁵ In this report, we address how the eastern flank can improve deterrence-by-denial by focusing specifically on the conventional or traditional war-fighting domain in light of recent regional developments.

We argue that, considering that Russia may yet find a way to reconstitute its military power by 2030, eastern flank countries must identify what measures they need to adopt now so they can field the necessary capabilities in time.⁶ Deterrence is essential for preserving the peace with a hostile adversary like Russia. Because NATO's response to Russian aggression against Ukraine in 2014 was arguably weak, and that Russia wrongly inferred that Ukraine's readiness and ability to defend itself in 2022 were low, NATO cannot afford for deterrence

to experience more failure. With Ukraine currently engaging Russian forces and, in effect, buying time for NATO to boost its own capabilities, we focus on which conventional deterrence and denial capabilities may be essential. To bolster local deterrence, our recommendations include, among others, abandoning self-imposed limitations on permanent basing in the eastern flank; expanding existing forward deployed units and pre-positioned equipment; encouraging greater cooperation on procurement, with a special focus on air defence, munition production, coastal defence; and improving logistical links.

This report is comprised of three main parts. First, we will look at how NATO has practiced deterrence in the past vis-à-vis- Moscow before examining the contemporary context. Second, we will take stock of the capabilities that members across the eastern flank have been acquiring to improve their own national postures. The third section looks at the adjustments needed for the European defence industrial basis to make deterrence sustainable and credible beyond the short term. These will be followed by recommendations on how the Alliance could move forward.

⁵ S. Quackenbush, "Deterrence Theory: Where Do We Stand?" *Review of International Studies*, vol. 37, no. 2 (2011), 741-762.

⁶ Accordingly, we choose not to address nuclear deterrence or disinformation for the sake of analytical simplicity.

I. Deterrence along the Eastern Flank: Past and Present

NATO relies on the collective defence commitment outlined in Article 5 of the North Atlantic Treaty, which states that an attack against one member state is considered an attack against all members.⁷ This commitment serves to discourage aggression by ensuring that any potential adversary would face the combined military capabilities of all NATO member states. During the Cold War, NATO's eastern flank primarily referred to those frontline members that bordered the Soviet Union and other members of the Warsaw Pact. These countries, such as West Germany, Norway, Denmark and Turkey, were crucial for NATO's forward defence strategy, which aimed at countering potential aggression from the Warsaw Pact. Indeed, the basic problem animating NATO defence planners for much of the Cold War was the real or perceived conventional military superiority of the Soviet Union and its Warsaw Pact satellites in Central and Eastern Europe. Because the Soviet Union had a locational advantage by dint of its geography, the United States faced a persistent credibility deficit: it was always going to be separated by an ocean and often had to rely on the threat of rapid nuclear escalation to compensate.⁸

To make up for this credibility shortfall, the United States (along with the United Kingdom, Canada and other allies) forward deployed military forces on West German and other allied territories to signal "skin in the game" and to bring combat effectiveness to bear.⁹ The result was a major basing presence. Being the cornerstone of NATO's forward defence, West Germany housed a significant number of US and other allied troops at its numerous bases. In the early 1980s, about 250,000 US troops were stationed in West Germany, alongside British, Canadian, Belgian and Dutch forces.¹⁰ Indeed, eastern flank

states largely bore the burden of NATO's deterrence posture, hosting key military installations and maintaining substantial military forces. Notable military bases included Ramstein Air Base in West Germany, the largest NATO-controlled air base in Europe, and Incirlik Air Base in Turkey, which played a critical role in providing access to the Middle East and the Black Sea region. With NATO eventually adopting a strategy of flexible response, which sought to enhance deterrence by expanding the range of military options against Soviet attack, frontline NATO members developed conventional forces that would help repel a limited attack without necessarily resorting to the strategic use of nuclear weapons. West Germany's military, the Bundeswehr, thus played a vital role, with a peak strength of nearly 500,000 personnel during the 1980s.¹⁰

The end of the Cold War and the disintegration of the Soviet Union completely altered European security for the better. A peace dividend ensued as the Red Army withdrew to Russian territory, and countries once part of the Soviet bloc had now restored or gained their independence. The diminished stature of the Russian armed forces and the promise of cooperative security made deterrence and defence less a priority than the ethnic conflicts that were flaring up on NATO's doorstep in south-eastern Europe. Against this backdrop, the Alliance saw successive waves of enlargement to include those countries that sought to enhance their security and promote civil-military reforms.¹¹

This enlargement redefined NATO's eastern flank, which now encompassed Poland, Czechia, Hungary, the Baltic states (Estonia, Latvia and Lithuania), Bulgaria, Romania and Slovakia. These countries make up a diverse geopolitical landscape, given how they each have their own historical experiences, threat perceptions and defence priorities, to say nothing of the disparities in their military capabilities. Still, many European countries, including those new to

7 "Collective Defence and Article 5", NATO, 14 April 2023. https://www.nato.int/cps/en/natohq/topics_110496.htm.

8 S. Rogov, "NATO and Russia: A View from Moscow", *Politique Etrangère*, vol. no. 5 (2009), 107-121.

9 "My Country and NATO", NATO. https://www.nato.int/cps/en/natohq/declassified_185912.htm.

10 J. Gotkowska, "USA – Germany – NATO's eastern flank. Transformation of the US military presence in Europe", *Ośrodek Studiów Wschodnich Centre for European Studies*, 14 August 2020. <https://www.osw.waw.pl/en/publikacje/osw-commentary/2020-08-14/usa-germany-natos-eastern-flank-transformation-us-military>.

11 "Enlargement and Article 10", NATO, 12 April 2023. https://www.nato.int/cps/en/natohq/topics_49212.htm.

NATO, would reduce their military budgets throughout the 1990s and into the 2000s, ridding themselves of much kit in the process.¹²

Much of NATO's deterrent posture had to hinge on the stated promise of the stronger allies to come to their aid from afar, if not resort quickly to the use of nuclear weapons. Eastern flank allies were already starting to take territorial defence seriously again before 2014, but the events of that year—specifically, Russia's seizure of Crimea and subsequent destabilisation of the Donbas—gave new impetus for NATO to go about this task. It was only a few years prior to 2014 that NATO formulated plans to defend the Baltic countries. Still weakened by financial austerity, the Baltic countries had few military capabilities and hosted no forward presence on the part of their stronger Western allies. After all, the NATO-Russia Founding Act (NRFA) of 1997, which aimed to promote cooperation and trust between NATO and Russia in light of enlargement, limited the size and scope of the permanent military presence on the territory of new NATO member states.¹³ However, permanently deployed forces have many benefits over rotational ones. They generally have greater familiarity with host country forces and the terrain that they serve to defend, higher morale, stronger cultural proficiency, higher manning rates and better interoperability. To build trust with Russia and to promote cooperation in the context of enlargement, NATO eschewed these practical benefits by making the NRFA underpin the strategy.¹⁴

The 2014 Wales Summit recognized these challenges, with NATO members pledging to significantly increase defence spending and create the Very High Readiness Joint Task Force.¹⁵ Two years later, at the 2016 Warsaw Summit, NATO members agreed to form the enhanced Forward Presence (eFP)—a set of battalion-sized multinational battlegroups deployed to Poland and each of the Baltic countries.¹⁶ These

battlegroups operate under NATO command through the Multinational Corps Northeast Headquarters in Szczecin, Poland. Deployments for the battlegroups are rotational so as to remain within the NRFA. For each battlegroup, a Framework Nation provides the main suite of capabilities that form the backbone of the deployment, with the United States being the one for Poland, the United Kingdom for Estonia, Germany for Lithuania and Canada for Latvia as regards to the eFP. Russia's invasion of Ukraine in 2022 prompted the creation of new battlegroups in Bulgaria, Hungary, Romania and Slovakia where Italy, Hungary, France and Czechia are the leading countries, respectively.

NATO's force posture along the eastern flank, therefore, consists of three core elements. Constituting the first and most important element are the national armed forces of the eastern flank members. The multinational deployments that operate under NATO auspices provide the second element. The eFP is the most visible arrangement in this respect. The third main element is what non-eastern flank members provide on a bilateral basis to countries located in the region. For example, the United States has pre-positioned military equipment throughout the Baltic region and elsewhere, sometimes deploying smaller units on a rotational basis to those countries. Most importantly, aside from leading the local eFP battlegroup, the United States had, before 2021, placed in Poland an Army division-level Mission Command Element, an Army Aviation Task Force, elements of a rotational Army Armoured Brigade Combat Team, a U.S. Navy Detachment to develop an Aegis Ashore missile defence site, an Army Logistics Task Force and U.S. Air Force Detachment.¹⁷

The eastern flank has thus seen significant change even before 2022. That Finland and Sweden moved to join NATO following Russia's full-scale invasion of Ukraine only adds to its complexity. Indeed,

12 J. Techau, "The Politics of 2 Percent: NATO and the Security Vacuum in Europe", *Carnegie Endowment*, September 2015. https://carnegieendowment.org/files/CP_252_Techau_NATO_Final.pdf.

13 "Founding Act on Mutual Relations, Cooperation and Security between NATO and the Russian Federation signed in Paris, France", *NATO*, 27 May 1997. https://www.nato.int/cps/su/natohq/official_texts_25468.htm.

14 J. Deni, "Rotational Deployments vs. Forward Stationing: How Can the Army Achieve Assurance and Deterrence Efficiently and Effectively?", *U.S. Army War College*, 2017.

15 "NATO Response Force", *SHAPE*. <https://shape.nato.int/nato-response-force--very-high-readiness-joint-task-force>.

16 A. Lanoszka and M. Hunzeker, "Evaluating the Enhanced Forward Presence After Five Years," *The RUSI Journal*, 2023, 1-10.

17 A. Feickert, K. McInnis and D. Mix, "U.S. Military Presence in Poland", *Congressional Research Service*, 4 August 2020.

Nordic countries like Sweden have not generally perceived themselves as being part of the eastern flank. Yet their positioning on the Baltic Sea makes them operationally implicated in at least those issues related to the Baltic countries, especially considering how this body of water is the site of extensive critical infrastructure and major trade routes. Their inclusion into NATO also strengthens the connection between the Baltic and Arctic seas, a highly complex and demanding environment. In light of these conditions, NATO must emphasise cooperation and collaboration among its member states and partners, particularly in the areas such as intelligence sharing, joint exercises and interoperability.¹⁸

II. Enhancing Deterrence and Defence along the Eastern Flank

Russia's performance in its full-scale invasion of Ukraine has been the subject of much critical observation — even ridicule — from many military analysts. In losing large numbers of military personnel and at least 10,000 visually confirmed vehicles, the Russian Armed Forces have confounded widely-held expectations that it would be able to achieve victory relatively quickly.¹⁹ Poor equipment, low morale, disorganised command structures and logistical challenges have hampered Russian military operations. Many Russian units — including those based in Kaliningrad or near Estonia (e.g., 11th Army Corps and the 76th Guards Air Assault Regiment) — have suffered serious attrition.

Nevertheless, the view that deterrence now has a low price in the aftermath of Russia's invasion of Ukraine would be mistaken for several reasons. First, despite incurring those material losses and being the subject



Map taken from: https://www.nato.int/nato_static_fl2014/assets/pdf/2022/3/pdf/2203-map-det-def-east.pdf

¹⁸ GLOBSEC Private-Public Sector Dialogues

¹⁹ For a representative view, M. Kofman and J. Edmonds, "Russia's Shock and Awe: Moscow's Use of Overwhelming Force Against Ukraine", *Foreign Affairs*, 2022. On Russia's vehicular losses, see "Attack On Europe: Documenting Russian Equipment Losses During The 2022 Russian Invasion Of Ukraine", *Oryx*, 24 February 2022, <https://www.oryxspioenkop.com/2022/02/attack-on-europe-documenting-equipment.html>.

of devastating sanctions, the Kremlin shows no signs of moderating its maximalist war aims against Ukraine. That Russia can endure such losses testifies to its resolve in pursuing those maximalist aims as well as its intent on replenishing its force posture. Second, Russian air and naval forces remain largely intact to say nothing of its nuclear weapons arsenal. Along these lines, Russia can reconstitute ground units through mobilisation.

Moreover, whatever the strategic and tactical incompetence that might have characterised its military operations, Russia's way of war is brutal and has exacted a hefty price on Ukraine, its population, its infrastructure and its environment. Moreover, Russia possesses significant artillery advantages that Ukraine has had difficulty in overcoming. Its use of various missile types and drones to attack Ukrainian critical infrastructure and population centres from the air may not have yielded clear strategic gains for Russia, but they have imposed significant costs on Ukrainian society and strained local air defence systems.²⁰ Finally, Russia does undertake many malicious activities across multiple vectors against NATO members even if no state of war exists. Russian propaganda channels repeatedly make unsettling references to launching military strikes against NATO members. The eastern flank has been subject to daily cyber-attacks on state and critical infrastructure of Russian origin.²¹ Although European countries have taken great pains to reduce their dependency on Russian hydrocarbons, they remain vulnerable to Russian energy coercion.

In view of Russia's wanton military aggression against Ukraine, NATO updated its Strategic Concept at the Madrid Summit in June 2022. Previously, the Alliance's core tasks were defined in the 2010 Strategic Concept as collective defence, crisis management and cooperative security.²² The new Concept retains those three core tasks, with minor

changes: "deterrence and defence" replace collective defence, and "crisis prevention and management" replaces crisis management. The 2022 Strategic Concept is "deterrence and defence-centric," shifting NATO away from its previous focus on crisis management. The eastern flank policy reset, that followed the invasion in February 2022, reinforced existing forces (such as the enhanced Forward Presence²³), deploying new forces at the Alliance's periphery and reviewing NATO's force model and level of preparedness.²⁴ One key decision was to upgrade the eFP battlegroups from a battalion to a brigade.

Given the depth of the politico-military challenge that Russia still poses, what else can the Alliance do to enhance deterrence and defence along the eastern flank? To be sure, the eastern flank is but one flank with many fronts. Spanning the area between Finland and Bulgaria, its regional breadth is huge. Analysing the flank on a country-by-country is too exacting. For our purposes, we see the flank in three main tiers: the Nordics, the north-eastern region that comprises the Baltic countries and Poland; the 'interior' countries of Czechia, Slovakia and Hungary; and the Black Sea countries of Bulgaria and Romania. Each of these tiers have different needs and thus different capabilities that they might wish to bring to bear.

The Nordics

The Nordics represent the newest addition to NATO's eastern flank in its post-Cold War history. Whilst Norway and Denmark were the flank nations during the Cold War, Sweden and Finland were formally neutral. Since the end of the Cold War Sweden and Finland have joined the EU and have established very close relationships with NATO. Following the Russian invasion of Ukraine, the two countries filed to join NATO, with Finland officially becoming the 31st

20 S. Mansoor, "Why Experts Are Growing Alarmed About Ukraine's Air Defenses", *TIME*, 13 April 2023.

<https://time.com/6271538/ukraine-air-defense-shortages-russia/>.

21 W. Sędkowski, "Cybersecurity of NATO's Eastern Flank", *The Warsaw Institute Review*, 26 August 2021.

<https://warsawinstitute.review/news-en/cybersecurity-of-natos-eastern-flank/>.

22 "Strategic Concept 2010", NATO, 19 November 2010. https://www.nato.int/cps/en/natohq/topics_82705.htm.

23 "Deterrence and Defence," NATO, 12 September 2022, https://www.nato.int/cps/en/natohq/topics_133127.htm.

24 T. Tardy, "NATO's New Strategic Concept", NATO Defence College, 2022. and "NATO's Military Presence in the East of the Alliance," NATO, 21 December 2022, https://www.nato.int/cps/en/natohq/topics_136388.htm.

member of the Alliance on the 4th of April 2023.²⁵ Although the Swedish application is still being held up by Turkey, as of writing, it seems only a matter of time before Sweden joins the Alliance as its 32nd ally, reinforcing the eastern flank of the Alliance in the process and thus consolidating NATO's presence in the Baltic region. Indeed, formal alliance membership of these two allies might not necessarily adjust the balance of power in the Baltic Sea – effectively being turned into a NATO territory – but it will extend the reach of Article 5 while enshrining their consistent participation in various NATO proceedings and decision-making. Nevertheless, how they will orient themselves on the eastern flank remains unclear. They could very well assume the same perspective as the North-Eastern group precisely because of their location on the Baltic Sea. However, they could yet forge a separate subgroup, perhaps by capitalising on existing levels of cooperation with other Nordic countries through such formats as Nordic Defence Cooperation (NORDEFCO).²⁶

The two countries have sophisticated defence industries, able to produce a whole range of defensive equipment, including fighter jets, submarines, armed vehicles and more. Finland has many more short-range air defence systems than the neighbouring Baltic states, but it is only starting to plan for acquiring medium-range systems. In contrast, tucked as it is in Northern Europe, Sweden has already acquired a Patriot PAC-3 missile defence system and reactivated a medium-range air defence system called Launch Unit 23.

Because of their size, historic investment in defence and geographical location, Sweden and Finland have relatively capable armed forces. Sweden plans that the 60 x Gripen E's on order will be operated in parallel to Gripen C/D's which will continue to be upgraded and operated for many years and certainly beyond 2036. This roadmap will ensure that Gripen will continue to be the backbone of the Swedish Air

Force into the 2060s. Sweden will continue to rely on a dispersed concept of operations, where Gripen's are deployed across the country in remote locations to further mitigate the risk from long range enemy missile attacks. In late 2020, Finland announced the purchase of 64 F-35As for the Finnish Air Force and with all aircraft planned to be delivered by 2030. Finland should, therefore, have at least its first F35 squadron fully operational by 2030. Finland, which has the longest border with Russia, can mobilise a force of up to 285,000 personnel strong in wartime. Unlike Sweden, Finland acquired long-range strike capabilities that could be used against assets located within Russian territory.²⁷

The North-Eastern group

The North-Eastern group and Nordics are the only part of the eastern flank – and the entire Alliance, for that matter – where NATO has a direct land border with Russia. This geographical reality thereby makes the Baltic region highly vulnerable. Moreover, Russia can bring not only ground forces to bear but also air and naval assets stationed in the Kaliningrad exclave, which sits between Lithuania and Poland in the southeastern corner of the Baltic Sea. Connectivity on land is a problem. Finland and Sweden are separated from the Baltic countries, which only have a land bridge through the Polish-Lithuanian border – a thin slice of territory.²⁸ Complicating matters is that rail networks in the Baltic countries use a different gauge than the rest of European NATO.

The threat, in other words, is multi-vector and much more sophisticated than elsewhere along the eastern flank. For this reason, it has received the most attention and priority since 2014, as evinced in the eFP deployments that began in 2017. With Finland joining and Sweden about to join the Alliance, the Baltic Sea largely comes under the control of NATO. Perhaps as a result of the region's vulnerability, support for NATO is strongest here. The Baltic states

25 Finland joins NATO as 31st Ally, NATO Communication on the 4th of April 2023 https://www.nato.int/cps/en/natohq/news_213448.htm#:~:text=Finland%20became%20NATO%27s%20newest%20member,at%20NATO%20Headquarters%20in%20Brussels.

26 Håkon Lunde Saxi, "The Rise, Fall and Resurgence of Nordic Defence Cooperation," *International Affairs* 95, no. 3 (2019): 659-680.

27 Charly Salonijs-Pasternak, "Friends with (Some) Benefits: How Non-Allied Sweden and Finland View Long-Range Conventional Precision Strike," *Nonproliferation Review* 27, no. 1-3 (2020): 61-79.

28 Some experts say that this land bridge is a major vulnerability. For a dissenting view, see A. Lanoszka, "Myth #2: 'The Suwalki Gap Matters', *Chatham House*, 14 July 2022, <https://www.chathamhouse.org/2022/07/myths-and-misconceptions-around-russian-military-intent/myth-2-suwalki-gap-matters>

and Poland stand out as being most committed NATO allies, with the most developed willingness to deter Russia.²⁹

Poland and the three Baltic countries of Estonia, Latvia and Lithuania have all made moves to improve their own national armed forces. All countries have pledged to continue increasing their defence budgets into the foreseeable future, going beyond the threshold of spending 2% of their gross domestic product (GDP) that NATO members pledged to do in 2014.³⁰ Lithuania and Latvia reinstated male conscription in 2015 and 2022, respectively.³¹ Hence, they now have an opportunity to accelerate military modernisation and, in some cases, to consider acquiring compatible, if not common, military equipment.

By far the most populous of the four countries, Poland has announced several large defence acquisition projects that include 250 U.S.-made Abrams tanks and up to 18 HIMARS rocket launchers and 500 launcher loader module kits as well as 180 South Korean-made K2 Black Panther tanks, 200 K9 Thunder howitzers.³² Given the impressive size of these procurements, Warsaw will not only need to generate the required funding for them, but it also must fulfil its plans to grow its armed forces while maintaining, sustaining and enabling the capability that these purchases are intended to generate.³³ Poland also has 32 x 5th Generation F35A's on order, training to begin next year, with all aircraft planned to be delivered by 2030. Poland should therefore have

at least its first F35 squadron based at 32nd Tactical Air Base in Łask fully operational by 2030.

The Baltic states are also making considerable investments. Estonia has purchased 12 K9 Thunder howitzers, whereas Lithuania is awaiting the full delivery of 88 German Boxer infantry fighting vehicles.³⁴ Lithuania has also purchased 200 armoured U.S.-made Joint Light Tactical Vehicles, 16 German PzH 2000 howitzers, 18 French-made Caesar Mark II howitzers and eight HIMARS rocket launchers.³⁵ Latvia has also invested in long-range artillery rocket systems.³⁶

Much of the local deterrence and defence posture in the Baltic Sea region risks being overly ground-centric, though, with key air and maritime capabilities being, until very recently at least, largely neglected. Except for two NASAMS systems that Lithuania acquired in 2020, the air defence systems that the Baltic countries possess have short-range capabilities and are mostly used to provide force protection for military units.³⁷ This deficit is unsurprising given the small size of these countries and the subsequent budgetary constraints that they confront. In terms of maritime denial capabilities, the Latvian government recently approved a \$110 million purchase of U.S.-made Naval Strike anti-ship missiles to strengthen its coastal defences while Estonia agreed in 2021 to buy Blue Spear 5G missiles for its own coastal defence system. Lithuania has no such capabilities, whereas Poland might also buy large amounts of the Naval Strike missile.³⁸

29 M. Zaborowski, "Central European Security: History and Geography Matter", NDC Policy Brief, April 2021, <https://www.ndc.nato.int/news.php?icode=1528>.

30 T. Lawrence and W. Runkel, "Defence Spending: Who Is Doing What?", *International Centre for Defence and Security*, 9 February 2023, <https://icds.ee/en/defence-spending-who-is-doing-what/>.

31 D. Hutt, "Which European Countries Are Rethinking Military Service Amid Ukraine War?", *EuroNews*, 26 July 2022.

<https://www.euronews.com/my-europe/2022/07/26/which-european-countries-are-rethinking-military-service-amid-ukraine-war>.

32 "Poland – Country Commercial Guide", *International Trade Administration*, 22 July 2022.

<https://www.trade.gov/country-commercial-guides/poland-defense-industry>.

33 Poland has set a new spending target of 3% of GDP in 2023 in its efforts to recapitalize and to expand its military capabilities, particularly those related to land warfare. Poland even established an extra-budgetary fund called the Armed Forces Support Fund to finance these investments by issuing sovereign bonds.

34 "Estonia Buys 12 More K9 Self-Propelled Howitzers for EUR 36 Million", *Defence Industry Europe*, 20 January 2023.

<https://defence-industry.eu/estonia-buys-12-more-k9-self-propelled-howitzers-for-eur-36-million/>.

35 "Acquisitions and Infrastructure Development", *Ministry of National Defence Republic of Lithuania*.

<https://kam.lt/en/category/news/acquisitions-and-infrastructure-development/>.

36 For an excellent overview of the Baltic countries' military capabilities, see M. Hurt, M. Vargulis, L. Zdanavičius and T. Jermalavičius, "Baltic Defence Development: Adding Value to the Defence of the Baltic Sea Region", *International Centre for Defence and Security*, 20 March 2023.

37 J. Tarociński, "Safe Skies? Air Defence on NATO's Northern, Eastern and South-eastern Flank", *Ośrodek Studiów Wschodnich*, 19 January 2023, 2.

38 Piotr Szymański, "Estonia: Fortifying the Coast", *OSW*, 13 October 2023, <https://www.osw.waw.pl/en/publikacje/analyses/2021-10-13/estonia-fortifying-coast>; Jarosław Adamski, "Latvian Government Approves \$110 million Naval Strike Missile Buy," *Defense News*, 5 May 2023, <https://www.defensenews.com/global/europe/2023/05/05/latvian-government-approves-110-million-naval-strike-missile-buy/>; Jędrzej Graf, "Poland to Make a Massive Purchase of Coastal NSM Missiles," *Defence24*, 2 May 2023, <https://defence24.com/armed-forces/navy/poland-to-make-a-massive-purchase-of-coastal-nsm-missiles-exclusive>

The Baltic states continue to rely on allied contributions to the Baltic Air Policing mission to guard their airspace. At sea, the Baltic countries' maritime presence is largely left to patrol boats and surface vessels dedicated to mine warfare.³⁹ Nevertheless, the abovementioned Estonian coastal defence missile systems have a maximum range of 290 kilometres.⁴⁰ The Polish Navy has suffered from years of neglect and under-investment. Poland does plan to build three *Miecznik* frigates to address capability gaps in its ageing fleet.⁴¹ The Polish government has ambitions to revitalise Poland's submarine capabilities with newer vessels, but such plans are long-standing and concrete details remain sparse.⁴²

The Interior of the Eastern Flank

Czechia, Hungary and Slovakia are interior with respect to the eastern flank insofar as they have neither a land border with Russia nor direct access to a waterway that Russia could credibly interdict with its naval forces. Slovakia and Hungary do border Ukraine. However, Russia would need to inflict absolute defeat on Ukraine — an extremely unlikely event — to present a credible ground threat to those countries. The threat profile is perhaps the simplest in this part of the eastern flank. In a conventional war, Russia can only attack by way of air and missile strikes. Still, as much as there may be greater merit in air denial given this threat profile, Czechia does provide troops to the multinational battlegroup located in neighbouring Slovakia. Czechia and Slovakia have been stridently in favour of Ukraine since Russia's full-scale invasion began, but public opinion in those countries is admittedly divided. Hungary has been very cautious, and so far, it has refused to send any military aid to Ukraine.

The three countries are in the process of military modernisation. Czechia already has a defence

industrial base capable of development and manufacturing, particularly with respect to small arms, vehicles and light attack aircraft. The Czech defence ministry announced in January 2022 its intent to recruit more personnel, spend 2% of GDP on defence, streamline the acquisition process and establish an investment fund for strategic modernisation projects.⁴³ Prague signed a deal with Sweden to acquire CV90 IFVs and opened negotiations with the United States to acquire 24 F-35s to replace its leased Gripen combat aircraft. The Czech Gripen C/D Fleet has been upgraded continuously since being declared operational; the lease has the option to be extended to 2028, which means that Prague would need to extend it further to maintain any Air Defence capability into 2030.

Following the experience of the Hungarian Police Forces being overwhelmed by the large-scale migration that took place in 2015 and 2016, Hungary's Zrínyi 2026 Defence and Military Development Programme envisioned replacing badly ageing equipment, especially for the land forces. Accordingly, Hungary went about procuring Leopard 2A7+ main battle tanks, PzH 2000s self-propelled howitzers and Lynx infantry fighting vehicles.⁴⁴ The Hungarian Air Force saw some investment, typically in the form of lift capabilities in addition to upgraded rotary-wing aircraft. In August 2021, an upgraded contract was signed with SAAB to modernise the Gripen fleet, which would include an improved PS-05/A Mk4 radar and new armament. After implementing the MS20 Block 2 software upgrade, the Hungarian Gripens will be able to launch Meteor, IRIS-T missiles and GBU-49 bombs. All of these weapons are under procurement as of 2022. The Hungarian Air Force plans to keep its upgraded Gripen fleet well into the 2030s and beyond and even acquire enough fighters for a second fighter squadron. Hungary has declared that it does not require the deep strike capabilities.

39 *Military Balance* 2023 (London, UK: IISS, 2023): 87-88, 109-110.

40 Hurt et al, "Baltic Defence Development," 2.

41 Tomasz Grotnik, "Latest News on Poland's MIECZNIK Frigate Program," *Naval News*, 3 December 2022, <https://www.navalnews.com/naval-news/2022/12/latest-news-on-polands-miecznik-frigate-program/>

42 Łukasz Michalik, „Program Orka, czyli co się stało z polskimi okrętami podwodnymi,” *Wirtualna Polska*, 3 March 2023, <https://tech.wp.pl/program-orka-czyli-co-sie-stalo-z-polskimi-okretami-podwodnymi,6872407955794656a>

43 "Minister Jana Černochová Presented her Decalogue for Defence", *Ministry of Defence & Armed Forces of the Czech Republic*, 11 January 2022. <https://www.army.cz/en/ministry-of-defence/newsroom/news/minister-jana-cernochova-presented-her-decalogue-for-defence-232848/>.

44 O. Balogh, "The Importance of the Zrínyi 2026 Defence and Military Development Program", *Vojenske Rozhledy*, vol. 3 (2019): 67.

For Slovakia, its parliament adopted a new defence strategy in January 2021.⁴⁵ Its air force is procuring jet trainers in preparation for its 14 x 4th Generation F-16 Block 70/72 F-16s. Pilots are already undergoing training, and priority needs to be given to getting the infrastructure ready, with the first aircraft deliveries planned for 2024. Operational readiness, therefore, should be met by 2030. Slovakia will also be receiving Patria 8x8 armoured vehicles and CV90s in the coming years, and the SKMOD has been successful in securing significant levels of industrial participation in the areas where it has considerable expertise, such as barrel production, vehicle assembly, turret manufacturing, simulation and support. Because of its military assistance to Ukraine, a combined Dutch-German Patriot air defence system is now deployed in Slovakia and Germany will be supplying fifteen Leopard 2A4 main battle tanks.

The Black Sea Region

Bulgaria and Romania do not share a land border with Russia, but they do sit on the Black Sea where Russia did impose an economic blockade on Ukraine prior to launching its ground invasion in February 2022.⁴⁶ Snake Island — a strategic piece of Ukrainian territory that Russia briefly controlled in 2022 — is less than 50 kilometres away from the closest Romanian city. Indeed, following its seizure of Crimea in 2014, Russia went about a large-scale military build-up on the peninsula, prioritising air defence systems and maritime capabilities. Russia has suffered key losses in the Black Sea — most notably, the sinking of the *Moskva* — that loosened its grip on the Black Sea.⁴⁷

That Russia was able to impose a blockade and dominate the Black Sea reflects the maritime weaknesses that NATO has in this area of the eastern flank. After all, Bulgaria and Romania have neglected

their naval capabilities and much of their inventories are composed of Soviet-era equipment.⁴⁸ The NATO presence remains more limited than in the Baltic region. The tailored Forward Presence in Romania builds upon a Romanian brigade with a divisional headquarters and an air policing mission. Of the two countries, Bulgaria has traditionally closer links to Russia. Romania will more consistently favour a strong approach to deterring Russia, especially amid revelations that Moscow has been trying to destabilise neighbouring Moldova. That said, at least officially, Romania has been cautious about providing military assistance to Ukraine, while Bulgaria might have supplied ammunition in secret.⁴⁹

Bulgaria and Romania have made some limited efforts to invest in their militaries. Bulgaria adopted a long-term development plan called Programme 2032 that envisions a significant re-equipment, modernisation and force generation, including the formation of battalion battlegroups within its mechanised brigades and the modernisation of its fleet of T-72s.⁵⁰ The Bulgarian Navy is looking to procure a multipurpose patrol vessel and modernise its frigates to improve its Black Sea presence. It has allocated new funds to purchase a further eight F-16C/Ds on top of the eight agreed earlier. Pilot training has already begun and with the first aircraft deliveries planned for 2024, it is clear that operational readiness by 2030 should be met. Bulgarian MiG-29s are due for retirement this year, with the government now exploring options to extend their availability.

Under the Armata 2040 project, Romania is looking to modernise its armed forces in accordance with NATO standards, having announced a defence budget increase in March 2022. It should soon receive the first batch of F-16s purchased from Norway to complement those already received from Portugal. Its acquisition plans include U.S.-made Piranha V

45 "Defence Strategy of the Slovak Republic", *Ministry of Defence of the Slovak Republic*, 2021. https://www.mosr.sk/data/files/4291_defence-strategy-of-the-slovak-republic-2021.pdf.

46 P. Dickinson, "Black Sea Blockade: Ukraine Accuses Russia of Major Maritime Escalation", *Atlantic Council*, 10 February 2022. <https://www.atlanticcouncil.org/blogs/ukrainealert/black-sea-blockade-ukraine-accuses-russia-of-major-maritime-escalation/>.

47 D. Axe, "The Russian Black Sea Fleet May Have Lost Another Flagship", *Forbes*, 29 October 2022. <https://www.forbes.com/sites/davidaxe/2022/10/29/the-russian-black-sea-fleet-may-have-lost-another-flagship/?sh=2a2b317192e6>.

48 Deborah Sanders, "The Bulgarian Navy after the Cold War: Challenges of Building and Modernizing an Effective Navy," *Naval War College Review*, vol. 68, no. 2 (2015): 69-84.

49 A. Andreev, "How Bulgaria Secretly Armed Ukraine", *Deutsche Welle*, 21 January 2023, <https://www.dw.com/en/how-bulgaria-secretly-armed-ukraine-with-nato-weapons-deliveries/a-64478423>.

50 "Programme for the Development of the Defence Capabilities of the Bulgarian Armed Forces 2032", *Ministry of Defence of Bulgaria*, 11 February 2021. https://www.mod.bg/en/doc/cooperation/20210427_Program_2032.pdf.

armoured vehicles, H215 helicopters, air defence radars, surface-to-area missiles and corvettes. Romania will procure the Naval Strike Missile for coastal defence and has announced its intent to procure two French-made submarines and two second-hand, though upgraded, mine-hunting vessels from the United Kingdom.⁵¹

Persisting Gaps

Russia's aggression against Ukraine between 2014 and 2022 already prompted many NATO members along the eastern flank to take their militaries seriously again. Some countries brought back conscription and began major efforts to recapitalise their national armed forces with more modern equipment. Still, not least because military power is expensive and many of the countries simply lack the budgetary means, NATO members have had to emphasise certain military capabilities over others whilst some gaps in crucial capabilities remain. However, we must take note that the software-driven battlefield is becoming a reality; existing platforms or surplus Western platforms can be made interoperable while capabilities can be enhanced, and operational effectiveness increased by utilising AI as a capability enabler.

The most significant gap is in air defence, which has proven essential for Ukraine to defeat Russian attacks. Eastern flank countries' current inventories mainly consist of aging Soviet-era systems that are largely incapable of effectively countering modern aerial threats. These countries should prioritise acquiring advanced surface-to-air missile (SAM) systems, such as Patriot PAC-3, NASAMS or SAMP/T, to enhance their ability to defend against aircraft, cruise missiles and other aerial threats, including unmanned aerial vehicles.

For effective regional air defence, these air defence systems should be integrated with NATO's Integrated Air and Missile Defence (IAMD) system. A more robust and modern air defence system would signal

to Russia that any attempt to challenge the region's airspace would likely be costly and ineffective. By 2030, the aim should be to acquire a layered air defence system capable of effectively defending against a wide range of aerial threats. This investment would involve advanced SAM systems, enhancing interoperability with NATO's IAMD and developing and procuring cutting-edge air defence technologies, such as directed energy weapons and hypersonic interceptors. By 2030, these countries should have established a robust training programme for air defence personnel and regular joint exercises with NATO allies to ensure readiness and maintain operational effectiveness.

The eastern flank countries need to strengthen their intelligence, surveillance and reconnaissance (ISR) capabilities to monitor and counter potential adversaries more effectively. Addressing gaps in ISR capabilities would improve their situational awareness, early warning and decision-making processes. Investing in ISR platforms, such as high-altitude long endurance (HALE) unmanned aerial vehicles (UAVs), surveillance aircraft and satellite systems, would significantly enhance the eastern flank countries' ability to monitor their borders and detect threats. These platforms would also allow them to improve their capacity to share intelligence and coordinate operations with NATO Allies. Given the increasing importance of cyberspace in modern warfare, the eastern flank countries should also emphasise the development of cyber and electronic capabilities such as advanced signals intelligence (SIGINT) and electronic intelligence (ELINT) systems to effectively monitor, intercept and disrupt enemy communications and electronic emissions.

Technology must be employed as a force multiplier. Whilst people, effectors and munitions are in short supply, sensors are plentiful. The eastern flank can gain a deterrence advantage by leveraging the digital nature of the new equipment and generating software-defined, AI-enabled sensor fusion and targeting cycles that deliver effects faster than is

⁵¹ Sam LaGrone, "Romania Buys Naval Strike Missile Coastal Batteries in \$217M Deal," *USNI News*, 5 January 2023, <https://news.usni.org/2023/01/05/romania-buys-naval-strike-missile-coastal-batteries-in-217m-deal>; and S.I. Catalin, "Romania Intends to Buy Two French Scorpene Submarines for 2 Billion Euros," *Defense Romania*, 19 May 2023, https://m.defenseromania.ro/romania-intends-to-buy-two-french-scorpene-submarines-for-2-billion-euros_622746.html

conventionally possible. The eastern flank nations must take bold action and pursue the advantages of AI-enabled software and edge processing now or potentially face a renewed Russian force in five years with the same capability potential that they have today.

Rapid deployment and force projection are essential for the eastern flank countries to respond effectively to emerging threats and support NATO's collective defence efforts. Addressing gaps in these areas would require investment in strategic mobility assets, development of agile and modular forces and investing in infrastructure and prepositioning. Investing in strategic mobility assets, such as transport aircraft and helicopters, would enable rapid and efficient deployment of forces. Accordingly, having stocks of operable equipment is hardly sufficient: national armed forces must be able to react and to deploy swiftly, if necessary, personnel, equipment and supplies over those distances that cover the eastern flank. Eastern flank countries should thus establish agile and modular forces, thus reorganising existing units into smaller, more flexible formations that can be tailored to specific missions in addition to being easily integrated with NATO forces.

This is not to say that old structures should be eliminated completely, but one lesson from Ukraine's defence of its territory relates to the value of small, decentralised units capable of quickly responding and operating with relative independence. Agile and modular forces should be created to go about these changes along the eastern flank while stressing the importance of their effective integration with NATO's broader defence efforts. These changes include adopting NATO standards, participating in joint exercises and investing in compatible equipment and communication systems, which would ensure interoperability. The last point to address within the rapid deployment and force projection is the improvement of military infrastructure, such as airfields and logistical facilities. Additionally, prepositioning equipment and supplies near potential hotspots can help reduce response times and alleviate logistical challenges.

Joint and multinational training is ultimately the prerequisite for enhancing the operational readiness, interoperability and, by extension, overall effectiveness of the eastern flank countries' armed forces. Investing in joint training centres and facilities can provide a shared space for the eastern flank countries and their allies to share best practices, and familiarise themselves with the tactics, techniques and procedures used by their allies, and develop and incorporate joint standard operating procedures. These training centres should involve the participation and even some leadership on the part of Ukrainians. After all, at great cost, Ukrainian military personnel have developed significant expertise in how to go about direct combat operations against Russia. Though Ukrainian military units have benefited from Western training, it would be arrogant to dismiss what lessons they have learned and incorporated over the course of their own war.

III. Building a Stronger Defence Industry for Europe

The fragmentation has been on display along the eastern flank – something that the Russian invasion of Ukraine has exposed amid talk of dwindling stockpiles and munition shortages – since the defence industry exists largely along national lines.⁵² Bulgaria's defence industry exports small arms but has only limited capacity to design and manufacture platforms. The Czech defence-industrial base does have development and manufacturing capability, particularly with respect to small arms, vehicles and training and light attack aircraft. Although Slovakia's defence industry has significantly reduced in size, it has retained design and production capabilities in the areas of ammunition, artillery systems, 30mm-155mm barrels, vehicles, turrets and simulation. Owing to its small size, Estonia has a niche defence-industrial capability, including robotics, ship repair and digital systems. The Finnish defence industry consists largely of privately-owned small- and medium-sized enterprises that develop niche products for export.

Still, it also features some internationally competitive larger companies producing wheeled armoured vehicles (e.g., Patria) and turreted mortar systems. Hungary’s defence industrial basis is very limited, but the government has plans to boost domestic capacity in the small arms sector, and the production of tracked armoured vehicles commenced in January this year in a new purpose-built facility. Lithuania also has a small defence industrial base with niche capabilities comprised of helicopter support, maintenance and repair.

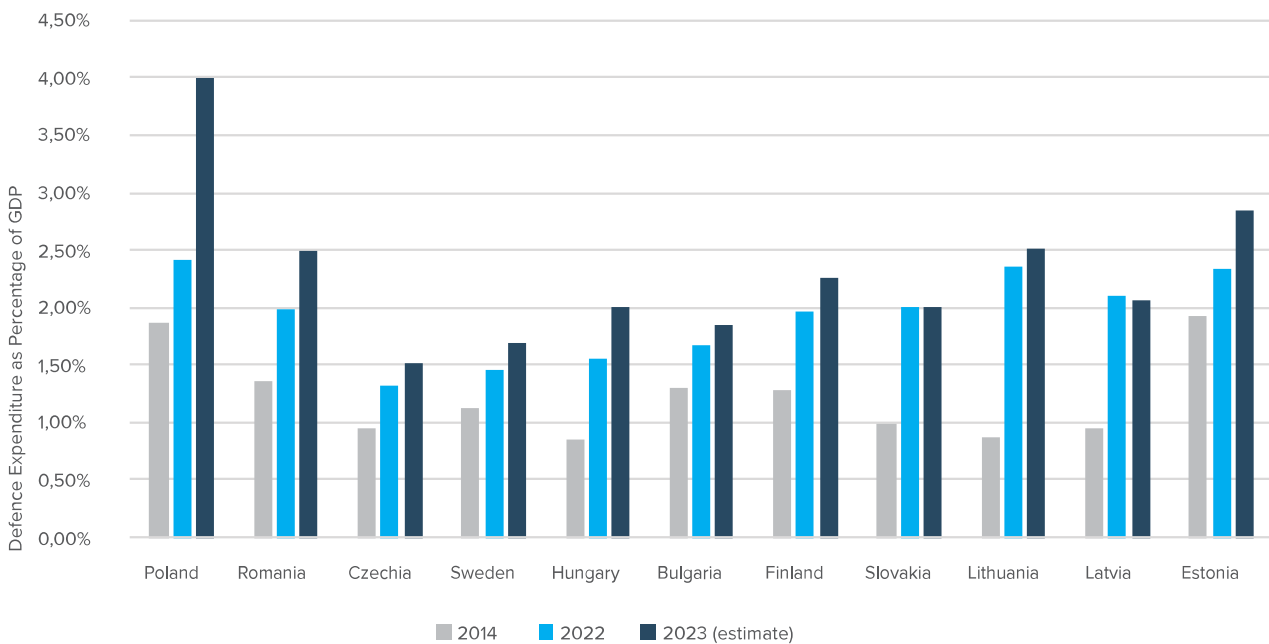
These national attitudes have considerable impact on security policies and these countries’ willingness to invest in defence. Poland and the Baltic states (especially Estonia) have been most consistently investing in defence for years by contributing over 2% of their GDPs on their militaries. Nevertheless, almost all NATO members are reckoning with years of neglect and low investment in the defence sector. Consequently, the political and social conditions in the Baltic states, Poland and Romania are conducive to the development of robust deterrence posture.

However, other parts of the eastern flank still face important challenges even if security on the eastern flank is indivisible and requires equal attention of the alliance.

Relatively little collaboration exists. The Estonian-Latvian joint effort announced in 2022 to go about missile defence is the exception, not the rule.⁵³ EU Member States agreed to collaborate on 35% of their investments as per the European Defence Agency Framework, but only 11% of defence expenditures were spent collaboratively in 2020 despite a surge in military spending.⁵⁴

Moreover, at least prior to 2014, European countries’ defence spending had declined overall. Because military platforms have become more sophisticated, more complex and thus more expensive, many industrial and capability gaps have widened. In May 2022, the European Commission and the High Representative of the Union for Foreign Affairs and Security Policy noted the need to replenish stockpiles, replace Soviet-era legacy systems and reinforce the

Defence Expenditure as Percentage of GDP in Eastern Flank Countries



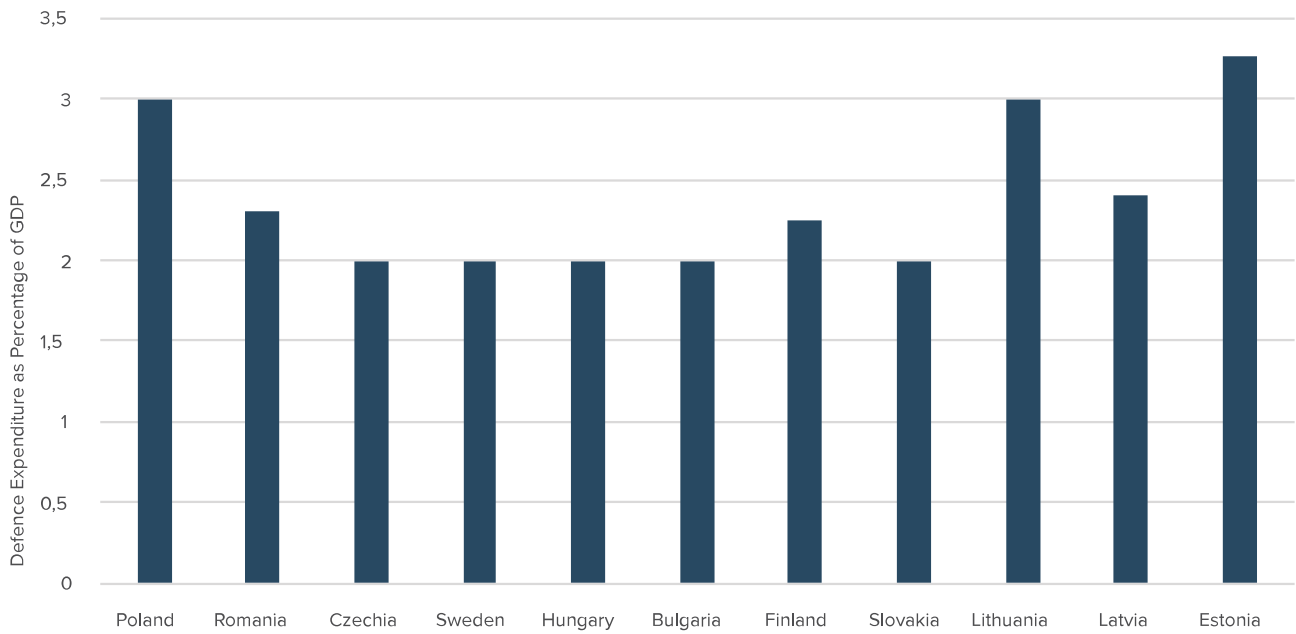
Note: Countries are organised by population

Data taken from: <https://icds.ee/en/defence-spending-who-is-doing-what/>

53 “Latvia and Estonia to Jointly Procure Air Defence Systems”, *Air Force Technology*, 4 July 2022, <https://www.airforce-technology.com/news/latvia-estonia-air-defence-systems/>.

54 “Joint Communication to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions on the Defence Investment Gaps Analysis and Way Forward”, *European Commission and the High Representative of the Union for Foreign Affairs and Security Policy*, 18 May 2022, https://commission.europa.eu/publications/defence-investment-gaps-and-measures-address-them_en.

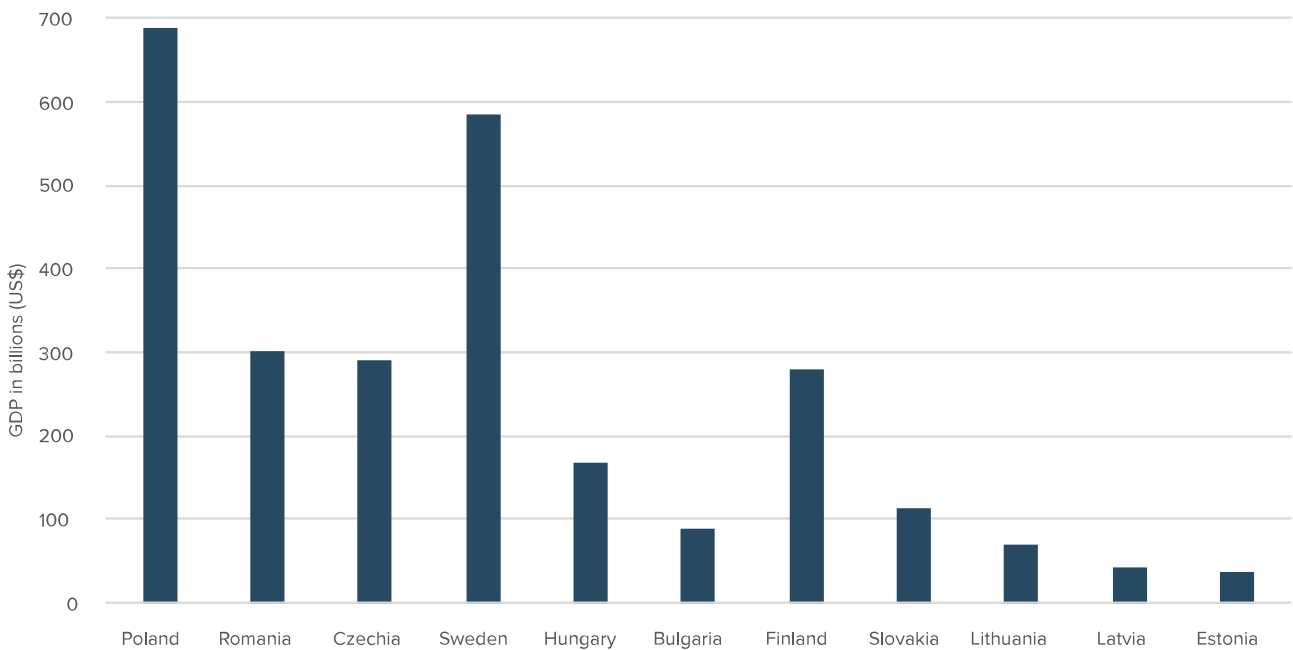
Defence Expenditure as Percentage of GDP Objective by 2030



Note: Countries are organised by population and these objectives are as of February 2023

Data taken from: <https://icds.ee/en/defence-spending-who-is-doing-what/>

GDP Current Prices in billions (US\$) 2022



Note: Countries are organised by population and these objectives are as of May 2023

Data taken from: https://www.imf.org/external/datamapper/NGDPD@WEO/WEO_WORLD

air and missile defence systems of all EU Member States.⁵⁵

How to address issues of redundancy and the lack of collaborative projects is difficult to tackle. Because procurement efforts and defence companies tend to be organised around national lines, the priorities and interests of national governments prevail. Those priorities and interests may have considerations other than deterrence of Russia in mind — namely, the continued viability and strength of the local defence industry — that clearer NATO or EU strategic guidance might not necessarily override. Still, some platforms might be more conducive for collaboration than others. Air defence, for example, works best if allies collaborate on developing multiple and integrated layers to fully close their skies to external aggression. Munition production may yet be another, especially with regards to 155-millimetre calibre artillery shells. Even if not jointly produced, the 155mm could be compatible with multiple cannons such as the U.S.-made M109, the Korean-made K9 Thunder, the French-made CAESAR, the German-made PzH2000, the Polish-made AHS Krab and the Swedish-made Archer.⁵⁶ These cannons exist in eastern flank inventories or have recently been delivered to Ukraine so that it could offset Russia's artillery advantages. Yet the lack of production of this calibre has hindered Ukraine's ability to mount counteroffensive operations aimed at liberating its territory.

Russia's war against Ukraine has brought to sharp relief the need for air defence and renewed munition production. Eastern flank countries have already taken steps to address those needs. As mentioned, Estonia and Latvia have agreed to undertake a joint project that involves developing air defence capabilities that would give coverage

over their territories. Some countries have ramped up production of artillery shells, as in the case of the European Defence Agency organising an arrangement for 24 countries to “procure ammunition collectively and more quickly by aggregating, coordinating, and agreeing contracts with the European defence industry.”⁵⁷ The war challenges us to consider more radical ideas that could allow NATO members to address certain capability gaps in a timelier and possibly cost-effective manner.

These ideas involve using certain emerging disruptive technologies that, if employed, would impose costs on the battlefield. For example, because Bulgaria and Romania might not be able to reconstitute their navies as quickly as they would like, they can consider interim solutions like coastal defence systems that would consist of anti-ship missiles and, more creatively, unmanned underwater vehicles. After all, Ukraine has used drone boats to attack facilities in Russian-occupied Sevastopol.⁵⁸ If Russia successfully defends its control over Crimea against any Ukrainian offensive, then Romania and Bulgaria could consider replicating Ukraine's strategy of developing a so-called army of drones that hold at risk Russian facilities.⁵⁹ Those countries in the Baltic littoral region may wish to consider similar, relatively low-cost platforms that, if numerous enough, could threaten the Baltic Sea Fleet and facilities located in Baltiysk, Kaliningrad.⁶⁰ Such investments could force Russia to divert a growing share of its tightening resources towards hardening its sites and developing other countermeasures. Underwater drones need not deliver kinetic force to be useful. *War on the Rocks* founder Ryan Evans suggested that underwater drones of the sort developed by companies like Saildrone could increase local maritime situational awareness by giving users a new platform capable

55 Ibid, 7.

56 “The 10 Most Effective Self Propelled Artillery”, *Army Technology*, 20 February 2019. <https://www.army-technology.com/features/featurethe-10-most-effective-self-propelled-artillery-4180888/>.

57 “EDA Brings Together 24 countries for Common Procurement of Ammunition”, *European Defence Agency*, 4 April 2023, <https://eda.europa.eu/news-and-events/news/2023/03/20/eda-brings-together-18-countries-for-common-procurement-of-ammunition>.

58 B. Pancevski and I. Lovett, “Russia Says Drone Boats Attack Black Sea Fleet in Crimea”, *The Wall Street Journal*, 24 April 2023. <https://www.wsj.com/articles/russia-says-two-drones-attack-crimea-another-crashes-near-moscow-d1f59bb5>.

59 M. Plichta, “Vladimir Putin's Drone War in Ukraine Could End Badly for Russia”, *The Daily Beast*, 4 May 2023, <https://www.thedailybeast.com/vladimir-putins-drone-war-in-ukraine-could-end-badly-for-russia>.

60 Drones tend to be small and so lack explosive punch. They are also vulnerable and susceptible to various countermeasures. As a result, they suffer very high loss rates. Some even say five minutes due to Russian electronic warfare capabilities. Hence the premium placed on quantity. S. Skove, “Drone-Operator Training Becomes A New Front In Ukraine's Fight Against Russia's Invasion”, *Radio Free Europe/Radio Liberty*, 27 September 2022, <https://www.rferl.org/a/ukraine-drone-operator-new-front-war-russia/32054212.html>. See also M. Zabrodskiy, J. Watling, O. Danylyuk and N. Reynolds, “Preliminary Lessons in Conventional Warfighting from Russia's Invasion of Ukraine: February—July 2022”, Royal United Services Institute, 2022, 37.

of undertaking intelligence, surveillance and reconnaissance missions over extended periods of time.⁶¹

Taking on board these sorts of innovations does entail some risk. Companies that develop the unmanned capabilities described above or could use additive manufacturing to produce ammunition may yet have to field proofs of concept in order to demonstrate their workability. Moreover, many companies specialising in these niche technologies are not necessarily from the eastern flank countries themselves. Saildrone, for example, is based in California. Accordingly, these foreign companies will have to compete for local defence contracts, sometimes facing regulatory barriers that could stymie their ability to export. They might have to be open to joint ventures, co-production and other cooperative opportunities if they wish to enter those markets.⁶² Given the novelty involved with some of these technologies, there is a risk that certain platforms may not perform as effectively as others, with the financial loss that their possible inadequacy could entail.

IV. Recommendations

In view of our discussion of the eastern flank, we make the following recommendations:

1. NATO members participating in the multinational battlegroups should fulfil their commitments to help expand them from the battalion level to the brigade level. Where needed and desired, the character of the presence should be altered from rotational to permanent. In the short term, upgrading the battlegroups might take time because even many of the Framework Nations from outside the eastern flank have neglected their own ground forces in recent decades. Still, the Madrid goal is worth whatever challenges might arise because it offers
2. One interim solution is to pre-position stockpiles of equipment and ammunition across the eastern flank, particularly for those artillery pieces that multiple NATO members have recently acquired. NATO should announce a new major commitment to this sort of pre-positioning initiative. Some trade-off exists between ammunition pre-positioned along the eastern flank and that which Ukraine could use immediately in intensive combat operations against Russia. Still, this possible trade-off simply reinforces how NATO countries must ramp up defence production.
3. Eastern flank countries must coordinate and cooperate on procurement. The Estonian-Latvian partnership on air defence is a good start, as are efforts to increase ammunition production at the EU level. Yet sea denial capabilities could be yet another area of cooperation. Estonia and Latvia have already made moves to seek coastal defence systems, but Lithuania lags behind. Poland might also buy large amounts of Naval Strike missiles to bolster its arsenal. In the Black Sea, Romania is purchasing Naval Strike Missile Coastal Defence Systems, but Bulgaria has not declared any such intent. Taken on a national basis, these procurement decisions create gaps in coverage and delivery times that could be avoided if pursued jointly.
4. Missile defence needs serious investment and stronger regional cooperation. Those joint initiatives mentioned earlier are welcome given the existing gaps. Of the three Baltic nations, only Lithuania has short-range air defences. Finland is only now contemplating getting a medium-range air defence. The

61 R. Evans, "Bind Ukraine Closer to American Military Learning", *War on the Rocks*, 20 April 2023, <https://warontherocks.com/2023/04/bind-ukraine-closer-to-american-military-learning/>.

62 Consider some of the advice given by the U.S. International Trade Administration to U.S. businesses wishing to enter the Polish defence market. See "Defence Industry", *International Trade Administration*, 22 July 2023, <https://www.trade.gov/country-commercial-guides/poland-defense-industry>.

14-member European Sky Shield Initiative, agreed upon in October 2022, is a good step towards filling these gaps. Yet to move beyond a letter of intent and to ensure that NATO's Integrated Air and Missile Defence is truly integrated, more bilateral and multilateral cooperation – like that witnessed from Estonia and Latvia – will be necessary to exploit economies of scale and get systems of greater ranges and sophistication.

5. By 2030, the eastern flank forces must be interoperable, and this goal cannot be achieved by relying on outdated Soviet-era equipment. While buying new platforms is one approach, it is not the only option. Western supplied platforms that are currently in service can be continuously maintained and upgraded, enabling their life to be extended and once replaced they can be transferred to other nations to fill capability gaps; this approach allows for the modernisation and standardisation of equipment across the region, enhancing interoperability and collective defence. Moreover, the software-driven battlefield is rapidly becoming a reality. In this evolving landscape, existing platforms or surplus Western platforms can be made interoperable through the integration of advanced technologies. By leveraging AI as a capability enabler, eastern flank forces can enhance their capabilities and increase operational effectiveness. AI can optimize decision-making processes, enable autonomous systems and improve situational awareness, leading to more efficient and effective military operations.
6. Eastern flank countries must redouble efforts to cooperate on logistics to enable the quick transport of troops and equipment. Procuring capabilities for land warfare is likely to follow national lines. Still, in a contingency, the lines on the map that separate the jurisdictions of sovereign NATO members will not have military value. Baltic rail networks tend to use the 1,520-mm gauge, whereas the rest of European NATO — and the Rail Baltica infrastructural project under works — uses the 1,435-mm gauge. Rail infrastructure has been fundamental in the fight between Ukraine and Russia precisely because of its importance for resupplies and reinforcements.
7. Allies must finally declare that the NATO-Russia Founding Act is no longer valid. The text of the 1997 agreement itself holds that Russia has “a shared commitment to build a stable, peaceful and undivided Europe, whole and free, to the benefit of all its peoples” while NATO will eschew major posture changes “in the current and foreseeable security environment.” Russia is clearly not committed to an undivided Europe with its crimes against humanity targeting Ukraine and bold efforts at territorial annexation. By unilaterally upholding this agreement, NATO imposes artificial limits on its presence on the eastern flank, thereby depriving itself of those advantages that we highlight that permanently stationed forces have over rotational forces: higher morale, greater cultural proficiency and local familiarity, greater manning levels and so forth.
8. NATO members must avoid concluding that Russia no longer poses a significant threat to the eastern flank because of the scale of its military losses in Ukraine. Countries with divided public attitudes towards NATO are particularly vulnerable to dismissing the Russian threat on this basis. Whatever its tactical competence, Russia has retained its ability to inflict massive devastation on Ukrainian society. It has kept up its maximalist goals of territorial annexation and regime change vis-à-vis Ukraine while articulating even more aggressive rhetoric against NATO. Russia has been able to reconstitute its armed forces through mobilisation and keep most of its air and naval assets intact. NATO members should thus plan for Russia to remain a major military threat to the entirety of the eastern flank in 2030. The budget of NATO's

Public Diplomacy Division should expand significantly, with special effort paid to those eastern flank countries where vulnerabilities are most acute.

9. Much of the eastern flank remains dependent on energy imports from Russia. In particular, the three land-locked countries of Czechia, Hungary and Slovakia have limited options to develop alternatives to Russian supplies, including those produced by nuclear reactors of Russian production. Meanwhile, a North-South energy network that ties Poland, the Baltic countries, Croatia and those landlocked countries still needs to be developed. Eastern flank countries must wean themselves completely from any measure of dependency on Russia. Accordingly, priority should be given to the development of the North-South corridor — as promoted in the Three Seas Initiative — given its strategic importance to the alliance.
10. As noted, the entire eastern flank endures daily cyber-attacks on state and critical infrastructure of Russian origin. So far, no major incident of a successful breach of cyber-security has been reported, suggesting that the region's information technology infrastructure is resilient. However, as Russia's war against Ukraine demonstrates, cyberspace is essential to today's warfare. Eastern flank countries must constantly update their cloud and data storage capacities in addition to engaging in a structured dialogue with leaders in the cyber industry. This process should be encouraged and aided by NATO's relevant structures such as the Innovation Fund.
11. Eastern flank countries, along with the rest of the Alliance, must boost public-private dialogue with industry to engage it in the planning process for 2030. They should encourage increased cooperation across the European and transatlantic defence industries to achieve interoperability.



SNAPSHOTS OF DEFENCE CAPABILITIES

This is a snapshot of the most important equipment and systems of the respective countries, which shows the defence capabilities originating in Allied countries with NATO interoperable standards. These tables do not show legacy Soviet systems or complete stocks of all the equipment in possession of the given countries. The objective is to show the key systems for each category, which are crucial to maintain a credible deterrent. The tables show both known in-stock amounts and known procurement plans and orders. With these snapshots, the aim is to show potential gaps and also deterrence potential. Totals reflect the current capabilities and what is being procured. But the number does not reflect capabilities that are being replaced or upgraded.

SWEDEN



FINLAND



POLAND



ESTONIA



LITHUANIA



LATVIA



Legend



Note: a black icon means the country has this capability, grey means it is yet to be procured, and black and grey striped means the capability has been ordered.

SLOVAKIA



CZECHIA



HUNGARY



BULGARIA



ROMANIA



Sweden



LAND CAPABILITIES			
Type	Variant	Model	Amount
APC			TOTAL: 1,064
	Tracked	Pbv 302	239
	Tracked	BvS-10 MkII	150
	Wheeled	Bastion APC	Unknown
	Wheeled	XA-180 Sisu (Patgb 180)	34
	Wheeled	XA-202 Sisu (Patgb 202)	20
	Wheeled	XA-203 Sisu (Patgb 203)	148
	Wheeled	Patria AMV (XA-360/Patgb 360)	113
	PPV	RG-32M	360
IFV			TOTAL: 411
	Tracked	CV9040 (Strf 9040; incl 54 CP)	369 (50 sent to Ukraine)
		Epbv 90 (OP)	42
MBT			TOTAL: 120
		Leopard 2A5 (Strv 122)	120

ARTILLERY			
Type	Variant	Model	Amount
SP			TOTAL: 35
	155mm	Archer	35

AIR DEFENCE			
Type	Variant	Model	Amount
SAM			TOTAL: 14
	Long Range	M903 Patriot PAC-3 MSE	6
	Medium Range	MIM-23B Hawk (RBS-97)	Unknown
	Short Range	IRIS-T SLS (RBS-98)	8
	Short Range	RBS-23 BAMSE	Unknown
	Point Defence	RBS-70	Unknown

AIR CAPABILITIES			
Type	Variant	Model	Amount
FGA			TOTAL: 98
		JAS 39C/D Gripen	96
		JAS 39E Gripen (being tested)	2
HELICOPTERS			TOTAL: 53
	TPT	UH-60M Black Hawk (Hkp-16)	15
	TPT	NH90 TTH (Hkp-14) (of which 9 configured for ASW)	18
	TPT	AW109 (Hkp-15A)	12
	TPT	AW109M (Hkp-15B)	8

NAVAL CAPABILITIES			
Type	Variant	Model	Amount
SUBMARINE • SSK			TOTAL: 5
		Gotland	1
		Gotland mod	2
		Södermanland	2
PATROL AND COASTAL COMBATANTS			TOTAL: 150
	CORVETTES • FSG		
		Visby	5
	PCGT	Göteborg	2
	PCGT	Stockholm	2
	PBF	Combat Boat 90H	100
	PBF	Combat Boat HS	27
	PBF	Combat Boat 90HSM	6
PB	Tapper (Type 80)	8	

Finland



LAND CAPABILITIES			
Type	Variant	Model	Amount
APC			TOTAL: 409
	Wheeled	XA-180/185 Sisu	260
	Wheeled	XA-202 Sisu (CP)	101
	Wheeled	XA-203 Sisu	48
IFV			TOTAL: 164
	Wheeled	AMV (XA-360)	62
	Tracked	CV9030FIN	102
MBT			TOTAL: 200
		Leopard 2A4	100
		Leopard 2A6	100

ARTILLERY			
Type	Variant	Model	Amount
SP			TOTAL: 23
	155mm	K9 Thunder	23
TOWED			TOTAL: 54
	155mm	K 83/ GH-52 (K 98)	54

AIR DEFENCE			
Type	Variant	Model	Amount
SAM			TOTAL: 410
	Short-Range	Crotale NG (ITO 90)	20
	Short-Range	NASAMS II FIN (ITO 12)	24
	Point Defence	ASRAD (ITO 05)	16
	Point Defence	FIM-92 Stinger (ITO 15)	350 on order
	Point Defence	RBS 70 (ITO 05/05M)	On order by 2026
GUNS - SP			TOTAL: 7
	35mm	Marksman	7
GUNS - TOWED			TOTAL: 16
	35mm	GDF-005 (ItK 88)	16

AIR CAPABILITIES			
Type	Variant	Model	Amount
FGA			TOTAL: 126
		F/A-18C Hornet	55
		F/A-18D Hornet	7
	Steath Multi role	F35 A	64 on order
HELICOPTERS			TOTAL: 27
	MRH	Hughes 500D	5
	MRH	Hughes 500E	2
	TPT	NH90 TTH	20

NAVAL CAPABILITIES			
Type	Variant	Model	Amount
PATROL AND COASTAL COMBATANTS			TOTAL: 20
	PCGM	Hamina	4
	PBG	Rauma	4
	PBF	Jehu (U-700)	12

Poland



LAND CAPABILITIES			
Type	Variant	Model	Amount
IFV			TOTAL: 1,751
	Tracked	Borsuk	1400 on order (first delivery by 2025)
	Wheeled	Rosomak	351
MBT			TOTAL: 1,613
		K2	1000 on order by 2026
		Leopard 2A4 (being upgraded to 2PL)	108
		Leopard 2A5	105
		Leopard 2PL	34
		M1A1 Abrams	116 on order by 2024
		M1A2 Abrams SEPv3	250 on order by 2026

ARTILLERY			
Type	Variant	Model	Amount
SP			TOTAL: 776
	155mm	K9A1 and K9PL	24 (+648 on order)
	155mm	Krab	62 (+42 on order by 2024)

AIR DEFENCE			
Type	Variant	Model	Amount
SAM			TOTAL: 724+
	Short Range	CAMM (Narew)	3
	Short Range	PILICA+	22 on order by 2029
	Point Defence	Piorun	420 Launchers
	Point Defence	Poprad	79
	Long Range	MIM-104 Patriot	2 baterries on order (over 200 missiles)

AIR CAPABILITIES			
Type	Variant	Model	Amount
FGA			TOTAL: 80
		F-16C Block 52+ Fighting Falcon	36
		F-16D Block 52+ Fighting Falcon	12
		F-35 Lightning II	32 on order (first delivery by 2024)
HELICOPTERS			TOTAL: 47
	TPT	PZL W-3 Sokol	10
		PZL W-3WA Sokol (VIP)	10
		SW-4 Puszczuk (trg)	22
		S70i Black Hawks	3 (+ 2 on order by 2023)

NAVAL CAPABILITIES			
Type	Variant	Model	Amount
PATROL AND COASTAL COMBATANTS			TOTAL: 1
	PSO	Ślązak (MEKO A-100)	1
PRINCIPAL SURFACE COMBATANTS - FRIGATES			TOTAL: 2
	FFH	Pułaski	2

Estonia



LAND CAPABILITIES			
Type	Variant	Model	Amount
APC			TOTAL: 136
	Wheeled	XA-180 Sisu	56
	Wheeled	XA-188 Sisu	80
IFV			TOTAL: 44
	Tracked	CV9035EE (incl 2 CP)	44

ARTILLERY			
Type	Variant	Model	Amount
SP			TOTAL: 24
	155mm	K9 Thunder	12 (+12 on order by 2026)

AIR DEFENCE			
Type	Variant	Model	Amount
SAM			TOTAL: 300
	Point Defence	Mistral	Unknown
	Point Defence	Piorun	300 on order by 2023

AIR CAPABILITIES			
Type	Variant	Model	Amount
HELICOPTERS			TOTAL: 2
	TPT	R-44 Raven II	2

NAVAL CAPABILITIES			
Type	Variant	Model	Amount
PATROL AND COASTAL COMBATANTS			TOTAL: 2
	PB	Roland	2



Lithuania

LAND CAPABILITIES			
Type	Variant	Model	Amount
IFV			TOTAL: 30
	Wheeled	Boxer (Vilkas)	30

ARTILLERY			
Type	Variant	Model	Amount
SP			TOTAL: 34
	155mm	PzH 2000	16
	155mm	Caesar Mark II	18 on order by 2027
TOWED			TOTAL: 18
	105mm	M101	18

AIR DEFENCE			
Type	Variant	Model	Amount
SAM			TOTAL: 264
	Point Defence	GROM	Unknown
	Point Defence	FIM-92 Stinger	Unknown
	Point Defence	RBS-70	260 (+ 4 year contract with Saab until 2026)
	Short Range	NASAMS III	4

AIR CAPABILITIES			
Type	Variant	Model	Amount
HELICOPTERS			TOTAL: 7
	MRH	AS365M3 Dauphin (SAR)	3
	MRH	UH-60M Black Hawk	4 on order by 2024

NAVAL CAPABILITIES			
Type	Variant	Model	Amount
PATROL AND COASTAL COMBATANTS			TOTAL: 4
	PCC	Zemaitis	4

Latvia



LAND CAPABILITIES			
Type	Variant	Model	Amount
APC			TOTAL: 200
	Wheeled	Patria 6×6	200 on order by 2029
IFV Tracked			TOTAL: 123
	Recce	CVRT Variants	123

ARTILLERY			
Type	Variant	Model	Amount
SP			TOTAL: 59
	155mm	M109A5ÖE	59

AIR DEFENCE			
Type	Variant	Model	Amount
SAM			TOTAL: Unknown
	Point Defence	FIM-92 Stinger	All are being sent to Ukraine
	Point Defence	RBS-70	Unknown

AIR CAPABILITIES			
Type	Variant	Model	Amount
HELICOPTERS			TOTAL: 4
	Transport	UH-60M Black Hawk	2 (+2 on order by 2023)



Slovakia

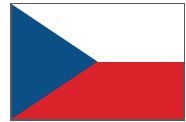
LAND CAPABILITIES			
Type	Variant	Model	Amount
IFV			TOTAL: 228
	Tracked	CV9035	152 on order
	Wheeled	Patria AMV	76 on order
MBT			TOTAL: 15
		Leopard 2A4	15 donated by 2023

ARTILLERY			
Type	Variant	Model	Amount
SP			TOTAL: 27
	155mm	M-2000 Zuzana	16
	155mm	Zuzana-2	11

AIR DEFENCE			
Type	Variant	Model	Amount
SAM			TOTAL: 2
	Short-Range	MANTIS	2

AIR CAPABILITIES			
Type	Variant	Model	Amount
FGA			TOTAL: 14
		F16 Block 70	14 on order (first delivery by 2024)
HELICOPTERS			TOTAL: 11
	TPT	UH-60M Black Hawk	11

Czechia



LAND CAPABILITIES			
Type	Variant	Model	Amount
IFV			TOTAL: 369
	Wheeled	Pandur II (incl 17 CP; 14 comms; 4 amb)	107
	Wheeled	Pandur II (KBV-PZ)	8
	Wheeled	Pandur II (KBV-PZLOK)	8
	Tracked	CV90	246 on order
MBT			TOTAL: 14
		Leopard 2A4	14 donated in 2023
ARTILLERY			
Type	Variant	Model	Amount
SP			TOTAL: 62
	155mm	Caesar	62 on order by 2026
AIR DEFENCE			
Type	Variant	Model	Amount
SAM			TOTAL: 32
	MANPAD	RBS-70	28 (+ 4 on order by 2023)
AIR CAPABILITIES			
Type	Variant	Model	Amount
FGA			TOTAL: 30
		Gripen C	12
		Gripen D	2
		L-159 ALCA	16
HELICOPTERS			TOTAL: 30
	TPT	PZL W3A Sokol	10
	Attack	UH-1Y Venom	4 (+ 6 on order by 2023)
	Attack	AH-1Z Viper	8 (+2 on order by 2023)



Hungary

LAND CAPABILITIES			
Type	Variant	Model	Amount
IFV			TOTAL: 209
	Tracked	KF41 Lynx	209
MBT			TOTAL: 56
		Leopard 2A4HU	12
		Leopard 2A7+	44

ARTILLERY			
Type	Variant	Model	Amount
SP			TOTAL: 24
	155mm	PzH 2000	24

AIR DEFENCE			
Type	Variant	Model	Amount
SAM			TOTAL: 45
	Point Defence	Mistral	45

AIR CAPABILITIES			
Type	Variant	Model	Amount
FGA			TOTAL: 14
		Gripen C	12
		Gripen D	2
HELICOPTERS			TOTAL: 22
	TPT	AS350 Ecureuil	2
	MRH	H145M	20

Bulgaria



LAND CAPABILITIES			
Type	Variant	Model	Amount
Process for replacement is ongoing, looking to maximize local content in a similar manner to Slovakia			

ARTILLERY			
Type	Variant	Model	Amount
Process for replacement is ongoing, looking to maximize local content in a similar manner to Slovakia			

AIR DEFENCE			
Type	Variant	Model	Amount
Process for replacement is ongoing, looking to maximize local content in a similar manner to Slovakia			

AIR CAPABILITIES			
Type	Variant	Model	Amount
FGA			TOTAL: 16
		F-16 C/D Block 70	8 (+ 8 on order by 2027)
HELICOPTERS			TOTAL: 18
	TPT	AS532AL Cougar	12
		Bell 206 Jet Ranger	6

NAVAL CAPABILITIES			
Type	Variant	Model	Amount
PRINCIPAL SURFACE COMBATANTS • FRIGATES			TOTAL: 3
	FFM	Drazki	3



Romania

LAND CAPABILITIES			
Type	Variant	Model	Amount
IFV			TOTAL: 241
	Tracked	MLI-84 (incl CP)	41
	Tracked	MLI-84M Jderul	101
	Wheeled	Piranha V	99
MBT			TOTAL: 211
		TR-85	103
		TR-85 M1	54
		M1A2 Abrams SEPv3	54 on order

ARTILLERY			
Type	Variant	Model	Amount
TOWED			TOTAL: 351
	152mm	M-1981	247
	152mm	M-1985	104

AIR DEFENCE			
Type	Variant	Model	Amount
SAM			TOTAL: 64
	Point Defence	CA-95	48
	Long Range	M903 Patriot PAC-3 MSE	8
	Medium Range	MIM-23 Hawk PIP III	8
GUNS - SP			TOTAL: 41
	35mm	Gepard	41
GUNS - TOWED			TOTAL: 24
	35mm	GDF-003	24

AIR CAPABILITIES			
Type	Variant	Model	Amount
FGA			TOTAL: 17
		F-16AM Fighting Falcon	14
		F-16BM Fighting Falcon	3
HELICOPTERS			TOTAL: 53
	MRH	IAR-330 SOCAT Puma	21
	MRH	SA316B Alouette III (IAR-316B)	8
	TPT	SA330L Puma (IAR-330L)	12
	TPT	SA330M Puma (IAR-330M)	12

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NAVAL CAPABILITIES			
Type	Variant	Model	Amount
PATROL AND COASTAL COMBATANTS			TOTAL: 18
	FSH	Tetal II	2
	FS	Tetal I	2
	PCFG	Zborul	3
	PCFT	Naluca	3
	PCR	Brutar II	5
	PCR	Kogalniceanu	3
PRINCIPAL SURFACE COMBATANTS • FRIGATES			TOTAL: 3
	FFGH	Marasesti	1
	FFH	Regele Ferdinand (Type-22)	2

The GLOBSEC Future Security & Defence Council

In the wake of Russia's invasion of Ukraine and an apparent threat to NATO member states, the Alliance adopted the new Strategic Concept during the Summit in Madrid in June 2022. The new Strategic Concept underlines deterrence and defence as the most important tasks for the Alliance under the current circumstances. As Russia's war against Ukraine and China's support for Moscow's actions made it abundantly clear, the benign post-Cold War order is over. The Alliance now requires a long-term vision to ensure resilience that will remain relevant for years to come. Most importantly, the security of the Alliance requires significant investment on the eastern flank and developing the posture that effectively deters Russian aggression. As of now, the development of these elements remains a work in progress.

The purpose of the GLOBSEC Future Security and Defence Council is to generate ideas and fuel effective enactment of deterrence against Russia and other threats to NATO, including the rise of challenges from China. The multidomain concept of credible deterrence that is effective not only towards the traditional military but towards new hybrid warfare is also a concept that needs to be implemented at the NATO level.

The Council is led by a Chair supported by an Advisory Committee made up of renowned defence experts, national and private sector leaders and champions of international diplomacy. It is designed to connect a diverse set of public and private stakeholders and act as a centre for idea generation and exchange that will deliver pragmatic policies and strategies. The process includes regular meetings of the Council and consultations.

The Advisory Committee of the Council included the following members:

Lieutenant General Ben Hodges, Pershing Chair in Strategic Studies at the Centre for European Policy Analysis; former Commanding General, United States Army Europe

General (Ret) John R. Allen, Former United States Marine Corps Four-Star General & Former Commander, NATO International Security Assistance Force

Samira Braund, CEO, UK Defence Solutions Centre

General Philip M. Breedlove, former Supreme Allied Commander Europe SACEUR

Ambassador Ivo H. Daalder, President of the Chicago Council on Global Affairs

Aranha González Laya, Dean of the Paris School of International Affairs at Sciences Po

President Kolinda Grabar-Kitarović, former President of Croatia; International Olympic Committee Member

Camille Grand, former Assistant Secretary General for Defence Investment at NATO; Distinguished Policy Fellow at the European Council on Foreign Relations

Marcel Grisnigt, Senior Vice President and Chief Corporate Development and Integration Officer at KNDS

Thomas Kauffmann, Vice President International Business and Services, GDELS

General Pavel Macko, former Deputy Chief of the General Staff at the Ministry of Defence

General Denis Mercier, Deputy General Manager, Fives Group; former Supreme Allied Commander Transformation

Admiral Manfred Nielson, former Deputy ACT, NATO

General Curtis Scaparrotti, Senior Counselor, Cohen Group; former Supreme Allied Commander Europe SACEUR

Jirí Šedivý, EDA Chief Executive

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Marcin Zaborowski, Policy Director, Future of Security Programme

Abbreviations

eFP	enhanced Forward Presence
ELINT	Electronic Intelligence
EU	European Union
GDP	Gross Domestic Product
HALE	High-Altitude Long Endurance
IAMD	Integrated Air and Missile Defence
ISR	Intelligence, Surveillance, Reconnaissance
NATO	North Atlantic Treaty Organisation
NRFA	NATO-Russia Founding Act
SAM	Surface-to-Air Missile
SIGINT	Signals Intelligence
UAV	Unmanned Aerial Vehicle

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Note: Report contains information taken from GLOBSEC Private-Public Sector Dialogues

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