Closing the Gap

Europe's Challenge to Rebuild Land Forces

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Clingendael Report

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Executive summary

Since Russia's full-scale invasion of Ukraine in 2022, Europe's security environment has deteriorated sharply, exposing long-standing weaknesses in European land forces. This report examines how Denmark, Germany, Sweden, and the Netherlands are addressing key land-domain capability shortfalls and assesses whether current efforts are likely to deliver meaningful combat power in time.

All four countries have significantly increased defence spending and shifted their strategic focus from expeditionary crisis management to national and collective defence. However, rebuilding land forces after decades of underinvestment is constrained by time, limited industrial capacity, personnel shortages, and the need for doctrinal adaptation. As a result, a window of vulnerability is likely to persist throughout the 2020s in capabilities critical for high-intensity warfare.

None of the assessed countries currently fields a fully operational, multilayered air defence system capable of simultaneously protecting manoeuvre forces, rear areas, and critical infrastructure. While high-end missile systems have received priority in recent decades, lower-layer air defences remain insufficient and fragmented, leaving forces vulnerable to attrition and saturation.

Land fires capabilities are similarly underdeveloped. Although all four nations are rebuilding artillery forces, their near-term effectiveness is constrained by limited system numbers, ammunition shortages, and delayed procurement timelines. Deep-strike capabilities are largely absent or only recently introduced, with continued reliance on non-European MLRS solutions. None of the countries currently possesses a fully developed, multilayered fires chain suitable for sustained high-intensity operations.

All countries are expanding their land manoeuvre formations to meet NATO requirements, albeit at different scales and speeds, with Germany also prioritising higher-echelon formations. While a strong North European industrial base offers opportunities, manpower remains a key limiting factor. Innovation can mitigate some constraints but cannot substitute for mass, stockpiles, and trained personnel.

The report concludes that progress is directionally correct but slow and uneven, requiring policymakers to plan explicitly for a prolonged transition period. Based on this conclusion, this report contains several policy recommendations.

Introduction

The international security environment in Europe has deteriorated significantly since the Russian Federation's full-scale invasion of Ukraine in February 2022. This invasion marked a fundamental rupture with the post-Cold War security order and demonstrated that large-scale, high-intensity conventional warfare has returned to the European continent.

Russia's sustained use of long-range fires, missile strikes, manoeuvre formations, and unmanned aerial systems (UAS) has underscored the renewed relevance of land forces and exposed critical capability gaps across European armed forces.

Challenges for the Netherlands

For the Netherlands, this deteriorated security environment has direct and tangible consequences. While various European intelligence agencies are warning that Russia could be fully prepared for a large-scale, conventional war against NATO by around 2030, the Netherlands is currently increasingly being exposed to hybrid threats and grey-zone activities as well.[1] The Netherlands' geographic position as a logistical hub for NATO reinforcement and host-nation support makes it a highly likely target in the event of a wider conflict. These developments place renewed demands on the Dutch armed forces, including its land forces.

A European response?

In response to these challenges, Europe faces the strategic imperative to rapidly scale up military capabilities. Years of underinvestment, force reductions, and expeditionary-focused force structures and training have left many European armies insufficiently prepared for high-intensity conflict. Since 2022, European governments have announced substantial increases in defence spending, force expansion initiatives, and ambitious modernisation programmes. The most

1 Simon Saradzhyan, 'Would Russia Attack NATO and, If So, When?', *Russia Matters*, 5 June 2025.

prominent effort in this regard has been the 2025 The Hague NATO summit conclusion of setting a renewed annual alliance member state spending target of a total of 5% of Gross Domestic Product (GDP).[2]

However, scaling the military is not merely a question of budgetary growth – it also requires informed prioritisation, doctrinal adaptation, and the efficient development of capabilities that address the most pressing operational shortfalls. For smaller and medium-sized armed forces, such as those of the Netherlands, learning from the experiences and choices of comparable, like-minded countries is therefore of crucial importance.

A comparative analysis

Against this backdrop, based on a multi-methods approach of desk research and semi-structured interviews, this paper assesses the progress being made in closing critical capability shortfalls of the land forces of three close NATO allies and the Netherlands itself. This endeavour is founded on the following research question: What capability shortfalls exist in selected European land forces, and how are these shortfalls being addressed? The three studied allies (Denmark, Germany and Sweden) are selected on terms of geographical proximity, comparative force structures and industrial cooperation and integration.

By examining how these European allies address and close capability gaps, the Netherlands can gain insight into alternative force development paths, trade-offs, and best practices. Countries with similar threat perceptions, alliance commitments, and industrial constraints may nonetheless pursue different solutions in areas such as force structure, procurement strategies, or capability prioritisation. Understanding such differences can help inform Dutch decision-making as it seeks to strengthen its land forces.

Four nations and three capability shortfalls

The report focuses on three critical capability shortfalls which stand central to NATO's collective defence posture. The first is Ground-Based Air Defence

2 NATO, 'The Hague Summit Declaration', 25 June 2025.

(GBAD), which is essential for protecting manoeuvre units, critical infrastructure, and logistics against aerial threats such as missiles, aircraft, and unmanned systems. The second capability area is Land Fires, encompassing heavy fires such as 155mm artillery and rocket artillery capabilities that enable deep strike operations. The third capability area is Land Manoeuvre Formations, referring to armoured and mechanised units capable of conducting sustained offensive and defensive combat operations under contested conditions. Denmark, Germany, Sweden and the Netherlands have all embarked on significant defence reforms since 2022, yet all approach capability development from a distinct political, industrial, and doctrinal starting point. The report is supplemented with an appendix on innovation, examining the role of innovation across the three assessed capability areas, highlighting its relevance for addressing identified gaps.

Analysis

This analysis assesses progress in closing critical land-domain capability gaps across Denmark, Germany, Sweden, and the Netherlands. Rather than cataloguing force structures or procurement plans in isolation, it critically examines whether current approaches are likely to generate timely and enhanced combat power for high-intensity conflict.

Europe has several critical capability gaps. This report focuses on the efforts of Denmark, Germany, Sweden and the Netherlands to close capability gaps in air and missile defence, artillery systems and ground combat capabilities. These capabilities are closely tied to the land domain and constitute 3 out of the 9 capability shortfalls as mentioned by the EU. Considering that these shortfalls align with NATO, they hold relevance for the Netherlands as well.[3]

Table 1 Capability Shortfalls as mentioned in the EU Defence Readiness Roadmap 2030[4]

Capability	EU definition	Relation to this analysis
Air and missile defence	Integrated shield against all air threats (missiles, aircraft, UAS) with NATO C2 integration	Included as Ground-Based Air Defence
Strategic enablers	Including strategic airlift, air-to-air refuelling, maritime awareness, combat capabilities, and border security	Excluded
Military mobility	EU-wide transport network enabling rapid movement of troops and equipment	Excluded
Artillery systems	Advanced fire systems with modern artillery and long-range precision missile capabilities	Included as Land Fires
Cyber, AI, electronic warfare	Advanced systems for electromagnetic spectrum control and cyber operations	Excluded
Missile and ammunition	Strategic stockpiles with sufficient industrial capacity for timely replenishment	Excluded
Drones and counter-drone systems	Comprehensive unmanned fleet (air, ground, surface, underwater) with autonomous capabilities	Excluded

3 Duchateau-Polkerman & Hendriks, "Defensiecapaciteiten-planning in de NAVO", 18th June 2025

4 "Joint communication to the European Parliament, the European Council and the Council: Preserving Peace – Defence Readiness Roadmap 2030" European Commission, October 16, 2025.

Capability	EU definition	Relation to this analysis
Ground combat	Full-spectrum, interoperable land combat capabilities for high-intensity operations	Included as Land Manoeuvre Formations
Maritime	Enhanced naval capabilities to ensure maritime security, situational awareness, and protection of sea lines	Excluded

The policy perspective

Denmark, Germany, Sweden, and the Netherlands are all undertaking significant efforts to modernize and expand their land forces after decades of underinvestment, reflecting a broader shift from crisis management to national and collective defence. Each country has articulated this transformation through formal strategic documents that provide political direction and financial frameworks, while simultaneously lacking publicly available information on specific timelines in relation to capability development. In 2025, Denmark, Germany, Sweden and the Netherlands have committed at the NATO summit to gradually increasing defence expenditure to 5 % of GDP by 2035, with a minimum of 3.5 % devoted to core defence, and to provide annual plans showing progress toward these objectives.

Table 2 Estimated national spending on core defence capabilities

	Denmark	Germany	Sweden	Netherlands
GDP by 2025 (bn USD)	500	5.330	711.5	1.410
Defence spending 2025 (bn USD)[5] [6]	14.3	+/- 127.9[7]	15.2	28.1
% of GDP by 2025	2.86	2.4	2.14	1.99
Expected GDP by 2030 (bn USD)[8]	591	6.059	839	1.622
GDP extrapolated to 2035 (bn USD)[9]	630	6.463	895	1.730
Estimated core defence spending by 2035 (3.5% of GDP, bn USD)	22	226	31	61

5 Based on IMF data, October 2025

6 Defence expenditure based on NATO provided numbers

7 German defence spending numbers for 2025 are not available. This number is estimated by Clingendael based on Berlin's claim to spend 2.4% of GDP in 2025 on Defence.

8 Source IMF, exchange rates applied as of 27-01-2026

9 Assuming 1.3% annual growth based on average EU economic growth from 2005 till 2024, Eurostat, June 2025

Denmark's Defence Agreement, which spans the period 2024-2033, provides EUR 20 billion in long-term funding and shifts defence policy toward national and collective defence. The agreement prioritizes ground-based air defence and supports the development of a fully supported heavy brigade, including land fires, by 2032. Denmark is also investing in personnel recruitment, retention, and training, including paid military apprenticeships and new staffing systems, to make its forces more attractive and capable.

Germany's National Security Strategy, reinforced by the EUR 100 billion *Sondervermögen* fund, seeks to make the Bundeswehr *kriegstüchtig* ("ready for war") and emphasizes national and collective defence. Germany plans to increase defence spending to 3.5 % of GDP by 2029 and improve recruitment and retention through incentives such as higher starting salaries. Through this, Berlin aims to provide NATO with at least ten brigades by 2030.[10]

Sweden's *Totalförsvaret* 2025-2030 strategy similarly prioritizes national and collective defence, with EUR 15 billion allocated to modernize the armed forces by 2030. Civil defence and societal resilience are central to Sweden's strategy, enhancing recruitment, conscription, and voluntary participation in the Home Guard.

The Netherlands is rebuilding its land forces after long-standing capability gaps, with a focus on integration with NATO partners, particularly Germany, and modernizing its artillery and mechanized formations. Efforts are aimed at addressing both personnel shortfalls and capability gaps, while ensuring interoperability with allied forces. The strategy is described in various policy documents, such as the *Defensienota 2024*.

10 Sabine Siebold, "Exclusive: NATO to ask Berlin for seven more brigades under new targets, sources say," *Reuters*, May 28, 2025.

Capability 1: Ground Based Air and Missile Defence

Picture 1 A US Patriot Missile Launcher[11]

Denmark, Germany, Sweden, and the Netherlands all currently lack a fully operational, multilayered air defence architecture capable of protecting manoeuvre forces, critical infrastructure, and rear areas simultaneously.

Modern, highend missile-based interceptor systems such as the Patriot or IRIS-T have been dominant in ground-based air defence for the last decades but are only a partial solution to counter aerial threats. Evidence from Ukraine

11 Image: US Army, Lance Cpl. Alyssa Chuluda

exemplifies that relying on high-end missile interceptors leads to a cost-exchange problem.[12]

Table 3 Indicative maximum optimal engagement ranges for various layers of ground-based air defence[13]

	Very short range	Short range	Medium range	Long range
Maximum range	3-5km	10-15km	25-50km	100km+

Denmark

After having abolished its ground-based air defence (GBAD) capabilities entirely in the last decades, Copenhagen is currently involved in rebuilding all layers simultaneously in line with the Defence Agreement's objective to achieve early operational capability of a multi-layered GBAD architecture by 2033. Whilst doing so, Denmark is acquiring a wide range of different systems to close pressing capability gaps as quickly as possible.

Denmark is procuring the European SAMP/T NG system to avoid becoming dependent on the United States and its Patriot system in the long run. In its efforts to rapidly rebuild air defences, however, Denmark risks ending up in a complex situation of operating as much as three different types of medium-range air defence systems at once; it acquires Norwegian NASAMS, French VL MICA *and* German IRIS-T SLM platforms. As a relatively small nation, relying on three different platforms may lead to fragmentation and complexity.

Germany

Germany's approach is ambitious in scale but constrained by integration and delivery timelines. Berlin's emphasis on creating a comprehensive system-of-systems, spanning Skyranger, IRIS-T SLS/SLM, and Patriot, reflects a

12 Bart van den Berg & Erik Stijnman, "Testing the Threshold," *Clingendael*, September 2025.

13 Throughout literature, various distances are being mentioned for each category and no clear definitions are set. This figure expands on the distances as given for medium and long range by SWP: https://www.swp-berlin.org/10.18449/2023C06/

sophisticated approach of layering air-defence.[14] Yet this ambition risks diluting near-term effectiveness. Medium- and short-range systems remain under delivery or development, leaving Germany disproportionately reliant on a limited Patriot fleet for several years.[15] Moreover, bringing air defence capabilities back into the army comes with doctrinal challenges, as the air force and the army have to reassess which branch is authorized to counter various aerial threats while deconflicting efforts rapidly.

Sweden

Sweden presents a contrasting model by placing all GBAD under army control, enabling tighter integration with land operations. However, this organisational clarity has not translated into balanced capability. Although Sweden's *Totalförsvaret* strategy formulates the objective to establish a multi-layered GBAD architecture by 2030, it currently lacks a medium-range layer altogether. This continues to constitute a structural vulnerability that will persist until IRIS-T SLM systems arrive only close to 2030.

The Netherlands

After years of limited investment, Dutch GBAD has focused primarily on highend but expensive capabilities, notably American Patriot and Norwegian NASAMS, while veryshort and short-range air defence for manoeuvre units have only recently reemerged as a priority. As a key logistical hub for NATO reinforcement, the Netherlands faces a dual challenge: protecting both deployed land forces and critical national infrastructure. Just as Denmark and Germany, the Netherlands is reacquiring cannon-based air defence systems and has selected the advanced yet expensive Rheinmetall Skyranger (a mix of cannon and missiles) in order to protect its ground manoeuvre units. Moreover, the Netherlands is acquiring Norwegian NOMADS missile-based ground vehicles for short-range protection.

14 "Starting gun sounds for Germany's advanced short – and very short – range air defence system," Hensoldt, January 25, 2024.

15 "Germany Buys 4 New Patriot Long-range Air Defense Missile System," Global Defense News Army Recognition Group, August 27, 2024.

General assessment

Across all four countries, the weakest link is not technological sophistication but scalability. Every nation started with the rebuilding of the higher layers of air defence based on lead times and the availability of defence industrial capacities. Whereas the Netherlands is currently rebuilding all layers in small amounts, Germany is rebuilding all layers in large amounts. Denmark and Sweden, meanwhile, have primarily focused on the highest layers only. Currently, however, each country is in the process of rebuilding and developing their lower layers of air defence as well – for example through cannon-based systems, electronic warfare, upgraded legacy systems and decentralised sensors.

Key takeaways

- **None of the four countries currently fields a fully operational, multi-layered ground-based air defence architecture**, despite strong political intent and operational need.
- **Short-range air defence is expanding fast, but deliveries are likewise due for several years**, gradually decreasing the capability gaps which will remain present up to 2030.
- **Long delivery times, personnel shortages and the need to recreate air defence doctrine** constrain near-term effectiveness, especially in the light of the procurement of highly technological – and often complex – systems that need advanced training.

Capability 2: Land fires

Picture 2 Dutch PzH 2000 fires a round in Afghanistan[16]

All four countries lack a mature, multilayered fires chain capable of sustained high-intensity operations. Years of budget cuts have left the nations vulnerable, with limited ammunition stockpiles, depth in available systems and – in some cases – even missing entire platforms such as heavy artillery or MLRS (Multiple Launch Rocket Systems).

16 Image: Gerben van Es/ Ministerie van Defensie

Table 4 Indicative maximum ranges for various land fires capabilities, depending on system and ammunition type

	81mm mortar *Out of scope*	120mm mortar *Out of scope*	155mm artillery	MLRS
Maximum range	5-6km	8-13km	25-40km+	70-300km+

Denmark

In recent years, Denmark has donated all its French wheeled truck CEASAR howitzers to Ukraine, leaving its land forces heavily exposed without any heavy artillery support. Denmark's rapid replacement of the donated CAESAR howitzers with Israeli ATMOS systems, which are also wheeled truck systems, reflects a pragmatic focus on availability over technological advancement. This logic is strongly in line with the Defence Agreement's objective to rapidly rebuild Copenhagen's conventional artillery capability by 2033. While it restores a baseline artillery capability enough to support one combat brigade, it does not constitute an improvement over the more capable CAESAR that Denmark used to have. Newly acquired Danish MLRS capabilities, centred on the Israeli PULS system, remain in the introductory phase and have not reached full operational capability by the beginning of 2026.[17]

Germany

Germany's land fires posture illustrates the tension between ambition and what is realistically possible. The Bundeswehr plans to rapidly expand its artillery battalions and introduce new systems, such as the wheeled howitzer RCH 155.[18] While the other nations are acquiring dozens of platforms, Germany is deep into several hundred – illustrating its ambition to increase capabilities fast Nonetheless, current inventories are limited, and delivery schedules are lagging stated objectives as industrial capacity is still expanding after years of divestments.

17 "Skydetest på nyt raketkastersystem," Forsvarsministeriet, January 13, 2026.

18 Lukasz Prus, "Germany officially hands over cutting-edge RCH 155 artillery system to Ukraine," *Defence Industry Europe*, January 14, 2025.

The tracked howitzer PzH 2000 continues to be the backbone of Germany's artillery, which, combined with a limited and aging MLRS fleet, is insufficient to support Berlin's ambition to rapidly grow its land forces and generate massed fires at division or corps level.[19] Moreover, the PzH 2000 will receive mid-life updates in the upcoming years,[20] affecting its availability on the short to medium term.

Germany plans to replace the ageing MARS II with a Europeanised version of the Israeli PULS system, designated as EuroPULS. In line with this logic, Germany has acquired the PULS-system by joining the Dutch contract, with the development of its European version materialising through Dutch-German cooperation. Whereas the Netherlands is responsible for testing and munitions, Germany takes the lead in relation to industrial production. Given that comparable long-range rocket artillery capabilities are largely absent within Europe, EuroPULS represents a pragmatic solution by rapidly acquiring this capability while reducing technological dependencies through European integration and industrial participation.

Nevertheless, while this approach mitigates dependency risks, it does not eliminate them entirely, as core technologies remain externally sourced.

Sweden

Sweden has moved decisively to rebuild its artillery through the expansion of the Swedish built wheeled truck ARCHER system, aligning land fires growth with brigade expansion.[21] However, Sweden's near exclusive focus on tube artillery, without a parallel investment in rocket artillery or longrange precision fires, leaves a gap in deepstrike capabilities. Even though the *Totalförsvaret* strategy document formulates the objective to have developed a rocket artillery unit by 2030, no initiatives are currently identified in this regard.

19 Clemens Speer, "Die Zukunft der Artillerietruppe – Rüstungsprojekte & Oranisation," *Sicherheit & Verteidigung*, October 8, 2024.

20 Paolo Valpolini, "KNDS Deutschland, where does the PzH 2000 go?" *European Defence Review*, October 29, 2025.

21 Jodesz Gavilan, "Sweden Completes Archer Artillery Upgrade Program," *The Defense Post*, November 4, 2024.

The Netherlands

The Netherlands occupies an intermediate position. Dutch artillery remains limited in size and depth, shaped by decades of expeditionary focus and multinational integration. Its few PzH 2000 systems were pooled in one central artillery battalion, with low readiness levels and leaving brigades without organic heavy artillery capabilities. In 2022, the Netherlands decided to reactivate the depot-based PzH 2000 in order to create two battalions for its 43. and 13. Brigades.

Close cooperation with Germany has partially mitigated its capability shortfall, particularly on corps/division level. However, reliance on allied assets reduces national flexibility and resilience. From this perspective, multinational integration has often served as an efficient substitute for national capabilities under budget constraints.

In 2022, the Netherlands began reintroducing MLRS into its forces, opting to acquire the Israeli PULS system and simultaneously preparing the for the development of the EuroPULS system. For the Netherlands, with its relatively small army, operational use of such long-range systems is closely coordinated with German formations in NATO contexts.

General assessment

Denmark, Germany, Sweden and the Netherlands are all rebuilding their land fires capabilities after decades of underinvestment. While 155 mm howitzers continue to form the backbone of land fires, limited numbers and delivery delays constrain near-term firepower. Sweden and Denmark are found to rely primarily on wheeled truck based howitzers that are less able to manoeuvre with ground forces. The Danish strategy is particularly remarkable given Copenhagen's decision to donate all of its CAESAR howitzers to Ukraine and opting for a replacement that is not necessarily more technologically advanced. Germany and the Netherlands, meanwhile, operate the tracked-based system PzH 2000.

Deep-strike capabilities are either absent or very limited, leaving none of the countries with a fully developed, multi-layered fires chain. Personnel shortages and reliance on non-European MLRS systems further restrict expansion, sustainment, and strategic autonomy.

Key takeaways

- **All four countries are rebuilding land fires capabilities** after decades of underinvestment, but current forces remain insufficient to support high-intensity operations.
- **155mm howitzers remain the backbone of land fires**, yet overall numbers and delivery timelines limit near-term firepower density.
- **Deep fires capabilities are absent or severely limited**, leaving all four countries without a fully developed multi-layered fires chain.

Capability 3: Land manoeuvre formations

Picture 3 A CV9035NL[22]

Debates on land manoeuvre formations, or ground combat, often emphasise technology and readiness metrics, underplaying the central role of manpower and societal resilience. Denmark, Germany, Sweden, and the Netherlands all aim to expand or regenerate brigade level formations, yet each faces structural constraints that challenge the credibility of these ambitions.

22 Image: Netherlands Ministry of Defence

Table 5 Number of current and future combat brigades per country

		Denmark	Germany	Sweden	The Netherlands
Current situation	Current combat brigades	2	8	2-4	3
	Land forces manpower, active[23]	5.700	60.650	6.850	15.350
	Land forces manpower, reserve	34.400	13.500	21.500[24]	3.900
	Population by 2026 (million)	5.96	83.46	10.55	17.94
	Current population (million) per brigade	2,98	10,43	2,64	5,98
Future situation	Future combat brigades	2	10	4	3
	Forecasted population by 2030[25]	5.96	83.1	11.3	17.9
	Expected future population (million) per brigade	2,98	8,31	2,83	5,97

Denmark

Denmark aims to develop one single heavy brigade by 2032 besides another brigade that is designed for other tasks, which also reflects an assessment of its demographic and fiscal constraints.[26] Like Norway, Sweden and the Netherlands, Denmark is part of the CV90-community and has thus procured the Swedish CV90 to support its brigade. Alongside this, it has also procured the German Leopard2A7 tank and Finnish Patria personnel carrier vehicles.

The reintroduction and expansion of conscription may alleviate manpower shortages, but short service durations limit the availability of qualified soldiers for complex, high-intensity operations.

23 IISS, "*The Military Balance*", 2025

24 Sweden only fields a Home Guard as its reserve force

25 Eurostat. (2023). Population projections (EUROPOP2023), baseline scenario (STP25) [Data set]. European Commission

26 NATO, NATO Defence Planning Capability Review 2019/2022, *Denmark* (October 14, 2020).

Germany

Germany's ambition to field ten or more brigades by 2030 underscores its central role in NATO's land defence, yet manpower remains a decisive bottleneck. Besides that, Germany is also developing division and corps-level formations. Their ambition can be seen in the large numbers of procured Leopard 2A8 tanks, Puma infantry fighting vehicles, BoxerRCT30 vehicles, and other supporting vehicles.[27] Germany is not only looking at the Germany Defence industry to support the Bundeswehr, but also looks at the Finnish Patria vehicles and the Swiss Piranha.

Berlin hopes to be able to support the expansion of the Bundeswehr through voluntary service and retention. While the Bundeswehr currently fields approximately 180.000 soldiers, the planned reforms aim to expand this number to around 260.000 by 2035.[28] However, without a clear pathway to sustained personnel growth, Germany risks fielding hollow formations; brigades that exist on paper but lack trained personnel and enablers.

Sweden

As part of its first and sole division, Sweden aims to rebuild one infantry brigade and three mechanised brigades by 2030, with one of the mechanised brigades to be stationed in the Arctic region. These brigades make use of a Swedish version of the German Leopard 2A5, the Swedish CV90 and mortar version Mjölner, and the Finnish Patria family for support vehicles.

To tackle personnel shortages, Stockholm makes use of a selective conscription model, which enjoys relatively high societal support and has enabled rapid force regeneration.[29] While Stockholm enrolled roughly 8.000 conscripts in 2024, the government plans to increase this number to 10.000 by 2030 and 12.000 by

27 Laura Pitel, "Germany approves 50bn in military purchases," *Financial Times*, December 17, 2025; "Germany and Netherlands order 222 Boxer RCT 30 infantry fighting vehicles," *Army Recognition*, November 16, 2025.

28 Sophie Tanno, "Germany wants to build Europe's strongest army – a new conscription bill is moving that closer," *CNN*, November 23, 2025.

29 "Total Defence Duty," Krisinformation.se, March 6, 2025.

2032.[30] Nevertheless, questions remain about the integration of conscriptheavy units into NATO operations beyond national territory. This debate exposes a broader tension between national defence priorities and alliance expeditionary requirements that all conscriptionbased systems must confront.[31]

The Netherlands

The Netherlands faces a distinct challenge as a highly professionalised force with limited mass. Its three operational brigades have been understaffed and at low readiness levels for years, lacking sufficient capabilities – most notably in relation to the absence of a third and fourth manoeuvre battalion within the mechanized brigades and an insufficient number of main battle tanks (MBTs) to provide adequate heavy armour. This is particularly problematic in line with the increasing prominence of a trans-Atlantic 'deterrence-by-denial' strategy.[32] However, the decision has now been made to rebuild an additional tank battalion and an extra CV90-equipped battalion. Given the current use of CV90s (including the procurement of the Mjölner mortar system) and the Leopard2A7, as well as close cooperation with Germany and Sweden, acquiring these additional combat vehicles has been relatively straightforward. Meanwhile, once these battalions reach operational capability, each mechanized brigade continues to lack one manoeuvre battalion. In addition, one of the brigades and the air mobile brigade still lack combat support and combat service support units.

As the Dutch brigades are heavily integrated with German command structures, they are highly interoperable but constrained in national autonomy. As NATO's logistical backbone, the Netherlands must balance deployable manoeuvre forces with the protection of critical infrastructure and lines of communication – tasks that compete for scarce personnel. As the Netherlands explores several voluntary conscription models, partly drawing on Scandinavian best practices, it is gradually expanding its forces. However, many of these initiatives remain in an early, immature stage.

30 "Swedish Defence Commission submits final report on military defence: Strengthened defence capability, Sweden as an ally", Swedish Ministry of Defence, April 26, 2024.

31 Morgan Johansson et al., *The Swedish Defence Commission's Report on the Development of the Military Defence* (April 26, 2024).

32 Deterrence by denial seeks to prevent aggression by ensuring an adversary cannot successfully achieve its military objectives, making attack futile rather than merely costly.

Higher force structures: Divisions and corps

As land forces and military capabilities expand, all nations must redevelop higher-level command structures – such as divisions and corps – to effectively orchestrate forces in wartime scenarios. Over recent decades, many of these structures were reduced, repurposed for peacetime functions, or disbanded altogether.

Sweden is developing a divisional headquarters intended to command its four mechanized brigades. This divisional structure remains under development and is not yet fully operational. Denmark leads with Latvia and Estonia a multinational division headquarters, Multinational Division North (MND-N), but does not field a fully national Danish division.

Together with Germany, the Netherlands maintains corps-level command structures through the 1 German-Netherlands Corps (1GNC). This headquarters enables operational-level planning, coordination, and integration of multiple divisions. However, it possesses limited to no organic combat and support capabilities and remains dependent on the assignment of additional enablers and forces in a crisis or wartime scenario. As a result, significant additional capacities with equipment and personnel are needed to support high intensity operations.

General assessment

All four countries are building up land forces to meet NATO requirements, but at different scales and speeds: Denmark is concentrating on a single fully mechanised brigade; Germany plans to field ten or more brigades and is focusing mainly on rebuilding division and corps level formations; Sweden is investing in the creation of four fully equipped brigades; and the Netherlands is focused on fully equipping its existing three brigades and strengthening integration into German structures.

At the same time, German and Swedish industry are increasing combat vehicle production, on which each nation depends. Additionally, several nations are also turning to the Finnish state-owned Patria industry for support vehicles, given their cost-effectiveness for high-intensity operations.

Manpower remains a key constraint. Denmark and Sweden rely on conscription, while Germany and the Netherlands are pursuing voluntary service with potential expansion. All four face challenges in recruitment, retention, and public willingness to serve. Civil defence and societal resilience are also critical enablers, shaping force readiness, the integration of conscripts, and the ability to operate effectively within NATO frameworks.

Key takeaways

- **Although land forces are expanding, higher-level command structures in Sweden, Denmark, and the Netherlands remain under development or dependent on multinational arrangements**, highlighting a persistent gap between growing force size and fully enabled divisional and corps-level warfighting capacity.
- **All four countries are building up brigade-sized land forces to meet NATO requirements**, but at different speeds and scales: Denmark focuses on one fully mechanised brigade, Germany aims to field ten or more brigades, and Sweden is rebuilding three mechanised brigades alongside a new Arctic infantry unit.
- **Manpower is a major constraint**: Denmark and Sweden rely on conscription, Germany plans voluntary conscription with potential expansion, and all face challenges in recruitment, retention, and public willingness to serve.
- **Civil defence and societal resilience are critical enablers**, affecting force readiness, integration of conscripts, and the ability to participate effectively in NATO operations.

Conclusions and recommendations

Denmark, Germany, Sweden, and the Netherlands have entered a critical phase of land force reconstitution after decades of sustained reductions. Political resolve, strategic alignment with NATO, and unprecedented financial commitments are now firmly established. Yet six key challenges remain to be addressed.

Challenge 1: A window of vulnerability persists

Procurement lead-times are long, with many critical systems only expected to reach full operational capability toward the end of the decade. Money does not buy speed. Delivery timelines, training pipelines, doctrinal adaptation, and personnel generation move far more slowly than political ambition. In the near to medium term, ambition continues to outpace military effect, creating a window of vulnerability in precisely those capability areas most relevant for high-intensity conflict in the line with an overall trans-Atlantic 'deterrence-by-denial' strategy.

While procurement momentum has clearly accelerated since 2022, early political signalling translated slowly into industrial output. European land forces are now constrained less by intent than by production capacity, integration timelines, and workforce availability, with significant gaps continuing to exist up towards 2030.

Policy recommendation for Dutch policymakers:

- Plan explicitly for a prolonged transition period in which capabilities are incomplete. As such, risk mitigation measures, such as multinational integration, forward deployment, and unwavering support to Ukraine, are essential to covering the window of vulnerability.

Challenge 2: Non-European suppliers will remain important for specific capabilities

Despite growing European cooperation, critical dependencies persist. Long-range air defence and deep fires remain reliant on US and Israeli systems, and Europeanisation efforts such as EuroPULS mitigate – but do not entirely remove – these dependencies, for example in relation to ammunition. This raises unresolved questions regarding long-term resilience, supply security, and political freedom of action in a protracted crisis.

At the same time, European states are acquiring broadly similar systems but continue to pursue national variants and bespoke configurations. While this preserves sovereignty and flexibility, it limits economies of scale and slows down collective capability maturation.

Policy recommendations for European armed forces:

- Adopt a dual-track approach to capability development, combining short-term reliance on non-European suppliers for critical enablers with a long-term, coordinated European industrial strategy to reduce strategic dependencies in areas such as long-range air defence and deep fires.
- Accelerate European standardisation and modularity, encouraging common baseline configurations for shared systems while allowing limited national customisation, in order to improve interoperability, economies of scale, and collective capability maturation.
- Use joint procurement and framework contracts more systematically, leveraging EU and NATO instruments to reduce fragmentation, shorten delivery timelines, and sustain industrial production at scale.

Challenge 3: Shortage in personnel remains a decisive constraint

Across all four nations, manpower shortages risk becoming the most consequential limiting factor. Conscription is expanding or being reconsidered, but force generation is as much a societal challenge as a military one. Numbers alone do not guarantee readiness; training quality, reserve integration, retention, and public willingness to serve are decisive.

Civil defence and societal resilience are therefore not ancillary concerns but operational enablers. Without them, sustained high-intensity operations and effective NATO integration will remain difficult to achieve.

Policy recommendations for European armed forces:

- Balance readiness with headcount, as an excessive focus on increasing personnel risks undermining training quality, unit cohesion, and reserve integration, ultimately reducing operational effectiveness.
- Professionalise reserve and mobilisation systems, including predictable call-up cycles, employer compensation mechanisms, and enhanced training pipelines, to ensure reserves are rapidly usable and interoperable within NATO frameworks.
- Embed civil defence and societal resilience into military planning, by clarifying roles and responsibilities for civilian authorities, improving crisis communication, and investing in civil-military coordination to enable sustained operations under stress.

Challenge 4: Technology, mass, and doctrine must be balanced

The assessed nations invest in top-tier technology, much of which is genuinely cutting-edge and competitive with, or even superior to, that of their primary adversary Russia. However, these systems are expensive, slow to scale, and demanding to operate and maintain. Recent battlefield experience demonstrates that technological advantage must be balanced with affordable mass, depth in stockpiles, and resilient logistics.

Equally, acquiring new platforms without corresponding doctrinal adaptation limits their effectiveness. The reintegration of ground-based air defence into manoeuvre brigades is necessary but comes with challenges, as air-land deconfliction in contested airspace.

Policy recommendations for European armed forces:

- Adopt a balanced force-design approach, combining high-end capabilities with scalable, affordable systems to ensure sufficient mass, stockpile depth, and sustainability in prolonged high-intensity conflict.

- Prioritise producibility and sustainment alongside performance, embedding requirements for industrial scalability, maintenance burden, and logistics resilience into acquisition decisions from the outset.
- Accelerate doctrinal adaptation in parallel with procurement, ensuring that new technologies are integrated into concepts of operation, training curricula, and command structures rather than treated as stand-alone capabilities.

Challenge 5: Prevent future cost reductions from disproportionately eroding military capabilities

Decades of cost-cutting measures did not merely reduce force size, but dismantled capabilities that are costly and time-consuming to regenerate. With a variety of systems being sold or simply disbanded under the assumption that they were no longer needed, recent developments illustrate how essential these capabilities are under today's security conditions – often after relative limited updates and modifications.

Reconstituting capabilities is characterized by long lead-in times, scarce personnel, and strained industrial capacity. Therefore, there exists an urgent need for long-term strategic thinking: when capabilities appear temporarily redundant, they should be preserved in storage and sustainment frameworks rather than liquidated. This is the equipment to be used by reservists, allowing wartime military production to take shape. While in the first instance seemingly being cost-inefficient, rebuilding lost military capacity is far slower and more expensive than maintaining such capabilities in the future.

Policy recommendations for European armed forces:

- End automatic liquidation of "redundant" capabilities. Often aging military capabilities are of use in a different tactical role or regain value in the face of new threats and after incremental updates. Link preserved equipment to reserve force structures, ensuring that stored platforms are periodically exercised, maintained by trained personnel, and integrated into mobilisation and force-generation plans.
- Protect industrial surge capacity, including production lines, supplier networks, and specialised skills, through long-term framework contracts, minimum sustaining rates, and targeted state support. Support the use of civilian production lines by embedding dual-use considerations as a core design principle, rather than over-engineering bespoke military capabilities.

Challenge 6: Expanding land forces need higher level orchestration and coordination

While land forces are expanding, higher-level command structures – such as divisions and army corps – remain under development or reliant on multinational arrangements. Many of these units supporting the headquarters (HQ) were reduced, repurposed for peacetime functions, or disbanded altogether over previous decades. This has caused gaps in operational-level command and control needed for large scale combat operations in high intensity warfare with a peer or near-pear opponent.

At the same time, completely refitting HQs presents an opportunity to adapt them to contemporary and future warfighting concepts. C6ISR developments can help to alter higher-level command structures itself. Rebuilding Cold War-era structures in their original form would therefore be neither effective nor advisable. Instead, new divisional and corps structures can be designed as flexible, multi-domain command nodes with scalable enablers, capable of integrating national and multinational forces in high-intensity conflict. Such command nodes can be designed to facilitate a more decentralised planning and execution of operations, as a prerequisite for dispersal and swarming concepts. This will help to mitigate threats by operating in a transparent battlefield, as well as GPS or communication denied environments.

Policy recommendations for European armed forces:

- Continue developing higher-level command structures as flexible, modular command nodes capable of integrating multinational forces and multi-domain effects. Define and adopt a coherent warfighting concept that explicitly empowers divisional and corps-level headquarters to operate at scale in high-intensity conflict – while making use of new and emerging technologies.
- Resource higher-level command structures with the organic capabilities required by that warfighting concept, prioritising critical enablers such as command and control, fires integration, sustainment, and protection. Utilize new C6ISR possibilities for a decentral planning and execution of operations, by design push resources down whenever possible.

Appendix A: Perspective for innovation

Building on the assessment of current and projected capabilities and shortfalls, and the policy recommendation following from them, this appendix offers perspectives on addressing these challenges through innovation from a technological, doctrinal, and organisational perspective. Innovation on itself is not a substitute for mass, manpower, or industrial capacity. It can act, however, as an enabling force multiplier that can help mitigate constraints, improve cost-effectiveness, and accelerate the operational relevance of existing and planned capabilities.

The insights presented in this appendix draw on the expertise of Clingendael researchers and build on the central finding of this report that closing capability gaps is not solely a matter of reconstituting previously divested capabilities but also requires the deliberate design and integration of new capabilities adapted to contemporary and future operational environments.

As highlighted in the coalition agreement of the incoming Jetten cabinet, up to 10% of defence spending should be allocated to innovation by means of a, yet to be installed, defence innovation authority – envisioned in the style of DARPA.[33] Against this backdrop, this appendix outlines possible avenues for innovation in support of closing identified capability gaps.

Ground-based Air Defence (GBAD)

For Denmark, Germany, Sweden, and the Netherlands, innovation in GBAD should focus on cost-efficiency, integration, and scalability. Experience from Ukraine highlights that effectiveness now depends more on decision speed,

33 "Aan de slag", *coalition agreement of D66, VVD and CDA*, presented 30 January 2026

saturation management and cost-exchange ratios than on individual interceptor performance. To support this, innovation should focus on:

- **Sensor and C2 integration**: Improving sensor-to-shooter cycles, enabling joint and allied data sharing, and integrating non-traditional sensors can boost situational awareness and engagement efficiency without new platforms.[34]
- **Densifying lower layers**: Affordable solutions, such as upgraded legacy systems, radars, lasers for drones, electronic warfare, can complement high-end short-range systems like Skyranger and medium-range systems like PATRIOT and IRIS-T, which are costly and limited in number. Even simple weapons, such as mobile .50 calibre machine guns provided with limited upgrades, have proven effective against low-tier threats.[35]
- **Doctrinal and organisational change**: Embedding very short-range air defence into manoeuvre units requires updated engagement authorities, training, and air land deconfliction to ensure even advanced systems are employed efficiently.

Land Fires

Innovation for artillery and land fires should prioritise improvements that maximise effectiveness of existing platforms while reducing exposure and cost. The main areas of focus are munitions, sensors, and integration across the force:

- **Enhanced munitions**: Lower-cost precision guidance, electronic warfare resilience, and course-correcting fuses improve effectiveness of existing 155 mm howitzers.
- **Sensor integration and UAVs**: Drones can provide limited deep-strike options and shorten engagement timelines, enabling faster shoot-and-scoot operations if doctrine is likewise adjusted.
- **European deep-strike capabilities:** Ground-launched missiles strengthen European deterrence and operational autonomy. They enable engagement of high-value targets at depth, reduce reliance on non-European systems, and provide greater political and operational flexibility, provided they are integrated with European ISR, targeting, and command structures.

34 https://www.rti.com/blog/jadc2-future-of-situational-awareness

35 "Ukraine's best drone-killing weapons ranked by military experts," *Ukraine Today*, July 22, 2025.

- **Doctrinal and organisational innovation**: Modular units and closer integration of artillery, manoeuvre, and drones improve responsiveness and mass at the point of decision, particularly for manpower-constrained forces. Mobility and survivability are critical in modern conflicts.

Land manoeuvre formations

Innovation in land manoeuvre should target manpower efficiency, training, and adaptability in order to sustain combat effectiveness under conditions of limited personnel, high attrition, and rapidly evolving threats:

- **Mission command:** Innovation supporting decentralised decision-making, clear intent, and trust in subordinate leaders is vital, especially in dispersed, contested operations affected by electronic and cyber warfare. Complicated IT-systems are prone to disruptions and friction. Taking mission command as point of departure mitigates risk of operational inertia after losing connections.
- **Uncrewed systems:** Tactical-level drones, unmanned unattended sensors and unmanned vehicles enhance reconnaissance, protection, and situational awareness, enabling subordinate commanders to operate more independently.
- **Training and organisation:** Simulations, modular unit structures, and flexible task organisation improve readiness, cohesion, and operational flexibility.