



EUROPÄISCHE
SICHERHEIT &
TECHNIK

Special Edition

Munich Security Conference 2025



FOR A STRONG EUROPE



Helsing



COMMUNICATION SYSTEMS MAKE THE DIFFERENCE!

Aeromaritime communications system of the German F125 class frigates have demonstrated exceptional reliability during their worldwide deployment as part of the INDO-PACIFIC Deployment (IPD) 2024.

COMMUNICATION
SYSTEMS

SYSTEM
INTEGRATION

ANTENNA
SYSTEMS

MILITARY
MESSAGE
HANDLING
SYSTEM

ADVANCED
PLATFORM
COMMUNICATIONS
SYSTEM

INTEGRATED
LOGISTIC
SUPPORT

SURFACE
VESSELS

SUBMARINES

AEROMARITIME



The value of the MSC is dialogue, as open and as controversial as possible



[Credit: privat]

It would be presumptuous for this special edition of the monthly magazine *Europäische Sicherheit und Technik* for the participants of the Munich Security Conference to claim that we can provide a comprehensive explanation of the world situation. There are far too many experts at the conference for that. But our authors want to contribute some aspects that may inspire the discussions.

In these times, it must also be made clear that a magazine published here at the Munich Conference has to have an editorial deadline on 10 January. After that, there would still be important dates to come: US President Donald Trump will have taken office. In Germany, the federal election campaign enters its final phase. With coalition negotiations in Austria between the conservative ÖVP and far-right FPÖ, the EU will probably have to deal with another right-wing nationalist government. After the fall of the Assad regime, the world is eagerly awaiting to see what will happen there – incidentally, with active EU member states becoming involved. So, as we write, we don't know whether anything decisive will happen. But we have tried to anticipate this.

Public perception of the 2025 Munich Security Conference will reflect the discussions surrounding the war in Ukraine, the new direction of the USA, the development in Europe towards autocratic, right-wing governments and Syria. But it is the tradition and good custom of the conference that the focus is also directed to other world regions in the panels. *European Security and Technology* offers a number of informative articles on these regions, including the growing interest of major powers in the Arctic. We take a look at South America. We also look at North Africa.

Our authors also deal with armaments policy and take a look at some armaments companies. Is armaments policy still national – or should we be shaping it at the European level?

Conferences like the one in Munich do not have any clearly defined outcomes. The value of the meeting is the dialogue and discussion, which should be as open and controversial as possible. In recent years, it has often been the case that statesmen and women have left the room after their intervention with different opinions having not heard an opposing view. A real discussion often did not take place. Hopefully, more dialogue will be encouraged this year.

Munich has often been a place where people who avoided each other in the plenary hall came together in the back rooms of the conference. Many a political process that later led to a result began in Munich. Let's hope that Munich this year can make a contribution in this sense, to making the world a little more peaceful.

Rolf Clement

Contents

Munich Security Conference

Promoting peace through dialogue

Interview with Christoph Heusgen,
Chairman of the Munich Security Conference

“Looking for the Silver Lining”

From a national to a transnational
security conference
Peter E. Uhde

Strategic Thinking and Foresight

Sebatian Bollien and Henning Riecke

Maritime choke points

Global maritime trade and international security
Deniz Kocak



[Credit: United Shipbuilding Corporation]

Strategic competition in the Arctic

Navigating a complex security nexus

Sophie Arts

There he is again

From Panama to Greenland
Marcus Pindur

How to defend the European peninsula?

Karsten Schneider

Growing instability in the Maghreb is a challenge for Europeans

Jean François Bureau

Current security challenges for South America

Andrés Hildebrandt

Hope or chaos for the Near East?

After 16 months of war, people long for peace
and a solution
H.M. Lawrence

8 **Russia’s War against Ukraine**
Is 2025 the Year of Peace?
Graeme P. Herd

10 **NATO 2030**
What could the Atlantic Alliance look like?
Karl-Heinz Kamp

12

16



[Credit: NATO]

NATO – fit for war?

Roger Näbig

46

24 **The Way to Victory**
How the West must join forces
Ben Hodges

19 **Ideas for a (new) European Security Order**
Detlef Puhl

54 **On the path to a European Army**
New strength is coming from
overcoming dysfunctional particularism
Hans-Peter Bartels

57 **French security policy in the European context**
Detlef Puhl

27 **British Security Policy**
Strategic Defence Review points to
difficult choices ahead
Conrad Waters

28 **Polish security policy in times of war in Europe**
Robert Czulda

32 **The Cold War 2.0**
NATO needs reforms
Rolf Clement

36 **National Security Council for Germany – within reach**
NATO needs reforms
Christina Moritz

Arms and Algorithm 72

Germany's AI Zeitenwende

Malte Clement

German security and defence industries 75

An overview of challenges and expectations at the beginning of 2025

Hans C. Atzpodien



[Credit: HENSOLDT]

Fast and large-scale delivery is a priority 78

ES&T interview with
Hensoldt CEO, Oliver Dörre

Countering the hypersonic threat 81

Doug Richardson

Accelerated growth of defence capacities and higher investments 87

Interview with Thomas Gottschild,

Managing Director of MBDA Deutschland GmbH

Solving Intricate Military Problems 89

AI can handle the flood of information

interview with with Dr. Germar

Schröder, head of the Public Sector Practice of Strategy& and the PwC/Strategy& initiative for defence, PwC partner André Keller and Ludwig Biller, director at Strategy&.

Columns

Word from the editor 5

Masthead 7

Masthead

ES&T [Europäische Sicherheit & Technik] Special Edition Munich Security Conference 2025

74th year

ISSN 2193-746X

Published by Mittler Report Verlag GmbH,

Beethovenallee 21

D-53173 Bonn,

Tel.: +49 (0) 228 / 3500870,

Fax: +49 (0) 228 / 35 00871

info@mittler-report.de

www.mittler-report.de

Local Court Bonn HRB 18658

Managing Director: Peter Tamm,

Publishing Director: Sylvia Fuhlich

A Tamm Media Group company.

This publication is issued in cooperation with the Bundeswehr/the Federal Ministry of Defence. The Mittler Report Verlag is solely responsible for the content and press law.

Europäische Sicherheit & Technik is the result of the merger of the magazines *Strategie & Technik* and *Europäische Sicherheit*. *Strategie & Technik* is a work title of the licensor Federal Republic of Germany, represented by the Federal Ministry of Defence. *Europäische Sicherheit & Technik* is the official organ of the German Air Force Association (IDLW), the Society for Security Policy e.V. (GSP) and the Clausewitz Society e.V. and is published in cooperation with the Gesprächskreis Nachrichtendienste in Deutschland e.V. The Mittler-Brief is part of ES&T.

Editorial team

Editor in Chief: Jürgen Fischer (Freelancer)

Editor responsible for this special edition: Rolf Clement (Freelancer)

Managing and picture editor: Wilhelm Bocklet (Freelancer)

Sales

Head of Sales: Michael Menzer, m.menzer@mittler-report.de

Sales Management: Susanne Sinss, s.sinss@hansa-online.de

Ad Disposition and After Sales Management:

Markus Wenzel, m.wenzel@mittler-report.de

Sales Representative Netherlands/Scandinavia/Israel/USA/Canada

Stephen Elliott, s.elliott@mittler-report.de

Sales Representative UK/Ireland/Eastern Europe/Turkey

Stephen Barnard, s.barnard@mittler-report.de

Layout: AnKo MedienDesign GmbH, 53340 Meckenheim

Production: Lehmann Offsetdruck und Verlag GmbH, 22848 Norderstedt

Design: kreativruedel GmbH & Co. KG, 53173 Bonn

Reader Service:

Mittler Report Verlag GmbH

Beethovenallee 21

D-53173 Bonn

Phone: +49 (0)228 3500888

Email: abo@mittler-report.de

©2025 Mittler Report Verlag GmbH. All rights reserved.

No articles may be reproduced without written permission from Mittler Report Verlag GmbH. All images not explicitly owned by the magazine remain the property of their respective copyright holders, as attributed in the relevant image credit.

Cover Photo: MSC / Kuhlmann

Promoting peace through dialogue

An interview with Christoph Heusgen, Chairman of the Munich Security Conference

ES&T: Mr Heusgen, the 2025 Munich Security Conference is taking place at a particularly exciting time politically. US President Trump took office just a month ago. In Germany, the final phase of a short but fierce election campaign is raging. In France, the incumbent government does not have a majority of its own in parliament, to mention just three developments in important countries. Is this more of an opportunity or more of a risk for the conference?

Heusgen: The mission of the Munich Security Conference – to promote peace through dialogue – is more important today than ever. However, the developments I have mentioned also illustrate how complex this task has become. International tensions and unforeseeable dynamics are, of course, challenges. At the same time, such times of upheaval always offer an opportunity to realign partnerships and find innovative solutions. I am pleased that with this year's conference, we are once again able to offer a unique platform to promote dialogue between stakeholders and bridge possible differences.

ES & T: What are the priorities for this conference?

Heusgen: As always, we will cover a wide range of topics. We will follow up on the debates of the last two conferences and look to the future of the international order based on the UN Charter with representatives from various states, particularly from the Global South, and discuss possible reforms of multilateral institutions. The realignment of transatlantic relations with the new US administration will certainly be another defining topic. We will also address the ever-increasing number of international and regional conflicts. In addition to Ukraine and the Middle East, we must also shed light on conflicts that receive less media attention, such as those in Sudan, Haiti and Myanmar. Based on a broad concept of security, we will also address issues such as food, climate and energy security, as well as economic security and the global impact of increasingly aggressive protectionism. Another key issue is Europe's role in this dynamic world. This involves finding answers to external challenges, i.e., stronger European defence, but also the question of how internal cohesion can be ensured in times of increasing polarisation.

ES&T: In this country, discussions often overlook the importance of other regions. How important is Latin America for Europe's security?

Heusgen: Latin America may be geographically distant, but it plays a very important role in overcoming global challenges. This resource-rich continent is extremely important for food security, the fight against climate change and the energy transition. The importance for Europe's security is particularly tangible when it comes to issues such as organised crime

and maritime security. Europe is one of the largest markets for Latin American drug cartels, which underlines the need for close cooperation in the security sector. Last November, we organised a conference in Rio de Janeiro that lasted several days and brought together Latin American, European and other international decision-makers and experts following the G20 summit. It became clear that much potential for cooperation remains untapped. The conclusion of the trade agreement

between the EU and the South American Mercosur countries after 25 years of negotiations is a significant step towards diversifying the European economy, but we must also deepen political and security cooperation.

ES & T: What role does the BRICS organisation play in today's world? How do you think it will develop?

Heusgen: The BRICS organisation has undoubtedly gained in importance, especially with its new members. Most recently, Indonesia, the largest economy and most populous country in Southeast Asia, has joined. However, it is important to emphasise that the BRICS countries have different priorities and do not always pull in the same direction. For example, some are clearly anti-Western or anti-American, while others are not. This heterogeneity could impair the organisation's effectiveness in the medium to long term, especially if the membership continues to grow and become even more diverse.

ES & T: Do you see new approaches for a cooperative policy with North Africa?

Heusgen: Cooperation with North Africa urgently needs to be strengthened. What happens in the region has a direct impact on Europe. We have always seen this in the areas of terrorism, organised crime and migration. However, it would be wrong to look at North Africa exclusively through the security lens. Cooperation must be broadened. I therefore welcome the fact that there is a new EU Commissioner for the Mediterranean who will draw up a cooperation pact that includes migration and terrorism, as well as investment,



[Credits: MSC]

economic stability, energy and transport. However, good governance remains a basic prerequisite for stability in North Africa and here, too, we must do more, whereby we must stop walking around while wagging our fingers.

ES & T: How do you currently assess cohesion in NATO? I am thinking of the visits of the Hungarian and Slovak presidents to Russia's ruler Putin.

Heusgen: NATO is the most successful defence alliance in the world. Despite occasional differences, it has guaranteed peace and stability for decades. Of course, you have to continuously work on internal cohesion. The Hungarian and Slovak solo attempts show how much disruptive potential comes from illiberal forces. Putin knows this and will always try to strengthen the backs of such forces and divide the Alliance. But in the end, the European allies in particular know that NATO is an important life insurance policy for them. After all, the brutal Russian war of aggression against Ukraine shows this day after day.

ES & T: Does the change of power in Damascus offer legitimate hope for a better future?

Heusgen: The surprising change of power in Damascus initially shows that many autocracies are built on sand. The end of Assad is a first step, but it is not yet a guarantee for a better future. Much depends on whether the new power structures in Syria are made more inclusive and peaceful and

sion-making processes and create incentives to encourage its member states to cooperate much more closely in the area of defence. The President of the Commission has therefore also appointed a defence commissioner for the first time, who is to work towards a genuine internal market for defence. Meanwhile, NATO must increase its defence and deterrence capabilities and arm itself even better against new challenges, in particular hybrid threats and new technologies. Furthermore, the EU and NATO should work together much more closely in the future to make better use of synergies. But ultimately, both organisations are only as strong as their member states want them to be. Germany plays an important role here and must finally stop hesitating when it comes to building up the military capabilities that are urgently needed and being willing to allow a stronger European defence.

ES & T: The Munich Security Conference has often been the place where approaches to conflicts, perhaps even agreements, were prepared behind the scenes. You know the guest list. Do you see opportunities for development? If so, would you also tell us in which conflict?

Heusgen: We will do everything we can to facilitate confidential discussions. Whether these are fruitful depends in the end on the parties involved. Of course, I hope that we will make progress in various conflicts. If I had a specif-



▲ A view of the audience in the main conference hall

how the international community accompanies the transition. I see a key role for the United Nations here, but also for regional actors such as Türkiye and Saudi Arabia. There will be no stability in Syria without a sustainable political process.

ES & T: Do we need organisational changes in the EU and / or NATO in order to more convincingly represent a unified policy?

Heusgen: Both organisations have to adapt to the changed strategic environment. The EU must speed up its deci-

ic wish, it would be that the Europeans in Munich send a strong and united signal of continued substantial support to Ukraine.

ES&T: You are handing over the leadership of the Munich Security Conference at the end of this conference. What are your experiences in recent years? What advice do you give your successor Jens Stoltenberg?

Heusgen: Jens Stoltenberg is a very experienced politician. He doesn't need my advice.

Rolf Clement asked the questions.



“Looking for the Silver Lining”

From a national to a transnational security conference

Peter E. Uhde

Ewald-Heinrich von Kleist was the founder of the Munich Wehrkunde Conference, hosting this security policy conference for the first time in November 1963. Over the course of more than six decades, the conference has developed into a transnational event. A former lieutenant in the Wehrmacht, Kleist (1922-2013) was a member of the resistance group around Claus Schenk Graf von Stauffenberg, which carried out an assassination attempt on Adolf Hitler during the Third Reich. Among the participants at the first Wehrkundetagung were future German Chancellor Helmut Schmidt and American politician Henry Kissinger. The latter returned to Munich again and again and usually combined his trip with a visit to his hometown of Fürth. In 2009, he received the Ewald-Heinrich-von-Kleist-Prize.

were held on a small, national scale at the Munich Chamber of Commerce and Industry. Today, the Hotel Bayerischer Hof is the venue.

Since 1993, the conference has had to be cancelled twice. In 1991, the police and the hotel were too concerned about the threat of protests due to the second Gulf War and believed that they could not guarantee the security of the conference. Von Kleist reacted by moving the conference to the Tucher Park Hilton, away from the city centre. It was mainly the American participants, who often brought their spouses to Munich, who pushed for a return to the centrally located Hotel Bayerischer Hof. The 1997 conference was cancelled because no successor could be found for the 75-year-old von Kleist, who had grown tired of office. In 1998, von Kleist chaired the conference one more time, after which Horst Teltschick, former foreign and security policy advisor to Chancellor Helmut Kohl, took over the chairmanship.



▲ **Among the participants at the first Wehrkundetagung were future German Chancellor Helmut Schmidt (left) and American politician Henry Kissinger (right) here 50 years later together with the former French president, Valéry Giscard d'Estaing. [Credit: MSC / Kleinschmidt]**

Von Kleist derived the name Wehrkundetagung from the “Gesellschaft für Wehrkunde” (Society for Defence Studies), the foundation stone which had already been laid in January 1952, also in Munich. He was one of the founders, along with a few like-minded people, of the first security policy association. He was also the publisher of the Zeitschrift für Wehrkunde (Journal of Defence), which today appears under the title European Security & Technology. It is also the official organ of the Society for Security Policy (GSP) and the Clausewitz Society.

Over the years, the Wehrkunde Conference has become the Munich Conference on Security Policy (MSK) and, since the beginning of 2000, the Munich Security Conference (MSC). There is no comparable institution in Germany dealing with the field of security at the international level. The first conferences

In the early years of the Federal Republic of Germany, it was mainly national cabinet members, members of the German Bundestag and the parliaments of the federal states, the military, scientists, representatives of business and the media dealing with foreign, security and defence policy issues who participated in the conference. Later, European and transatlantic participants were added. Legend has it that von Kleist attended a carnival event at the Bayerischer Hof in Munich

with US scientist Edward Teller, considered one of the fathers of the hydrogen bomb. Teller enjoyed the event so much that Kleist to hold the conference during carnival and at the Bayerischer Hof – the Americans loved such festivals. And so it came to pass, and Teller was one of the most loyal participants of the conference.

During the Cold War, the focus of the exchange of ideas was on East-West relations. With Horst Teltschik, the conference gained in international importance. After the reunification of Germany in 1990 and the dissolution of the Warsaw Pact in 1991, other strategic topics arose. Teltschik opened the conference to participants from the countries of Central and Eastern Europe, and also to an increasing number of business representatives, who would otherwise have been more likely to meet at the World Economic Forum in Davos.

In 2005, the MSC motto was “Peace through Dialogue”, which was taken as an opportunity to establish a “Peace Plaque”. The first recipient of this award was Kofi Annan, Secretary-General of the United Nations from 1997 to 2006. Last year, new NATO members Finland and Sweden, were honoured.

Looking back, special attention should be paid to the February 2007 conference “Global Crises – Global Responsibility”, which centred on the speech by Russian President Vladimir Putin. “Thank you, Chancellor, for inviting me to the conference table, which has brought together politicians, military leaders, entrepreneurs and experts from more than 40 countries around the world.”

Two quotes from his speech: “The security of each of us is the security of all of us” and “Wherever peace is broken, it is threatened and in danger everywhere at the same time.” He concluded by saying, “We very often hear, and I personally hear, from our partners, including European partners, the appeal to Russia to play an even more active role in world affairs. Allow me to make a small comment in this regard. There is no need to encourage or urge us to do this. Russia is a country with a history of more than a thousand years, which has almost always had the privilege of conducting an independent foreign policy. We will not change this tradition today. In doing so, we see very clearly how the world has

changed and realistically assess our own possibilities and potential. And, of course, we want to work with responsible and equally independent



◀ **Federal President Joachim Gauck opened the conference in 2014 with the topic: “Germany’s role in the world.”**
[Credit: MSC / Müller]

partners to build a just and democratic world, where security and prosperity are guaranteed not just for the chosen few, but for everyone.” This speech is considered a turning point in Russia’s policy from partnership to more conflict and confrontation. After the speech, Russia began its expansionist policy in Georgia.

Federal President Joachim Gauck opened the conference in 2014 and spoke on the topic: “Germany’s role in the world: Notes on responsibility, norms and alliances”. In his speech, he covered five decades of the Federal Republic of Germany, from the defence of the West to global governance, from defence to comprehensive security policy.

Afghanistan, the conflict with Iran, cyber warfare, the US missile defence shield, climate change, the euro crisis, the civil war in Syria, the Maidan revolution, the future of the EU, Brexit, North Korea’s nuclear programme, the Middle East and the refugee crisis, have all been on the agenda of the conferences in the ensuing years. Crises, conflicts, and wars have occurred and continue to unfold around the world.

The conference increasingly became a meeting of politicians from different fields. Behind the scenes, there was a lot of talking, mediating and negotiating, without the public being present. This has now become an important value of the conference.

Due to the COVID-19 pandemic, no face-to-face conference could be held in 2021. The MSC Special Edition 2021 provided a platform for TV broadcasts of the 57th MSC. US President Joe Biden, who took office in January that year, and French President Emmanuel Macron were connected from Washington and Paris, respectively. This created a new form of communication.

In 2022, participants again met in person, but in a small group. It again became clear that this is the only forum in the world where foreign and security policy experts, both civilian and military, from around the world can exchange ideas in informal discussions. Wolfgang Ischinger, who took over the MSC from Teltschick in 2008, hosted for the last time in 2022. He was succeeded by Ambassador Christoph Heusgen, former foreign and security policy advisor to Chancellor Angela Merkel and Germany’s ambassador to the UN.

Regardless of leadership changes, the legal form of the MSC has changed. As a foundation, it is privately organised and financed, but also receives funding from the federal budget and support from various sponsors. As every year, there will be demonstrations against the meeting of the “war strategists” during the conference days, which will keep the police busy.

The motto of MSC 2023 was: “We are looking for a silver lining on the horizon” with the main topics being the war in Israel and Gaza and the so-called Russian ‘special military operation’ against Ukraine, which is a blatant attack on the fundamental principles of the post-war order. In this regard, President Volodymyr Zelenskyy of Ukraine was invited to address the assembly via video link. German Chancellor Olaf Scholz said: “Dear Volodymyr, we would have loved to have you here with us today, because Ukraine belongs here, at our side, in a free, united Europe...”

In 2024, the Amerikahaus hosted the exhibition “Munich Moments” during the time of the MSC, which showcased the history of this unique, world-class event. UN Secretary-General António Guterres spoke at the opening and around 50 heads of state and government and over 100 ministers from around the world attended. Representatives from Russia and Iran were not invited.

Highlights of MSC 2024 included US Vice President Kamala Harris making a clear commitment to US engagement in NATO. German Chancellor Scholz and Ukrainian President Zelenskyy signed a bilateral security agreement. Following the news of the death of Kremlin opponent Alexei Navalny, which moved all participants, his wife, Yulia Navalnaya, called for the fight against the Russian system of violence under Vladimir Putin. Wars, other crises and conflicts around the globe will again be the focus of this year’s conference. Perhaps the participants will see a peaceful “silver lining on the horizon”.

MSC 2025 is the last conference to be chaired by Christoph Heusgen; he is handing over the reins to former NATO Secretary General Jens Stoltenberg.



Strategic Thinking and Foresight

Sebatian Bollien and Henning Riecke

Are we ready to think through the global changes ahead of us until the very end? Are our organisation as a free society, our values, and ultimately our survival, important enough to take politically difficult decisions which make us more resilient in a world in transformation? Often, it is easier to follow a strategy to put off change and meet challenges only when they actually arise. But in the German federal government there is an increasing level of interest in learning more about the methods of strategic foresight which would allow political actors to establish a vision of how to deal with an unpleasant future. If we are ready to imagine that different possibilities of the future are accepted as being part of the strategic culture — and this has a positive impact on the wider public — the understanding for preventive action will rise. For this to happen, long-term strategic thinking and the capacity for foresight have to go hand in hand.

Internal, external and interwoven challenges

Today, nobody can foresee how global trends turn into risks for our way of life; this can be climate change for example, or the rapid development of technology, each with consequences that are difficult to assess, or even the increasing geopolitical confrontation we are currently experiencing. At the same time, we are also confronted with internal challenges: the strength of the Western community of nations tends to erode as each of them face growing internal resistance against transatlantic cooperation, European integration, existing democratic values or their capability to deal with industrial or technological competition.

Internal and external risks, along with a diminishing ability to cooperate among allies, partners, and rivals, now define the key topics on the government's strategic foresight agenda. The term "foresight" simply means a method,

under strict scientific control, of a common reflection about different kinds of futures, futures to be desired and futures to be avoided, about scenarios, visions, reflections of "what if?" and interviews with experts regarding opposite expectations about the future. The deduction from this exercise of proposals to act makes this foresight a "strategic" one. In



▲ Germany has to prepare for a range of scenarios, from local disasters such as the flood in the Ahr valley (pictured here) to military threats from abroad, in order to be able to act when they occur. [Credit: Bundeswehr/EKT]

the meantime, many ministries and government agencies use these methods. They allow them to reflect on developments which cannot be described as a simple continuation of existing trends. Foresight and data-based prognoses are both useful to underpin long planning processes; foresight for a look into the distant future and data-based prognoses for trends in the near future.

This is particularly important if different developments are mutually dependent or in fact block each other. It is therefore high time to reflect openly on a future NATO without or with reduced US engagement. This would represent a first step in strategic planning in order to compensate for missing or reduced capabilities or to manage the renovation of NATO – and to generate readiness to support an increase in defence spending to make this possible. This, however, could cause opposition in society, and should therefore be taken into account from the outset. For example, conflict over budgets is a given, since expenses for support of sustainability and for education will rise as well. Defence capability is also connected to the capability for innovation, in particu-

AUTHORS

Dr Henning Riecke and Sebastian Bollien work at the Strategic Foresight Centre of the Federal Academy for Security Policy (BAKS)

lar concerning future disruptive technologies. Looking at these key technologies and technological sovereignty, it is important to focus on securing the availability of critical resources and new inter-state partnerships, including with fragile states, to obtain supply-chain resilience. These political efforts need to be made in the context of systemic and geopolitical competition.

This overview of interconnected challenges demonstrates that it is extremely relevant for a government, looking into the future, to be aware of the interaction of different transformation agendas such as climate neutrality, sustainability, capacity of digital innovation and sovereignty, energy policy, defence capability and modernisation of administration — all of these can be equally important, but also contradictory at the same time. Foresight can shine light on this context of interaction, as well as highlight blind spots. Germany's National Security Strategy of 2023 provides sufficient examples.

Ready to defend, resilient, sustainable – and forward looking?

Present and future strategic challenges in security policy led the incoming government coalition of 2022 (the so-called traffic-light-coalition) to agree on presenting a “comprehensive national security strategy” – the first of its kind in Germany. The “new era” proclaimed by Chancellor Olaf Scholz immediately after Russia's attack on Ukraine and only weeks after the conclusion of the coalition contract, demonstrates how much a new and common understanding of security was needed.

The Security Strategy, published in June 2023, constitutes a further development of previous “orientations for defence policy”, issued by the Ministry of Defence, integrates Alli-

ance strategies, and presents a new concept of “integrated security”. It describes Germany's role in an increasingly multipolar world and serves as a reference document for strategic planning and political action. It creates a basis for a systematic and all-government policy. It also demonstrates that strategic thinking and foresight is necessary, in order to be able to face new challenges faster and create room for action. Beside recognising geopolitical realities, the term “integrated security” calls for the interaction of different and resilient actors on the federal, the state, and local levels, as well as civil society institutions and citizens as being the indispensable foundation for our readiness to defend ourselves.



- ▲ [The BAKS Strategic Foresight Methods Seminar teaches foresight tools such as scenario techniques to members of federal authorities.](#) [Credit: BAKS]

It is not sufficient just to take note of the present situation. Future chances and risks for German and European security have to be identified and named as early as possible. To this end, the Security Strategy suggests that several ministries and government agencies conduct connected and joint foresight projects. This way, new paths of development for our security could be designed which would enable networks of different actors to act in common and in a coordinated manner. These are, besides political actors, organisations such as the Red Cross, civil protection agencies, administrations on all levels, civil society, media and the population as a whole. A strategic culture which develops out of these efforts requires the courage to avoid easy thinking and to think in terms of disruption as well. The (next) national security strategy must create room for possibilities to be a motivational factor for all-government and all-levels-of-government action and define clear goals.

Courageous visions, dark fantasies

Government strategies are often rather a frame than a plan for transformation. Often, it takes a crisis to create a political dynamic which fosters cooperation within the government and demands action. So, it is fair to say that today, there is a need to think ahead of time about crises and developments which could lead to a crisis, in order to be prepared to face them in a proactive manner.

Europe at home alone?

The November 2024 elections in the US demonstrated that a “MAGA” agenda (Make America Great Again) can find a solid majority among voters. This is bad for NATO. President Trump talked about leaving NATO already in his first term (2017–2021). After his reelection (2025–2029) and with a loyal team in his Administration, he can now put more pressure on Europeans in the Alliance and make US engagement in NATO part of a deal. It is easy to link a US presence in Europe and solidarity in case of Article 5 to an increase in European defence budgets and concessions on trade issues.

The US would not have to leave the Alliance with a big bang, rather it could reduce US capabilities in Europe step by step. A partial US withdrawal or an attitude of indifference about the issue could then revive conflicts among member states, and not only about support for Ukraine.

In the short term, Europeans have no means to compensate for the lack of conventional and nuclear deterrence in case of a reduction of US engagement. Would Europeans be ready to apply Article 5 without the participation of the US? Russia would probably abuse this precarious situation facing NATO and continuously provoke the Allies with small actions of violence to test the level of solidarity. Eastern European states, which are particularly exposed and have little trust in the EU's security policy capabilities, could ask for bilateral agreements for protection with the US, while others could seek to develop closer ties to Russia.

In the meantime, the EU has been able to establish a more solid position on security policy issues. There are common procurement projects and a budget to support such projects,

as well as a newly appointed Defence Commissioner. And during the present Polish presidency of the EU Council “security” is a topic given high importance. But the EU could not simply compensate for the capabilities of the US in terms of personnel, equipment or structures which provide the framework for the capacity of the Alliance to act. So, the question of a different, ‘more European’ command structure of NATO or a change of roles between NATO and the EU would most certainly cause trouble between allies and impact relations with other strategically important allies, such as Canada, Norway, Türkiye, which are not part of the EU. These types of potential conflicts can be thought of in advance and neutralised accordingly.



- ▲ **What might future conflicts look like? This is an important question, especially in view of the long development times for weapons systems such as the Puma infantry fighting vehicle. [Credit: Bundeswehr]**

Nothing new in the east?

International experts of strategic foresight have intensively discussed the Russian invasion of Ukraine. Come February 2025, Russia’s brutal attack on its neighbour will have been raging for three full years, with 2024 having brought a further escalation in this war: Moscow has sent North Korean soldiers to the front in the Kursk region of Russia; the new Russian missile system “Oreshnik” was activated; the Kremlin ended the moratorium for short-distance and long-distance missiles; and Ukraine took the fight into the Kursk region. It looks as if scenarios of continuous action are employed to wear Ukraine down and that a brutal intensification of fighting by the Russians are prevailing. The West reacted by increasing its support for Ukraine. But in spite of all these efforts, the frontlines remain more or less unchanged. Bad conditions for strategic foresight? On the contrary!

“We will support Ukraine as long as necessary”; that’s still the political guideline. This declaration is the right approach to take, certainly, and it has to be done. But it can also block new, forward-looking approaches, as it implies a policy of “carry on” which keeps us tied to existing scenarios. If we want to get real value-added from strategic foresight, we

need to look at Eastern Europe’s future in a more open way. The question is though: Under which conditions could peace talks become possible without undermining current efforts and without providing relief to the aggressor Putin? What are the alternatives to complete victory or the complete defeat of Russia? Under which conditions would the war extend to EU member states or to Germany? What would the dynamic look like that could develop the policy of enlargement of the EU and/or NATO? Perhaps, one could think of internal developments in Russia and we would have to ask another question: How can we identify even weak signals for new possibilities of development as early as possible?

At the same time, we have to take into account the real cost which Germany, the EU and NATO will have to bear in economic, diplomatic and societal terms, in order to provide for long-term stability in the region. Here, we should not only look at military solutions or short-term goals, but look at our own strategic culture: Which ideas shape our actions and how do we shape our own capacity to think in alternatives, in order to be able to not look at the future as a simple continuation of the present.

The almost invisible third one

“Putin attacks us by hybrid means, and puts his focus in particular on Germany”, Defence Minister Boris Pistorius said in December 2024. He is thereby falling into line with an increasing number of voices in the political world warning against these attacks, for which indications show that Russia is indeed the main actor behind hybrid attacks in Europe. They are tailor-made and range from disinformation campaigns and espionage to sabotage, cutting undersea-cables and manipulating cargo goods and outright cyber attacks. The German Federal Agency for IT-Security (BSI) describes the threat of today as being greater than ever before, in particular by agents from Russia.

In the future, it will not be enough to look at Russia alone when hybrid threats are discussed. Other states can also have an interest in seeking influence through hybrid actions and build up capacities for this purpose. Most recently, ever since Elon Musk was nominated to head the government Department of Efficiency in the new Trump administration and continues to use his own platform X to attack German politics, it has become clear how private business can influence the information space; often in a more subtle way than state actors. At the same time, Musk’s platform X could serve as an example by illustrating that technological leadership is not forever, and that disruption of markets and technologies might be just around the corner.

There are many opponents of open and liberal democratic societies in the world, some with a stronger voice than others. Most of them will not come from Russia. If we want to be able to defend ourselves against hybrid attacks, we need to apply an all-of-society-approach which is forward looking and includes different authors, goals, and methods. Forward-thinking must not be limited to analyze actors of the present, but has to anticipate new actors and technologies, discover future vulnerabilities, to make our democracies more resilient.

The great trek – in the EU?

Climate change will continue to play a role in security policy since a substantial amount of research is being carried out on the nexus “climate-security”. Conflict research has demonstrated that climate change hardly creates conflict, but reinforces existing conflicts. It is also clear that climate change can drive migration, but this most often takes place within national borders and does not reach Europe. Foresight can support the collection of data and prognoses and then raise new questions.

For the security policy of Germany and the EU, it is important to know whether the warming of the Earth increases the intensity of conflicts in its immediate neighbourhood, in the Middle East, in North Africa, or in South-eastern Europe as well. And it is not well known enough just how much climate change could reduce the quality of life in those European regions that find themselves particularly exposed, or making them uninhabitable and creating internal migration within the EU.

What would the consequences be for the EU’s internal market, which also provides for the right of each EU citizen to freely choose their place of work? Apart from the human suffering of Europeans fleeing the heat, which parts of European integration would present the greatest challenge?

Would the subsidies available in the Fund for Regional Development, the rules of the Schengen-space, or provisions for internal security in general reach their limits? Which would be the special regulations which the EU would have to decide? Which kind of tensions between areas of different climate zones in the EU would be caused by internal migration, which would then drive qualified workers out of some countries and for them to be put to work in others? The EU already provides considerable support to member states in their efforts to adapt to climate change. Strategic foresight will provide new ideas for the early detection of these crises.

Courage to engage in unpleasant thinking

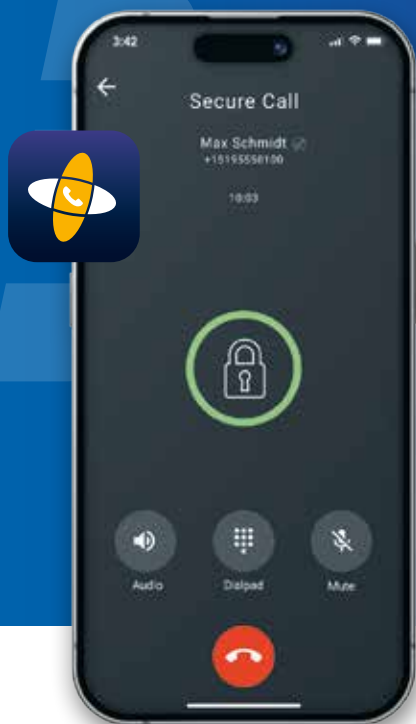
Consequences of limited innovation capacities, of insufficient defence spending, of a general public easily tempted by disinformation or of purely national migration policies can be illustrated by strategic foresight, which can also make transparent possibilities of development or turning points. This needs courage to engage in unpleasant thinking about the future which has to be valued in political discourse, as well as for the development of strategies. It is an important, not even expensive task of the German federal government to establish a format for competence and personnel to engage in strategic foresight in security policy and to launch projects in an all-government context.



SecuSUITE®

BlackBerry

Intelligent Security. Everywhere.



Your mobile phone is under attack!

State-sponsored espionage and corporate eavesdropping are rising. Staying ahead demands advanced solutions to secure your sensitive conversations.

SecuSUITE for Government is the trusted solution to safeguard your mobile communication.

- ▶ End-to-end encrypted calls and messages to ensure absolute confidentiality.
- ▶ Protection against known and unknown threats.
- ▶ Seamless integration with existing mobile devices and networks.
- ▶ Government-grade security trusted by organizations worldwide.

Take control of your communication security today:
Secusuite.sales@blackberry.com



Learn more about SecuSUITE for Government

Maritime choke points

Global maritime trade and international security

Deniz Kocak

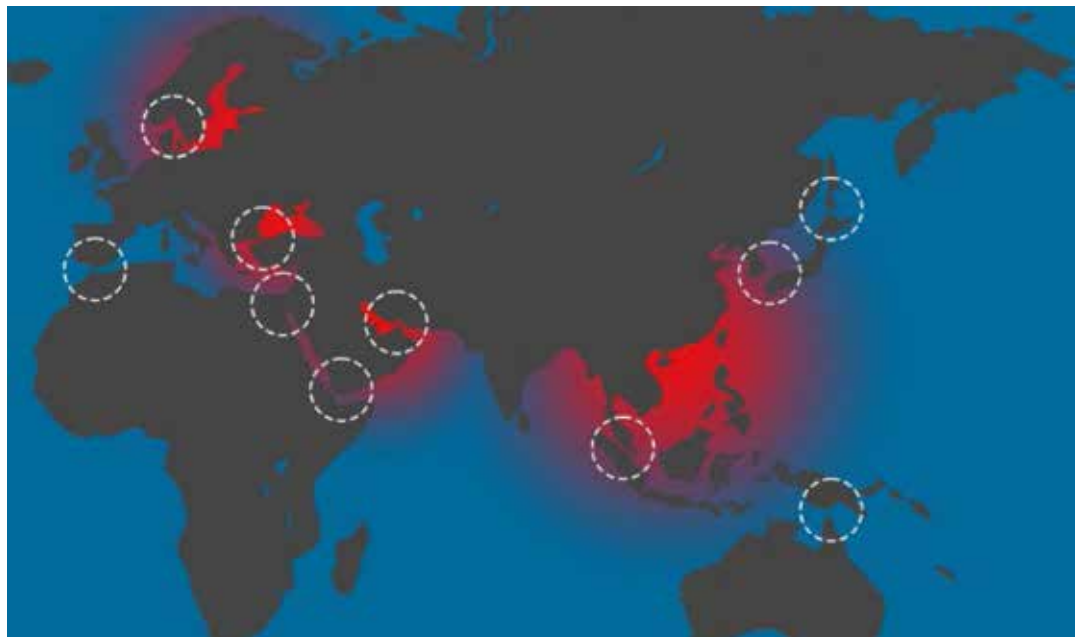
Maritime choke points, or straits and strategic waterways, form central hubs in the global maritime transport network. Maritime choke points serve as essential transit routes for international trade and as strategic control points in the geopolitical order. Around two-thirds of the volume of maritime trade is transported via these strategically important waterways, making them essential for the global economy. The blockage of the Suez Canal and increased tension in the Strait of Hormuz have highlighted the vulnerability of these maritime corridors and their far-reaching consequences for global supply chains. The strategic importance of these waterways has increased significantly in recent years, both due to the growth of international trade and in geopolitical terms. By examining the characteristic properties, geostrategic significance and control mechanisms of these straits, the dual role of maritime choke points becomes clear. On the one hand, they are indispensable transit routes for global maritime trade, connecting oceans and seas, and on the other hand, they serve as hubs for international security interests.

Definition of maritime choke points

Maritime choke points are straits along heavily used global sea lanes (Sea Lines of Communication, SLOC). These strategic waterways connect various seas and, due to their geographical characteristics, shape international maritime trade. Due to the natural limitations of these passages, a significant portion of global shipping traffic is concentrated in a small space. The resulting geostrategic relevance

AUTHOR

Deniz Kocak is a research scientist at the Helmut Schmidt University / University of the Federal Armed Forces Hamburg and the interdisciplinary research centre Maritime Security (iFMS) based there.



▲ **Worldwide chokepoints and increased threats [Source: U.S. Navy]**

of these straits is based on their function as indispensable passages for the global movement of goods. A distinction is made between natural and artificial passages. Natural straits are formed by the convergence of land masses, such as the Strait of Malacca between the Malay Peninsula and the Indonesian island of Sumatra. Artificial waterways, on the other hand, were constructed to optimise maritime shipping, including the Suez and Panama canals. These passages play a central role in international maritime traffic, with operational and safety requirements varying depending on the type of bottleneck. The vulnerability of these passages is demonstrated by the fact that interruptions – due to natural events, technical defects or targeted interventions – have far-reaching consequences for global supply chains.

Strategic locations and features

The international maritime network is made up of several straits with specific geographical and operational characteristics. In the Middle East, the Strait of Hormuz connects the Persian Gulf and the Gulf of Oman with the Arabian Sea. The Bab el-Mandeb connects the Red Sea and the Gulf of Aden. The Suez Canal allows maritime traffic between the Mediterranean and the Red Sea and is considered a central passage for European trade. In Southeast Asia, the Strait of Malacca connects the Indian Ocean with the Pacific Ocean. Additional routes lead through the Lombok and Sunda Straits.

The spatial limitation of the straits inevitably leads to bottlenecks in shipping traffic. For example, more than 95,000 ships pass through the Strait of Malacca annually despite its limited width. The high density of traffic in the narrow passages increases the probability of delays and leads to nautical challenges. This is especially true in adverse weather conditions or when there are increased security requirements. The narrow passage width also increases the risk of blockages – whether unintentional or deliberate – as the 2021 Ever Given incident in the Suez Canal showed. These waterways also frequently pass through areas in which several states have territorial claims or spheres of influence. The overlapping national sovereign rights and claims to power exacerbate the geopolitical tensions in the respective sea areas. This is evident in the Strait of Hormuz, where regional conflicts have a direct impact on international shipping and the trade in crude oil.

Economic importance and trade policy implications

From an economic perspective, straits are particularly important due to their central role in global trade flows and energy supply. A significant proportion of maritime trade passes through these strategic passages, especially for containerised goods and energy resources such as crude oil and LNG, which are transported through choke points such as the Strait of Hormuz and the Suez Canal. The economic consequences of disruptions to sea routes at choke points therefore extend far beyond the direct transport costs. Recent events have shown how disruptions can have far-reaching effects on international supply chains. Using alternative routes, such as around the Cape of Good Hope instead of through the Suez Canal and the Bab el-Mandeb, results in higher transport costs and significantly longer delivery times. This results in higher insurance premiums and storage costs. In addition, there is a risk of production stoppages in processing plants and bottlenecks in the availability of goods, for example, for electronic products from Asia destined for the European market.

Security aspects and control mechanisms

Securing maritime choke points is based on military control, international regulations and technical monitoring. The United Nations Convention on the Law of the Sea (UNCLOS) defines the legal framework for these waters. It guarantees the right of innocent passage and takes into account the security concerns of the coastal states. This legal basis allows for the establishment of regulated archipelagic sea lanes (ASLs), which ensure the free passage of merchant ships while respecting state sovereign rights.

The control mechanisms at these choke points vary depending on the geographical and political context. In the Strait of Malacca, a multilateral cooperation framework between Indonesia, Malaysia and Singapore, and now also Thailand, enables coordinated patrols and the exchange of information through the Eyes in the Sky (EIS) programme. This cooperation also extends to the Regional Cooperation Agreement on Combating Piracy and Armed Robbery



blackned

**Meet us at Enforce Tac!
Hall 9 | Booth 9-424**

Digital Superiority on the Battlefield

Mission-critical communication for enhanced command and control capabilities

Shaping the digital transformation of the Bundeswehr

Providing a secure, supplier-independent framework with a truly open ecosystem



BSI

VS-NfD approved
BSI-VSA-10822
Valid until: 30 June 2025



Partner of D-LBO



Visit our website!

blackned GmbH
Zugspitzstraße 1 | D-87751 Heimertingen
www.blackned.com

against Ships in Asia (ReCAAP), which increases maritime security through the exchange of information and transnational cooperation. The Combined Maritime Forces (CMF) in the Indian Ocean are another example of a multilateral approach to securing strategically important sea lanes, in which naval forces from several countries work together to ensure stability at sea. Leading maritime powers are also consolidating their strategic positions through naval presence and military bases. This is evident in the US naval presence in the Strait of Hormuz and the expansion of Chinese naval capabilities in the Indo-Pacific region. At the same time, regional actors are strengthening their maritime

long term, changing the existing geostrategic situation. In parallel to these developments, non-state actors are increasingly endangering the security of waterways and require new adaptation strategies and protection concepts. Attacks by the Houthis in the Strait of Bab el-Mandeb illustrate this threat. Their attacks led to a significant decline in shipping traffic through the Red Sea and forced some shipping companies to take costly detours via the Cape of Good Hope. Furthermore, piracy remains a risk factor for maritime trade. In addition, regional conflicts and political uncertainties in neighbouring areas can complicate the operation and security of the straits.



◀ **The maritime component of the Chinese Belt and Road Initiative and the expansion of ports and facilities near strategic straits will lead to power shifts in the long term [Graphic: mawibo media]**

security measures. India, for example, has expanded its maritime surveillance capabilities and entered into cooperative agreements with neighbouring countries to enhance maritime security. In addition, many states are seeking to increase their respective influence on international trade and strategic passages by strategically investing in infrastructure in ports and surveillance stations along important sea routes.

Future challenges and their impact

Climate change and geopolitical shifts are making it more difficult to control these strategically important waterways. Rising sea levels and more frequent extreme weather events can hinder navigation, meaning that maritime infrastructure must be adapted. These environmental changes are occurring at a time of steadily growing trade volumes, which are increasingly straining the capacities of the main straits, particularly in the Strait of Malacca.

Furthermore, the rivalry between naval powers at the most important straits is intensifying, particularly in the Indo-Pacific region. The strengthening of new maritime actors and the opening up of alternative sea routes, for example through the Arctic, could reorganise established trade routes. The maritime component of the Chinese Belt and Road Initiative and the expansion of ports and facilities near strategic straits will lead to power shifts in the

Conclusion

As strategic transit routes, maritime choke points determine the processes of world trade and the international security architecture. These waterways fulfil tasks that go beyond their geographical location. They link trade policy, military strategy and geopolitical interests. Their central role in world trade is particularly evident, as they handle around two-thirds of the global maritime trade volume and thus have a significant impact on the international economy and energy supply.

This analysis emphasises that effective management of maritime choke points must reconcile the control of straits and the freedom of commercial shipping with necessary protective measures. The expanded range of hazards – from military conflicts to asymmetric threats – requires constant adaptation of the monitoring and security systems. This increases the need for internationally binding regulations and cross-border cooperation. The strategic straits will continue to gain in importance for world trade, and the growing maritime trade, new geopolitical conflicts and technical developments pose increasing challenges for the management and security of these waterways. The stability of global maritime trade will depend on how the international community ensures the safe use of these key straits through diplomatic, legal and operational measures.



Strategic competition in the Arctic

Navigating a complex security nexus

Sophie Arts

Over the last two decades, the strategic importance of the Arctic region, situated between the Euro-Atlantic and Indo-Pacific regions, has steadily grown in the context of shifting geopolitics. Environmental issues, economic interests, and security challenges are deeply interlinked in this theatre.

Rising global temperatures, which is leading to melting sea ice and thawing permafrost have focused scientific attention on the region, which is disproportionately impacted by climate change. These conditions have also fuelled economic interests in resource exploration and extraction (fossil fuels, minerals, and protein), shipping, and tourism. Interest in these opportunities extends beyond the eight states that hold territories within the Arctic Circle and together comprise the Arctic Council: Canada, Denmark, Finland, Iceland, Norway, Russia, Sweden, and the United States. Increased traffic and competing national interests have gone hand in hand with heightened security risks and threat perceptions in an era of strategic competition. And most recently, declarations by Donald Trump after his re-election in November 2024 that he intends to buy or take over Greenland; this large island in the Arctic region, which belongs to a NATO ally, namely the Kingdom of Denmark, have highlighted the strategic importance of this region.

Russia's Arctic posture and challenge to NATO

As tensions between the 'West' and Moscow have grown – especially since Russia's annexation of Crimea in 2014 and in the wake of its full-scale war against Ukraine in 2022 – so has the centrality of the Arctic for Euro-Atlantic security. The Russian Arctic is of utmost economic, political, and strategic importance to Moscow. It holds vast tapped and unexplored fossil fuel and mineral resources, whose development is seen as critical to Russia's economic future. Moscow is also eager to establish the Northern Sea Route (NSR) within its Exclusive Economic Zone (EEZ) as an alternative international shipping route and is seeking international (especially Chinese) investment in infrastructure projects along its path – with growing, but still limited, success.

AUTHOR

Sophie Arts is a fellow of the German Marshall Fund, Geostrategy North team, where she leads the work-stream's research on Arctic security and geopolitics.



▲ **The “Yakutia”, Russia's newest nuclear icebreaker is escorted out of the Neva River from the yard in St. Petersburg. [Credit: United Shipbuilding Corporation]**

At the same time, the Kremlin remains intent on exercising control over its Arctic territories and defending its avenues of approach for economic and strategic benefit. Under its interpretation of the UN Convention on the Law of the Sea (UNCLOS), this includes international waters within its EEZ and its extended outer continental shelf claims.

The region is central to Russia's national security. Much of Russia's strategic, sea-based, nuclear deterrent is based around the Kola peninsula. The Northern Fleet, which is headquartered in Severomorsk, is critical to Russia's ability to project power into the North Atlantic. The Kremlin has upgraded much of its Cold War era military infrastructure and assets, including those supporting its multi-layered bastion defence, in the last two decades. Despite Russia's prioritisation of its operations in Ukraine, it has not significantly reduced its air and naval capabilities in the strategically important Arctic since 2022 and continues to field new polar capable surface and subsurface vessels.

While climate change is opening economic opportunities for Russia, a more accessible Arctic is also enhancing the Kremlin's sense of vulnerability, as Mathieu Boulègue argues, among others. A 2023 GMF report by this and other authors assesses that NATO's Nordic enlargement in response to Russia's 2022 full-scale invasion of Ukraine has ironically heightened this “sense of Western ‘encirclement’ by an American-led NATO”. Since Sweden joined NATO in 2024, all Arctic Council states except Russia are now part of the Alliance. This development has also further underscored the strategic continuity between the Arctic and the Baltic Sea, which raises the potential for horizontal escalation across theatres. In early 2024, ostensibly in response

to NATO's Nordic enlargement, Russia integrated the Northern Fleet into the reestablished Leningrad military district, which borders both the Baltic Sea and the Arctic, positioning itself for more integrated operations across both theatres.

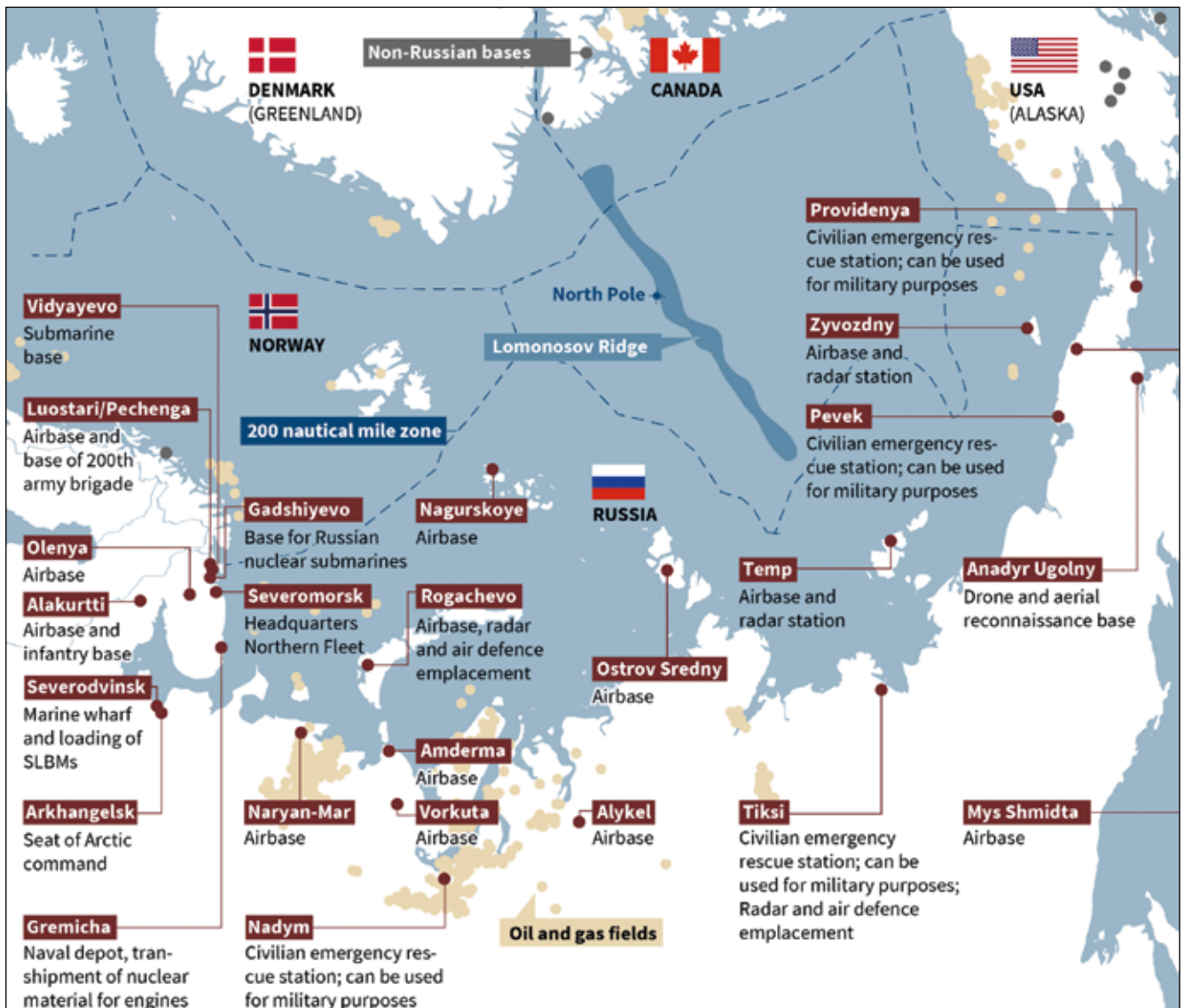
In parallel, the potential for vertical escalation from the conventional to nuclear domain has arguably also increased, especially after Russia lowered its threshold for nuclear weapons use. In a barely veiled reference to NATO's support of Ukraine, a November 2024 doctrine update holds that Russia may use nuclear means to respond to conventional attacks by states in coalition with nuclear states. Putin's nuclear sabre-rattling, as he continues to frame Russia's war against Ukraine as a proxy war with and provoked by NATO, is tapping into Western fears of escalation and almost certainly aims to deter the Alliance from further supporting Ukraine. At the same time, Russia's aggressive campaign of subthreshold activities against NATO allies in the Baltic Sea region and High North (e.g., kinetic attacks, including against undersea infrastructure, and electronic warfare), coupled with provocative

air and naval manoeuvres near Alaska (some in cooperation with China), further heightens the risk of escalation.

These developments demand a stronger and more calibrated NATO posture across the North-Eastern Flank. NATO is in the process of resourcing and operationalising its most robust defence plans since the Cold War, including the Alliance's regional plans outlining the defence of the High North and Arctic. While more investments are needed and logistics will need to be further optimised, NATO has set in motion a critical process that has and will continue to strengthen the Alliance's ability to operate cohesively in case of conflict.

Although NATO's updated Concept for Deterrence and Defence of the Euro-Atlantic Area (DDA) also seeks to address the Alliance's posture and command and control across the spectrum of conflict, NATO allies' responses to hybrid threats have so far not managed to deter Russia from pursuing an aggressive subthreshold campaign against Nordic and other NATO members. Muted responses risk to further embolden other adversaries that have increased their cooperation with Russia, including Iran, North Korea, and most importantly China. Recent incidents of commercial vessels damaging energy pipelines and undersea cables with Chinese involvement emphasise this growing risk.

▼ **Sophie Arts is a fellow of the German Marshall Fund, Geostrategy North team, where she leads the work-stream's research on Arctic security and geopolitics. [Source: SWP]**



Implications of Russia–China cooperation for Arctic security

The relationship between Russia and China in the Arctic (and beyond) has rapidly evolved over the last decade. It has progressed from mutual suspicion to a deeper strategic, and mutually beneficial, partnership in recent years, driven in large part by the two countries' authoritarian leaders, Vladimir Putin and Xi Jinping.

China became a permanent observer to the Arctic Council in 2013, published its first Arctic strategy in 2018, and has since expanded its economic, scientific, and civil-military activities in the region. While Russia has historically been focused on maintaining the sovereign rights of Arctic states and limiting the influence of other states, Russia's growing, self-inflicted isolation in the last decade appears to have affected President Putin's calculus. Initial Russian resistance to China's permanent observer role in the Arctic Council has given way to increased cooperation between the two countries as both Russian and Chinese relations with the West have deteriorated.



- ▲ **This photo from the “North American Aerospace Defense Command” was released after the US and Canada intercepted Chinese H-6 bombers flying near Alaska in July 2024. [Credit: NAADC]**

A series of reports published in the spring and summer of 2024 by The German Marshall Fund (including by this author) explores the growing cooperation between Russia and China in the Arctic in more depth. It finds that Russia's growing economic and technological dependence on China (not least to support its operations in Ukraine) is driving greater openness in Moscow to cooperate with Beijing in the Arctic. This applies even to sensitive technological and “dual-use” areas in the space and undersea domains, which were previously deemed ‘off limits’. As Alexander Gabuev writes in a 2022 Foreign Affairs article, Russia and China have not disclosed their defence contracts since the United States introduced the “Countering America's Adversaries Through Sanctions Act” in 2017. But growing cooperation by Russian and Chinese universities associated with their defence establishments, as outlined in more depth by GMF, suggest that joint Arctic scientific work is likely supporting defence research and development on both sides.

Recent years have also seen a significant uptick in civil-military cooperation and joint air and naval patrols near Alaska and the signing of a memorandum of understanding (MoU) between the Russian FSB and China Coast Guard in April 2023 that

outlines a pathway for joint law enforcement on the NSR. It is challenging to assess the depth and sincerity of these activities, which are undoubtedly also shaped by political posturing and efforts to send a message to the United States and NATO. It is important to note that military manoeuvres to date have been mostly parallel and far from interoperable, as recent U.S. Department of Defense China Military Power Reports have emphasised. While there has been no evidence of Chinese or Sino–Russian naval manoeuvres on the NSR beyond a joint coast guard patrol in the Bering Strait in October 2024 (far from Russian strategic assets), other information-sharing efforts may be underway and could be supplemented with a greater Chinese coast guard or naval presence in the future.

Concern over Chinese dual-use activities and even efforts to shape the governance structure in the Arctic in its favour have grown in policy circles on both sides of the Atlantic. Analysts are watching cooperative activities with military applications between Russia and China in the Arctic especially closely. The U.S. Department of Defense Arctic Strategy, published in July 2024, emphasises that China “includes the Arctic in its long-term planning and seeks to increase its influence and activities in the region”, and further assesses that recent joint activities between Russia and China “could open the door for further PRC presence in the Arctic and along the NSR”.

Some analysts and policymakers have argued that the China challenge in the Arctic has been overblown. Norwegian experts Jo Inge Bekkevold and Paal Sigurd Hilde posit in a recent Foreign Policy article that “the Pentagon's new strategy contributes to enhancing a somewhat skewed narrative of the threat China actually poses there,” arguing that “the reality is that China currently has very limited political, economic, and military influence there.”

Growing suspicion of China's dual-use activities and economic coercion tactics has limited Chinese influence and investment in Northern Europe and North America; Chinese military activities are indeed limited, but importantly increasing. China's focus on developing polar capabilities and operational experience and Russian willingness to support these efforts demand close attention and investments to enhance Arctic capacity by NATO allies.



- ▲ **Members of the China Coast Guard stand in formation during a joint patrol with Russia that China says entered the Arctic Ocean. [Credit: China Coast Guard]**

Recent efforts to develop 'Western' Arctic capabilities, including expensive projects in the space and sea domain via 'minilateral coalitions' of NATO allies, are important steps that further bolster NATO's strengthened Northern Flank. But considering persisting gaps in NATO allies' Arctic domain awareness (especially in the North American Arctic) and posture, as well as the lengthy development and procurement times of polar capabilities, further investments are urgently needed to address vulnerabilities that could be exploited by adversaries.

A challenging context for Arctic diplomacy and governance

Changing geopolitical realities and threat perceptions have deeply affected the prospects for Arctic cooperation in recent years. The Arctic Council was established in 1996 as the principal regional governance format between the eight Arctic states to promote cooperation on shared issues outside of the military security domain. However, as relations between Russia and the 'West' have deteriorated, hard security concerns have gradually overshadowed the former unique spirit of collaboration and commitment to maintaining low tensions that defined Arctic diplomacy in the post-Cold War era. An uptick in hybrid activities by adversaries in recent years, often involving non-state actors, has further blurred the lines between civil and military means and responses, making it difficult to assess where the concept of security begins and ends.

Russia's full-scale invasion of Ukraine has left the seven NATO Arctic Council States with a predicament. While they are intent on keeping the Arctic Council alive and maintaining a secure and stable Arctic region, a continuation of the status quo ante in Arctic diplomacy seems unimaginable and full-fledged cooperation untenable. In February 2022, 'the Arctic 7' took the unprecedented step of pausing the meetings of the Arctic Council, then chaired by Russia. Since then, under the Norwegian Chair, virtual working group meetings have resumed to ensure that the Council can continue its critical work in a limited format.

While the existential threat of climate change and its effect as a threat multiplier, along with other environmental and human security issues, require global cooperation (also with Russia and China), an approach of cooperation for cooperation's sake is unlikely to succeed, also considering Moscow's and Beijing's flawed track-record in contributing productively to environmental policy goals even prior to 2022.

Nonetheless, the seven Arctic NATO states are right to prioritise keeping the format alive even to ensure limited progress. They also have a vested interest in maintaining the Arctic Council as the primary diplomatic forum in Arctic affairs. This is especially relevant, as China is attempting to advance alternative, non-Arctic specific governance frameworks and lawfare approaches that give other states a greater role in regional

rule making, as Jørgen Staun and Camilla T. N. Sørensen show in their 2023 Article "Incompatible Strategic Cultures Limit Russian-Chinese Strategic Cooperation in the Arctic." While Moscow has traditionally been focused on maintaining sovereign rights in the Arctic, recent efforts by Russia inviting China and other BRICS countries to participate in Arctic exercises and patrols suggest that the Kremlin might change its tune on this issue further in the future – especially if relations with the other Arctic Council states continue to deteriorate.

Policy recommendations

As the era of low tension in the region is threatening to become a relic of the past, it will be more challenging to balance environmental, governance, and security priorities affecting the Arctic. Many Arctic policy experts and stakeholders are deeply



- ▲ Russia, here represented by FM Sergei Lavrov (right), reaching out a hand to the BRICS countries – (from the left) Brazil's President Lula da Silva, China's President Xi Jinping, South Africa's President Cyril Ramaphosa, and India's Prime Minister Narendra Modi – for cooperation within a number of spheres and parts of the world – not least in the Arctic. [Credit: CGIS]

concerned by what they see as a growing 'securitisation' of the Arctic, which is increasingly eclipsing environmental issues that demand attention and cooperation. The second Trump administration will likely accelerate this trend further (much as the first Trump administration did).

It can only be hoped that Trump's worst rhetoric reflexes which alienate allies – including recent statements not excluding the possibility of using military force against a NATO ally, the Kingdom of Denmark, and annexing Greenland by force – will remain brash bargaining tactics that will not translate into official policy positions of his administration. As egregious and counterproductive as his imperialist statements are, the transatlantic partners should attempt to shape debates around Arctic security productively and seize opportunities to work with the United States to create a stronger defence and deterrence posture in the Arctic that addresses threats from both Russia and China. While it may well fall on deaf ears, the Allies should attempt to reframe 'soft security' issues and emphasize the threats posed to transatlantic and national security and prosperity by environmental risks and disasters (including those associated with Russia's degrading

nuclear infrastructure due to permafrost thaw and the potential of dangerous pathogen releases).

Leveraging alliances and partnerships

Alliances are the United States' and Europe's greatest competitive advantage vis-à-vis Russia and China and it would be in the United States' greatest interest to honour that. As adversaries continue to advance their capacity to sow discord and divide NATO allies, efforts to enhance political cohesion will remain critical to transatlantic security. While the second Trump administration will likely prioritise bilateral, and at times hostile diplomacy, European allies and partners, as well as Canada should remain committed to consultation and coordinated strategic communication wherever possible. While it bears many risks, a more transactional approach toward Russia and China by a new Trump administration could potentially provide opportunities for more productive engagement in the future, if used correctly and coordinated with European allies.

Where consensus at the level of 32 is not feasible or when more agile and quick reaction approaches are needed, minilateral coalitions remain an important pathway to strengthen Arctic capabilities and operations. As Russia and increasingly China continue investing in Arctic-relevant dual-use capabilities – including surface, subsurface, and space assets – NATO allies must continue prioritising capability and posture developments. Most critically, this includes investing in space, air, sea, and undersea capabilities that support situational awareness and continental defence, communications, and military multi-domain operations.

Recently launched minilateral capability coalitions that leverage cooperation between the public and private sector serve as helpful model that allies should build on. This includes the Arctic Satellite Broadband Mission (ASBM) between the United States and Norway and the Icebreaker Coalition or "ICE Pact" between the United States, Canada, and Finland.

Reframing deterrence across the spectrum of conflict

Since 2016, NATO policy holds that a hybrid threat against the Alliance may result in the full spectrum of responses, including the evocation of Article V. The uptick in grey zone aggression by Russia, China, and other adversaries despite this policy demonstrates that deterrence in the hybrid domain is failing. NATO allies need to continue assessing national whole-of-government approaches and NATO's policies and options of responses against hybrid threats and use strategic communication and other means to respond to incidents swiftly and in a coordinated manner. Short of this, continued hybrid attacks will continue to raise the potential of vertical and horizontal escalation.

Advancing integrated defence planning

The growing role and interest of China in the Arctic and the uptick in Sino-Russian cooperation demands a more global, multi-domain approach to security by NATO allies. Russia's increasing willingness to cooperate with China and other adversarial powers, including North Korea and Iran, presents a tremendous challenge for the transatlantic partners. Even if none of these relationships ever rise to the level of an alliance (which at this point seems likely given some persisting diverging interests), Europe and the United States will likely have to face more frequent, simultaneous, and potentially coordinated security challenges in the hybrid and conventional domain, which will strain military and political resources.

Bolstering Arctic defence and deterrence will require more integrated defence planning across all domains and across the Atlantic and Pacific theatres. This is especially true for Canada and the United States as Atlantic and Pacific powers. But the shifting geopolitical landscape also has implications for NATO's posture as European allies grapple with their political, economic, and security approach towards China.



SZENARIS

Simulation Teamtraining

Research & Development

Consulting

Online Instructions

E-Learning

www.szenaris.com

There he is again

From Panama to Greenland

Marcus Pindur

The tone sounds familiar: Donald Trump threatening to annex Greenland, which is part of the territory of Denmark. When a US president, even before taking office, makes unrealistic territorial demands on a NATO partner, and does not even rule out the use of force, the Allies know what he thinks of the Western Alliance. More of the same can be expected.

For Trump, alliances are not an international asset, but a liability. This has been clear for a long time, and it is not simply an expression of his dissatisfaction with the inadequate defence efforts of his allies. That he was right in this criticism has been demonstrated in recent years. It took the prospect of a European future without the US as a permanent protective power and Russia's full-scale attack on Ukraine for a majority of the Allies to achieve the goal of raising 2% of GDP for defence. Thomas Kleine-Brockhoff, director of the German Council on Foreign Relations, said in an interview with the 'Tagesspiegel' about Trump's call for a 5% target: 'It is true that the Federal Republic of Germany must do much more for its defence – and quickly. I think the 5% figure is plucked out of thin air, there is no serious justification for it.' Be that as it may, most experts now assume that a financing rate of 3 to 3.5% of GDP is necessary for the defence budget.

The problem for the Western world is that Trump's view of the world is a very narrow, nationalist concept. The Allies must prepare themselves for this. Where the push on the island of Greenland ultimately leads is not decisive here. But the fact that Trump is publicly opening up this conflict at the expense of NATO ally Denmark undermines the solidarity of the Alliance and erodes international legal norms that the West otherwise usually defends. Many observers see this as a signal to Russia and China that the US is claiming geopolitical dominance in the Western Hemisphere. Greenland is indeed a strategically important island in the North Atlantic, since from there, Russian Navy movements in the North Atlantic can be easily observed. But it would have been the 'normal' procedure within NATO to simply ask the Danish government to expand the American military presence in Greenland. This request would in all likelihood not have met with any resistance.

Many Europeans contradicted Trump. The inviolability of borders is a fundamental principle of international law, explained German Chancellor Olaf Scholz. He said he had discussed this

AUTHOR

Dr. Marcus Pindur has been security policy correspondent at "Deutschlandfunk" since January 2019.

with a number of European heads of state and government, as well as with EU Council President António Costa. The fact that a future US president is attacking his allies instead of dictators Putin and Xi speaks volumes. Scholz didn't even have to mention the next US president by name, so significant was the wave that Trump was pushing. Trump even declared that Canada could become the 51st state of the USA. Besides that, Panama could be deprived of the Panama Canal. But it is very unlikely that all this will happen.



▲ **Greenland is a strategically important island in the North Atlantic, since from there, Russian Navy movements in the North Atlantic can be easily observed. US Thule Air Base has the largest of eight worldwide satellite ground stations of the Air Force of the United States. [Source: USAF / Graphic: mawibo media]**

But what is important for the Allies is that words are not enough. Germany in particular has wasted a lot of time. The first Trump shock reached us as early as 2016. Nevertheless, we have only recently reached the 2% target for financing the Bundeswehr. And all the experts, including Defence Minister Pistorius, realise that Germany must quickly reach 3 or 3.5% in order to deter Putin and his neo-colonial policy of aggression. This must be the first political priority of the next federal government – also in order to prove to Trump the value of alliances, especially NATO.

The 'Trump method' and the 'free-riding' Europeans

After decades as an entertainer and tabloid star, Trump has a penchant for provocation. He aims to attract attention in order to mobilise his supporters. He enjoys annoying and belittling his opponents, to the delight of his supporters, who then share his disrespectful comments and posts. This will not change in the next four years. We should not expect 'presidential' behaviour from Trump.

Kenneth Weinstein is one of Trump's foreign policy advisors, currently working at the Hudson Institute, a conservative think tank. In his view, Trump's behaviour has a method. Trump behaves like an aggressive New York real estate agent who knows how to put pressure on and irritate negotiating partners and opponents, the political scientist said in an interview with "Deutschlandfunk". He said that Trump plays on the fact that people think he is crazy in order to achieve concessions.

Trump's demand for a 5% target is probably to be understood in this way. If 3.5% comes out at the end, then Trump can chalk it up as his success. Whether this is a rationalisation of Trump's impulsiveness and anti-Alliance instincts remains to be seen.



◀ **Elon Musk is set to take on an advisory role in Trump's team: he is to lead the Department of Government Efficiency, responsible for deregulation and bureaucracy reduction. While this is not a government job, it is extremely important due to Trump's particular trust in him. [Credit: picture alliance / AP| Brandon Bel]**

In Germany – and in other European countries – it is often underestimated how deeply the American political class is annoyed that the Europeans, and Germany in particular, have not made an adequate contribution to Western defence since the end of the Cold War. As early as 2016, then-President Obama referred to the Germans as 'free riders' in an interview with 'The Atlantic' – in German, in the polite translation: 'Trittbrettfahrer'. In the less polite translation: 'Schmarotzer'.

This anger has been building for decades, and across party lines. As early as 2011, Robert Gates, a Republican and defence secretary under George W. Bush, warned that NATO was in danger of splitting in two: Those willing to shoulder their fair share of the defence of the Alliance and those who refused to do so. His successor, the Democrat Leon Panetta, made a similar statement a little later – that the underinvestment of many Western partners was undermining the Alliance. The Europeans are rightly complaining about Trump's heavy-handed approach. But the truth is that this transatlantic point of friction has existed for decades. Political scientist Constanze Stelzenmüller, the Fritz Stern Professor in Washington, D.C., summed up Germany's behaviour years ago: Germany has outsourced its economic growth to China, its energy supply to Russia and its security to the United States. A pointed comment, but one that hits the nail on the head.

Ukraine: Europe in troubled waters

The war in Ukraine presents Europeans with several major challenges, according to political scientist Christian Mölling of the Bertelsmann Foundation. At the centre of

this is Russia's war of aggression in Ukraine. Without the US, without President Joe Biden, Ukraine would probably have fallen in the first few weeks. Trump initially refused to support Ukraine. Then he made the claim that he would end this conflict within 24 hours. Then came the turnaround, shortly before his inauguration. There will be a conversation between Trump and Putin within the next six months. Such statements are met with scepticism by Ukraine and its other Western Allies: Kyiv fears that Trump could force Ukraine to make major concessions to Moscow in return for a quick end to the war.

But at the moment, Putin believes he is on the road to victory. Slowly but surely, Russian troops are advancing – albeit at a terrible cost in human lives. The British Ministry of Defence estimates that more than 300,000 Russian soldiers have been killed or wounded. But that doesn't bother Putin – he has recruited 10,000 North Korean soldiers. What price he paid to Kim Jong Un, the North Korean dictator, for this is unclear. Some observers speculate whether Kim Jong Un has access to Russian missile technology in return.

The Ukrainians lack artillery ammunition, air defence and soldiers. There is a great fear of being abandoned by Trump, even if the Ukrainian president is practising forced optimism and describing future cooperation with Trump as an opportunity. Political consultant Weinstein believes it likely that Trump will initially pressure the Russian leader into a compromise by targeting Russia's energy sector. If that doesn't work, Trump could threaten to massively supply Ukraine with weapons and ammunition and push back the Russians. At present, no one can say how likely this scenario is. In any case, it would mean a departure from Trump's rather sceptical attitude towards Ukraine. Furthermore, spending American tax money on foreign countries is extremely unpopular among Trump's core voters.

Musk and the AfD

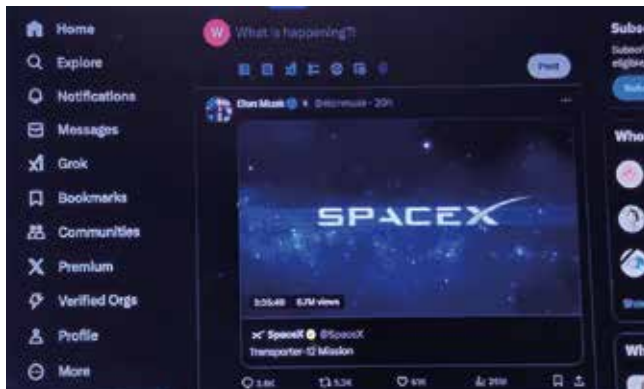
Elon Musk is set to take on an advisory role in Trump's team: he is to lead the Department of Government Efficiency, responsible for deregulation and bureaucracy reduction. While this is not a government job, it is extremely important due to Trump's particular trust in him. Musk is considered the richest man in the world, who owns companies Tesla, Space X and the former Twitter, now 'X'. According to various reports, the entrepreneur is said to have donated between USD 100 and USD 270 million to Trump's election campaign. He benefits from multi-billion-dollar government contracts from several US departments; due to this multitude of conflicts of interest, he could not hold an official government office. One of Trump's advisors said that he didn't need to, Musk's influence on Trump was so great anyway.

Musk increasingly delights in using muscular language and criticising foreign heads of government. However, the South African-born entrepreneur does not direct his criticism at dictators like Putin or Xi, but at allied countries including Great Britain or Germany. He called German Chancellor Scholz a 'fool' after the terrorist attack in Magdeburg and German President Steinmeier an 'undemocratic tyrant'.

On the other hand, Musk has no problems with the AfD. ‘People want change,’ Musk said in an interview with Alice Weidel, AfD’s candidate for Chancellor, on the X platform: “And that’s why I recommend voting for the AfD,” said Musk to president-elect Trump. “Only the AfD can save Germany, full stop.” The conversation was otherwise unproductive, except for the fact that Weidel wanted to persuade the corporate magnate that Hitler was a communist. Musk did not contradict her. And Musk had apparently also overlooked the fact that the AfD had mobilised against the Tesla plant in Brandenburg. But we will have to get used to this kind of electoral support for far-right parties in Europe.

Musk, Zuckerberg: online platforms and disinformation

Another conflict between the Trump administration and the EU Commission is looming in relation to large online platforms. In December 2024, the European Commission opened proceedings against the online platform X. The relevant authority launched an investigation into ‘the dissemination of illegal content’ under the Digital Services Act (DSA), it announced. Among other things, the law requires online platforms to take strict action against hate speech and agitation or misinformation online.



▲ Another conflict between the Trump administration and the EU Commission is looming in relation to large online platforms. In December 2024, the European Commission opened proceedings against the online platform X of Elon Musk.. [Credit: mawibo media]

Elon Musk had set up fact-checking programme on X shortly after taking over the network. He was followed in December 2024 by the owner of the Meta group, Mark Zuckerberg. Maintaining professional fact-checkers in about 100 countries is an expensive business. This was replaced – initially only in the US – by so-called ‘community notes’, where users themselves can add contextual information under a post.

In the context of the upcoming change of president in the US, Zuckerberg had announced that his company would be discontinuing the fact-checking programme on the Facebook and Instagram services in the US. Zuckerberg justified his decision by saying that ‘fact checkers were simply too politically biased’ and ‘destroyed more trust than they created, especially in the US’. At the same time, he accused the EU of ‘censorship’. The Meta boss thus adopted the rhetoric of Trump, who had repeatedly accused Meta boss Zuckerberg of being

biased against right-wing politicians. Many interpreted this as a kind of pre-emptive act of submission by Zuckerberg to Trump, who had repeatedly called for the Meta conglomerate to be broken up. Zuckerberg publicly asked Trump to support him with the EU Commission.

Tech bros against MAGA enthusiasts

But there are also unmistakable fault lines in the coalition of Trump supporters. Musk came to the US as an academic immigrant; however, the anti-immigration Trump base (‘MAGA’) wants to see restrictions placed on or an end to the corresponding visa category. Musk has stated that attracting top talent from abroad is essential for America. He even announced that he would ‘go to war’ on this issue.

This, in turn, has infuriated many Trump supporters. Trump’s former White House adviser, the ultra-right Steve Bannon, denounced a ‘scam by Silicon Valley oligarchs to take over the jobs of American citizens’.

Immigration is a key issue for Trump, who is pursuing a strict policy of deportation. During his election campaign, he announced that if re-elected, he would order the largest mass deportation of undocumented immigrants in US history. Trump’s continuous demand for a drastic restriction of immigration was a major factor in his victory in the presidential election in November. This conflict is therefore highly explosive.

Tariffs: ‘The most beautiful word in the English language’

For Trump, tariffs are a kind of panacea for protecting the American economy and American workers from what he brands as unfair trade practices. The German trade surplus with the US has always been a thorn in his side – in 2023 it amounted to around EUR 63 billion.

In the run-up to the election, Trump threatened to impose a 20% tariff on many products. While Europe is nothing without the US in terms of security policy, the EU is still a major power when it comes to trade. American digital companies make a lot of money in the EU and hardly pay any taxes. This is where you could start. But at the same time, a willingness to compromise is called for. A trade war between the US and Europe would weaken the West’s weight against China. The impact of a trade war would also be reflected in higher consumer prices in the US. Neither of these outcomes can be in Trump’s interest.

Conclusion

The Europeans’ security dependence on the United States is their greatest political Achilles’ heel. It is imperative that the Europeans make a significantly greater defence effort. Whether Trump leaves NATO or talks it down is impossible to predict but his foreign policy advisors are rather against the idea. However, Trump’s own political instincts are far too often directed against his allies. There is only one way forward for the Europeans: they must toughen up and thus prove to Trump their added value for NATO in terms of security policy – and to be able to act confidently against aggressors like Putin.



How to defend the European peninsula?

Karsten Schneider

Being preoccupied with the war in the East we often forget – Europe is a peninsula. Its land lines of communication lead eastward – either through Russia, through Ukraine or through Türkiye. The alternatives are the sea routes over an ocean that is so strategically important that it gave its name to our most important Alliance, the North Atlantic with all its marginal seas that surround Europe.

Not only do most of our strategic trade routes run there, but also many sub-sea cables, the lifelines of our information society. It is all the more worrying when Russian so-called research ships carry out their suspicious activities along these routes.

In this respect, we have our bad experiences from the Baltic Sea. Numerous hostile acts against underwater infrastructure continue to keep this area in the headlines. At first glance, the Baltic looks like a NATO lake, almost all of its neighbouring states are now members of the Alliance. However, the situation is not quite so clear, because the countries east of the Baltic Sea bordering Russia have little strategic depth in war and are dependent on reinforcements from their Allies. This is where the Kaliningrad exclave becomes a problem, as Russia can pose a significant threat to the sea routes to the Baltic States and Finland from this position. This remains a significant military challenge.

In the north, the North Atlantic is bordered by the polar waters. From here, the Russian Northern Fleet, based in Murmansk, has always posed a major threat to the sea routes across the Atlantic. Additionally, these waters are now gaining an entirely new importance. As the polar caps melt, the Northeast Passage is opening up, thereby significantly shortening the sea route to Asia. On the one hand, this is an opportunity, and on the other hand, it opens up a gateway into the North Atlantic for China. We should be carefully watching the build-up of the Chinese icebreaker fleet.

In the south, the Mediterranean is not only the open southern flank of Europe, but also part of the important sea route to Asia, even in times when traffic is restricted by the Red Sea security situation. At the same time, we find some of the most explosive trouble spots in Europe's vicinity on the coasts of the Mediterranean, such as the Middle East and Libya.

The Mediterranean is not only a place for peaceful trade, but also for the transport of drugs, weapons and, above all, migrants.

AUTHOR

Rear Admiral (retd) Karsten Schneider is President of the German Maritime Institute

▶ **Standing NATO Maritime Group 1 Flagship, ESPS *Almirante Juan de Borbon* with oiler FGS *Rhoen*, transiting near the Norwegian Oseberg oil and gas field [Credit: NATO]**



Powers that do not mean well for Europe have long since discovered the control of migrant flows as a means of exerting pressure, as this issue dominates election campaigns in many European nations.

Finally, let's look at the Black Sea. At the moment, events there are dominated by the Russian-Ukrainian war. At the same time, it is also the scene of Russian-Turkish rivalry and an important transport corridor for energy from Central Asia to Europe. It will therefore retain its strategic importance even after the end of the Ukraine war.

For all their differences, these seas have one major thing in common that affects our security: they are ideal venues for the kind of hybrid warfare that we have not taken seriously enough for a long time. Even if the high seas are not a lawless area, they fall outside of national jurisdiction. In addition, in most countries it is unclear which state institutions, armed forces, coast guard, or police are responsible for security tasks outside their own territorial waters. Our opponents are deliberately targeting this gap.

We are observing what is called the 'tactics of 1,000 cuts'. The fatal thing about this method is that the many small attacks are all below the level that would cause real alarm in western countries. Through the gradual destruction of the vital infrastructure at sea, Europe is being strangled bit by bit without European states reacting in an adequate manner.

In order to counter these threats below the threshold of triggering NATO Alliance Article 5, we Europeans must set up a common defence against such attacks. A centralised European coordination is required: who is responding, how and where. The national competency gaps must be overcome. Some countries are on the right track, others are far from understanding the seriousness of the situation.

The necessary changes will interfere with existing national and international regulations and responsibilities. To achieve them will require much more courage and determination than observed so far in European capitals. They will have to adapt national legislature, in cases up to the constitutional level, and the European Treaties. The size of this Herculean task is no reason to postpone it, but to start immediately. Otherwise, it will be too late.



Growing instability in the Maghreb is a challenge for Europeans

Jean François Bureau

Since the “Arab Spring”, Maghreb nations (Morocco, Algeria, Tunisia, Libya) have distanced themselves from the EU and NATO partners. Although situations might be different, with Morocco and Egypt (Mashrek) enjoying closer relations with the Europeans than Algeria, Tunisia and Libya, the overall picture tends to be much more transactional than cooperative.

Despite the ambition of the EU’s Barcelona Declaration of 1995, its member states and its partners on the southern and eastern rim of the Mediterranean (including Türkiye, as well as Israel and the Palestinian Authority), several cooperation mechanisms between the EU and North Africa did not survive the establishment in 2008 of the “Union for the Mediterranean” (UfM). But this format which links 16 Mediterranean countries (among them Israel, Lebanon, Jordan, Egypt, and Western Balkans nations) to the 27 EU member states, is probably not the right arrangement to address the specific issues of the Maghreb.

In 2023, the 8th UfM regional Forum focused on the situation in Israel and Gaza and “a process of reform of the UfM in order to reinforce the organisation’s role and efficiency.” Non-western external influence (Gulf States, China, Russia, and Türkiye) has increased, paving the way for a more hesitant relationship between the European countries and the southern part of the Mediterranean.

Even more so, disunity in the region has very much increased. Severe tensions between the countries concerned (Algeria/Morocco; Libya/Egypt) also increase the obstacles for any significant regional common projects; these tensions also raise the prospect of open war (Algeria/Morocco), of the continuation of a situation in Libya, where a national state still does not exist, and of authoritarian regimes (Tunisia and Algeria), or of rising radicalism due to an enduring economic stagnation which is fuelling social unrest and widescale youth unemployment.

AUTHOR

Jean François Bureau is a consultant in international affairs, former French MoD General Controller, NATO ASG and VP International affairs Eutelsat



▲ **The Arab Maghreb Union (AMU) is an economic and political organisation formed by the five so-called “Arab Maghreb” countries namely Algeria, Libya, Morocco, Tunisia and Mauritania. [Graphic: mawibo media]**

Europeans seem to be left with a short-term contingency planning, trying to contain the risks of the crisis spreading to Europe, especially in terms of immigration and/or radicalism. At the same time, northern African countries are also facing migration from Sub-Saharan countries. As a consequence, instability rises leading to military *coups d'états* in Mali, Niger and Central Africa or the installation of authoritarian regimes in the Sahel with active support from Russia. North African countries also seem to be caught between social pressure stemming from Sub-Saharan countries, internal inabilities to address the expectations of a large young population, and the priorities of Europeans after Russia started its war against Ukraine. Altogether, this does not provide room for a balanced relationship, nor for renewed cooperation.

The North Africa trade balance with the EU has not improved

With the exception of Morocco, trade and economic relations between the EU and the Maghreb countries have not developed much. The EU trade agreements which were concluded with each North African nation have not significantly expanded the development of these partners. In 2013, the Association Agreements with Morocco and Tunisia were supposed to be updated with the conclusion of bilateral Deep and Comprehensive Free Trade Areas (DCFTA), just as

they exist between the EU and Ukraine, Moldova, and Georgia. But negotiations were adjourned one year later; even Morocco, the main trading partner of the EU in the region, did not demonstrate much interest in this approach.

The four EU Association Agreements (Tunisia 1998, Morocco 2000, Egypt 2004, Algeria 2005) have spurred the growth of trade between both sides of the Mediterranean, but they have not raised the share of these countries on the EU market significantly, where their products meet with competition from other countries, especially China and Türkiye.

As a result, “North Africa’s trade balance with the EU has deteriorated, but to a lesser extent than with the rest of the world.” Exports from the EU to North Africa increased by EUR 2.5 billion annually over the 12-year period following the signing of the Association Agreements, but North African exports to the EU declined after the agreements took effect, not least as the EU imported less oil and gas from Algeria, while exports to the EU from Egypt, Morocco and Tunisia rose slightly from EUR 0.7 to 0.9 billion annually. After the COVID pandemic, EU exports to North Africa dropped by 13.8%, to reach EUR 61.5 billion, while EU imports from North Africa declined by 18.4%, amounting to EUR 41.5 billion.

Overall, “nearly all [North African countries] have faced lower trade flows with the EU since the Association Agreements entered into force, with the exception of Egypt, whose share of trade with the EU has remained steady,” writes the French Ministry of Economics and Finance. In order to redress such a situation, the EU Commission has intended to explore a more flexible approach to trade, and proposed in 2021 to initiate the negotiation of investment facilitation agreements with North African countries.

In the meantime, China, Türkiye, India, Russia and Saudi Arabia have increased their share of trade with the North



- ▲ In 2008 the “Union for the Mediterranean” was established, which links 16 Mediterranean countries (among them Israel, Lebanon, Jordan, Egypt and Western Balkans countries) to the 27 EU member states. [Graphic: mawibo media]

African countries, which, at the same time, continue to see “extremely low levels of intra-regional trade” (less than 5% of overall trade in North Africa).

Since the ambition to develop an integrated Maghreb, which the Arab Maghreb Union (AMU), established in 1989, was supposed to foster, and the Barcelona Declaration of 1995 was to support, the EU has developed the Southern Neighbourhood Policy, which includes Morocco, Algeria, Tunisia and Libya; a new Agenda for the Mediterranean was also approved in 2021. Clearly, dealing with social issues, questions of sustainability, the rule of law and the dimension of connectivity, this new agenda confirmed that the ambition of creating an inclusive economic space, was no longer the main purpose of the EU/Maghreb relationship.

However, the most recent IMF report of 2024 tends to confirm that the economic stagnation of the North Africa region continues, with an exception for the countries which can export oil and gas. The Maghreb dependency on energy exports has not been reduced much.

Maghreb regimes are moving towards transactional relations with their partners:

The end of 2024 confirmed that both Algeria and Tunisia develop authoritarian policies and regimes. Algeria’s President Tebboune, former Prime minister and President since 2019, was re-elected on 7 September 2024, by 95% of the voters, with a turnout less than 50%. In Tunisia, President Saied, in his bid for re-election, reached 90% of the vote on 6 October 2024, but the turnout was less than 30%. After the elections, both governments have again developed repression and illiberal policies, regarding the rule of law, freedom of press and the independence of justice.

Both Algeria and Tunisia are labelled “high” (C) in terms of country-risk by the French insurance company Coface, while Morocco is rated B and Libya D (“very high”). Algeria is still highly dependent on its oil and gas exports, which provide 90% of the external revenues and 60% of the budget revenues, and youth unemployment which is reaching 30% could be a major source of social unrest, keeping in mind the Hirak movement of 2019 which was severely repressed.

Without natural resources, Tunisia is even more fragile. Youth unemployment is close to 40% and tourism, a key resource, is highly dependent on public order and social stability. In addition, Tunisia is facing large migration flows from the Sub-Sahara region, and migration to European countries, especially to Italy, have been very much restricted. However, Tunisia seems to have decided to refuse the IMF loan of USD 1.9 billion because of the conditions the IMF wants to impose. President Saied vocally denied the IMF the right to challenge the “nation’s sovereignty”. In short, Tunisia refused to accept the conditionalities set for IMF support.

Migration is therefore still a major source of tension between Maghreb nations and the EU. In the recent past, it has also been weaponised. Greece faced the issue, as migrants were carried to the border from Türkiye, and Spain as well, as

- ▶ **Migration is a major source of tension between Maghreb nations and the EU; for example, Moroccan authorities permitted large numbers of migrants attempting to cross the border to the Spanish enclave of Ceuta. [Credit: UNHCR / M. Edström]**

Moroccan authorities permitted large numbers of migrants attempting to cross the border to the Spanish enclave of Ceuta in North Africa. And the EU policy to support its member states, which take migrants back to their countries of origin, has not been able to reverse the trends. Algeria does not cooperate with the EU on migration; Tunisia did conclude an agreement with the EU and experts are convinced that between the two sides, the “relationship is likely to be shaped by the migration issue for the foreseeable future.” Migration is also a major issue for the relationship between Morocco and the EU, as long as a migration deal has not yet been concluded between Rabat and Brussels.

In the case of Morocco, such an agreement might depend on yet another issue which is about Western Sahara. As Moroccan King Mohammed VI stated in 2022, “the Sahara issue is the lens through which Morocco looks at its international environment. It is the clear, simple benchmark whereby my country measures the sincerity of friendships and the efficiency of partnerships.” As Spain and France recently supported Morocco’s views, following US recognition of Moroccan sovereignty over the Western Sahara in 2020, this issue has become a key condition of cooperation with Morocco. The recent decision of the Court of Justice of the European Union (4 October 2024) which confirmed that “the 2019 EU-Morocco trade agreements regarding fisheries and agricultural products, to which the people of Western Sahara did not consent, were concluded in breach of the principles of self-determination and the relative effect of treaties” did not prevent the French government from reaffirming “its unflinching commitment to its special partnership with Morocco and its determination to deepen it. As such, the relationship between the European Union and Morocco is strategic, and France will continue working with its European partners



- ▶ **The Western Sahara source of tension between Morocco and Algeria is not going to disappear, to say the least, and we can assume that the surge of military spending in Algeria is related to it. Fighters of the Western Sahara Polisario [Credit: Atlantic Council]**



on strengthening their exchanges, especially economic exchanges, and on safeguarding the achievements of the partnership, with due regard for international law.”

This commitment was probably a key trigger of the Algerian reaction towards France. In fact, the Algerian authorities were upset by the fact that in July 2024, French President Macron decided to be more supportive of the Moroccan position regarding the Western Sahara. The imprisonment of Boualem Sansal, a French-Algerian writer, jailed on 16 November 2024 when traveling from France to Algiers, was associated with a press campaign against Paris, claiming that the French secret services were plotting in the country.

The Western Sahara source of tension between Morocco and Algeria is not going to disappear, to say the least, and we can assume that the surge of military spending in Algeria is related to it.

When it comes to Libya, in 2022, the UfM called for the implementation of the UN Resolution that demands to “preserve unity, sovereignty and territorial integrity of Libya, stop all foreign interference, and achieve national reconciliation, sustainable peace and stability.” This list of requests can only highlight the numerous challenges Libya is facing and regarding regional stability. The country is basically split in two parts, between Tripolis and Benghazi, militias and weapons traffickers are still very active, the ceasefire agreements (last one being 23 October 2020) fail to prevent the battle for power, and the absence of a political process leaves room for external influence, the most recent being a Russian attempt to establish military bases in the country, in order to replace the two in Syria after the toppling of the Assad regime. Even if a more positive relationship between Egypt and Türkiye may help a stabilisation process in Libya, there is still a long way to go before the country can recover from the regime change in 2011. The risk for Libya to remain a failed state is still there and every attempt to prevent it seems to fail.

Growing military capabilities could add to regional instability

According to the SIPRI 2024 report, military expenditure in North Africa (defined as Morocco, Algeria, Tunisia, Libya, but excluding Egypt) has increased from USD 18 billion in 2014 to USD 25.4 billion in 2023 and USD 28.5 billion in 2024, roughly +41%.

In 2023, the major changes saw an annual increase of 76% in Algerian military expenditure; Algeria and Morocco accounted for 82% of the spending in the sub-region. With USD 18.3

billion in 2023, Algeria was the largest military spender of the whole of Africa, and also deepened its military cooperation with China, and now looks for the local production of Chinese military equipment.

From 2019 to 2023, Russia provided 48% of Algerian arms imports, Germany 15% and China 14%. During the same time period, the US provided 69% of Morocco's arms imports, France 14% and Israel 11%; in 2023, the Moroccan defence budget reached USD 12.21 billion.

Egypt's military expenditure reached USD 3.58 billion in 2023, declining by 12% and representing 1% of GDP. From 2019 to 2023, the main armaments suppliers were Germany with 27%, Italy 22% and Russia 20%.

Both Egypt and Algeria are now turning towards Russia and China to develop their space programmes, after Morocco confirmed major cooperation with France.

As Egypt is first and foremost aiming at preventing the spread of the Gaza war to the Sinai and controlling the Rafah border to Gaza, the polarisation of Maghreb military relations (Algeria with Russia and China, Morocco with the US, France and Israel) only confirms that the strategic balance of the Maghreb will more than ever be organised along the Western Sahara crisis, which may become an east-west issue. The resumption of Algerian military operations (the Western Sahara-Polissario HQ is based in Tindouf, Algeria) may turn into an open war with Morocco.

Also, in 2014 the crisis in Syria and the activities of the ISIS "califate" increased the number of terrorist incidents in the EU. The deployment of French military forces in the Sahel and others in the 2010s was aimed at preventing the development of another source of terrorism which could spread to Europe. These concerns were very much at the top of the list at that time. There is no evidence that the military regimes which are now in charge in countries of the Sahel will take action to fix that risk: tensions between Algeria and Mali seem to confirm that Algiers is very much worried by the situation at its Saharan borders. It is also significant that Algeria planned a discussion about terrorism in Africa during its chairmanship of the UN Security Council in January 2025.

This polarisation among the North African nations, with the consequence of more divergent relations between EU member states and the Maghreb nations, the ongoing Libyan civil war, will call for more active relations between the two shores of the Mediterranean. It is the message that the NATO Washington Summit delivered in July 2024 after a group of experts recognised that "as instability grows on NATO's southern neighbourhood, the Alliance requires a renewed strategic approach." However, unless the migration issue is weaponised again, by Türkiye concerning refugees from Syria or by Libyan forces, the war in Ukraine and the need to increase the European defence capabilities may limit the room for a resolute security partnership between both sides of the Mediterranean. Meanwhile, the Maghreb region remains torn by its own internal tensions, which EU member states may find difficult to fully understand.



MITTLER REPORT

Media kit:



Published monthly, **EUROPEAN SECURITY & DEFENCE (ESD)** is the leading defence and security trade journal in and for Europe.

Organised in four dedicated sections of interest – Politics, Armed Forces, Armament & Technology, and Industry – every issue responds to the information requirements of the European and global defence and security community.

We have the readers. Print and digital.

MITTLER REPORT VERLAG GMBH
53173 Bonn · Germany

info@mittler-report.de • www.mittler-report.de

Current security challenges for South America

Andrés Hildebrandt

Leo Tolstói's famous line from *Anna Karenina*: "All happy families are alike; each unhappy family is unhappy in its own way," can serve as a guiding principle to understand both the most pressing security challenges for South American states and how these have shaped their current relations. Nevertheless, if all the metaphoric potential of Tolstói's aphorism is going to come to fruition, further elaboration is required.

First, the current crisis of South American states will be exclusively analysed from a classical Weberian perspective, which identifies two primordial functions for nation states: on the one hand, the protection of sovereignty and territorial integrity from external aggression; on the other, the internal public order and protection of citizens from domestic threats. These two dimensions form the basis to analyse current structural security challenges facing the region. Special consideration will also be given to the political crisis in Venezuela, which has generated the greatest humanitarian crisis in contemporary regional history and is one of many factors that explain a heightening of diplomatic tension not seen since the Cold War.

Therefore, while each country has particular historical idiosyncrasies that explain difficulties to consolidate its national institutions and foreign policy, common difficulties emerge, establishing what might be called patrons of dysfunctionality. In this regard, while the "unhappiness" of each South American household is unique, enough similarities betray the common features of one large family.

The formation of South American states

Most South American states emerged during the 19th century through rebellions against colonial rule. Though militarily victorious, the emerging nations were not able to replace the well-trained groups of civil servants, which left after independence, leaving each new state in a situation of administrative chaos and economical disarray. Although in the late 18th century, the Spanish colonies were thoroughly reorganised in smaller territorial units for efficiency's sake, this independence fragmented these territories even further, creating, for example, Bolivia and



- ▶ **In the late 18th century, the three Spanish vice-royalties in South America were thoroughly reorganized in smaller territorial units for efficiency's sake.**
[Credit: Wikipedia]

Ecuador as separate entities from Peru or separating Colombia from Venezuela. Because it was not a priority for the Spaniards to meticulously draw borders within territories, which after all were entirely theirs, armed territorial disputes erupted between the new-born nations.

Of course, there are always exceptions to the rule. Although Brazil underwent a series of regional revolts in the 1820s, some of which caused thousands of deaths, it was able to maintain a strong national economy and a largely intact central government. One probable cause was the choosing of an imperial model, clearly distinct from the republicanism of the Spanish-speaking countries, which was, in the later decades, balanced with liberal reforms. In this regard, the first decades of independence were challenging, though not as chaotic as in Latin America's Spanish-speaking republics. This comparative stability should not distract from the massive economic and social challenges, especially considering that in 1888, Brazil became the last nation in the Western Hemisphere to formally abolish slavery.

AUTHOR

Dr. Andrés Hildebrandt is head of the Peru office of the Konrad-Adenauer-Stiftung e. V.

Amidst this regional constellation, in each new country the militarily victorious groups of the independence wars understood themselves not only as the guarantors of territorial integrity, but rather the new ruling political class, legitimising their claim through their participation in the armed conflict and the birth of the independent nations. So began an entanglement of the armed forces in South American politics, which would last throughout the 20th century. However, these armed forces should not be compared to those European armies which will play a key role in the consolidation of modern, centralised states, with a broad fiscal base and a Weberian institutional frame. Although these processes occurred parallelly, South American countries were unprepared structurally, politically and ideologically to take advantage of the opportunities presented by war. Paradoxically, the liberation from colonial powers produced states that were far weaker institutionally, measured by the tax revenues for the state. The structural incapacity to widen the fiscal revenue would foster the deep-rooted dependency of these new states, which were already heavily indebted by their liberation wars, needed to secure loans from new international creditors such as the United Kingdom. These creditors invested in the extraction of very few raw materials, which became predominant in the GDP of each country, explaining, even until these days, the lack of diversification in South American economies. Systems of crony capitalism were created, controlled by small political classes, which precariously balanced their simultaneous entanglement with international creditors and the national military class. This also prevented the formation of national bourgeoisies and the creation of what Daron Acemoglu and James A. Robinson described as inclusive economic systems, which could have decisively contributed to overcome a legacy of poverty and ethnic discrimination of indigenous groups, which still shapes in a profound way the political agenda of the continent.

Current capacities of South American states to deal with security challenges of the 21st century

The abovementioned historical context should explain why throughout the 20th century South American states may be labelled with the concept coined by the Argentinian political scientist Guillermo O'Donnell – “States with gaps”. This type of state is not necessarily dysfunctional or failed, but rather a state that was built in stages and fragments and whose cultural, social and historical bases are not homogeneous, but rather the result of processes of decolonisation or republican liberation. In the case of the latter, the historical dynamics surrounding access to state power stand out, which were built predominantly on the basis of proximity to the centre of political power. This has ultimately meant the absence of strategic visions for the construction of the national state.

In the cases of Bolivia, Ecuador and Peru, although the time of military dictatorships has been overcome in the last decades and civilian institutional oversight has been implemented, the lack of a community of civilian experts specialised in security and defence issues is a limitation for any control over the police and military institutions, since the absence of a network of specialists with in-depth knowledge of these issues reduces the possibility of creating the necessary consensus between citizens, authorities and political parties.

In relation to their frontiers, these countries share a patron of historical neglect or have only been occupied by the police and military, without generating social cohesion strategies, although countries such as Ecuador and Peru have attempted agrarian promotion strategies, which, however, have never been developed as long-term state policies.



- ▲ **Venezuelan refugees and migrants cross the Simon Bolivar Bridge into Colombia, one of seven legal entry points on the Colombia-Venezuela border. According to the latest statistics there are nearly 8 million Venezuelan refugees worldwide, of which 6,71 million are in Latin America, mostly in Colombia (2,81 million).**
[Credit: UNHCR/Siegfried Modola]

In the case of Bolivia, an economic nationalism, based on uncontrolled ‘extractivism’, has empowered union corporations that cultivate millions of hectares of leaf crops, pollute Amazonian rivers with mercury and destroy vast areas of forest every year. These corporations, allied with the government, prevent the Bolivian Police, the Armed Forces and National Customs from establishing effective control over the national territory.

By the end of 2023, Ecuador was one of the 11 most dangerous countries in the region. Although in January 2024, President Noboa decreed a state of emergency, criminal organisations responded by unleashing a wave of violence throughout the country, which eventually led to the decree of a non-international armed conflict. Twenty-two organisations were considered military targets, accused of terrorism. However, the crimes of extortion, kidnapping, and political assassinations continue to mark the daily scenario, despite the fact that the number of detainees linked to the actions of criminal organisations has increased.

In the Peruvian case, there is a substantial deterioration of trust in law enforcement institutions. The dysfunctionality and low legitimacy of law enforcement institutions are linked to a low-middle capacity entrapment, political instrumentalisation and the permeability of particular influences in the institutional agenda of the Armed Forces and the PNP (corruption and cases of policy self-management). The production of cocaine has grown from 385 tons in 2011 to 785 in 2021. While international attention is still fixated on the threat of drug production and trafficking, illegal mining is the crime with the highest accumulated amount, with US\$ 8,216 million, far surpassing drug trafficking (US\$ 640 million) and corruption of public officials (US\$ 1,487 million). According to the Global Organized Crime Index (2023), the Peruvian state has a score of 4.38 in resilience to organised crime, a low score out of a 10-point indicator and ranks eighth among South American countries.

Brazil and Chile represent a second group of countries, which in comparison experienced single periods of long and severe military autocracy throughout the 20th century. Brazil between 1964 and 1985, and Chile under Pinochet between 1973 and 1990. In Brazil, some long-term consequences have been the involvement of the military in decision-making in other sectors beyond defence; and also, within the Federal and local echelons of the military and police forces, budgetary imbalance, which is excessively concentrated in the personnel account and does not allow for necessary modernisation.

Nevertheless over the last decades, Brazil and Chile have effectively ascertained civilian oversight over the military and police, developed a strong presence on their frontiers, combined strategies for economic development (controversial though for the related conflicts with indigenous populations), and project regional and international agendas. Brazil, both as a BRIC country and a leader in regional environmental issues, pursues this approach, especially regarding the preservation of the Amazonian basin.

Regarding Chile, according to its 2020 Defence Policy, the country considers itself a tricontinental country – the Americas, Oceania (Easter Island) and Antarctica – where Antarctica is considered an integral part of Chilean territory (despite being only a territorial claim). For Chile, the Pacific Ocean is a challenge due to the fact that most of the world's trade transits through it, with the threat of piracy and illegal activities and rising competition between international players as China and the United States. In this context, assertion of control over territorial waters is not enough and regional and international initiatives are paramount. To this we must add the complex Antarctic scenarios that are envisaged in view of the revision of the Washington Treaty in 2048.

Colombia is a unique case, having battled home-grown guerrillas since the 1960s and dealing with mighty drug cartels since the 1970s. Even after a successful and historical peace process in 2016 between the government and the largest rebel group (the Colombian Revolutionary Armed Forces or F.A.R.C), Colombia faces important security challenges, not only regarding the historical threats from the drug cartels, but also from activities such as illegal gold mining, which only in 2022 increased in the southern part of the country by 11%. Colombia has some of the best prepared Armed and Police Forces of the entire region. It has also the unique trademark of exercising civilian oversight over these institutions through just one ministry, the Ministry of Defence, whereas the rest of countries of the region have divided this function between the Ministry of the Interior and the Ministry of Defence decades ago.

Since the beginning of the War against Drugs during the Nixon administration, through the increased efforts of the Andean Counterdrug Initiative during the last years of the Clinton administration, the dominant strategy of the Colombian government has been to recover the institutional presence throughout the country, implementing multidimensional security mechanisms, fighting in joined operations of the Police and Armed Forces and the dismantling of illegal criminal groups.

Only recently, the left-wing government of Gustavo Petro (2022) implemented a new strategy of dialogue with illegal armed groups and criminal gangs, with an emphasis on participation,

protection of the population, equity, provision of social services and access to justice has been implemented. Its interest has been to overcome the previous approach, denying the existence of internal enemies, making the application of justice more flexible and decriminalising the weakest links in the illegal economies.

However, because the phenomena being combated are of structural proportions and even involve transnational criminal organisations, the results obtained in terms of illicit drug trafficking and human trafficking are not positive. Altogether, cocaine production in Colombia increased from 273 in 2011 to 972 tons in 2021.

According to experts, Latin America has become the incubator for cross-border criminal organisations, which are adapting and complexifying their structures as they expand their illicit activities beyond drug trafficking. But organised crime is not



- ▲ **The 14-nation Lima Group was formed on 8 August 2017 to deal with Venezuela's political and economic emergency. The Lima Group calls on the regime in Venezuela to desist from violating the sovereign rights of its neighbours. [Credit: Lima group]**

just about drug trafficking. It includes widespread extortion, little studied because of people's distrust in reporting it. And mining, which operates in a different way as it is organised crime, co-opting all mining activity, not only illegal mining, but also formal mining, which it extorts.

In the face of these challenges, the attitude of individual states, who suffer from the systemic deficiencies described above, remains anchored in parochialism, putting ideological differences above cooperation, diplomacy and pragmatic agreements. One important cause for this situation, amongst several others, is the rift in the region caused by the Venezuelan migration crisis.

The Venezuelan migration crisis and the current diplomatic tensions in South America

In the early 2000s, most South American countries had left the time of military rule and had consolidated constitutional systems for peaceful and democratic political transitions. After decades of economic mismanagement and faced with the hegemony of the Washington Consensus after the end of the Cold War, most countries had – though in different degrees – embraced policies to ensure macroeconomic stability and opened themselves to free trade, globalisation and foreign investment. The election of Hugo Chavez as Venezuelan President in 1998 began to change this landscape. With its immense oil reserves and in a time of booming prices in the energy market, Chavez financed a social revolution in his country, which took an increasingly authoritarian path, developed close ties and gave important financial aid to Cuba and promoted similar political projects in countries such as Bolivia and Ecuador.

After Chavez’s death in 2013, and the rise to power of Nicolas Maduro, a stagnant economy, hyperinflation, authoritarianism and the utter lack of perspectives drove millions of Venezuelans to leave their country. According to the latest statistics there are 7,89 million Venezuelan refugees worldwide, of which 6,71 million are still in Latin America, mostly in Colombia (2,81 million), Peru (1,66 million) and Brazil (669,000). Many migrants are victims of human trafficking networks, which are a part of the newly created transnational crime structures described above.

The incumbent Latin American countries, although individually adhering to some of the most important international legal mechanisms for refugees (such as the Cartagena Declaration on Refugees of 1951) have not agreed on a common legal framework to process refugees requests or harmonised their administrative procedures to simplify the legal integration of Venezuelan migrants.

Only with the creation of the Lima Group in 2017 was a regional multilateral body established to support the Venezuelan opposition and seek a peaceful solution to the crisis in Venezuela. Among other issues, it sought the release of political prisoners and the holding of free elections, offering humanitarian aid and criticising the breakdown of institutional order in the South American country. Ten American countries initially signed the declaration, among them the most important Argentina, Brazil, Canada, Chile, Colombia, Costa Rica, Guatemala, Honduras, Mexico, Panama, Paraguay and Peru.

Today the Group is extremely weakened, due to the fact that Peru re-established relations with Venezuela in 2021, Argentina left the Group the same year, and political changes in the region, such as the return to power of Luiz Inácio Lula da Silva in Brazil.

The ideological conflict around the Venezuelan question has taken its toll on traditionally cordial diplomatic relations such as the ones between Peru and Colombia or Brazil and Chile, thus weakening the capacity of the region to set priorities and act as united block and respond to internal and global challenges.



RECOMONKEY
Combat ID & Photography

Combat ID

Training & assistance for all levels, including Instructors.

Practical advice for training delivery & assessment.

Full audits of image libraries to check accuracy.

Verification of 3D Imagery for training systems & gaming.

Photography

Extensive searchable image Database split into intuitive groupings.

Regularly updated and checked by competent and current subject matter experts.



www.RecoMonkey.com

mail@recomonkey.com



[/groups/recomonkey/](https://www.facebook.com/groups/recomonkey/)



[/recomonkey/](https://www.instagram.com/recomonkey/)



[/RecoMonkey](https://twitter.com/RecoMonkey)



[/@recomonkey895](https://www.youtube.com/@recomonkey895)

Hope or chaos for the Near East?

After 16 months of war, people long for peace and a solution

H.M. Lawrence

For centuries, war has shaped the Orient, mostly limited in time and place. But since 7 October 2023, when HAMAS attacked Israel, there are no limits for the conduct of military conflicts anymore; the use of new weapons systems makes this possible. While in years gone by, two or few adversaries fought for land or power, today a large number of different groups, internal and external, with their respective individual interests make rapid solutions of conflicts impossible. Global players, regional powers, individual states, dynasties, religious groups or international groups of terrorists, all fight over an area which, for its

uation today is more complex than ever before and could even escalate further (with an outright war between Israel and Iran, for example). On the other hand, it also holds opportunities to find solid solutions for an end to decades of conflict and for a better future for the people.

Political tension leads to military conflict!

During the past decades, a sort of Cold Peace (between Israel on the one side and Egypt and Jordan on the other), political tensions, sabre-rattling, and temporary limited wars have characterised the region, which today is close to an explosion. For more than a year, Israel has been waging a war in the Gaza Strip to destroy HAMAS militarily – with also two million Palestinians still suffering.

In particular, Iran-sponsored proxy-militias in the Arab world have showed solidarity with the Palestinian terrorist organisation. For months, Israel was struck by missiles fired from Lebanon, Iraq and Yemen. Hezbollah, Shiite militias in Iraq and Houthi in Yemen disposed of missiles of all kinds and used them against the ten million inhabitants of the Jewish state.

On 1 October 2024 the Israeli Defence Forces (IDF) began their ground offensive in the north against the Hezbollah in Lebanon and hit them very hard. Attacks by the Israeli air force, carried out the targeted killing of Hezbollah leaders and unconventional measures like the explosion of pagars in possession of Hezbollah fighters were successful – but the inhabitants of Beirut and Southern Lebanon have all suffered.

The next surprise came at the beginning of December 2024. An alliance of different Islamist militias in Syria (“Hai’at Tahrir asch-Scham” – HTS – the Committee for the Liberation of the Levant) succeeded, within a few days, to first move into Aleppo and Idlib, and then into Damascus. The Syrian Army and the whole regime of Bashar al-Assad collapsed – an event which reminded of the takeover of Kabul by the Taliban in August 2021. But a peaceful transfer of power is not certain. Israel took advantage of the situation and destroyed important military facilities in Syria. In the north, Kurdish militias fight for their autonomous region, and the Alawites, a group who had been in power for the past 50 years, at first opposed the new rulers before declaring their support, waiting for the next steps.

At the end of December 2024, the Israeli Air Force also intensified its attacks on positions and installations of the Houthi in Yemen, 2,000 km away. In a show of support for HAMAS, the Houthi attacked Western ships in the Red Sea. As if the



- ▲ **During “Operation Iron Swords” the IDF discovered the HAMAS tunnel system, destroyed their command posts and killed their leaders; but it also meant an almost complete destruction of civil infrastructure in the Gaza Strip, including schools and hospitals, and suffering of the population. [Credit: IDF-Spokesperson]**

oil wealth and for the fact that it is the cradle of the three “religions of the book”, is of high importance for the whole world. While armies used to fight battles and decide the outcome of a war in the past, today media coverage and the endurance of the population determine the course of events. There is only one thing that remains the same: the local population who pays the price. The past year and a half have shaken up an already volatile region and disturbed the distribution of power. The sit-

AUTHOR

H. M. Lawrence is the pseudonym of a freelance Middle East expert. The name is known to the editorial team.

seventh-poorest country of the world, Yemen, wasn't suffering enough, the conflict between HAMAS and Israel has now extended to the Strait of Bab al-Mandab.

Could the escalation of today be expected?

The Near East is up in flames. The real conflict with Iran, the Shiite regional power, has not broken out yet. While different countries of the region try to sort out their conflicts by war and violence, regional and global powers play their games behind the scenes. The oil-rich region is far too important for Washington to leave the field to Beijing or Moscow, in spite of its increasing strategic reorientation towards Asia ("Pivot to Asia"). Türkiye, Saudi Arabia, and the European Union are also trying to secure or even extend their own positions. These international actors seem to make a solution for the problems of the region even more complicated, with no contribution to a reduction in tensions. The self-interests of each player seem to be more important than the desire for a lasting and just peace, despite the hopes that appeared at the beginning of the decade.

In September 2020, the Foreign Ministers of Bahrain and the United Arab Emirates (UAE) signed agreements of "normalization" with Israel, brokered by the US. Only a few months later, Morocco and Sudan joined the so-called "Abraham Accords". A normalisation in the relations between the Jewish State of Israel, founded in 1948, and an accepted place for it in the Arab world seemed to have been launched. Mutual relations improved, most of all in the economic and diplomatic domains, in particular with the UAE. But the key problems of the region, the "Palestinian Question" and the conflict with Shiite Iran had not been addressed by the "Abraham Accords". Israel continued to promote Jewish settlements in the occupied West Bank, and Iran continued to build up its system of proxy-militias in the region. All this did not contribute to calming regional tensions. In spite of this, US diplomats continued to work on solutions. An agreement between Israel and Saudi Arabia, the guardian of the holy sites of Islam and representative of the Sunni world, was just about to be concluded. With important concessions regarding security guarantees for the royal House of Saud and the development of nuclear energy, the US had prepared the way for a normalisation with Israel. Just like Donald Trump before him, Joe Biden tried to lay the foundation for a peaceful and respectful coexistence of the states in the Near East.

The HAMAS attack takes Palestinians back to the headlines

But the world did not take into account the hatred of people in the region who are influenced by ideology. In the early hours of 7 October 2023, Palestinian HAMAS terrorists, supported by Tehran, launched a well-planned attack on Israel, coming from the Gaza Strip. The Sunni fighters attacked Israeli towns and kibbutzim close to the border to the Gaza Strip, killed 1,200 people and took more than 240 people hostage in the Gaza Strip. Israel's response was met with worldwide understanding and accepted as being morally justified. The IDF attacked the Gaza Strip with its two million inhabitants inhabiting a very small piece of land. During "Operation Iron Swords" they discovered HAMAS's tunnel system, destroyed their command posts and

killed their leaders. But their military victory also meant an almost complete destruction of civil infrastructure in the Gaza Strip, including schools and hospitals, and wide-scale suffering of the population. World opinion began to change. Demonstrators in many countries, who protested against extremely harsh and disproportionate operations by the Israeli Air Force, demanded an end to the fighting and a halt in the delivery of weapons to Israel. But nothing changed. IDF continues to fight HAMAS, to discover more tunnels, but also to destroy more infrastructure. At the same time, HAMAS continues to refuse to let go the remaining hostages (during a short ceasefire at the end of 2023, roughly 100 hostages were freed in exchange for Palestinian prisoners in Israel). The UN deplore the humanitarian situation for two million people in this densely populated land. In December 2024, a report by the UN Human Rights Commission warned that the health services in Gaza may collapse. The International Court of



▲ **On 1 October 2024, the Israeli Defence Forces (IDF) began their ground offensive in the north against Hezbollah in Lebanon. [Credit: IDF]**

Justice (ICJ) has decided that Israel and HAMAS must stop the fighting. And the International Criminal Court (ICC) has indicted Israeli Prime Minister Benjamin Netanyahu, former Defence Minister Yoav Gallant, as well as three HAMAS leaders, who have been killed in the meantime, for war crimes.

Israel's southern neighbour, Egypt, looks at the fighting with suspicion. It fears thousands of Palestinian refugees crossing the border at Rafah, and has imposed strict controls. It also criticises the occupation by Israeli forces of the "Philadelphi Corridor", a road between Egypt and the Gaza Strip, 14 km long and 100 m wide, to allow for patrolling of the border, which was de-militarised in 1979 and taken over by Egypt when Israel withdrew from Gaza in 2005. But the smuggling of weapons, equipment, and HAMAS fighters into the tunnel system in Gaza could not be prevented by the Egyptians. President al-Sisi now calls the occupation of the corridor by Israel a violation of Egyptian sovereignty.

Israel hits Hezbollah very hard

In a well prepared and perfectly planned operation, the IDF succeeded in eliminating most of the Hezbollah leadership in Lebanon. The killing of Hassan Nasrallah, the charismatic leader of Hezbollah in September 2024, and the coordinated explosion of many hundreds of pagers of Hezbollah fighters demonstrated to the world the resolve of Israel. As it did in 1978, 1982, and 2006, Israeli ground forces again crossed the “Blue Line”, observed by UN blue helmets (UNIFIL), and attacked Hezbollah fighters in Southern Lebanon. Accompanied by air attacks, this offensive caused destruction in Beirut and refugee movements within Lebanon. On 27 November 2024, both parties agreed to



▲ Lebanese Army Chief Joseph Aoun during a visit to the UNIFIL military base of Deir Kifa in Southern Lebanon. Aoun was elected on 9 January 2025, as new President of Lebanon [Credit: picture alliance / abaca | Abd Rabbo Ammar/ABACA]

a ceasefire, again brokered by the US with Israel promising to stop fighting, and Hezbollah agreeing to completely withdraw weapons and fighters behind the Litani River (30 km north of the “Blue Line”). This ceasefire still holds, more or less. Hezbollah’s weakness today – especially after the fall of the Assad regime in Syria — has also opened new possibilities to reach a solution to the political crisis in Lebanon, where political parties (and Hezbollah has important representation in the Lebanese Parliament) have not been able for two years to elect a new president (according to the Constitution, this has to be a Christian). Now, in January of this year, the commander of the Lebanese Armed Forces, General Joseph Aoun, was elected. This is an important step towards saving the former “Switzerland of the Near East” from falling apart.

Opposition topples Assad regime in Syria

In December 2024, Hezbollah received another fatal blow. To the surprise of many experts and Russian diplomats, Syrian President Bashar al-Assad, in power since 2000, fled to Moscow. In a well-prepared offensive, the HTS-militia, supported by Türkiye, took control of the important cities of Aleppo and Idlib in the north of the country. But the Syrian army and its Russian ally failed to react, as they did in the past. Without support from Moscow or Iran, the Syrian Army rapidly fell apart and the troops of the so-called opposition entered Damascus. But

the victorious HTS-militia and its leader al-Dschaulani (who now is called again by his real name al-Sharaa) are known to be an Islamist terror organization. He himself had created the “al-Nusra Front”, the Syrian branch of Al-Qaida. But the new “strong man” in Damascus now takes a moderate position, in order to not present an obstacle to diplomatic efforts by neighbouring countries, or the EU, the US, or Russia. It remains to be seen if he and his group will turn out to be the right individuals not only to stabilise the country, but also to appease the situation among the many groups in the country who often fight between themselves. As a first step, al-Sharaa has put into place a provisional government headed by Mohammed al-Bashir (former head of government in Idlib). He has promised a peaceful transfer of power and protection of minorities, as well as elections, probably not within four years.

The fall of the Assad regime offers hope for the Syrian people to see an end to the civil war which has raged for 13 years. But it also carries dangers. As a strategic link between Hezbollah in Lebanon and Iran, which created it, Syria was responsible for the delivery of arms to the Shiite militia and, at the same time, presented a threat to Israel. While the Assad clan had suppressed internal quarrels for 50 years, these may now reappear. The Kurdish minority in the north-east, supported by the US in their fight against ISIS (Islamic State) enjoys autonomy. Fighting for oilfields between the new masters and the Kurdish “Syrian Democratic Forces” broke out in December 2024. But the new leadership has announced that all militias will be dissolved and replaced by a national army which has still to be formed. If and when this will be done, remains an open question. Also, among Assad’s “home base” of the Alawites, a religious group close to the Shiites who make up roughly 10% of the Syrian population, there is fear for their future under the new government. However, talks between the groups have started.

Prospects of the second Trump Administration for the Near East

Besides all these regional issues, the election of the new US president also plays an important role. On 20 January 2025, Donald Trump, for the second time, took over the White House and will, for four years, have a significant impact on developments in the Near East. His son-in-law Jared Kushner had prepared the “Abraham Accords” in 2020, and his special envoy Amos Hochstein had arranged for a settlement of the sea border between Lebanon and Israel in 2022. They have both had an important share in influencing positive developments in the region. Today, expectations are equally high. The somewhat unorthodox policy of the 47th president as a dealmaker may yet surprise many. The Israeli government under Benjamin Netanyahu, after military success “on all fronts”, finds itself in an upswing position. The situation in the Near East remains complex, and wars, during the past 100 years, have never led to lasting peace. In the end, only a comprehensive agreement among all parties to the conflict can bring permanent peace. For this to happen, strategic interests of the US, China and Russia, but also regional ambitions of Türkiye, Egypt, Iran, and Saudi Arabia, have to be taken into consideration as well. And a solution for the Israeli and the Palestinian peoples still has to be found. Only then, the cultural, religious, and economic wealth of the Orient can offer its people the future they deserve. 

Russia's War against Ukraine

Is 2025 the Year of Peace?

Dr. Graeme P. Herd

Russia's full-scale multi-axis attack on Ukraine began at 0400h (CET) on 22 February 2022; it was a war of choice, even as Russia claimed it was not fighting Ukraine but an existential civilizational war against the West. Russia's theory of victory rested on first destroying Ukraine's statehood (territorial integrity and sovereignty) by force. Ultimatums, hybrid attacks and threats of nuclear escalation followed all of which were supposed to weaken the integrity of the political West in international politics. In short, the subjugation of Ukraine would break the West. For Putin, the Cold War outcomes would be reversed: Russia would unify with Ukraine similar to Germany's reunification in 1989, and just like the Soviet Union in 1991, the West would itself disintegrate and fracture.



“No war, no Putin”: War stabilises Russia?

Three years in, the war has become the stabilising logic of Putin's regime, justifying his imperial policy choices and legitimising his personal quarter-century rule. Putin's bedrock goal of defeating Ukraine remains. At the 19 December 2024 “Results of the Year with Vladimir Putin” TV show, Putin stated that Russian forces were advancing along the entire front line in Ukraine and doubled down on his justification for the war, adding that in hindsight, he should have launched it earlier. He praised Russia's Oreshnik intermediate-range ballistic missile, capable of inflicting ground damage to any point

AUTHOR

Dr. Graeme P. Herd is Professor of Transnational Security Studies George C. Marshall European Center for Security Studies. This chapter reflects the views of the author and are not necessarily the official policy of the United States, Germany, or any other governments

in Europe and challenged those in the West who doubted its capabilities to a “high-tech duel” against US air defence systems. As an aside, the US SM-3 surface-to-air within the Aegis Ballistic Missile Defense System (deployed in Poland and Romania) can in theory intercept the Oreshnik.

In this “war of resource and resolve”, Russia has four times the population and ten times the economy of Ukraine, and Putin professes also to have the resolve. His 2021 mantra “No Putin, no Russia” has metamorphosed into “No war, no Putin” by 2024. Continuous conflict is sustained by a war economy, with war-related wealth transfer tying the elite to Russia's messianic mission, and military-patriotic mobilisation used to calibrate coercion and target those deemed “unpatriotic” in society. This domestic transformation is

- At the 19 December 2024 “Results of the Year with Vladimir Putin” TV show, Putin stated that Russian forces were advancing along the entire front line in Ukraine [Credit: President of Russia]

mirrored in Russian foreign policy, with deepening strategic partnerships with China, North Korea, and Iran (a partnership treaty with a collective “defence cooperation” clause, to be signed on 17 January 2025), which aims to sustain Russia's warfighting, avoid sanctions and weaken the West.

Check: Russia's unstable Status Quo?

Yet outside the Kremlin's “Vladimir the Victor” information bubble, Russia looks weaker, having since 2022 conceded influence and positions in Nagorno-Karabakh, Armenia, Moldova and Syria. Israel, South Korea, Azerbaijan and Türkiye have all increased support for Ukraine. In addition, the Ukrainian Army's formations in the Kursk region of southern Russia visibly undermine the global perception that Russia has a strong deterrence capability and is a military superpower. Russia's apparently “inexhaustible resources” that enable Russia to wage a full-scale war are becoming exhausted. Not only would a Russian “victory” in Ukraine constitute a long-term drain on Russian resources, but Putin lacks a strategy to attain it.

With a record level of 30,000 battle casualties a month, and its recruitment efforts slumped below these irrecoverable losses despite an increase in enlistment payments by a factor of five since 2022, military attrition is finally biting Russia. All of Russia's solid-fuel missiles – including Oreshnik missiles – built at the Votkinsk plant in Izhevsk have a limited production capacity, as Russia's shortage of Iskander mis-

siles attests and, from 2026 onwards, Germany will deploy longer-range Tomahawk cruise missiles and developmental hypersonic weapons.

For all Putin's 'wunderwaffe' hype, Oreshnik is not a turning point in its confrontation with the West. If Russia uses non-strategic nuclear weapons (NSNW) in Ukraine it will lose the "Global South" (Chinese and Indian support) and risks consolidating the "Global West" against it. The US declared they would target and destroy conventional Russian naval (and land) forces in the Black Sea and Ukraine, potentially triggering revolt in Russia just when Russia would lack any capacity to suppress it – with 90% of its field army fighting in Ukraine. NSNW would not have any significant military utility on the battlefield in Ukraine as any targeting of major troop formations would have to be followed by a massive exploitation of the gap created to cause a rout and 'blitzkrieg' towards Kyiv.

In 2024, Uralvagonzavod, Russia's primary tank factory, delivered 300 new tanks to the Russian Army and during the same period, Russia repaired and restored tanks from the strategic reserve. According to the Ukrainian General Staff, in December 2024 alone, the Ukrainian Armed Forces destroyed 208 Russian tanks. Media reports suggest that tanks in the strategic reserve suitable for restoration will run out in mid-2025. Either Russia manages to import thousands of additional armoured vehicles or it loses the battlefield initiative. Moreover, President Zelensky has directed Ukraine's growing domestic defence industry to produce 3,000 cruise and drone missiles and 30,000 long-range drones in 2025, in order to seriously downgrade Russia's offensive ability. If Ukrainian missiles can strike Moscow 700 km from the front line, this would represent a loss of Russia's strategic level deterrence.

In 2021, Russia's workforce shortfall was estimated at 2.2 million people; in 2023, the shortage was 4.8 million workers due to: anti-war emigration (400,000–650,000 people left and did not return); 700,000 battlefield casualties (and additional increases in male mortality due to a subsequent rise in violence, crime, and alcoholism); and, an outflow of migrant workers due to anti-migrant policies. Russia also faces a labour scarcity trilemma as it has the labour resources to service only two of three necessary tasks.

First, without soldiers, Russia cannot maintain the strategic initiative and secure "victory" in Ukraine. However, Russia also lacks the equipment, training cadre and infrastructure to process second-round mobilisation. Putin would need to declare martial law and transform the "Special Military Operation" (SVO) to a "war" and in the process risk losing political control of a military he currently purges – aside from the societal effects this would entail. Second, Russia needs defence industrial complex workers (3.8 million people), many of them skilled, to produce the necessary major combat platforms and weapons systems, such as missiles, precision-guided weapons, drones, and artillery munitions. Third, the civilian economy needs the same workers to produce consumer goods, service the public sector (health and education) and staff the law enforcement sector, with

Interior Minister Kolokotsev stating that his ministry is one third understaffed.

Militarisation of Russia's economy has created macro-economic imbalances: the civil economy is stagnating (investments and private consumption may fall to zero) and stagflation (high inflation and low growth) and rouble depreciation are apparent. Russia's defence spending has doubled since 2021 and the 2025 budget allocates \$145 billion or 6.3% of GDP. In the event of a frozen conflict, current spending levels would still continue in order to maintain Russia's expanded army, reconstitute equipment and replenish expended munitions.

If the US, Brazil and Canada and others increase oil production and therefore global supply, and China's economy slows, oil prices will fall from \$75 per barrel (pb), and here experts' opinions vary, to below \$70 pb or even \$50 pb by May, and below \$40 pb by the end of the year. In addition, Ukraine's attacks on Russian oil factories have decommissioned between one-fifth to one-third of its refining capacities. Russia's share of European market natural gas imports fell from 42 to 5% as of 1 January 2025 (cutting annual revenue by \$6 billion).



▲ **Russian Defence Minister Sergei Shoigu conducts an inspection of fulfilment of state defence order by military-industrial complex in Chelyabinsk and Kirov regions in March 2023. [Credit: MoD Russian Federation]**

As Russia's national interest is defined in Russia as the elimination of threats to the leader and the regime, no sacrifice is too great to safeguard that. If the war does increasingly destabilise Putin's regime, he will end it. If he does not, and true to Russia's imperial political culture, his elite will eventually move against a weakened septuagenarian leader whose decisions threaten the stability of the system itself, as underscored by the abdication of Nicholas II in 1917; Beria's execution in 1953; Khrushchev's fall in 1964; and the coup Gorbachev suffered in 1991. Intra-elite power transitions are supported by the silent passive majority in society focused on their own survival. This common and visceral understanding explains why Putin does not order second-round mobilisation and vertical escalation but also why Putin in

2025 faces “zugzwang” (any move worsens his position) when addressing the accumulated reality of previous policy choices.

Internationally, the Kremlin’s imperial “statehood denial” propaganda caricaturing Ukraine as a fractured backward Russian territory have failed to take root in global consciousness. Ukraine’s united resistance and resilience have exploded Russia’s “one territory, one people, one religion” mantra as myth, and replaced it with the realisation of Ukraine as an agricultural superpower in global food security, and a sophisticated high-tech innovation hub. Russia’s state-controlled media narrative that the “SVO” is not a war but the first “battle” in a global struggle to replace “Anglo-Saxon”-led US hegemony with “fair multipolarity” has more traction. Here, Putin has a rhetorical offramp to declare “victory and leave”. Indeed, senior pro-Kremlin propagandists Olga Skabeyeva and Vladimir Solovyov predict that 2025 could become a “year of peace” for Russia. Recent polls in Russia suggest a majority favour peace talks, as Russians embrace a patriotic-nationalist Russia, rather than Putin’s imperial-nationalist discourse: “Why spend money on Mariupol? Better spend it here in Russia.”

2025: a Year of Peace?

How might these various tensions and impulses shape potential “peace for territory” negotiations? President Trump announced he is prepared to use US leverage to negotiate a Russia–Ukraine war endgame. Putin’s positive is full of cognitive contradictions: Russia has “parameters for peace” (i.e., “conditions”) for “negotiations without preconditions” and claims to want “a long-term durable peace, backed up with guarantees for the Russian Federation and its citizens” but not to halt the fighting. Putin’s core rationale for war – preventing Ukraine’s future NATO membership – became unintended collateral damage when Russia announced it had “no problem” with non-aligned Sweden and Finland joining NATO, even though Finland’s accession doubled the length of NATO’s borders with Russia and Sweden’s turned the Baltic Sea into a ‘NATO lake’.

Putin’s “victory” involves full direct control of Kherson, Zaporizhzhia, Donetsk and Luhansk (self-proclaimed “historical Russian lands”), with the rest of Ukraine fully subjugated through “denazification”, “demilitarisation” and imposed neutrality and NATO should shrink to its pre-1997 border. If after three years of war, Putin cannot achieve his maximalist absolutist goals he is in effect defeated. Putin’s goal of destroying Ukrainian statehood is incompatible with Ukraine’s need for credible security assurances to uphold its statehood (territorial integrity and sovereignty). As President Zelensky noted, for Putin, even direct negotiations would signal Moscow’s defeat, as all-out surrender by Kyiv demonstrably would not have been achieved.

Four potential alternative negotiated outcomes can be identified. First, Ukraine as “West Germany”. This model is compatible with President Zelensky’s victory plan presented to the Verkhovna Rada in Kyiv on 16 October 2024. Ukraine will agree to a ceasefire if it leads to a durable peace pro-

cess underpinned by credible long-term security guarantees that deters a future Russian attack by triggering appropriate third-party intervention or retaliation from a Ukraine armed with a suitably enhanced deterrent. For NATO, granting membership allows for greater security synchronisation, giving NATO increased influence over sub-regional security order and ensures that the common denominator of NATO’s security interests would also become Ukraine’s.



▲ President Zelensky presented his “victory plan” to the Verkhovna Rada in Kyiv on 16 October 2024. [Credit: The Presidential Office of Ukraine]

Three challenges are apparent. First, NATO membership represents an unambiguous defeat for Putin. Second, for Ukraine, the return of Crimea is critical to its future Black Sea trade and links to global markets and economic viability as an independent state. Third, the process of NATO membership is slow (needing the approval of 32 parliaments) and subject to consensus with national vetoes in play.

A second option is the “South Korean model”, characterised by a demilitarised zone (DMZ), Western boots on the ground and credible bilateral mutual security treaty commitments to come to Kyiv’s aid if attacked. It appears to be most compatible with Trump’s draft proposal to freeze the current front lines, establish a demilitarised zone without using US or UN forces to police it, and impose a twenty-year neutrality on Ukraine. If we apply this model to Ukraine, then Ukraine builds a strong conventional deterrence, has bilateral security guarantees, with European trip-wire troops based on its territory and falls under the US nuclear umbrella. This would be a NATO-lite/like model, in that it offers NATO-like guarantees from a NATO coalition of the willing but without NATO membership.

Open questions abound. Would the frontline freeze in Donbas and Kherson and Zaporizhzhia regions become the DMZ? Which combination of peacekeepers, electronic surveillance and unmanned sensors would be acceptable to Kyiv and Moscow to monitor the DMZ? Third-party adjudicators should trigger enforcement of DMZ breaches, but what costs can credibly be imposed on violators? In short, what deters further Russian aggression? South Korea’s declaration of martial law and a questioning of the Trump administration’s willingness to risk Kansas for Kyiv undermines the US “extended deterrence” aspect of this model.

MITTLER REPORT



www.euro-sd.com



Published monthly,
EUROPEAN
SECURITY & DEFENCE (ESD)
is the leading defence and
security trade journal
in and for Europe.



©US Army/CV2 Cameron Roxberry

A Company of

TAMMMEDIA



Publishing house Bonn,
Beethovenallee 21, D-53173 Bonn

Third, in April 2022, President Zelensky stated: “We cannot talk about Switzerland of the future” – probably, our state will be able to be like this a long time after. But we will definitely become a ‘big Israel’ with its own face.” This analogy suggests external guarantees through active defence partnerships, with a European NATO coalition of the willing conducting joint air defence (“open skies”) operations to protect Ukraine against a nuclear armed Russia. Ukraine could adopt Israel’s broader “security first self-defence” approach, societal resilience, intelligence dominance, innovative technologically based ecosystem, and democracy. Israel carries out sabotage attacks against hostile actors in its neighbourhood, Ukraine conducts deterrence by punishment attacks on Russia.

However, the security circumstances between Israel and Ukraine are too different for the comparison to be useful and for Israel to act a model. The Golan Heights and West Bank do not equate to Kyiv’s relationship with Crimea and other Ukrainian territories that Russia currently occupies. Unlike Israel, Ukraine has the prospect of eventual EU membership and then access to the EU’s mutual assistance clause. Lastly, unlike Ukraine, Israel has an independent nuclear deterrent and is not a Non-Proliferation Treaty member.

The fourth model is that of a “nuclear Ukraine”, posited as “nuclear or NATO” option by President Zelensky on 17 October 2024. In effect, the key message is: “If you won’t defend us, we’ll [expletive deleted] do it ourselves.” Ukraine embraces – as a last resort – a standalone sovereign independent deterrent in the form of strong combined arms capabilities, including tactical nuclear weapons, and long-range strike capabilities. Without nuclear weapons the necessary conventional deterrent would entail a standing army of 500,000 (60+ brigades) which sacrifices Ukraine’s economic future for a garrison state. With nuclear weapons, Russia is deterred, societal support assured (in the latest KIIS polling, 73% of Ukrainians support Ukraine “restoring nuclear weapons”) and affordable, given the probative costs of a conventional garrison state. But the gap between acquiring and declaring credible nuclear status legitimises Russian “counter-proliferation strikes” against Ukraine. The nuclear option forces a recalibration of the balance of risks against possible alternative futures.

Conclusions

After three long years of war, Ukraine has clearly demonstrated it can avoid “defeat”, through its resilience, will to fight (launching a new offensive in the Kursk region 4–5 January 2025) and vital Western support. Russia becomes more dependent on the support of Iran, North Korea and China as, over time, its red-line diplomacy and deterrent credibility erodes, and internal conflicts between the FSB-MoD, industrialists-financiers and centre-periphery intensify. The West has also had time to imagine both the consequences and costs of Ukraine’s defeat (a divided, demoralised, depopulated and anti-western Ukraine under Russia tutelage) and Russian victory, with future *fait accompli* land gabs and nuclear proliferation. President Trump is the dynamic factor in 2025 and Ukraine’s future strategic status will reflect the new “transatlantic bargain” and by extension, the nature of US “burden shifting” to the Asia-Pacific region.



NATO 2030

What could the Atlantic Alliance look like?

Karl-Heinz Kamp

A few years after its creation in 2003, NATO's "Allied Command Transformation" (ACT) initiated a major project attempting to design NATO's future in 2030, referred to as "Multiple Futures". After numerous conferences and workshops about different "futures" for NATO, a 200-page report was presented in 2009. The report mentioned different sorts of trends, challenges and options for the Alliance to be considered; however, one word did not appear once — Russia. Obviously, a long time horizon tends to reduce the validity of forecasts until they become meaningless.

The situation in 2025

Moscow continues its brutal war on Ukraine, with no end or resolution in sight. Russia's sheer size allows Putin to continue his attacks for a long time, although his modern military equipment continues to be reduced and the casualty figures (dead and wounded) are immense. He continues to deplete large reserves of older weaponry, while his arms industry operates at full capacity, producing all necessary military equipment that doesn't rely on components

	2020	2022	2023	2024
GDP according to the estimate of the German federal government	3.449.600	3.953.900	4.185.600	4.310.600
Defence budget	46.089,45	50.561,53	51.132,65	51.951,94
Spezial fund for the Bundeswehr		0,00	5.807,65	19.799,82
Outside Defence budget	5.302,05	7.704,71	10.680,77	18.834,01
According to NATO criteria	51.391,50	58.266,25	67.621,07	90.585,85
Share of defense spending in GDP according to NATO criteria	1,49 %	1,47 %	1,62 %	2,10 %

In Million Euro

▲ **Until Chancellor Scholz's declaration of a "new era" in 2022, Germany hasn't even seriously tried to spend 2% of its GDP on defence; even in 2024, it barely succeeded in doing so. [Graphics: mawibo media /Source: MoD GE]**

Today, a forecast for 2030 is a lot easier, and not only because of the shorter time line looking ahead. Important factors shaping the future of NATO appear clearly: Russia continues its war against Ukraine; Moscow's aggression is met by the West — to the surprise of Putin — by determination; China develops into a threat to security way beyond the Asia-Pacific region; and the White House in Washington is occupied, once again, by a president who is unfathomable. So, what will the strategic context look like in five years' time, and what does this mean for the North Atlantic Alliance?

AUTHOR

Karl-Heinz Kamp is a German political scientist. He was President of the Federal Academy for Security Policy from 2015 to 2019.

subject to Western sanctions. And Russia's very patient population seems to accept more than 650,000 war victims without complaint, while the Russian government pays the families of fallen soldiers EUR 50,000.

But the loss of lives and military equipment, as well as the sanctions imposed by the West are not without consequences. Only 20% of Russian tanks produced today are really new, 80% are older models, either repaired or modernised; and their stock continues to diminish. Russian economic growth today is based, almost exclusively, on the production of weaponry, at the cost of investment in civilian production, while the armaments industry suffers from shortages in personnel and equipment. Certainly, it is possible to bypass sanctions, but this works only to some extent and at a high cost. As a consequence, Russia is increasingly cut off from the international technology market. Its "Future Fund", built

up over years, is almost used up, and Russia's energy exports, because of falling prices, contribute less and less to the State budget. This means the war not only weakens today's Russia, it ruins the perspectives of the country's economic development. Recent events such as the fall of the Assad regime in Syria and the weakening of Iran reduce Moscow's international influence further, as the "axis of autocracies", from North Korea to Iran and Venezuela proves in essence to be an "axis of the poor".



▲ **Donald Trump will not hesitate to threaten the Allies in his second term. [Credit: Official White House Photo]**

For NATO, Russia's attack on Ukraine has had the opposite effect: its position has not weakened, but has become stronger. After parts of NATO, Germany in particular, held on to the idea of partnership with Russia for too long, the Alliance, after 2022, took action in a surprisingly determined way. Deterrence and defence again became the main focus of military and political action, leading to an increase in the Alliance's defence capabilities. Many NATO Allies have now increased their defence expenditures by an important margin, after having neglected their armed forces for years, thereby compensating in part their shortfalls. Forward presence of troops on the Eastern Flank of the Alliance has increased, defence plans have been adopted, and the entry of Finland and Sweden into the Alliance has made the Baltic Sea NATO's "Mare Nostrum".

China, until recently both a partner and a "systemic rival" of the West, has developed into an aggressive opponent way beyond the Asia-Pacific region. It supports Russia's war of destruction in Ukraine, tolerates North Korea becoming a nuclear power, actively engages in the fight against the international rules-based order shaped by the West, and declares the US and its allies to be its main opponent. On the other hand, given US interests in the Pacific, China represents the main threat to Washington, as Beijing, unlike Moscow, not only has the will, but also the means to challenge the US politically and militarily. Therefore, in 2024, the US spent USD 3.6 billion on its "European Deterrence Initiative", but

USD 14.7 billion on its "Pacific Deterrence Initiative". At the same time, the US continues to make clear to their European allies that, given the existing global interdependencies, their vital interests would also be challenged in case of a conflict in the Asia-Pacific region. It is obvious that Washington, regardless of who is president, expects support from its NATO Allies in its conflict with Beijing.

So, the US expects support from the Europeans regarding China, but doesn't forget that it has complained over years about an uneven burden sharing in NATO. In spite of repeated reminders by numerous US presidents and secretaries of defence, part of (NATO) Europeans still have their own security subsidised by the US. Until the declaration by Chancellor Scholz of a "new era" in 2022, Germany hasn't even seriously tried to spend 2% of its GDP on defence and only just succeeded in 2024. Still today, wealthy NATO nations including Canada, Italy and Spain, are far from reaching the 2% benchmark and therefore ignore their own engagements.

Donald Trump, in his first term in office, expressed his disappointment in a more brutal fashion than his predecessors and will not hesitate to threaten Allies in his second term. But he will probably not aim at destroying NATO for the sake of destruction. He obviously intends to end what he considers to be an outrageous injustice: insufficient burden sharing. The fact that the European work force is granted an annual leave of 30-35 days whereas their American colleagues can count on only 12 days is proof for the US of the mismatch regarding expenditures for their own security.

NATO in five years

By 2030, NATO will see itself more than ever as a defence alliance and a tool of Western assertiveness against Russia. The tendency until 2022 to charge NATO with all kinds of tasks in security policy – from climate protection to energy security and hybrid threats – will have ended. This means, NATO implicitly modifies its Strategic Concept of 2022, which had been developed before Russia's attack on Ukraine. As core functions of the Alliance, besides deterrence and defence, this concept includes crisis management and partnership with non-NATO countries. But in spite of recent developments in Syria, Lebanon, or Sub-Saharan Africa, military crisis management is, for the foreseeable future, of no real importance. After the sobering results of NATO missions in Afghanistan or Libya, there is no appetite within the Alliance to engage in further costly stabilisation missions with an uncertain outcome. Moreover, NATO no longer has the necessary forces. Crisis management in the past could be done with current military forces, as territorial defence was not seen as an urgent need. Today, all forces are planned to be available for deterrence and defence against Russia.

Contrary to its 2022 Strategic Concept, NATO isn't really engaged in any counter terrorism activity. Although the document mentions terrorism as the second most important threat after the threat of Russian aggression, this was included for political reasons in order to satisfy concerns of NATO countries in the South. In reality, NATO as a political and military alliance, does not dispose of the necessary

tools to handle threats such as terrorism or Islamist violence. In this respect, the European Union has many more possibilities to act.

NATO in 2030 will therefore have intensified its cooperation with the EU, if this is possible with the different memberships in both organisations. In reality, the EU will have abandoned, since 2022, illusionary plans for a European army or an autonomous European Defence Union, and leaves military defence to NATO. At the same time, the EU has become an important actor in security policy, successfully managing sanctions against Russia, support for Ukraine, or the security of gas supplies for Europe. So, we have functional cooperation, to which both organisations contribute their core competencies.



▲ **As long ago as 1970, then US Ambassador to NATO Harlan Cleveland described the Alliance as “an organised controversy about who is going to do how much”.**
[Credit: National Archives]

NATO's concentration on defence against Russia has shifted the balance among the Allies towards the north-east. The entry of Finland and Sweden in 2024 strengthened NATO considerably and has turned the Baltics and the High North into regions dominated by NATO, linking the Baltic Sea, the Polar region and the North Atlantic. The increasingly close cooperation between Finland, Norway, Sweden, the three Baltic republics and Poland has created a North-East corridor in which Poland plays a central role – just like West Germany during the Cold War. Warsaw plays this role having raised its military capabilities by spending more than 4% of its GDP on defence. In this constellation, Germany has fallen behind, having neglected its relations with Poland for too long, and there is a lingering suspicion of Berlin seeking understanding with Moscow, often at the expense of the Allies..

In 2030, Ukraine still has not received an invitation to join NATO, because there is still no unanimity to support the request. But important NATO Allies have concluded bilateral

security agreements which go beyond the engagements laid down in the 1994 “Budapest Memorandum”, which Russia has broken without bearing any consequences. Also, the Europeans have further developed the “Ramstein Format” to a European-managed forum to coordinate military assistance to Ukraine, thereby compensating, in parts at least, the reduction of US support.


2030 – one year after Trump's second term

Donald Trump's second term as president of the US has speeded up the evolution of NATO in many ways, even if this has led to serious crises and friction. Trump's unexpected and convincing victory in 2024 laid bare the differences in threat perceptions on both sides of the Atlantic. Security concerns in Europe are directed towards threats from Russia, while American citizens are mostly concerned about economic decline, migration from the South and China's offensive on American markets. These differences have led to a situation in which NATO is no longer the centre of transatlantic security relations.

At the same time, the US has not been able to stay away from international crises, as announced by Trump at the beginning of his second term, and concentrate on China, the economy and the transformation of the system of government. Instead, the events in Syria, Iran, Russia and Africa obliged Washington to become engaged in order to safeguard US interests.

One year after the end of Trump's second term, his demands and threatening of Allies produced results in many ways. At the NATO Summit in The Hague in June 2025, the Allies agreed to increase defence expenditures to a minimum of 3% of GDP and to enhance their defence capabilities. The strengthening of NATO and the corresponding weakening of Russia through several years of war, sanctions, and economic problems have fundamentally changed the balance of power in Europe. The European pillar of NATO is increasingly able to defend against an aggressive Russia even if the US decides to send more troops to the Pacific and cannot, or does not, want to provide as many strategic “enablers” (satellite reconnaissance, air transport, air refuelling, etc.) to Europe as in the past.

Regarding Asia and the Pacific, NATO has changed its perspective. As the North Atlantic Treaty Organization, the Alliance cannot become militarily involved in the Pacific, and most European allies don't have the means to do this. But NATO has further deepened its partnership with the democracies in the region, the so-called “Asia-Pacific-Four” (Australia, Japan, New Zealand, and South Korea), and conducted port visits of warships, as well as common exercises – also in the Straits of Taiwan.

In 1970, then US Ambassador to NATO, Harlan Cleveland, described NATO as “the organised fight over who does how much”. This fight escalated during the four years of the first Trump presidency. But NATO and the transatlantic relationship survived this president, as all the others. 

NATO – fit for war?

Roger Näbig

‘Si vis pacem, para bellum: If you want peace, prepare for war’. If NATO did not already have a motto, this Latin saying would fit the current situation of the Western alliance very well, as it contains a piece of timeless logic of deterrence that already preserved peace during the Cold War: Preparing for war in a credible way could be the best way to actually prevent war between Russia and NATO.

The question of NATO’s war-fighting capability is therefore of crucial importance for the security of Europe and the entire Euro-Atlantic area. In the face of the ongoing threat from Russia and the changing geopolitical landscape, a sober analysis of the military capabilities and readiness of the alliance is essential. What is the current state of NATO and to what extent is the alliance really prepared for a possible armed conflict with Russia?

Progress since 2014

Since Russia’s annexation of Crimea in 2014, NATO has made significant efforts to strengthen its deterrence and defence capabilities. The Readiness Action Plan, adopted at the 2014 Wales Summit, marked the beginning of a major overhaul of NATO’s strategy. In the following years, further important steps were taken:

Increase in defence spending: member states committed to increasing their defence spending to 2% of GDP.

Enhanced presence in the east: establishment of multinational battlegroups in the Baltic states and Poland (Enhanced Forward Presence).

Improving operational readiness: introduction of the NATO Readiness Initiative to increase the size of the rapidly deployable forces.

These measures have undoubtedly contributed to an improvement in NATO’s deterrence and defence capabilities. However, the question arises as to whether they are sufficient to withstand a large-scale conventional attack by Russia.

Current situation and challenges

Russia’s war of aggression against Ukraine in February 2022 once again starkly demonstrated the urgency of NATO’s robust defence. The Alliance responded by further reinforcing its eastern flank:

AUTHOR

Roger Näbig is a lawyer and freelance journalist in Berlin specialising in global conflicts, defence, security, military policy, armaments technology and the law of war.

- Doubling the Battlegroups: additional multinational units were stationed in Bulgaria, Hungary, Romania and Slovakia.
- New Force Model: at the 2022 Madrid Summit, a new NATO Force Model was adopted to increase the operational readiness and flexibility of the armed forces.

Regional defence plans: At the 2023 Vilnius summit, new regional defence plans were finally adopted.

With Finland joining NATO last year and Sweden this year, defence capabilities in Northern Europe, the Baltic Sea and the Baltic states have been greatly improved.



- ▲ **Canopies filled the sky over Hohenfels, Germany, for ‘Saber Junction 2024,’ a U.S.-led exercise pitting Allied paratroopers against each other [Credit: NATO]**

These steps show that NATO is taking the threat seriously and is working to develop its capabilities. Nevertheless, significant challenges remain:

- Troop strength and operational readiness: although NATO has ‘comfortably exceeded’ its goal of 300,000 soldiers on high alert, it remains questionable whether these forces could actually be mobilised and deployed quickly enough.
- Equipment and ammunition: There are still bottlenecks in important weapon systems, particularly in air and missile defence and in long-range guided weapons. The exact amount of artillery ammunition is kept secret, but it has been an open secret since the Russia-Ukraine war that NATO’s existing stocks are far too small for a prolonged conflict.
- Logistics and infrastructure: The rapid redeployment of large troop units over long distances continues to pose a logistical challenge. Railway stations, roads and bridges need to be renovated not only in Germany but also in Eastern Europe.
- Interoperability: Despite some progress, there are still problems with the seamless cooperation of the various national armed forces. One example of this is the large number of different land-based weapon systems.

Assessment of individual member states

NATO's war-fighting ability depends heavily on the capabilities of its individual members:

USA: As by far the strongest military power within the alliance, the United States forms the backbone of NATO's defence. Its technological superiority and global reach are unrivalled. However, the question arises as to what extent the US would be able to deploy additional forces to Europe in the event of a conflict with China in the Pacific, given other global commitments.

United Kingdom: The United Kingdom has powerful and well-equipped armed forces. However, years of austerity have reduced troop strength. The Royal Navy plays an important role in the maritime security of the alliance, but is struggling with ongoing personnel problems, which are currently even leading to the decommissioning of warships.

France: French armed forces are well trained and equipped with modern equipment. France maintains a rapid reaction force of about 5,000 troops deployable within a week. France's nuclear deterrent is an important pillar of European security.

Germany: In recent years, the Bundeswehr has had to struggle with significant problems in terms of operational readiness and equipment. Despite a special 100-billion-euro fund, progress in modernisation has been limited so far. It is questionable whether Germany would currently be able to fully meet its NATO commitments.

Poland: As a frontline state, Poland has invested heavily in its armed forces in recent years, particularly in the army and air force. With one of the largest land forces in Europe, Poland plays an increasingly important role for NATO's eastern flank as Germany.

Turkey: The Turkish armed forces are large in number, but President Erdogan's policies have not always made clear their loyalty to the alliance in the event of a conflict with Russia. Turkey's special geopolitical role in the Middle East makes it a difficult partner to assess.

Smaller member states: Many smaller NATO states, particularly in the Baltic region, have significantly increased their defence efforts. However, their absolute military strength remains limited.

New initiatives and technologies

NATO is endeavouring to improve its capabilities through multinational cooperation and the use of new technologies. Some promising approaches are:

Development of new unmanned aerial vehicles (RPAS) for reconnaissance and electronic warfare.

- Improving the interoperability of artillery ammunition.
- Building a networked synthetic training environment for multinational exercises.
- Strengthening space capabilities through projects such as NORTHLINK and STARLIFT.

These initiatives show that NATO has recognised the importance of modern technology and multinational cooperation. However, it will take some time before these projects reach full effect.

Conclusion: Is NATO fit for war?

After careful analysis, it can be concluded that NATO has made significant progress in improving its defence capabilities, but is not yet fully prepared for a major conventional war in Europe.

NATO's strengths lie in its technological superiority, the quality of its forces and its ability to work together across national borders. The enhanced forward presence on the eastern flank and the new regional defence plans have undoubtedly increased deterrence.

Nevertheless, significant weaknesses remain:


- The immediate operational readiness and rapid deployment capability of the armed forces of many European NATO states remains inadequate.
- There is a lack of critical capabilities such as air defence, anti-drone defence, precision munitions and strategic transport.
- The logistical infrastructure in Europe is not optimally designed for the rapid deployment of large troop contingents.
- Political decision-making within the alliance could prove too slow in the event of a crisis.



▲ **Soldiers from the Danish Army during a Multinational Brigade exercise in Lithuania [Credit: NATO]**

To be truly war-ready, NATO would have to:

- further increase the operational readiness of its forces and regularly test them in large-scale manoeuvres,
- close critical capability gaps, particularly in air defence and precision munitions,
- improve the logistics and infrastructure for rapid troop movements in Europe, and
- streamline political decision-making processes and intensify advance planning for various crisis scenarios.

While NATO is better prepared for a major conflict with a peer opponent like Russia than it was 10 years ago, it still has a long way to go to be truly war-ready. The Alliance's deterrent effect is currently based more on its political unity and nuclear component than on its conventional strength. It is to be hoped that NATO will use the coming years to further develop its capabilities without ever having to put them to the test. 

The Way to Victory

How the West must join forces

Ben Hodges

The United States of America, along with our allies and partners, is facing several global challenges. The international rules-based order from which we have all benefited so much is under enormous pressure. Each of these challenges can seem worrying in its own right. However, recognising that they are all strategically linked is an important step in effectively countering them and ultimately succeeding. But what are these global challenges and how do they interact?

Russia

Currently, the first and most dangerous threat is Russia, with its war of aggression against Ukraine and its aggression against Europe as a whole. In the eleven years since Russia's aggression against Ukraine, starting with the illegal annexation of Crimea in spring 2014, the Kremlin has spent hundreds of millions of dollars undermining our democratic processes and institutions; threatened to escalate the conflict to a nuclear level; and created millions of refugees in Central and Western Europe – not only from Ukraine, but also from Syria, as a result of its support for the Assad regime, and from the entire Middle East.

Since its attack on Ukraine, the Kremlin has murdered tens of thousands of civilians in cold blood and routinely executed Ukrainian prisoners. Moscow has severely disrupted food and energy supplies, causing prices to skyrocket worldwide. Europe has long been confronted with a hybrid war. Should Ukraine fail

in its military defence, there is an increased risk that Russia will attack NATO countries with conventional weapons.

Iran

The second threat comes from Iran. With its nuclear weapons programme, the regime in Tehran is endangering the entire Middle East. In addition, the mullahs support several terrorist organisations that attack Israel on the one hand and attack merchant shipping in the Red Sea and the Gulf of Aden on the other. However, with the collapse of the Assad regime, Iran no longer has any other ally than Russia. Moscow is helping Tehran with nuclear technology, while Iran is selling its Shaheed drones and ballistic missiles to Russia.

North Korea

The third threat emanates from North Korea, with its constant threats against South Korea and Japan. The regime in Pyongyang, which also has no other friend than the one in Moscow, is the largest external supplier of ammunition and ballistic missiles to Russia.

China

Finally, the fourth threat comes from China. The leadership of the People's Republic's Communist Party is watching closely to see whether the West is willing to actually defend the international rules-based order in Europe. If we fail, if we do not stop Russia in Europe, then China will be even more assertive in the future.

While watching the global West wrestling with Russia, China is shamelessly supplying the aggressor with key components and materials bolted onto missiles used to kill Ukrainian civilians. In the Indo-Pacific, Beijing is using its naval forces and its commercial fishing fleet to threaten Vietnam and the Philippines and to make illegal claims to large parts of the South China Sea. It is using its navy and air force to threaten and intimidate Taiwan, blockading the island and rehearsing a possible invasion at some point in the not too distant future. China is also developing new long-range weapons that can reach the US bases on Guam.

How do we react?

How do we deal with these threats, with these international challenges? How can we organise ourselves to win? Do we, the global West, have the collective political will, the industrial capacity and the military capabilities to stand up to the



◀ **Lieutenant General (Retired) Ben Hodges is the former Commanding General of US Army Europe (2014-2017).**
[Credit: Felix Schmitt]

AUTHOR

Lieutenant General (retired) of the US Army Ben Hodges is former commander of US Army Europe (USAREUR).

regimes in Russia, Iran, North Korea and China? Can we organise ourselves collectively to meet global challenges and protect the international rules-based order?

How to organise a victory in the spirit of Ukraine

In my view, we are witnessing the progressive collapse of the Soviet Union that began in 1991. The decline is not linear, but it is unmistakable. Putin's war against Ukraine has bankrupted the Russian economy and cut off the country from much of the West. His military is largely incompetent and corrupt. Almost all former Soviet republics and members of the former Warsaw Pact have turned away from Russia.



- ▶ **Refugees are being used as weapons (starting with the support for the regime in Syria in 2015), causing millions of people from the Middle East and Ukraine to flee to Central and Western Europe; meanwhile the former President of the Syrian Arab Republic Bashar al-Assad found asylum in Russia. [Credit: Kremlin]**

Putin has even strengthened NATO through his war. Finland and Sweden have joined NATO. It would make sense for us to prepare for the collapse of the Putin regime – and organise for victory.

But what is victory? To win means to push back Russian forces to Ukraine's internationally recognised 1991 borders. And yes, that includes Crimea. Victory also includes the return of the tens of thousands of abducted Ukrainian children, accountability for Russian war crimes before the International Criminal Court, the use of Russian funds to rebuild Ukraine, and Ukraine's membership in NATO.

A peaceful solution will only succeed with clear leadership.

Is it possible? Let's look at the end of the Second World War as a historical example. In 1942, the Allies had no reason for optimism. Great Britain had suffered heavy defeats since Nazi Germany and Russia invaded Poland in 1939 and stood alone as the German armed forces occupied the European continent. Britain was under severe threat as an empire.

America had no interest at that time in becoming involved in a ground war in Europe. 'America First' was a strong political movement in the isolationist US. We had an army that was smaller than Bulgaria's army at the time and most of our Pacific fleet was still burning or underwater in Pearl Harbor. In January 1942, British Prime Minister Winston Churchill came to Washington D.C. to meet with President Roosevelt. During this conference, the strategic priority 'defeat Nazi Germany first' was

finally agreed upon – subsequently with the proviso of unconditional surrender.

On the basis of this clearly defined goal, President Roosevelt was able to mobilise the American population, convert the economy to war, train 12 million men and women in uniform, and successfully end the war together with our allies. We in the West need this kind of clarity. And we need leaders who can talk to their citizens as adults, explaining what is at stake.

Russia is weakened, Ukraine is challenged

When we, the global West, in particular the United States, Germany, the United Kingdom and France, act together, I remain optimistic that Ukraine will indeed win this war. After almost 11 years of being on the attack, Russia still only controls 20% of Ukrainian territory. The Russian navy and air force are not particularly good and suffer heavy losses. The Black Sea fleet has lost a third of its ships and is in retreat from Sevastopol. The Russian air force has largely failed.

More than 700,000 Russian soldiers have been killed or wounded so far. If you put Russia's recent tactical advances in their proper geographical and operational context, they are in the far east of Ukraine. The Ukrainian Armed Forces Commander, General Syrskiy, has recently stabilised the situation and bought time to build up combat strength. The counter-offensive he launched in the Kursk direction has damaged Russia's self-image.

For its part, Ukraine should get its personnel affairs in order. There are over a million women and men of military age in the country, but many thousands more live in Germany, Poland, Romania and other European countries. Ukraine's civilian leadership is now challenged to win the trust of Ukrainian families. It must explain that the lives of their sons and daughters are not wasted, that they will receive proper training and equipment and be integrated into a well-trained unit before being sent into combat. It must show that the Ukrainian Army is not a 'prisoner army' as older Ukrainians remember it from the Soviet era.

Trump will have great influence over Putin

The Ukrainian General Staff must re-establish worn-out units and improve the armed forces technically. This requires building an 'institutional army' responsible for recruiting, ed-



- ▶ **Finally, there is China; the leadership of the Chinese Communist Party is closely monitoring whether and how the West is willing to actually defend the 'international rules-based order' in Europe; here a meeting between Vladimir Putin, and the President of the People's Republic of China Xi Jinping. [Credit: Kremlin]**

educating, training and equipping soldiers and units needed to create the 'operational army' that actually fights. This requires investment in people, infrastructure and equipment for the new units.

US President Trump will have a great deal of influence on Putin, much more than he did eight years ago. Apart from the fact that Putin's military has still not managed to defeat Ukraine, he is politically weakened because he has been unable to protect Assad in Damascus. Trump, on the other hand, is entering office with much more experience than he had during his first stint in the Oval Office. He inherits a strong US economy and can count on 31 allies in NATO and other partners – if he is willing to help Ukraine and to assure them that the US will not turn its back to its friends in Europe.

Putin's only hope is that the global West gives up and turns away from Ukraine. Because he doesn't care how many casualties the warring parties suffer, he will continue until he realises that he cannot win.

Biden has made serious foreign policy mistakes

At this point, it is unclear what policy the Trump administration will ultimately choose. However, it will have to repair the damage caused by the Biden administration's failure to define our strategic objective in Ukraine. Biden failed to explain to the American people that it is in our strategic interest for Ukraine to defeat the aggressor Russia. This led to incoherent, contradictory policies and only drip-fed support for Ukraine.



◀ **Biden failed to explain to the American people that it is in our strategic interest for Ukraine to defeat the aggressor Russia.**
[Credit: official White House Photo]

The Biden administration was also paralysed by fear of a Russian nuclear weapon. The likelihood of Russia using a nuclear weapon is remote. From Russia's point of view, there would be no advantage to using such a weapon. The advantage lies solely in the threat – and a certain self-deterrence. This self-deterrence also sends the dangerous message that the US is vulnerable to nuclear blackmail – to Iran, Pakistan, North Korea, China and others who possess or want nuclear weapons themselves.

We, on the other hand, should use our economic power to help Ukraine win. Russian oil and gas, delivered to China and India, is keeping Russia at war, keeping its industry running and enabling it to buy ammunition, drones and ballistic missiles from Iran and North Korea. Shutting off the flow of oil and gas across the so-called 'shadow fleet' through the Baltic and Black Seas will be as important as any military assistance we can provide. More effective enforcement of sanctions would also help stop the movement of components.

It is better to kill the archer than to try to intercept all the arrows.

Ukraine now needs the ability to isolate Crimea, the key terrain of this war, and make it impregnable to Russian navy, air force and logistics. Every square metre of Crimea is within range of ATACMS short-range missiles. Ukraine has already shown how it can be done, with just three UK-provided Storm Shadow missiles, destroying the Black Sea Fleet's headquarters at Sevastopol and its main maintenance facilities, and forcing the fleet to retreat some 400 km east to Novorossisk.

Ukraine must be able to strike targets deep inside Russia without restrictions from the US or anyone else. Ukrainian civilians will die and the power grid will be destroyed because we are not allowing Ukraine to strike at the places from which these attacks are launched. It is better to kill the archer than to try to stop all the arrows.

Ukraine also needs the ability to neutralise the Russian mass; it is Russia's only advantage. NATO's Supreme Commander in Europe said that precision can ultimately defeat mass, as long as there is enough time and enough long-range strike capabilities. The sheer Russian mass – headquarters, artillery, logistics – must be destroyed with precision strikes. 2025 is the year of industrial competition; Ukraine and the West must win this competition against Russia. This should be possible if one bears in mind that the economic power of the West is many times greater than that of Russia. However, political will is needed to win this industrial competition.

The admission of Ukraine into NATO and the EU is of the utmost importance.

Regardless of how this war in Ukraine ends, a fresh strategy for containing Russia will be needed. Our best partner in terms of education, understanding of Russian psychology and its military capabilities will be Ukraine. It will be a bulwark against Putin's clearly articulated plans to further conquer Europe. Ukraine's survival and its admission into NATO and the European Union are of the utmost importance for Europe's security and prosperity and for countering the global threats we face. Helping Ukraine destroy Russia's imperialist ambitions once and for all could improve the security environment in Europe for decades.

If Russia fails, Iran will be isolated. Tehran would no longer be able to support its proxies in their attacks on Israel and the West, as seen with Hezbollah, Hamas and the Houthis. The regime in North Korea would also be increasingly cut off from the world if the Kremlin loses its war in Ukraine.

Finally, victory over Putin's Russia will demonstrate to the Chinese that we, the global West, have the political will, industrial capacity and military capability to achieve all of these goals. This would send a strong message of deterrence to China, so that it does not make the same terrible miscalculation as the Kremlin.

We should return to the clarity of Churchill and Roosevelt, who gave their nations, their industries and their armed forces strategic priorities and long-term goals in their hour of greatest need.



Ideas for a (new) European Security Order

Detlef Puhl

Europe's security architecture is broken. On 24 February 2022, Western decision-makers were forced to acknowledge that Russia had broken international law by launching a full-scale military attack on Ukraine, seeking to deny its neighbour the right to exist as an independent nation. This is all happening in the immediate neighbourhood of NATO

the war is quite another. But there is no time to do one after the other. Meeting the immediate challenges on the ground can only succeed if ideas exist of what needs to be achieved in the long run, of how NATO can collectively support Ukraine to get there, and of who needs to be engaged in order to get there.



▲ **NATO and EU failed to establish a solid and cooperative peaceful relationship with Russia, in spite of the EU's cooperation agreements with Russia and the "NATO-Russia Council" of the Alliance. The picture shows General Valery Gerasimov (CoD, Russian Federation) (left) and General Knud Bartels (Chairman of the NATO Military Committee) (right) in a meeting of the NATO-Russia Council in 2014. [Credit: NATO]**

and the EU. Both organisations have failed to establish a solid and cooperative peaceful relationship with the world's largest nuclear power in Europe. In spite of the EU's cooperation agreements with Russia and the Alliance's "NATO-Russia Council", a body created to provide a format of cooperation on an equal footing. This was the day, when thinking about a new security order in and for Europe should have begun. Coping with the immediate challenges that the war posed and continues to pose to Europe was one thing; thinking about what would have to follow after

AUTHOR

Dr. Detlef Puhl started as a freelance journalist after he retired as a Strategic Communications Advisor to the Assistant Secretary General of NATO for New Security Challenges.

Almost three years later, the war continues. NATO's Strategic Concept, prepared before the war and adopted shortly after Russia's invasion in 2022, provides no answer to the question of a new security order for Europe after this war is over. Neither does the EU's so-called Strategic Compass, prepared and adopted in parallel. Those concepts were designed after a period of time when security challenges to our countries emerged from many different sources and in many different forms. NATO was increasingly tasked to deal with "emerging security challenges", which were non-military in nature for the most part and included: cybersecurity, international terrorism, energy security – all policy matters where often divergent national interests prevail among the growing number of NATO member countries and where NATO didn't and still doesn't provide appropriate structures and procedures to deal with these issues. The catchword for this new reality sounds fancy: "multifaceted" challenges or threats. But NATO's focus was lost. When Russia began

its military operations against Ukraine in 2014, NATO was unable to say: Stop! And organise meaningful support against the aggressor against a partner country. In 2017, when Donald Trump took office as president of the US, he called NATO “obsolete”. In 2019, when NATO celebrated its 70th birthday, French president Emmanuel Macron called the Alliance “brain dead”. Macron is still in office, and Trump took office for a second term on 20 January 2025. And the MSC devoted its conference in 2020 to the topic of “Westlessness”, the absence of an agreement for an idea of who and what “the West” consists of. So what is NATO really? Today? And tomorrow?

For NATO to remain relevant for Europe’s security, the Allies have to re-discover the way to focus on the core business of a military alliance: Security for their people on their territory against any external aggression. Nothing less, nothing more. And for this purpose, they have to stand united, and take care of their unity. This can best be done if they concentrate on this one purpose, which is common to all, and provide the military means, organisation and capabilities, in order to fulfil that common purpose.

Any further extension of NATO’s activities will not serve the coherence of the Alliance, but rather enhance the potential of divergences and contradictions among the member countries which will still pursue their own national interests. On the other hand, new challenges to security will continue to develop, and the distinction between protection against external and internal threats will be increasingly blurred for a number of reasons: Dependence on critical infrastructure, on communication lines in highly complex societies has already become relevant for security, but cannot be dealt with through military or diplomatic structures.

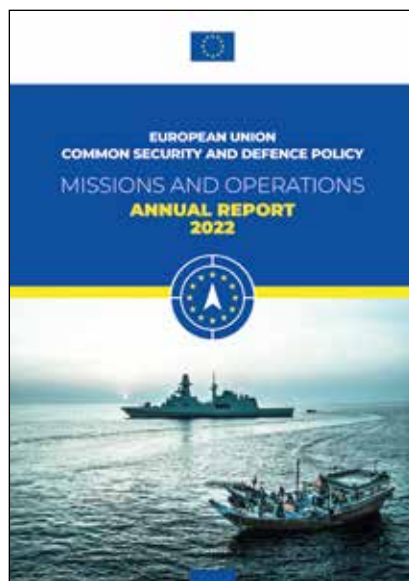
The Allies will have to change the way how they relate to NATO. Not all policy issues related to security can be matters for NATO, while the Alliance cannot, on the other hand, ignore the fact that security today is much more than a matter of military defence. It is the Allies who will have to permit and to define how they wish the Alliance to play a role in non-military security matters. Perhaps create new structures within the organisation? Which ones should be authorised to deal with matters of internal security, of protection of critical infrastructure, of coordination with the private sector, which is the prime actor in cybersecurity? Only here, highly sensitive matters of national sovereignty, of very selective cooperation in intelligence sharing, of national and/or private economic competition between nations come into play. NATO’s internal stress levels will only rise – unity will be harder to achieve. The result would be contrary to what an efficient and credible military defence alliance would wish for.

At the same time, while NATO has to manifest its unity and its capacity to act, the increasing number of its member countries

make it ever harder to agree on a common interest; the number and perhaps the intensity of different, even divergent national interests will rise. Where does the most serious threat to NATO’s security come from? The East and Russia? Or the South and Islamist terrorists in the Near East and North Africa? Or the Indo Pacific and China? Or all of these? Security doesn’t necessarily improve as the number of allies increases. It will therefore be necessary to establish a new format, a new link between an alliance concentrated on a clearly defined military mission and providing the necessary means to fulfil that mission, and a broader alliance of nations able to engage in crisis management efforts on the basis of coalitions of the willing.

After the end of the war in Ukraine, it will not be possible to deny NATO membership to the country, as it seeks protection against another attempt by its hostile neighbour to

impose its will by military force. And the same may be true for Moldova, squeezed between Ukraine and NATO territory. But Georgia? And will NATO have to play a role in the Pacific, to support the US as the US is supporting Europeans in Europe? NATO is already



◀ **The EU conducts a “Common Security and Defence Policy” (CSDP), but only in a limited fashion – for missions outside of the Union.**
[Credit: EU]

in the midst of fundamental change. And this happens without any script, without any plan. NATO will have to develop a plan for its future. Endless expansion of tasks and nations cannot

be the solution. But where to stop? And why? And when? It will be hard to reach agreement among the 32 nations.

It will be equally hard for Europeans to reach agreement on what their role is in providing for Europe’s security. After 24 February 2022 they were forced to acknowledge how much they depend on the willingness and the capabilities of the US to make sure an aggressive Russia does not violate NATO territory. But who are “the Europeans”? Does the European Union represent “the Europeans”? Also on matters of security? That’s difficult, too, and requires bold steps to establish a strong and credible format that is to be taken seriously in this new global competition of great powers.

Yes, the EU conducts a “Common Security and Defence Policy” (CSDP), but only in a limited fashion - for missions outside the Union with the purpose of “peacekeeping, conflict prevention and the reinforcement of international security” in the framework of the UN Charter (Art. 42,1 Lisbon Treaty). And it is tasked to develop “step by step” a “common defence policy of the Union”, which leads to a “common defence”, as soon as the European Council decides unanimously (Art. 42,2). So, here’s a plan, adopted in 2009. But 15 years later, this decision has not been taken yet. “Common defence” continues to rely on NATO, and for NATO

members. And although EU member states have the obligation, “in case of an armed attack on the territory of one member state” to do “everything in their power” to “help and support”, and “in accordance with Art. 51 of the UN Charter”, this must also be done in accordance with the obligations regarding NATO, “which remains the basis and the instrument for collective defence” for NATO members (Art. 42,7). This is far from defining a clear mission for the EU in security policy and does not enable the Union, at this point in time, to take autonomous action to enable security on the continent.

The appointment of a Defence Commissioner for the new EU Commission, who took office on 1 December 2024, doesn't change anything in this regard. For CSDP, “special regulations and procedures” still apply which call for unanimity of all 27 member states when they take decisions, place responsibility for action with the High Representative and the member states, and preclude the Union from taking legal action in this regard. The roles of the Commission and the European Parliament are limited to the Union's competencies in the field of economy and trade.

In recent years, though, it has become obvious that questions of international trade and economic cooperation, for which the supranational Commission bears responsibility, have become of concern for international security policy, for which the Commission is NOT responsible. Serious and long-term interruptions of international trade, as happened during the COVID-pandemic, showed immediate impact on international security making apparent the vulnerability of global exchange in an increasingly interdependent world. Complex societies simply depend on flawless lines of transportation and of communication across the globe. In this context, political leaders like Donald Trump or Xi Jinping now use their economic power (Trump: Trade wars are easy to win; and China's 'Great Belt Initiative') to seek strategic advantages for their ambitions to shape or reshape the international order in their favour.

For the EU, this means its economic policies (international trade, market regulations, international finance, competition law) depend on and, at the same time shape the geostrategic position Europeans can hold in this race of great powers for global dominance. Already, as soon as sanctions are to be imposed to counter aggressive nations like Russia, Iran or North Korea, it's the EU, not its member states, which prepares and decides on such strategic actions. In this respect, the EU is a geopolitical actor. But it still lacks important elements of a genuine capability to act on its own. Member states, like Hungary for example in the case of sanctions against Russia, can still veto any decision. And the Commission, under due parliamentary control, can manage economic and financial sanctions, but cannot bring diplomatic or military pressure into play. In order for the Europeans to weigh their economic weight in this geostrategic context, they have to provide the EU meaningful powers to act on their behalf.

This would also increase European leverage in a future transatlantic relationship. There can be no doubt that Europeans and Americans (US, Canada, and maybe others) have every interest in not only maintaining, but further developing their

transatlantic partnership. After all, they constitute two large and powerful groups of democratic countries, challenged by ambitious authoritarian regimes. But this partnership will have to respond to the new geostrategic context – with an aggressive Russia seeking revenge for the loss of its former empire, with a belligerent China seeking to establish a new world order, and other powers of the “Global South” wishing to escape “Western” or any other dominance and to establish a geostrategic position of their own which allows them to determine their place in the international system. Europeans must claim an important role in this global game. And it is only through the EU that they will be able to do this.

For this to happen, the EU Treaty of Lisbon will have to be modified and entrust institutions of the Union with real power to act: Allow for majority voting in the Council to take decisions; establish parliamentary oversight by the European Parliament; upgrade the position of the High Representative to a

- ▶ **The EU has to upgrade the position of the High Representative to a real Foreign Minister.**
[Credit: EU]



real Foreign Minister and provide the new Defence Commissioner oversight over all activities in security and defence policy of the Union.

This, without any doubt, would represent a great leap forward. And it puts one question on the table which has already been raised in other fields: economy and finance (Macron: We need a European Finance Minister) where a real political counterpart to the European Central Bank is needed to manage the currency union effectively; border protection and migration, where political leaders from many EU countries call for better protection, but without being ready to make Frontex a real EU border guard. This question is: What exactly is the European Union to be? How far, and how deep should European integration go?

If not all 27 member states want to go so far (even more countries have expressed the wish to join the EU), a new, separate treaty would have to do the job, engaging fewer countries in a real political and/or security union soon, but open for the others to join later. This Union could then be a more valuable partner in a renovated transatlantic partnership.

Is all this unrealistic daydreaming? Perhaps. But Europe's security architecture is broken. It has to be replaced, not repaired, because the geostrategic context has changed dramatically – and it continues to change. This change does not come from “the West”. But the democratic world will have to have the ambition to shape the change, not only adapt to it.



On the path to a European Army

New strength is coming from overcoming dysfunctional particularism

Hans-Peter Bartels

The impacts are now being felt from all sides. The era of the 'peace dividend' since the end of the Cold War in 1990 is irrevocably over. Europe must become fortified again. Only real military strength deters Putin's Russia, helps Ukraine and, incidentally, keeps the United States reliably in the Alliance. Today, it is about the self-assertion of a continent that is no longer divided but about global co-responsibility for peace and freedom. That is why European militaries need more and more modern equipment, an efficient defence industry, not to mention the need for additional active soldiers and reservists – but they also need better organisation of the diverse national contributions. The issue of a European army therefore remains on the agenda.

There are over 1.5 million soldiers in the member states of the European Union. 1.4 million of these 'EU soldiers' are also 'NATO soldiers'. It is important to note that EU-Europe and NATO-Europe do not compete with each other, but are rather congruent; either way, they form the European pillar of the transatlantic Alliance. The US has about 1.3 million soldiers, but this just one army. Europe simultaneously maintains 32 allied armies, if one counts NATO-only members Albania, Montenegro, Norway, North Macedonia and Great Britain (not to mention unarmed Iceland, Türkiye and Canada), in addition to the 27 EU nations. Yet some armies are smaller than the others. Even the largest does not really keep more than 200,000 men and women under arms. Germany has 180,000, Finland 24,000, Portugal 22,000 and Slovenia 6,000 active soldiers. The German term for this is *Kleinstaaterei*, or small-state thinking.

During the Cold War, the West German Bundeswehr was supposed to have 495,000 soldiers. If needed, 1.3 million would have been available if the reserves had been called up. Even the so-called special cases of Europe, the United Kingdom and France, with their nuclear weapons, bases around the world and aircraft carriers, would not be particularly effective on their own today when it comes to defending Europe. But that's what alliances are for. And the better the armed forces of the individual nations are connected, the higher the degree of interoperability and standardisation, the deeper the integration in training, procedures, language and leadership, the more effective and deterrent they are.

AUTHOR

Dr. Peter Bartels was the Parliamentary Commissioner for the Armed Forces of the German Bundestag and works now as a freelance journalist.



▲ **Warsaw Pact Exercise Waffenbrüderschaft (Brotherhood in arms) 80: soldiers from left to right: Poland, USSR, Czechoslovakia, Bulgaria, Romania, and East Germany. [Credit: Reddit]**

In fact, the level of cooperation in Western Europe has at one point been far higher than currently experienced in the Alliance today. The existential threat of a Third World War has caused national reservations to lose their significance. After 1990, however, the clock seemed to run backwards for a long time. In both West and East, little stood in the way of sovereign re-nationalisation. Each member of the Alliance cut and saved where it thought fit, often duplicating pointless structures and deepening capability gaps that others had already opened up.

And yet every specific purpose of the Alliance has always required – and since 2014 has again required – the common military capability for action, whether in multinational out-of-area operations or in classic collective defence. There are states in the West that want to be able to intervene unilaterally worldwide even outside of their alliance membership: the United States, the United Kingdom and France. But even these UN veto powers usually do not succeed on their own, but only in a 'coalition of the willing'. And Turkey also takes the liberty of pursuing special national interests in Syria and Iraq.

But no one else is wasting any thoughts on going it alone militarily, neither to intervene in conflicts anywhere in the world, nor to defend Europe. From a German perspective, everything we do militarily, we do together with others in an alliance – on principle on the one hand, and on the other hand because it would hardly be possible otherwise in practice. The Bundeswehr is not an autonomous universal army, nor did it ever have to be in the Cold War period. It was founded in 1955, so to speak, into NATO.

In the 1985 *White Paper on the Situation and Development of the Bundeswehr*, a map of West Germany is printed on page 191. 'The Army in Frontline Defence' is written above it. The map shows all Allied Corps stationed in the Federal Republic along the former inner-German border. It starts in the north with a German-Danish corps, continues south of the Elbe with a Dutch,

German, British, Belgian, then another German corps, followed by two American and finally another German corps. In reserve – French and Canadian troops. This is what West German national defence looked like at the time.

A map showing the combat formations of the former National People's Army (NVA) of the GDR also shows the inner-German border with numerous red arrows that advance far westwards through the Federal Republic. The map was part of the Warsaw Pact's *Waffenbrüderschaft* 80 exercise. The NVA was also founded as part of another alliance, and despite its name, it was truly not an army for national purposes.

A third historical reminiscence: in Churchill's World War memoirs, we read about the most protracted discussions with US President Roosevelt to clarify the organisation of the British and American forces planning to land together in France in 1944. The invasion could not fail. On the other side of the Channel, German General Rommel stood at the head of an incalculable German defence. So, a real alliance had to be created at the troop level of hundreds of thousands, later millions of soldiers: tactical procedures, operational procedures, command channels and supplies – nothing was standardised. But as with Apollo 13, the square had to fit the circle, and in the end it worked.

There is every reason to organise armed forces from the outset in the way they are actually to be deployed in an emergency. Out-of-area crisis management? Always multinational! National and alliance defence? Always multinational! But the domestic base, the structure of the armed forces, training and everyday life have so far been organised on strictly national lines, as if that is precisely the core of state sovereignty. 'Train as you fight' is one of the newer multinational maxims from the experiences of foreign missions in recent decades. And of course, it's better to train for alliance defence together.

So has the time come to put together the many individual military parts in Europe to form a complete transnational army? Probably not. But timing is important. And at the present time, when so many simpler problems appear so difficult to solve, negotiations on the creation of a European army would be more likely to trigger rejection, discord and the hardening of positions. Moscow would surely celebrate.

It is not that an agreement cannot be reached in principle. France, Germany, Italy, The Netherlands, Belgium and Luxembourg had already concluded a treaty to establish a European Defence Community (EDC) or Europäische Verteidigungsgemeinschaft (EVG) in 1952. The 'European Defence Forces' were to be directly subordinate to the (American) Supreme Allied Commander, Europe (SACEUR). The treaty regulated everything from the detachment of national contingents for additional tasks in

the French colonies (only with the approval of SACEUR), to a standard uniform, to arbitration. The Bundestag and Bundesrat had already ratified the EVG Treaty, which was intended to bring German soldiers into the Western Alliance without having to re-establish a German army. But in 1954, the French National Assembly, with its new majorities, put a spoke in the wheel. And so, the Bundeswehr was established one year later.

Europe can agree and combine national sovereign rights at a higher level; however, not everyone has to participate. The introduction of the euro as the European single currency is one example of this, or the Schengen Area regulating control at internal borders. But as with the euro project, which started in the 1970s and then became real money only later in 2002, the development of a common European Army is likely to be a generational project. It started quite inconspicuously at some point in the second decade of the 21st century and went hardly noticed. The European Defence Agency (EDA), the multinational procurement agency OCCAR, the NATO Support and Procurement Agency (NSPA), and now also the newly created office of an EU Defence (industry) Commissioner may still be institutionally in limbo, but they already breathe spirit into a larger whole.

What the Europeanisation of defence needs today is not a founding treaty, but a clear political goal, not as some sort of cloudy vision, but in the sense of a regulative idea, as the philosopher Jürgen Habermas would call it: a vision of the future that guides current action and at least does not counteract it. And most importantly, the Europeanisation of European defence needs practice.

I think a good image for this practical orientation would be 'islands of functioning cooperation'. Purely national capabilities, organisational forms and ambitions must gradually become multinational islands of cooperation. Not everyone is working with everyone, not everything is already connected with everything in a planned way. What matters is that it works in reality: better small and good than large and dysfunctional. After all, the military has serious missions to fulfil. Gradual development, reorganisation and integration are taking place simultaneously.

If it goes well, the islands of functioning cooperation grow, become larger, and there are more of them; some of them even grow together and in this way, they gradually form a mainland. This image could stand for what has actually been happening in Europe for about ten years. We are experiencing something like the normative power of the factual.

The defence of Europe is currently making progress along three paths of Europeanisation; these are not separate paths that lead in different directions, but parallel ones. In reality, they are all leading in the same direction, towards the same goal. The three avenues are: firstly, the Framework Nation Concept (FNC), which is about improving NATO-European cooperation; secondly, Permanent Structured Cooperation (PESCO), which involves EU-European cooperation in dozens of individual projects; and thirdly, there is the bilateral and multilateral cooperation between individual nations, which, as yet, has no name.

◀ **The German/French brigade is an example of intergovernmental cooperation in Europe, the integration of a Dutch tank-company in a German tank battalion goes a step further. [Credit: Bundeswehr]**





▲ **A good example of synergies is the European Air Transport Command in Eindhoven, where seven states cover their air transport needs from a common pool. [Credit: EATC]**

When it comes to intergovernmental cooperation in Europe, many people initially point to the Franco-German example: the Franco-German brigade, the Eurocorps staff in Strasbourg, and the joint 'Tiger' helicopter school in Le Luc. But hand on heart – it doesn't work. At least not well, and not in a way that could serve as a model for further cooperation (except for higher echelons of command, where NATO has had plenty of experience with multinational staffing for the last 70 years).

The joint brigade still consists of two elements, a French and a German one, which are happy if they can communicate with each other via radio. For cost reasons, the French army has long since disbanded its combat unit stationed in Donaueschingen (Germany), while the Bundeswehr still maintains a battalion on French soil, in Illkirch, Alsace.

Occasionally there are complaints that there is no real joint operational history. But that is not the problem; the stumbling block to integration is the French national reservation about the unilateral deployment of its military.

For France, German soldiers would be welcome as fellow travellers, but on a French ticket. But that is not how it is done. We can only hope that the joint air transport squadron with French and German Hercules aircraft now set up in Évreux will be put to better use. There must be more synergies than just the shared use of the tower and fire brigade – as in Le Luc.

On the other hand, a positive example of existing synergies is the European Air Transport Command in Eindhoven, where seven member states cover their air transport needs from a common pool. In Germany, the air force units concerned no longer have their own national command but are co-ordinated by the 200 staff members in Eindhoven – Germany provides 50 of them. If you ask how large a German command would have to be if the Bundeswehr wanted to do it itself, the answer is: about 200.

The most advanced model, however, is the cooperation with Dutch neighbours. Since 1996, they have been sharing a joint naval headquarters in Den Helder with Belgium. And they are now merging their entire land forces with the German army. Basically, the rationale of this integration project is this: national up to brigade level, multinational from division level. This could act as the new European benchmark.

And there are also extensive projects for army cooperation with Lithuania, not only since the decision to station a German combat brigade there, including in the field of armaments (Leopard,

Boxer, self-propelled howitzer). Norway and Germany want to combine their submarine assets (with a total of 12 state-of-the-art fuel cell boats). In the Baltic Sea region, the German Navy can coordinate the naval forces of allied littoral states from Rostock with a multinational command facility. The development of a dedicated European air-to-air refuelling fleet in Eindhoven and Cologne, in which Germany is participating with five new Airbus A330 aircraft, is well on track. And there is also a completely communitised unit: NATO's own AWACS squadron in Geilenkirchen.

Looking at mergers, relationships, cooperation – however many forms of cooperation and integration have been taken on in the meantime – it is easy to lose track of them. However, one thing seems to be clear from all the efforts of recent years: The train is moving, even if all too slowly perhaps. The process of Europeanisation seems to have become irreversible. In the long term, this will have consequences for the common understanding of leadership, for common training and operational principles and for commonly procured identical equipment. Incidentally, identical does not necessarily always have to mean European. If there is an increased urgency, American standard solutions can also be the means of choice for many armies. Examples of this would currently be the Patriot air defence system or the F-35 stealth fighter bomber. But fundamentally, the European defence industry must be able to master and deliver such technology itself. However, it is often still too fragmented for this, just like the national armies.

Chancellor Olaf Scholz addressed another topic of integration in his speech on Europe in Prague in 2023: He again called for a 'genuine European headquarters'. This is because Europe's leadership capabilities could become crucial to its survival if, within the 32-nation NATO, there was no unanimity on handling the Alliance's situation in an emergency, and the parallel US command structure in Europe was unavailable. In that case, a European defence 'coalition of the willing' would have no military superstructure of its own. That is why there should be something European alongside the US commands, not as an original EU HQ, but as a dual-use headquarters for those NATO European states that want to take this step now. It could be urgent.

Working on a European defence policy is not seen as a punishment and the topic may not always be present everywhere, but when it is raised, it is popular. The regular Eurobarometer surveys consistently reveal that a majority of respondents are in favour of 'more Europe' in defence, often well over the 50% mark.

If more territory on the mainland is gained in this manner in the future, and the newly unified land proves to provide stable foundations, the time will come when it will be more effective to organise and lead the entire region not based on the rationalities of individual islands, but according to a unified set of European rules. In dialectical terminology, one could say that this is the point at which quantity turns into quality. The result would be the formal establishment of the European army, in which 20 or 30 national armies would be systematically dissolved and merged. Incidentally, 'merger' is a term from the EDC Treaty of 1952, not a vain fashion, but an old need that is now becoming increasingly existential in this era.



French security policy in the European context

Detlef Puhl

For quite some time, France's security policy has been at odds with the policies pursued by its friends and allies. Ever since President Charles de Gaulle decided in 1966 that France should withdraw from NATO's integrated military structure and since NATO's supreme military HQ (SHAPE) was invited to leave Fontainebleau to be re-established in Mons, Belgium, France had adopted a "special position" within the Alliance – a position of being both "in" and "out" at the same time. France, one of the founding NATO members and the oldest ally of the US (dating back to its support for Washington's rebel army in its war of independence against the British) has always insisted that it is a key member of the Alliance, but refuses 'all-out' US leadership, which, to the contrary, was unchallenged, if not outright welcomed by all the other European allies, the Germans and British above all. This policy of being "in" and "out" ended 2008, when President Nicolas Sarkozy decided that France should return to the military structure and take its place as appropriate. But it has nevertheless shaped a tradition of thinking that is deeply enshrined in the formation of French security policy makers, civilian as well as military.

It is important to recall this period of history, because it is directly linked to France's current ambition to play a leading role in shaping European security architecture, which has undergone dramatic change over the past 20 years. This ambition aims at giving Europe a stronger voice in European security matters, and at enhancing France's influence throughout Europe. Policymakers in Paris are emboldened in their ambitions by recent developments in security: Russia's invasion of Ukraine in 2022, which seeks to restore, if not the Russian Empire, at least its status as a major power with its own sphere of influence, free from Western interference. Even more important is China's ambition to challenge the US for world leadership, thereby highlighting the need for Europeans to assert their influence in this new 'competition of giants'. Furthermore, the US pivot to Asia recognises this emerging challenge as the most significant threat to Washington's ambition for global leadership. Challenges in Europe come second.

AUTHOR

Dr. Detlef Puhl worked for the French MoD before joining NATO's International Staff. This text reflects his own views.

In this competition, do Europeans simply have to support their American allies with whom they share the same values of democracy and rule of law? Or do they have to play a role of their own, as they, in economic terms, are competitors equal to both, China and the US? And in Ukraine, obviously European support against the Russian aggression is not enough; without US support, Ukraine would certainly have ceased to exist as an independent nation. How can Europe make sure it is safe from further Russian aggression if the US decides to reduce its support for Ukraine and Moscow is able to claim victory and feel rewarded after all? And in relation to the US, how can Europe contribute to maintaining and even strengthening a transatlantic Alliance that is essential to its own security?



▲ The "Suffren" class, part of the Barracuda programme, is the French Navy's second-generation nuclear attack submarine, following on from the "Rubis" class.
[Credit: NAVAL Group]

It is within this strategic context that the French "Revue nationale stratégique" was presented in November 2022, several months after Russia launched its attempt to take over Kyiv and Ukraine, an attempt that has failed after almost three years of incredible suffering and loss of life and equipment, but has still not given up on its original aim. And even though the political situation in Paris is far from clear and stable at the beginning of 2025, the strategic analysis holds: Europe—and France—is confronted with increased strategic competition among the great powers, with an increase in hybrid warfare through disinformation campaigns and attempts to destabilise Western societies, and with the reappearance of threats with the use of nuclear weap-

ons. French security policy seeks to respond to all of these challenges and has identified ten specific missions in order for the country to act as a “balancing power”, promoting European strategic autonomy and fostering complementarity with the transatlantic Alliance.

First of all, France intends to maintain a robust and credible nuclear deterrence (mission No. 1). Given the increase in nuclear threats from Moscow, where President Putin and his successor-predecessor-puppet Medvedev likes to raise this point time and again to scare the Western public, in particular the Germans; and given the efforts by Russian allies North Korea and Iran to push their own nuclear capabilities—not to forget the important build-up of nuclear forces in China—readiness of nuclear capabilities has become the top priority of French “strategic objectives” again. And it is complemented by the idea of a European dimension. This, however, remains to be examined, because Paris insists that the French “force of deterrence” be “independent and sovereign”, but that it could be, perhaps should be, available for the security of Europe – under



▲ **French President Macron presented the “Revue nationale stratégique” in November 2022 in Toulon, Following the adoption of the EU’s Strategic Compass and NATO’s new Strategic Concept, the National Strategic Review reaffirms the demanding objectives and resources of France as well as the French responsibility in our actions. [Credit: Ministère des Armées]**

conditions yet to be determined. President Macron has invited his European partners to talk about this, though they remain reluctant, preferring nuclear protection provided by the US.

Then comes the need for France to be “united and resilient” (mission No. 2). This shows the strategic importance of what has come to be called “hybrid warfare” – the attempts of a strategic opponent to destabilise the country through manipulation of political movements, disinformation, sabotage, promoting fear and polarisation in open democratic societies. All of this is taking place already and leads French policy-makers to the conclusion that the Ministry of Defence and all other government agencies have to develop synergies to create and support some sort of “spirit of defence” in the country which has been dormant during a long period of peace, in particular after the end of the Cold War. This cor-

responds to the German defence minister’s call on his own country to get “ready for war”. This is a call and a strategic way of thinking which disturbs a civil society accustomed to peace and focused on individual well-being.

This has, for the strategists in Paris, an immediate economic impact (mission No. 3). In a world of a globalised economy, efforts will have to be made to secure and protect supply chains for critical goods, such as energy, computer chips or medical products. Here’s where French security interests are intimately linked to Europe, where it is the European Union which acts as the responsible geopolitical caretaker of the interests of its member states. This strategic objective is directly linked to the need for resilience in cyber space (mission No. 4). The more international, but also national interaction depends on communication through cyber space, the more the lines of communication for military or any other security-related information and commands become vulnerable and need particular protection. This again calls for a special approach in dealing with private industry who are the drivers and managers of development and maintenance of secure communication systems in cyber space. The French call these “strategic industries” and claim the right of government oversight.

Against this background, France aspires to be an “exemplary ally” in the Euro-Atlantic relationship (mission No. 5). This role is defined as France being a solid contributor to an increase in operational capabilities for the defence of Europe, which remains the key role for the Alliance. France intends also to increase its value as a key nation within the Alliance, and it wishes to be the “engine of cooperation between NATO and the EU”. This aligns with the idea that France insists on being a valuable ally, a key ally within NATO without being a “vassal” of the US, who, in their own national interest, are more concerned about security challenges in the Pacific than about Europe with powerful and wealthy allies, who should and could engage more in the defence of their continent.

According to the “Revue stratégique”, this is only possible and sustainable if France succeeds in building a European strategic autonomy (mission No. 6). This term extends way beyond concepts of military or security strategy. It includes (see above) communication and hi-tech, critical infrastructure and “strategic industry”. In all of these matters, France invites Europeans to define common interests and build common structures which could then develop into a common European strategic culture.

Key to this development is the build-up of a European Defence Technological and Industrial Base (EDTIB), a favourite topic among French strategic thinkers. European hi-tech military equipment should no longer be subject to foreign (mostly American) restrictions on their use (certification procedures, black boxes), and European armed forces should no longer be dependent on hi-tech developments elsewhere (mostly in the US, but also Israel). Moreover, European taxpayers should no longer pay billions to foreign industry, if they can spend the money on “homegrown” products. Here lies a clear conflict of interest: Competition among mostly privately-owned armament industries against government-driven cooperation at the European level, combined with subsidies to “national champions”.

Who and what is “European industry” in this context? Are very high performing British industries included, although they are not subject to EU policies and regulations? Are industries included which are based in Europe, but whose business models are designed to serve the global market, and not exclusively European needs, simply because the European market is too small and fragmented? France cherishes the idea of “strategic industries” in which government has a say, if they are not owned by government, to ensure the strategic interests of the country are served. In other countries, Germany for example or Britain, governments hesitate to interfere with private business objectives, which necessarily go beyond national markets. Berlin has long adhered to the principle of buying military equipment “off the shelf” as the most economical way of procuring weaponry. The US market is large enough to sustain private business models of US-based industry, but government does interfere for reasons of “national security”. So, what does the French approach mean in real terms of security policy?

There is a convincing rationale which goes like this: Wealthy and hi-tech European nations should avoid becoming dependent on industries outside of Europe, which may be subject to political priorities set by foreign governments, such as the US. Also, European industries should be supported to develop and maintain their own hi-tech expertise to become and/or remain independent. On the other hand, cooperation among European industries on common projects doesn't always or necessarily follow political guidelines. Major difficulties with recent Franco-German projects (Future Combat Air System, Main Ground Combat System) have demonstrated that political and private commercial interests are often difficult to match. As political strategies and business strategies often diverge, the need for patience and perseverance is obvious.

Similar difficulties arise with the French ambition to actively develop a European system of air defence, which would be part of the notion of “strategic autonomy”. A comparable project has already been launched by Germany in the framework of NATO, based on and including US technology. To realise the ambition of making Europe ready to develop a military capacity for autonomous action is more complicated than just figuring out, whether discussing or writing, what the word “autonomous” actually means and how agreement can be reached on a common understanding. French ideas about “European strategic autonomy” tend to fundamentally change the nature of the Atlantic Alliance. The “exemplary ally” is not inclined to simply get back into line. Furthermore, the ambition to reach “European strategic autonomy” needs fundamental changes for the EU or for whatever format will come out of the discussions which will have to follow; discussions about a “European Defence Union” which France wishes to develop with Germany.

But strategic thinking in France doesn't end with Europe and the Alliance. The country intends to be a valuable partner for security in many parts of the world (mission No. 7), in particular regions neighbouring Europe, and therefore having an immediate impact on Europe's security: Africa, the Mediterranean and the Red Sea, the Arab/Persian Gulf, as well as

in the Indo-Pacific region. At the same time, Paris pledges to oppose another arms race.


For decision-makers to be free to take decisions on the basis of independent information, France intends to boost its capacities in reconnaissance and surveillance (mission No. 8). This is important, because the sharing of information, even in the context of NATO, for example, is and remains a very selective undertaking with clear restrictions even among the Allies. The more you know, the more you can choose to share and get something in return. This becomes even more urgent, as hybrid warfare activity is already directed against selected critical infrastructure. Therefore, France pledges to increase its capabilities to defend against such threats (mission No. 9). Finally, France aims at developing and disposing of complete freedom of action, including very high intensity military operations in all kinds of configurations of multiple fields of action (mission No. 10).

French security policy takes a global view, based on a strong transatlantic Alliance where Europeans will have to take on a new role. For this, Europe will have to develop its own “strategic autonomy” complementary to that of NATO in order to strengthen the “European pillar” and become a more valuable ally to the US for which Europe is no longer

◀ **The French nuclear missile M51 weighs 56 tonnes and is 12 metres high. It is built by Ariane Group and as part of the French nuclear deterrent, can carry six to twelve TN-75 kt (kiloton) warheads with a yield of 100 kt each.**
[Credit: Ariane Group]



the most important challenge. Russia's war against Ukraine has temporarily raised concern in Washington regarding the security of Europe. But once this war is over (and President Trump has claimed he can end it quickly), it will be up to the Europeans to provide security. This is what French security policy seeks to actively promote.

French security policy aims to be ready for this situation. And it includes a look at challenges coming from Europe's neighbourhood, which is far from peaceful. Whilst being aware that France alone will not be able to meet all these challenges on its own, Paris finds the solution in Europe. Making Europe capable of becoming a geostrategic actor in its own right, closely allied to the US, is the strategic vision, for which Paris desperately needs strong partners, above all Germany. This is the strategic challenge, the Allies, the Europeans, in particular French and Germans will have to address – as soon and as quickly as possible. 

British Security Policy

Strategic Defence Review points to difficult choices ahead

Conrad Waters

The direction of future British security policy will be determined by a new Strategic Defence Review launched by the country's new Labour government in July 2024. Scheduled to conclude in the first half of 2025, the review needs to balance the United Kingdom's strategic priorities in the post-Brexit era, whilst addressing capability gaps that have been made all the more apparent by the ongoing Russo-Ukraine war. Given the backdrop of a challenging financial environment, difficult decisions are inevitable.

Background

British defence and security policy has continuously evolved since the end of the Second World War. There has been at least one review of defence policy in each of the following decades. The current exercise is the fourth to be undertaken in the last nine years. Each of these reviews has attempted to determine how best to equip and structure the United Kingdom's (UK) armed forces against the backdrop of an ever-changing security environment. Inevitably, they have met with varying degrees of success.

The foundations of the UK's current security architecture can arguably be traced back to the Strategic Defence Review (SDR) of 1998. Initiated by the Labour administration headed by then Prime Minister Tony Blair, the review aimed to adapt the armed forces to a post-Cold War era that was typified by the emergence of a disparate range of global threats. SDR 1998 resulted in a shift towards global expeditionary capabilities – of which the two *Queen Elizabeth* class aircraft carriers are, perhaps, the review's most significant

legacy – and an emphasis on tri-service collaboration to maximise both effect and efficiency. SDR 1998 was also notable in maintaining a full spectrum of military capabilities as a buffer against considerable uncertainty as to how future threats might develop.

Although SDR 1998 was concluded over a quarter of a century ago, it was a well-regarded undertaking whose legacy persists to the present time. However, some of its effectiveness was undermined by the inadequate financial resources allocated to fund its implementation. An important consequence was that the breadth of the UK's defence and security capabilities were increasingly coupled with a lack of depth. This deficiency was



▲ **A UK-led Carrier Strike Group headed by HMS *Prince of Wales* pictured operating with the NATO Amphibious Task Group in March 2024. The enhanced focus on expeditionary capabilities heralded by the British 1998 Strategic Defence Review has endured to the present day.** [Credit: Crown Copyright 2024]

exacerbated by, first, the demands of the 'War against Terror' and, later, the global financial crisis of the early millennium. Notably, the Strategic Defence and Security Review (SDSR) of 2010 implemented by the then Conservative government of David Cameron imposed significant cuts across the armed forces.

More recently, security planning has been further complicated by the fall-out from Brexit and the near contemporaneous re-emergence of a Russian threat. Most significantly, the former Johnson administration's desire to promote its post-Brexit 'Global Britain' vision by increasing the UK's security presence in the Asia-Pacific region has given rise to inherent contradictions with Europe's paramount importance to British security interests and the threat to the continent's stability from increased Russian aggression. Additionally, although funding has increased, the costly, once-in-a-generation renewal of Britain's

AUTHOR

Conrad Waters is a naval and defence analyst. He is Editor of *Seaforth World Naval Review*, Joint Editor of *Maritime Defence Monitor* and a regular contributor to other Mittler Report publications.

strategic nuclear deterrent is squeezing the money available for other security priorities. Spending across all nuclear equipment programmes in the decade to 2033 is currently anticipated to amount to GBP 118 billion. This is well over a third of the total projected cost of British equipment spending during this period.

A new review

Formally launched on 16 July 2024, the latest UK SDR has the stated objective of determining, "... the roles, capabilities and reforms required by UK Defence to meet the challenges, threats and opportunities of the twenty-first century, deliverable and affordable within the resources available to Defence..." Commissioned by Prime Minister Keir Starmer and overseen by



- ▶ **Prime Minister Keir Starmer (centre) and Defence Secretary John Healey (left) meet with Lord Robertson (right) – newly appointed head of the British government’s strategic defence review – in 10 Downing Street on 16 July 2024. [Credit: Crown Copyright 2024]**

Defence Secretary John Healey, the review marks a departure from previous British practice in being headed by three external experts appointed from outside the UK Ministry of Defence. The lead reviewer, Lord Robertson, is a former NATO Secretary General who had previously served as UK Defence Secretary at the time of SDR 1998. His appointment therefore represents an element of continuity in the thinking that had driven British defence and security policy during previous decades.

The review has been given a relatively broad remit, extending from the strategic and operational context through recruitment, education and training to the state of the defence industrial base. At the same time, a number of fundamental ‘parameters’

- ▶ **The Royal Navy’s offshore patrol vessel HMS Tamar at anchor during a four-day visit to Pitcairn Island in the South Pacific in January 2024. The current British SDR must determine how to balance a ‘NATO-first’ defence strategy with maintaining the UK’s broader global interests. [Credit: Crown Copyright 2024]**



have been set that provide a broad indication of the UK’s security priorities. These total eight in number and comprise:

- A total commitment to the maintenance of the UK’s strategic nuclear deterrent.
- The primacy of the NATO Alliance as the “cornerstone of UK Defence”.
- The need to ensure UK homeland security to ensure the safety of the country and its citizens.
- The maintenance of support for Ukraine in the short, medium and long term.
- The importance of military and civilian defence personnel.
- The maintenance of defence ties in the Indo-Pacific, Persian Gulf and Middle East, including an ongoing commitment to delivering the AUKUS security partnership with Australia and the United States.
- Within the previous parameters, the need to prioritise objectives so as to set out a deliverable and affordable defence strategy.
- A financial framework guided by the Labour administration’s manifesto commitment to “...set out the path to spending 2.5 per cent of GDP on defence”.

These parameters are not necessarily entirely coherent, setting the review team considerable challenges as they undertake their work.

Strategic priorities

Perhaps the greatest challenge facing the latest SDR is the need to determine the UK’s strategic security priorities in the post-Brexit era. Whilst affirming the primacy of NATO and, hence Europe, in British security planning, the review’s parameters also seemingly seek to ‘have their cake and eat it’ by preserving the importance of AUKUS and a presence in the Middle East. Some commentators have sought to place this contradiction in the context of the need to balance the short-term threat posed by Russia against the longer-term rise of China and the ever-growing importance of the Indo-Pacific region. It is equally possible to see this approach as a continuation of the UK’s indecision between prioritising its European or global interests that have been a consistent feature of national political discourse since the end of the British Empire.

It seems apparent that the Starmer administration is keen to use security and defence policy as a means of repairing bridges with the European Union given that more fundamental steps in areas such as trade and youth mobility are fraught with political hazard. The Trinity House Agreement signed between Germany and the UK in October 2024 represents an early ex-



- ▲ **British paratroopers from the 3rd Battalion, Parachute Regiment, engage 'enemy' targets during Exercise Swift Response in Estonia in May 2024. A British government minister has recently stated that the British Army would be rapidly expended if required to fight a war of the intensity of the current conflict in Ukraine. [Credit: Crown Copyright 2024]**

ample of British efforts to improve bilateral links in the defence sphere with European countries. The agreement encompasses industrial collaboration in spheres ranging from artillery systems to drones, as well as operational initiatives in fields such as maritime air reconnaissance and the protection of seabed infrastructure. Subsequently, in December 2024, Prime Minister Starmer arranged to join EU leaders at a defence meeting scheduled to be held in Brussels the following February in a sign of his willingness to explore the possibilities of wider cooperation on a pan-European basis.

The advent of the second Trump administration is potentially a complicating factor. It might be assumed that renewed uncertainty over US support for European security will accelerate collaboration between the EU and UK at the expense of other interests. However, it is equally possible that Britain could double down on its support for the United States' friends in the Asia-Pacific region as part of the price to be paid for securing President Trump's commitment to the NATO Alliance. Whilst its significance may be fading, it is also important not to underestimate the endurance of the so-called 'special relationship' between the two wartime allies, as well as the depth of the Anglosphere's 'Five Eyes' intelligence-sharing arrangement.

Another important factor in driving the 'global' agenda is the importance of partnerships such as AUKUS to boosting Britain's defence industrial base. In addition to helping fund the massive investment required to revitalise the UK's submarine industry through the SSN-AUKUS programme, the so-called 'Pillar 2' of AUKUS is intended to deliver a wide range of cutting-edge technologies that are arguably fundamental to the British defence sector's long-term industrial relevance. It may be, however, that there is an industrial and economic advantage to be gained through the apparent determination to maintain both European and global security partnerships. For example, the sixth generation Global Combat Air Programme (GCAP) that encompasses Italy, Japan and the UK is indicative of the merits of having 'a foot in both camps'.

Force deficiencies

Another significant challenge that the review needs to address is how best to restructure the UK's armed forces to make good the deficiencies that have become increasingly apparent with the return to open conflict in Europe. The post SDR 1998 approach of maintaining a broad but shallow spectrum of military capabilities on the basis that there would be sufficient warning of future threats to bolster any required capacity was appropriate to the post-Cold War environment. However, this strategy seems no longer sustainable now that there has been a return to East-West hostility and those threats have all-but materialised. In early December 2024, British Minister for Veterans and People Alistair Carns stated that, on the basis of current casualty rates in Ukraine, the regular British Army would be "...expended..." within six months to a year if fighting as part of a multinational coalition in a conflict of similar scale.

This assessment is illustrative of the need to rebuild military mass and resilience that is also evidenced by the scramble to rebuild lost munitions capacity being pursued by other European defence ministries. Inevitably, this reconstitution of capacity is proving extremely expensive. Moreover, the war in Ukraine



- ▲ **A British Army Sky Sabre point defence and local area defence missile system. An almost complete lack of integrated air and missile defence for the British homeland is one of the capability gaps that the current British SDR is likely to address. [Credit: Crown Copyright 2023]**

is revealing capacity gaps – such as an almost complete lack of integrated air and missile defence for the British homeland – that are likely to be equally costly to remediate. It therefore seems inevitable that the review will require the surrender of some existing assets and formations to release the resources needed to provide the highest priority capabilities at the requisite level.

One important security question that this reality gives rise to is the extent to which the UK might be willing to surrender national sovereignty over some capabilities in return for yet greater reliance on Alliance structures. Although loss of sovereignty with respect to key assets such as the strategic deterrent would be unthinkable, greater integration with NATO and other allies would be one means of retaining an ability to contribute to a wide spectrum of operations whilst achieving greater efficiency. The British Royal Navy's CSG-21 carrier strike group



- ▲ **The withdrawal of Royal Air Force Puma and older variant Chinook helicopters is one of a number of defence economies being implemented by the British defence ministry even before the SDR has concluded.** [Credit: Crown Copyright 2023]

deployment to the Indo-Pacific, which was supported by vessels and aircraft from the American and Dutch militaries, is one example of how this model might work. Such capacity sharing might become particularly useful in a European context if the availability 'high end' US capabilities becomes less predictable under a second Trump administration.

The financial backdrop

As of 2023/24, the UK spent GBP 53.9 billion on defence. This figure represents – in real terms – a decline compared with the equivalent GBP 57.1 billion spent when a Labour government was last in power in 2009/10, but has seen a steady increase from the recent real terms low of GBP 44.8 billion seen in 2014/15. NATO estimated that the UK spent 2.3% of gross domestic product (GDP) on defence in 2024, placing it ninth in the Alliance under that definition. After Germany, it has Europe's largest defence spending.



- ▲ **Eurofighter Typhoon aircraft of Royal Air Force 3(F) Squadron return to their home base after completing an air policing mission over Romania in 2022. The UK's current defence review holds out the potential of increasing national defence resilience whilst strengthening international relations that were eroded in the aftermath of Brexit.** [Credit: Crown Copyright 2023]

The Starmer government has committed to increasing defence spending to 2.5% of GDP over time and this formed one of the current review's parameters. However, it has been less forthcoming on when the increase will occur, doubtless complicating the review's deliberations. It is also relevant to note that many commentators believe that the 2.5% figure remains inadequate to deal with the increased level of threat that is now present. They note that recent growth in UK defence spending has been lower than that of many other Alliance partners and remains far below that of the Cold War era. In addition, the debilitating impact of Brexit on economic performance means that the UK's economic growth has been sluggish.

One indication of the pressure on British defence spending was provided in November 2024 when Defence Secretary Healey announced that six "outdated military" capabilities would be taken out of service to save GBP 150 million over two years and up to GBP 500 million over five years. The list of equipment included British Army drones, Royal Air Force helicopters and five Royal Navy warships. Whilst described by the minister as pragmatic, "common sense decisions", the fact that they were taken before the review had even concluded its work suggests funding restrictions will be a key determinant of its outcomes.

One way that the UK government hopes to balance money and requirements is to develop a more efficient relationship with industry. As in many countries, procurement delays and cost overruns have been a perennial feature of British defence equipment programmes and continuous efforts to improve matters have met with only partial success. One key direction of travel that is likely to be validated by the current review is increased emphasis on developing longer term partnerships to leverage higher levels of investment into the sector. Speaking to the parliamentary House of Commons Defence Committee in November 2024, Defence Secretary Healey noted, "One of the flaws has generally been the contract-by-contract approach to industry that this country, unlike many others, has taken. This cannot work...we have to be willing to have a long-term relationship and a long-term strategy". Initiatives that have already been taken include decisions to appoint a new National Armaments Director and create a Military Strategic Headquarters that will give the UK's Chief of Defence Staff formal command over the air force, army and navy service chiefs for the first time. This is aimed at helping prioritisation of equipment spending across the armed forces and ensuring faster delivery. An updated defence industrial strategy will also be published.

Concluding remarks

The current British strategic defence review provides a valuable opportunity to rebase national defence and security policy after a period when it has struggled to keep pace with a rapidly developing geopolitical environment. The review will need to overcome significant challenges in determining the correct balance between the UK's European and global interests whilst deciding which capabilities to prioritise within limited funding. If successful, the review holds out the prospect of creating a more resilient security architecture whilst strengthening international relations that have been eroded in the aftermath of Brexit. Given the deteriorating international environment, the stakes are high.



Polish security policy in times of war in Europe

Robert Czulda

Poland is systematically increasing its spending on the technological modernization of its armed forces. Although the threat from Russia is the main driver of this policy, Polish decision-makers recognize a number of concerning trends that seem to be inevitable.

Threat perception

In Poland, there seems to be a prevailing belief that the future is uncertain due to at least four major factors shaping international security: (1) Russia remains an aggressive and expansionist state; (2) European countries are weak, incapable of strengthening their military potential, and lack strategic vision; (3) under Donald Trump, the United States might reduce its involvement in Europe, which would particularly impact Central and Eastern Europe; and (4) the current global order is undergoing rapid changes, with the post-World War II international framework fading into history.

Regarding Russia, General Wiesław Kukuła, Chief of the General Staff of the Polish Armed Forces, notes that the Kremlin is preparing for a conflict with NATO. "Russia is an opportunist and will exploit every opportunity or emerging weakness to achieve its own interests," Kukuła stated, emphasizing that the Kremlin perceives the current Western approach as a sign of weakness, fear, and indecision. To counter Russia, Poland has called on its NATO partners to allocate at least 3% of their GDP to defence. The lack of decisive rearmament among Western allies is viewed with concern in Poland. Nevertheless, in this matter, as in others related to foreign and security policy, Poland has minimal influence on the international stage and has failed to make proposals that gain the support of other countries. Poland's foreign policy can be seen as passive and uncreative, reflecting public perception of its political elites as unambitious, listless, and driven by a deep sense of inferiority towards Western European states. Many people perceive this as a missed opportunity to improve Poland's position in Europe.

AUTHOR

Dr Robert Czulda specialises in International Affairs and Polish Defence matters and is based in Poland at the prestigious University of Łódź.

While Trump's second presidency is anticipated — with some degree of uncertainty — Poland is more optimistic than Western Europe. During his first term, Trump was appreciated for his strong stance against Russia and for what was perceived to be his understanding of the region's strategic importance. His opposition to the Nord Stream 2 pipeline, a joint Russian–German project, was positively received as an effort to reduce



▲ **The Polish Armed Forces are preparing in response to the growing threat from Russia. Poland believes that Russia will not limit its aggressive policy towards the West. [Credit: Polish Armed Forces]**

Europe's dependence on Russian gas, not just to promote the sale to Europe of liquid gas from the US. Trump's promotion of regional cooperation and his criticism of Germany's influence in Central and Eastern Europe were also welcomed. Poland's right-wing still recalls his 2017 charismatic speech in Warsaw, where he reaffirmed US commitment to NATO and collective defence. Moreover, under Trump, the US strongly supported the Three Seas Initiative, a partnership among 13 European countries bordering the Baltic, Adriatic, and Black Seas. This project, initiated in 2015 by Poland and Croatia, served as a flagship initiative of the previous Polish government, led by the ideologically conservative and economically pro-social Law and Justice Party (PiS).

While the PiS government considered relations with the White House a cornerstone of Poland's security, the current government under Donald Tusk has reasons to be concerned about relations with Trump. Tusk, who took office in December 2023, was labeled by his predecessors as being in alignment with Berlin, making Poland's foreign policy more dependent on German

interests and somewhat less aligned with the US. Critics of Tusk recall his and Foreign Minister Radosław Sikorski's past harsh remarks about Trump. Tusk once accused Trump of being a "Russian agent", while Sikorski referred to him as a "fascist".

Nevertheless, while Tusk enjoyed very good relations with Angela Merkel, his ties with Olaf Scholz are strained and impact bilateral relations between Poland and Germany. For instance, there was significant domestic discussion about Tusk not being invited by the German Chancellor to the October 2024 talks in Berlin on Ukraine's future, which included US President Joe Biden, French President Emmanuel Macron, and UK Prime Minister Keir Starmer. According to former Estonian President Toomas Hendrik Ilves, Chancellor Scholz personally blocked Poland's participation in these discussions. This incident further fueled Polish public resentment towards Germany's foreign policy, often viewed as pro-Russian, anti-American, and hegemonic within the EU at the expense of smaller nations like Poland.



◀ **Poland consistently argues that NATO's key strategic objective is to keep Russian forces as far east as possible. This stance is unsurprising given that Poland shares borders with Belarus (418 km) and Russia (210 km of land and 22 km of maritime border).**
[Credit: Polish Armed Forces]

There is also apprehension in Poland regarding potential US plans to pursue peace negotiations with Russia on Ukraine. Many view this as appeasement or naive, increasing risks for NATO's Eastern Flank. The widespread belief is that the West would once again be making a grave mistake by trusting Russia's assurances. After all, Russia violated the 1994 Budapest Memorandum, which pledged to respect Ukraine's sovereignty, first with aggression in 2014 and later with the full-scale invasion in 2022. Given Russia's consistent disregard for agreements, why would Putin suddenly become a reliable negotiation partner?

Within the framework of EU cooperation, Poland has participated in numerous operations and actively contributes to EU Battle Groups. Both the current and previous governments support EU defence initiatives, but under one condition – they must not – substitute – NATO, particularly the role of the United States. For Poland, American presence in Europe remains the cornerstone of its security and that of the region. Most Poles reject the concept of EU federalization and are skeptical of the idea of a "Euro-Army".

Recently, the government in Warsaw has been intensifying its strategic cooperation with France, which, a few years ago, encouraged Poland to join a military operation in Africa (which

ultimately did not happen). France, which has become more active in Central and Eastern Europe, is seen by Poland as a potentially influential partner in military and political fields, more than is said about Germany. At the same time, in late 2024, Poland, during the NB8 (Nordic-Baltic Eight) summit in Sweden, proposed to the countries of the region (Sweden, Norway, Denmark, Finland, Iceland, Lithuania, Latvia, Estonia) joint naval patrols that would increase security in the Baltic Sea and better protect critical infrastructure (this was a proposal in response to the recent damage to underwater cables between Finland and Germany, as well as between Lithuania and Sweden, and suspicions regarding the Chinese bulk carrier Yi Peng 3).

Threats from the East

Poland consistently argues that NATO's key strategic objective is to keep Russian forces as far east as possible. This stance is not surprising given that Poland shares borders with Belarus (418 km) and Russia (210 km of land and 22 km of maritime border). Poland is a critical NATO member state in defending the Suwałki Gap and the Brzeska Gate. The Suwałki Gap is a narrow corridor between Poland and Lithuania, bordered by Russia's Kaliningrad Oblast and Belarus. Its defence is essential for NATO to maintain ground support for Lithuania, Latvia, and Estonia. Meanwhile, the Brzeska Gate, an 80 km-wide stretch of land between Poland and Belarus, is a strategically vital area separating Belarus from Russia's Kaliningrad Oblast.

Tensions from the east escalated sharply in February 2022 when Russia launched a full-scale invasion of Ukraine. This aggression profoundly shocked Polish society, as it marked the first open war near Poland's borders since World War II – a period still remembered with pain. Consequently, Poland has experienced significant demographic changes. According to the Polish Border Guard, approximately 13.1 million Ukrainian citizens crossed the border since February 2022. According to EU statistics, roughly 1 million of them have been registered as refugees (Poland's population is around 38



▶ **2024, Poland allocated EUR 27.5 billion for defence expenditures, with an additional EUR 12.5 billion channeled through an additional budget (FWSZ).**
[Credit: Polish Armed Forces]

million). This large influx, even if temporary, has contributed to rising inflation, which reached 14.7% in April 2023 (it is now roughly 5%).

Poland secures its eastern border from two primary threats: (1) Russian military aggression and hybrid provocations, as well as; (2) illegal migration, which the Kremlin orchestrates by encouraging illegal migrants to travel to Russia before directing them to breach the Polish border. This migration crisis began in 2021, prior to the war in Ukraine. The most severe incident occurred in November 2021 near Kuźnica, where aggressive migrants attacked Polish border guards, soldiers, and police with stones, bottles, cobblestones, and even stun grenades. A



▲ **Official figures indicate the Armed Forces now include 198,000 personnel, of which 130,000 are professional soldiers. [Credit: Polish Armed Forces]**

large and aggressive crowd of illegal migrants was effectively stopped, and the actions of Polish security forces were praised by many commentators across Europe.

To address these threats, Poland deployed thousands of soldiers to the border and constructed a 5.5-metre-high steel fence topped with barbed wire. Despite domestic political opposition at the time, Polish forces maintained strict patrols in the area, a position, which the present government maintains. Numerous attacks against Polish personnel were reported from the Belarusian side, including projectiles and laser beams aimed at Polish units. Despite the heightened security measures, over 100 Polish soldiers were injured, and one soldier was killed. The illegal migrant suspected of this murder has since relocated to Western Europe.

From the outset of the war in Ukraine, Poland has actively supported Ukraine both militarily and with humanitarian aid. Poland leads all countries in terms of aid provided to Ukraine as a percentage of GDP (4.91%), with 0.71% directed toward military assistance and 4.2% covering the costs of supporting Ukrainian refugees. Poland's military aid includes over 350 tanks, 14 MiG-29 jets, 12 Mi-24 helicopters, and other equipment such as BMP-1 vehicles, KRAB 155 mm self-propelled howitzers, MSBS GROT 5.56 mm assault rifles, and various drones. The PIORUN MANPADS, in particular, has earned acclaim in Ukraine for its effectiveness against Russian helicopters. Nevertheless, the current government has unequivocally stated that Warsaw is not

currently considering deploying Polish soldiers to a potential international peacekeeping or monitoring mission in Ukraine, as proposed by the French president.

While Poland steadfastly supports Ukraine militarily and politically, bilateral relations have faced challenges. One issue is the dispute over Ukrainian grain, which for some time was allowed to enter Poland without meeting EU standards and was illegally sold, harming Polish farmers. Additionally, unresolved historical tensions persist. In July 1943, the UPA (Ukrainian Insurgent Army) massacred Polish civilians in the Volhynia region, killing approximately 100,000 people, including many children. Poles remain resentful as Ukraine has



▲ **The Polish Armed Forces are only beginning to modernise their weak navy. The Miocznik-class ships, based on the British Arrowhead 140 design, with a displacement of approximately 7,000 tons, will be Poland's largest combat vessels. They are versatile naval platforms capable of performing all types of missions. [Credit: PGZ]**

not formally apologised for these atrocities and continues to honour figures such as Stepan Bandera and others in the UPA as national heroes. Furthermore, Kyiv's refusal to permit the exhumation of victims' remains continues to strain relations, undermining Polish sympathy for Ukraine.

Defence capabilities

In 2024, Poland allocated EUR 27.5 billion for defence expenditures, with an additional EUR 12.5 billion channeled through an additional budget (FWSZ). However, by December 2024, it was officially reported that actual defence spending fell short by approximately EUR 4.6 billion, reducing the total to 3.8% of GDP instead of the planned 4.1%. Although it represents an improvement over 2023, when the execution rate was only about 50%, the 2024 execution rate still reached just over 60%, falling below expectations.

In 2023, Poland allocated EUR 25.8 billion to defence (3.9% of GDP), marking a 51% increase compared to 2022. In nominal terms, Poland ranked fourth in Europe for defence spending, following Germany, the United Kingdom, and France. Despite this, the Polish Armed Forces continue to face serious challenges, ranging from shortages of personal equipment for soldiers to the lack of an integrated command and control system.


Moreover, despite three years of war in neighbouring Ukraine, Poland has yet to establish a functional civil defence system. Many Cold War-era shelters remain inactive and it wasn't until March 2024 that initiatives to support local governments in constructing shelters began. Additionally, the Polish military has started building fortifications along its border.

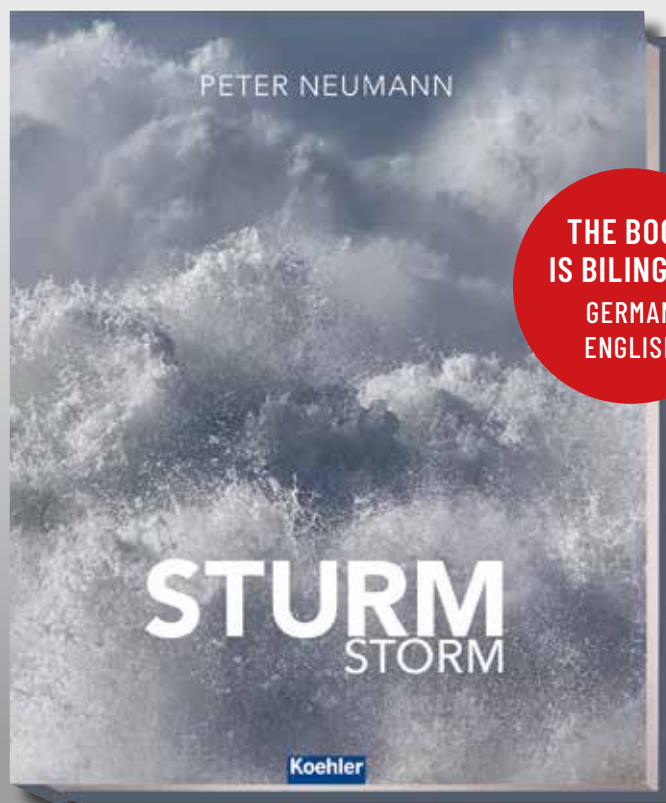
Planned acquisitions include JASSM-ER air-launched missiles, AH-64 Apache attack helicopters, multi-role and support helicopters, F-16 modernisation, additional K2 tanks with ammunition, PILICA air defence systems, unmanned reconnaissance and strike systems, satellite terminals, light reconnaissance vehicles under the KLESZCZ programme, and lightweight radios. Key air defence programmes — WISŁA, NAREW, and PILICA+ — are being accelerated. A significant priority is the development of satellite capabilities, with the Satellite Operations Centre expected to achieve full operational readiness this year. Poland is also expanding its Cyber Defence Forces, which now include around 6,500 personnel, both military and civilian.

The size of the Polish Armed Forces is also increasing, which generates significant costs. Official figures indicate the Armed Forces now include 198,000 personnel, of which 130,000 are professional soldiers. While the previous government aimed to expand the military to 300,000 personnel, the current Tusk administration has expressed scepticism and effectively abandoned this goal. Nevertheless, the Polish military continues to grow, with the announcement in November 2023 of creating a sixth division.

Poland is also forming its fifth division, the 1st Legion Infantry Division, which will include four brigades. This decision has sparked controversy, as existing formations already face shortages of equipment and personnel. Concurrently, the Territorial Defence Forces (WOT) continue to expand, now numbering approximately 35,000 soldiers. Plans call for their eventual expansion to 20 brigades, including two designated as Border Protection Brigades.

Poland's defence spending has contributed to broader fiscal challenges. In June 2024, the European Commission listed Poland among 12 countries with excessive deficits (exceeding 3% of GDP or public debt surpassing 60% of GDP). The Polish government attributes this to increased defence expenditures, a justification partially acknowledged by Brussels. Under EU accounting rules, military spending is recorded not upon payment but upon delivery. Poland's revised 2024 budget projects a record deficit of EUR 67.3 billion. According to the Ministry of Finance, the state budget deficit for 2025 is forecast to reach 7.3% of GDP, even as GDP growth is expected to hit 3.1%.

Poland's strategic position has thus created enormous strain on the country's budget. It has also created significant shortfalls at this point in time in the realisation of plans to meet the challenges for its security, which include: further increases in terms of defence budget, procurement programmes and numbers of the armed forces. These efforts will have to continue for the foreseeable future. 



Spectacular and unique images of the stormy seas and coasts around the world.

Peter Neumann, »Sturm / storm«
Hardcover / 256 pages / format 26 x 30 cm
€ (D) 39,95 / ISBN 978-3-7822-1326-4

ORDER YOUR COPY NOW

Webshop: koehler-mittler-shop.de / Mail: vertrieb@koehler-mittler.de / Phone +49 40 70 70 80 321
Maximilian Verlag, Stadthausbrücke 4, 20355 Hamburg / Also available in bookstores

The Cold War 2.0

NATO needs reforms

Rolf Clement

New structures and a willingness to compromise

At a certain point in time, we actually banned the term “Cold War” from our vocabulary. Two heavily armed blocs, each with the power to destroy the other – a notion that should surely be a thing of the past. Nevertheless, we had to abandon this wishful thinking as early as 2014, when Russia occupied and then annexed the Ukrainian peninsula of Crimea.

But the time without a “Cold War” still dominates our security policy awareness, albeit increasingly subliminally, especially in Germany. From this point of view – and only from this point of view – the election of Donald Trump as US President for a second term is perhaps helpful: now everyone recognises that some things have changed for the worse in terms of security policy.

The fact that Russia started the war in Ukraine, thus causing the current situation in Europe is a fact that underlies all security considerations and analyses. We must address the question of how to deal with this situation; two questions are of immense importance here. First, what must the Europeans do? And second, what role will the United States play in a future European security order?

Over the past 75 years, during which the NATO Alliance has existed, we have become accustomed to the fact that the United States, with its troops stationed in Europe, with the promise to deploy additional troops in an emergency, and with the guarantee of a nuclear umbrella, provides and guarantees a very substantial element of Europe’s defence. During the Cold War, however, the debate began as to whether the Europeans’ contribution to this security was appropriate. At that time, it was determined that 2% of each nation’s GDP should be spent on defence. This figure was decided by the NATO Council, which means that all NATO member countries at the time, i.e., the Western Europeans, the United States and Canada, adopted this figure. Even then, by no means all States fulfilled this voluntary commitment.

“Peace dividend” brings new dependencies

The discussion about European NATO states contributing more is therefore not new. However, during the “peace dividend” period, the budget for defence was reduced in all NATO members, accompanied by a reduction in weapons systems. After the end of the confrontation between the two blocs, upper limits for the main weapons systems were agreed for each European country in the Treaty on Conventional Armed Forces in Europe (CFE), based on the balance of forces in Europe before 1989. These



▲ For 75 years, NATO has stood for peace and security in Europe. [Credit: NATO]

upper limits provided for reductions in the holdings of all countries. However, with the end of the Cold War, these upper limits were no longer reached by any country, and each remained well below them. All were convinced that military conflict in Europe was no longer conceivable.

This was further underpinned by the fact that close cooperation was established with Eastern European countries, especially Russia, in many areas, particularly in the economic sphere. However, since Putin took office in 1999, Russia has deliberately rebuilt its military capabilities. This was noticed late in the West, but it was still noticed. High-ranking Bundeswehr officers said at the time in personal conversations that one should actually react to Russia’s measures and take more military precautions oneself. However, that did not fit into the political landscape at the time and was therefore not done.

No one wanted to argue against the political climate of opinion in Europe. So, the turnaround was also not made when Russia invaded Georgia in 2008, thus once again using the military option on the European continent. It was only in 2014, after the annexation of Crimea, that a surprised NATO was suddenly willing to change course. However, this was difficult because political and economic ties had since emerged that led to a dependency of Western states, especially in energy supply.

Europe is not thinking strategically

The United States viewed this European policy with a certain amount of reserve, making a few admonishing comments here and there, but not demanding a change of course. After all, the United States was naturally pleased with the calm and seemingly stable Europe that existed, at least until the annexation of Crimea. Washington was becoming increasingly aware that trouble was brewing in the Pacific region, especially from China. China attacked the United States’ economic supremacy and backed this

up with military rearmament. In 2009, then US Secretary of State Hillary Clinton spoke of this threat for the first time, as did President Barack Obama when he made the “Pivot to Asia” official US policy with a speech. In Europe, there were expressions of concern, but no clear reactions – after all, the US hastened to make it clear that it would maintain its commitments in Europe.



▲ **Since the existence of NATO and European security organisations, there have been calls for European states to speak with one voice in security policy, which is still not the case. [Credit: NATO]**

During this time, it became very clear that European governments, especially the German administration, were not basing their policies on strategic considerations. The United States generally takes a more strategic approach to policy. It was convinced that diplomatic efforts could only be successful if flanked by an appropriate military force. As a result, the United States was, and is more effective than its European NATO partners at projecting power. The lack of willingness to think strategically remains a key issue in Europe today.

NATO decided to address the very specific security concerns of the Baltic States by stationing rotating troops in Estonia, Latvia and Lithuania. The deployment of NATO troops in Lithuania took place under German leadership, while in Latvia and Estonia, the United Kingdom and Canada took on this task. The United States also announced a substantial contribution to the strengthening of NATO’s so-called Eastern Flank, which took place primarily in Poland. President Trump fully honoured this commitment from President Obama during his first term in office.

Findings remained without action

For quite some time, there was growing evidence that Russia was planning to annex at least parts of Ukraine, if not the whole country. Russian propaganda from as early as the summer of 2021 suggested that something was brewing. From the fall onwards, an extensive deployment of Russian troops in western Russia and Belarus had begun, only to be described as an exercise. There was no military response in the West. The prevailing view there was that military responses would jeopardise diplomatic efforts to prevent the attack. This contradicted all the necessities identified in earlier years, even at NATO. There it was undisputed that military threats

must be met both by military and diplomatic means. The territorial integrity of Ukraine was especially important for NATO members USA and Great Britain: When Ukraine agreed to give up its nuclear weapons in the early 1990s, these two NATO states, together with Russia, provided Ukraine with a security guarantee under the Budapest Memorandum in 1994 regarding Ukraine’s sovereignty and existing borders. Russia has broken this promise. It will now depend on whether the USA still feels bound by it when Donald Trump assumes office for a second time.

After the full-scale Russian invasion of Ukraine in 2022, NATO has sought to support the Ukrainian government. This approach could only succeed because the US fully accepted the task. The Europeans alone were, and still are unable to do so alone – the peace dividend was too consistently implemented, and the change of direction from 2014 was too little.

But now the unity of will to support Ukraine is crumbling. One example: the boycott of the EU and NATO states to make themselves independent of energy supplies from Russia is being undermined on all sides. Numerous EU states are still obtaining significant, and now even increasing, gas supplies from Russia, for which they are transferring billions to Moscow, filling the war chest there. Military support for the Ukrainian Army, which is being provided at great financial expense, is increasingly being called into question. Even Germany, which is providing political and military aid at great cost, is falling short of what it could be doing. For its part, Russia is mocking the ban on using weapons supplied by Germany to attack Russian military infrastructure and supply routes: as many as 10,000 North Korean – i.e., foreign – soldiers are fighting on the Russian side. Does this also have global significance? Does North Korea want to attack South Korea with Russian help? If so, the USA, as South Korea’s partner, would be directly affected.

Russia internationalises Ukraine war

In doing so, Russia is internationalising the war while NATO has taken great care to ensure that no soldiers from its member countries are deployed in Ukraine. The fact that North Korea and Russia are taking a different approach has led to NATO’s reaction, which, however, has highlighted the dilemma described. Verbal protests were formulated, but no consequences were expected to come from them. Why did NATO states not link the demand to end the deployment of these soldiers with the consequence that if the demand was not met, Ukraine would be allowed to use weapons supplied by the West without territorial restrictions? Why is the West again doing nothing to stop this escalation? The West is so predictable. But it also unable to agree on further steps.

EU and NATO contradict each other

This friction is evident from a declaration made by NATO on the sidelines of the EU summit in Budapest on 9 November. In its declaration, NATO pledges firm support for Ukraine until the war is won. NATO decisions require unanimity. Hungarian President Orbán sounds quite different in his political statements. The firmness of other Allies is also not assured. So, Russia knows that this is just words on paper.

NATO must reform itself

It is clear that NATO must reform itself – politically and institutionally. The primary goal must be to guarantee the defence of the Alliance beyond doubt for outsiders. The unanimity principle is an important element in this approach: everyone must obey the principle that an attack on one is an attack on all. And this must be conveyed credibly.

Doubts are now arising as to whether the most important NATO power, the USA, still obeys this principle without any ifs and buts. If Donald Trump's campaign statement that the mutual assistance guarantee only applies to countries that implement the NATO decision to spend 2% of GDP on defence becomes American policy, that de facto means the termination of the core premise upon which NATO operates. It is impossible to end the security guarantee at a national border in an emergency. Of course, it is necessary that all states fulfil this requirement. But to enforce non-fulfilment with sanctions that work for everyone is unacceptable. However, if the reports about a first phone call between Trump and Putin are correct, then not everything is as 'hot' as it is cooked in the US either. But you can't rely on that any more than you can rely on campaign statements.

Regardless of what US policy looks like in the future, the other NATO states must draw consequences. Because let's not fool ourselves, a Harris administration would also have approached NATO with new demands.

First of all, it must be ensured that the US nuclear umbrella remains in place over NATO countries as the last line of defence – with no ifs, ands, or buts.

But it is also necessary for the countries in the Alliance to reflect on how they can remain capable of action. To this end, NATO must focus on its core task of defending the Alliance. NATO should no longer take on any tasks that go beyond this. This means that the commitment to this task is weakened. This also means that missions such as the one in Afghanistan, or the coordination of military assistance for Ukraine, are not purely NATO tasks. In organisational terms, these must be carried out by coalitions of the willing.

As shown, different views repeatedly arise in current situation analyses, something which also endangers NATO's public image. That is why European states must create a security union under the EU umbrella or in a new organisational form, which anyone who is seriously and consistently willing to make joint efforts can join. But it must no longer lead to the current fraying of positions and indecision.

One major asset that NATO can use to its advantage is military integration. This gives the Organisation clout – provided that this integration lasts longer than a single operation. Repeatedly, there are multinational formations. However, in Afghanistan for example, France and Spain pulled out during the mission. This has to be ruled out in this security union. The best vehicle for this would be a European Army, though this demand is also very old. After the Second World War, it was negotiated once with the European Defence Community – with far fewer partner countries than would be the case today. Nevertheless, we must not be

under any illusions; there are considerable reservations in many countries – including Germany – about creating this instrument. It has to be seen as a relinquishment of national sovereignty, which it is, but one that is not willingly accepted by all.

Last, but not least, we have to realise that, for the time being, the Europeans are not in a position to defend themselves militarily on their own, i.e., without US support. There are programmes in many countries to improve this situation, including in Germany, which has earmarked additional funds in the form of a EUR 100 billion special fund; however, this will expire in 2027. If the necessary programmes are to continue, the defence budget will have to be increased significantly. For example, the Bundeswehr has ordered 100 new tanks under the special fund regime – far too few to survive in a major conflict. Economists have calculated that it will take around 100 years to fully equip the Bundeswehr at the current rate. Even if some of our partner countries are better equipped – the others don't discuss their shortcomings as openly as the Germans – it is clear that considerable efforts are needed to achieve the goal of defence capability.



▲ **The Eurocorps is a good example of what multinational formations could look like. Currently, Polish Lieutenant General Jaroslaw Gromadzinski (r.) is leading this formation. [Credit: Eurocorps/Bastian Koob]**

It would also be necessary to harmonise this at the European level. Not everyone has to have and be able to do everything. Right? Joint armaments planning with the courage of some countries not to keep everything in stock would be much more cost-effective, but it requires that all assets – regardless of who has them – are available to everyone. That would then be truly integrated defence. That would have to be an essential element of the security union.

In all of this, it must also be ensured that there are sufficient personnel who can operate the necessary weapons systems. This is also a major challenge.

Since the existence of NATO and European security organisations, there have been calls for European states to speak with one voice on security policy. This is repeatedly demanded in soapbox speeches, but comments on this topic, are still valid today. So, if nothing develops politically, one has to look at whether the organisation fits. This is obviously not the case. This article is intended to be a contribution to this discussion.



National Security Council for Germany – within reach

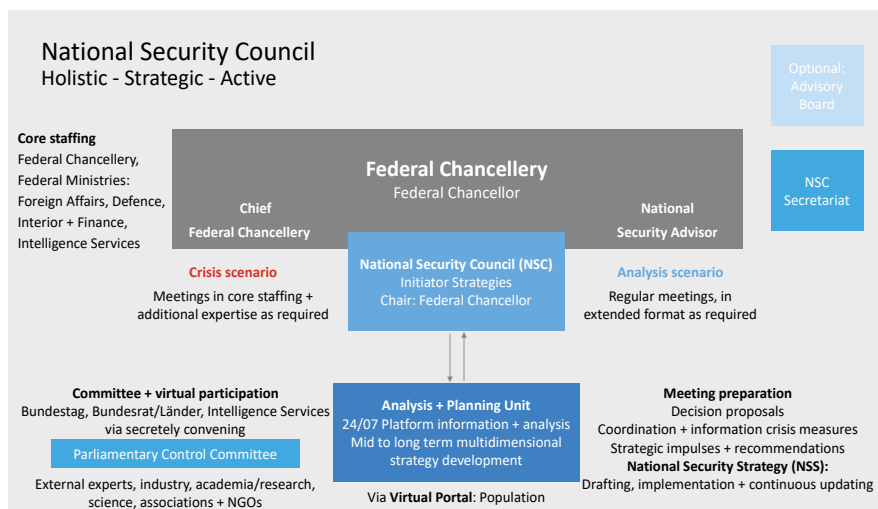
Christina Moritz

The preconditions for establishing a National Security Council (NSC) in Germany have never been more favourable. And it has never been as urgently needed as it is now. A few weeks ahead of coalition negotiations, one thing is clear: Friedrich Merz, CDU/CSU party and parliamentary group leader with the best chances of becoming the tenth Chancellor of the Federal Republic, will establish this overarching security institution in the Federal Chancellery. This is stated on page 5 of the CDU and CSU election manifesto, and the Liberals have also long since written the NSC into their own programme. Three of the six Parliamentary groups currently represented in the German Bundestag are likely to add their votes behind it in the upcoming legislative period. But what about the Social Democrats and Alliance 90/The Greens, who have yet to take a public stance? Can they bring themselves to adopt a structural approach to the comprehensive concept of security? Will they take account of the requirements of the new era in security policy by supporting the necessary institutional adjustment and realignment of the German security architecture with a National Security Council?

In order to coordinate the management of individual crisis-related events and simultaneously carry out an overall strategic classification, as 67 countries around the world are already doing, Germany must set up an NSC nucleus as a cabinet committee at the Federal Chancellery with a National Security Advisor, Secretariat and Liaison Officers of the Federal Ministries, which meets regularly – and more often if necessary – and advises the Federal Chancellor on the entire security policy spectrum. The meetings would be prepared by an external analysis and planning unit, which would be kept as small as possible and set up across all ministry portfolios. As this unit gathers all civilian and military information around the clock, including external expertise that has not yet been taken into account, and evaluates developments, it could act as a strategic initiator for the medium- and long-term perspective beyond short-term day-to-day business. This

AUTHOR

Christina Moritz, a political scientist from Berlin and CISS Fellow, is conducting research and working on her model for a German National Security Council, which she first presented in 2016.




[Credit: Christina Moritz]

would complete the hitherto incomplete situational awareness picture as well as accelerate coordination and decision-making processes.

In the event of major emergencies, the NSC would act as the coordinating national crisis unit with the right to access information directly. Representatives of the NSC, the Bundestag, the Federal States and the Intelligence Services could exchange information in a checks and balances system in the Parliamentary Control Committee, meeting in secret on Parliamentary premises, and ensure the necessary commissioning and monitoring of the results of the NSC's work. Germans would be given the opportunity to contribute suggestions and questions via a virtual portal and thus have the opportunity to help shape security provision and strategy development themselves. In international cooperation, the NSC would become the central point of contact, the one "telephone number", for all security policy issues. This certainly is an added value in times that require fast, flexible and forward-looking government action.

In order to finally be able to actively and strategically manage German security policy, the institutional requirements for proactive resilience must be created by establishing a National Security Council. Without the NSC as a coordinating body, the complexity of threats, actors and the information, preparation and active involvement of the population, especially during a major catastrophe, can no longer be managed.

The coalition negotiations – with whichever partner – will show if the security of the country and the well-being of the people, to which politicians are primarily committed, will prevail. The population has a right to better protection. The opportunity for the long overdue fundamental institutional change in Germany's security architecture is there. Now is the time to seize it. 

Arms and Algorithm

Germany's AI Zeitenwende

Malte Clement

Artificial intelligence (AI) has crossed the threshold of imagination and entered not just our daily lives but the very heart of modern defence. From autonomous “kamikaze” drones used in Ukraine’s resistance efforts to Israel’s “Lavender” programme for target identification, AI is already transforming how wars are fought. The debate is no longer about whether AI can disrupt military affairs, but rather how soon and how thoroughly it will reshape them. In this evolving security environment, it is essential for armed forces to maintain their own technological edge so as not to lose their deterrent potential—an issue that also poses a challenge for the Bundeswehr.

AI on the battlefield: Transforming defence capabilities

Today’s battlefield is increasingly driven by real-time data. Networks of satellites, aerial drones, ground robots, and soldiers’ body cameras continually collect vast streams of information. When fused through AI analytics, these data streams become invaluable tools for situational awareness, threat prevention, and strategic decision-making. AI holds the potential of reshaping almost every facet of military operations, from logistics and maintenance to early detection of enemy activities.

Such capabilities are indicators for the interconnected battlefield of the future. AI-powered sensors do not merely gather data; they synthesize it, filter out noise, and deliver critical insights in real time. For example, advanced data evaluations can pinpoint the location of hostile artillery within moments of firing or identify troop movements long before they become an immediate threat. Defence ministries worldwide see AI as a potential game-changer for mission success and troop safety, as it enables faster, more precise decision-making.

Such potential should be especially appealing to an armed force like the Bundeswehr, which is undergoing a period of pivotal transformation, grappling with resource constraints, while facing new geopolitical realities and a shifting security environment. Yet despite Germany’s status as a leading global economy and a highly competitive hub for AI research, the

AUTHOR

Malte Clement is a political scientist who works and conducts research in Vienna.



▲ Radar warning receivers will soon safeguard all NH90 helicopters from missile and laser threats.
[Credit: Airbus]

Bundeswehr has not fully capitalised on the technology’s advantages. Structural and cultural barriers, coupled with a traditionally risk-averse stance toward military innovation, have limited its potential to embrace cutting-edge AI tools.

AI in the Bundeswehr: Current applications and limitations

Despite some reluctance, AI systems are already being used in the Bundeswehr: radar warning receivers will soon safeguard all NH90 helicopters from missile and laser threats, by employing AI-based data analysis to detect threat patterns. The “Preview System”, which leverages open-source intelligence for predictive modeling, is deployed to identify emerging crises and field camps are also protected by AI-based systems.

These applications focus on enhancing defensive capabilities rather than increasing the force’s lethality. Lethal autonomous weapons (LAWS) are not part of the Bundeswehr’s arsenal. The guiding principle is that effective human control must not be relinquished. As stated in the 2019 Strategy Paper on AI in Land Forces, “humans must retain authority over life and death” and “even from a military standpoint, the use of any future conceivable LAWS is neither desired nor pursued”.

Nevertheless, the Bundeswehr recognises that adversaries might not share the same ethical framework. Efforts are thus geared toward expanding existing capabilities through human-machine collaboration to counter potential threats from actors who may incorporate LAWS into their arsenal. A key role in expanding the defensive capabilities of Germa-

ny's armed forces is taken by the Bundeswehr Cyber Innovation Hub (CIHBw). It seeks to foster cooperation between military, academia and industry and bring cutting-edge technology into the ranks.

A key challenge for the CIHBw lies in accelerating technology transfers. Dual-use products, those initially developed for civilian markets but adaptable to military needs, are of particular interest. By building relationships with start-ups, venture capitalists and established companies, the Bundeswehr hopes to shorten development cycles and swiftly integrate the latest AI solutions. Notable examples include the collaboration with Aleph Alpha to create a "ChatGPT for the Bundeswehr" or ARX-Robotics, which builds, for example, robots capable of carrying out autonomous actions during training simulations.

Despite these efforts, Germany still faces the fundamental hurdle of prioritising smaller, more flexible AI-based programmes. In the past, the procurement system has favoured large, expensive weapons platforms, leaving relatively little room for agile integration of digital tools. Broader digitization initiatives, such as the D-LBO programme aiming to modernise command systems and data-sharing protocols by 2027, must address the fact that AI requires not only funding but also high-quality data and robust computing power.

International AI landscape

Germany's cautious foray into AI-enabled defence stands in stark contrast to the broader international landscape. Israel, for example, has long capitalised on a close public-private cooperation in the field. Targeted funding and partnerships have created a flourishing AI ecosystem with thousands of

start-ups, benefitting the capability development of the IDF. From AI-managed ammunition stockpiles in automated warehouses, AI-driven ground combat vehicles to AI-enhanced intelligence-gathering and analytics, Israel stands as an example of high-speed AI innovation.

China's centralised system likewise yields remarkable efficiency in AI adoption. The principle of "military-civil fusion" merges the economy, the state, and the armed forces, allowing new AI applications to tap into extensive resources, including massive data pools and processing power. Recognising AI's strategic value, Chinese authorities classify its development as a priority for national defence. The result is a booming AI sector that quickly translates research breakthroughs into military capabilities.

Meanwhile, the United States remains at the forefront of cutting-edge military AI. The Pentagon has historically spurred developments in AI and related fields through significant funding and close collaboration with private companies. Industry giants like Lockheed Martin and Raytheon now share this space with software-driven firms like Palantir and Anduril, forging new partnerships that incorporate AI into areas ranging from intelligence analysis to autonomous weapons systems.

Faced with these global benchmarks, the European Union has begun to rethink its AI policies. Once primarily focused on the civilian and regulatory aspects of AI, Brussels now recognises AI's utility for security and defence. Yet the EU's defence posture remains heavily shaped by each member state's preferences. To overcome fragmentation, the EU has established two major instruments: the European Defence Fund (EDF) and Permanent Structured Cooperation (PESCO). These aim to strengthen the European defence industrial



- ▲ With the newly introduced drone defence system ASUL (defence system for unmanned aerial vehicles), small unmanned aerial vehicles can be detected, classified, identified and combated in real time from a fixed location.
[Credit: Bundeswehr/Dirk Bannert]

base and accelerate collaborative R&D. Looking ahead, initiatives like the 2021 European Industrial Strategy and the appointment of Henna Virkkunen as Executive Vice-President for Technological Sovereignty, Security and Democracy underscore the EU's growing strategic focus on emerging technologies in the context of security matters.

However, European aspirations often clash with national priorities. Germany, for instance, continues to emphasise its own approach to securing autonomous AI capabilities. Its security and defence industry strategy of 2024 explicitly identifies AI as a field in which Germany must ensure domestic supply lines. Such protective stances highlight the lingering tension between EU-wide cohesion and individual state-level industrial interests.

The need for a structural *Zeitenwende*: Overcoming challenges and risk aversion

Germany's prolonged underfunding of its military, combined with an anti-militaristic mindset shaped by postwar history, explains much of the Bundeswehr's current struggle to modernise. The country aims to build a digital, interoperable armed force capable of integrating AI-driven systems

er, agile AI projects essential for networked defence often encounter lengthy delays. In addition, Germany struggles with cultural hurdles that stem from its authoritarian past and explain why technological innovations are often met with scepticism, with more emphasis placed on socio-political acceptance and the legitimacy of military strength than on the impact it might achieve. A telling example of this mindset is the years-long public debate on arming a limited number of combat drones—systems now used thousands of times worldwide.

Such risk aversion has merits, reinforcing both public acceptance and moral oversight. At the same time, it can compromise Europe's strategic competitiveness if adversaries adopt an "act first, regulate later" mindset. European militaries might find themselves stuck in lengthy approval cycles, only to discover that their technological edge has dulled. Consequently, risk aversion, if not balanced by an openness to experimentation, may impede AI's integration into defence, particularly when data resources and specialised skills are already scarce.

For Europe as a whole, the fragmentation of approaches adds further complexity. The European approach to military AI lacks coherence and ties only loosely to threat perception and force-planning for the future. Countries that prefer robust defence investment and decisive adoption of new technologies may clash with those more focused on socio-political acceptance or historical anti-militarism. This disparity not only slows overall progress but also risks leaving the EU militarily and technologically dependent on outside powers.

The implications go beyond budgets and expertise. A fundamental *Zeitenwende*, in strategic thinking is vital. If European countries and Germany especially wish to avoid taking a back seat to global AI leaders, they must prioritise combined, cross-border efforts to rapidly scale promising projects. The need to maintain a deterrent capability rests on how effectively AI can be harnessed in the coming years. The political landscape beyond Europe's borders, including the possibility of shifting alliances or unilateral policies from major powers, further narrows the window for making this strategic choice.

Although the Bundeswehr has already begun integrating defensive AI applications while upholding the principle of human oversight, these cautious measures must be accelerated if Germany hopes to stay competitive and effectively address emerging threats. Private AI firms, offering both specialised expertise and substantial resources, have become indispensable drivers of innovation, much of which now unfolds outside traditional military structures. Their growing prominence not only amplifies the potential for breakthroughs but also signifies a power shift toward private entities within the defence ecosystem. To harness this momentum responsibly, closer partnerships with industry, backed by clear political commitments, are essential. Equally crucial is adherence to ethical guidelines and democratic values, ensuring that technological progress strengthens security without undermining societal principles.



- ▲ **Hanna Virkkunen has been Vice-President of the European Commission and Commissioner for Digital and Border Technologies since the end of 2024. [Credit: EU]**

for real-time data exchange and swift, coherent responses. Yet digitisation is a foundational step; it demands revamping legacy structures and plugging the Bundeswehr into a 21st century communications infrastructure. Tools such as the D-LBO programme tackle precisely this challenge, but progress is not yet at the speed the rapidly shifting security environment requires.

Another significant hurdle lies in a procurement process designed more for cost efficiency than for innovation. Acquiring an AI-driven threat-detection system, for example, can prove more bureaucratically taxing than purchasing a new helicopter fleet. This mismatch means that the small-



German security and defence industries

An overview of challenges and expectations at the beginning of 2025

Hans C. Atzpodien

The Munich Security Conference 2025 convenes one week before the general elections in Germany take place on 23 February. This election will be held following the collapse of the Federal Government, and at a time of increased political populism, a more fragmented party spectrum, a new election law and – last, but definitely not least – a new US-administration with assumed specific perspectives on Germany's role in the world. This all creates an environment with a substantial amount of uncertainty. On the other side, NATO Allies – and especially we, as Germans – have been presented with facts with a high degree of certainty related to threats around us. We have heard throughout 2024 that the Russian Federation is conducting a hybrid war against us, that the Russian Federation is producing armaments at a rate 15 times greater than the entire EU armament production, meaning these armaments can be designated for use other than in the war in Ukraine. However, regardless of the clarity of these messages, our government has so far chosen to neglect such facts in terms of providing the necessary budgetary means in order to address the situation. This places a major burden on those parties which will form the new Federal Government since it have to acquaint the public with the respective financial burden which we have to accept in order to make ourselves fit for complete deterrence by 2029 at the latest; the country's new government will also have to deal with the expectations of the new US-administration. The public must also be informed that deterrence will require not only a strong military, but also the full resilience of our society to withstand any form of disruption, both from external and internal sources.

Against this background, the challenges faced by German security and defence industries are huge. In the period between Russia's annexation of Crimea in 2014 and the full-scale invasion of Ukraine in 2022, we have seen an increase in Germany's regular defence budget of more than 50% in absolute terms, a modest increase though compared to Germany's increased GDP in the same period. For this



▲ **Between Russia's annexation of Crimea in 2014 and the full-scale invasion of Ukraine in 2022, Germany's regular defence budget rose nearly 50% in absolute terms, modest compared to Germany's higher GDP recorded in the same period. [Credit: Bundestag]**

reason, Germany's armed forces have not been able to regain the strength which would have been needed for an effective NATO contribution. Only after 24 February 2022, did the Federal Government under Chancellor Scholz decide to 'rescue' previously neglected procurements, by designating extra budgetary resources for the armed forces of about EUR 100 billion above the current budget. Due to the war in Ukraine, and Kyiv's constantly increasing need for armaments, coupled with, up to that point, the neglected needs of the Bundeswehr, this additional budget created the perception of a major boost for the defence industry. Nevertheless, it quickly became clear that a part of the additional budget would be consumed by inflation and interest, and that a major share would be used for the procurement of F-35 fighter planes and Chinook helicopters from the US. Over the course of 2023 – when the extra budget funds became fully consumed from a planning perspective – it also became obvious that further funds would be needed in order to satisfy the needs of the Bundeswehr in order to meet NATO's increased capability requirements, and to be able to fulfil the 2% pledge to NATO beyond 2027. Although the budgetary deficiencies became as evident as the aforementioned threat landscape, the acting Federal Government failed to

AUTHOR

Dr. Hans C. Atzpodien, Managing Director BDSV e.V.
(Federation of German Security & Defence Industries)

develop the necessary determination to deliver the bold messages the public required. On the part of the German security and defence industry, the war in Ukraine, together with the extra EUR 100 billion for the armed forces triggered numerous upscaling efforts for production capacities, even without, or prior to respective orders having been placed. Without the government's willingness, however, to draw the obviously needed budgetary consequences in the summer of 2023, the industry's preparedness to further increase capacities suffered a severe setback. Due to a lack of confidence in concrete orders, or calls from framework contracts finally being granted, the industry's disposition towards further Bundeswehr procurement remained cautious.

At the same time, the Bundeswehr procurement authority, the BAAINBw ("Bundesamt für Ausrüstung, Information und Nutzung der Bundeswehr") significantly increased its approval rates for large-scale projects – those beyond the volume of EUR 25 million. While initiatives for the acceleration of the procurement processes in 2022 had little effect, this changed under the helm of new Defence Minister Boris Pistorius, who entered office in January 2023. Under his leadership, the German MoD has simplified its procurement regulations, sped up the overarching priority of its purchasing processes, and seriously intensified its communication with the industry. In a speech at the General Assembly of the Federation of German Security & Defence Industries (BDSV) in November 2023, Minister Pistorius stated: "We not only want to maintain the already strong defence industry in Germany, but also strengthen it further. It is our task as the Federal Government to ensure and promote the performance, competitiveness and resilience of your industry. For too long, the State has seen itself more as a regulator than as a partner to your industry. We have clearly changed this in the last two years in the Ministry of Defence."



◀ **Due to the war in Ukraine, the Federal Government decided in June 2022 to 'rescue' previously neglected procurements, by designating extra budget funds for the armed forces of about EUR 100 billion beyond the current budget. [Credit: Bundesregierung]**

Looking ahead, Germany's security and defence industries have clearly expressed expectations. First of all, the budgetary needs of the Bundeswehr and our society's needs for resilience have to be met in full, which implies hundreds of millions – even billions – of Euros which need to be designated for our security and deterrence until the end of the decade. This is a political task that will require broad consent by German society. The more effectively these political needs are communicated, the more likely this consent will be given. Therefore, a public attitude from the new US administration that appears too authoritarian towards Germany would be counterproductive. Public emotions must be mobilised in support of our enduring transatlantic partnership and

friendship, and not used against them. Secondly, our industry needs clear-cut signals in terms of a demand which needs to be satisfied within a certain period of time, in the form of corresponding contracts. In order to make the realisation of such contracts quicker and more reliable, the BDSV is proposing a number of measures which we have summarised under the headline "Programme for an Economy of Resilience", which has clear similarities with France's *Economie de Guerre*. Minister Pistorius stated in October 2023, that German society should become "fit for war" (in order to avoid war), which was not met with much of a positive response, so we decided to replace this term with the far more benign term "resilience".

Here are the most prominent parts of our "Economy of Resilience" proposals:

- a. As already noted, a reliable, foreseeable and plannable budget and situation for the years ahead is of the utmost importance. It might be supported by a law providing a long-term defence spending perspective, comprising more than just one legislative period.
- b. Securing existing and well-performing supply chains – including SMEs, which are usually involved to a high degree with their highly specialised skills – is another prerequisite for the acceleration of an increase in armament output. In order to guarantee both a higher quantity, and greater quality of production output, a national stockpile of armaments has to be made possible. But there is also the need to allow more armament exports to provide the industry with proper incentives for further upscaling.
- c. At the same time, dependency on foreign raw materials, together with 'home-grown' EU obstacles, have to be proactively addressed. While US competitors for defence products have been urged by their government to make themselves more independent from Chinese suppliers, this has not been implemented so far inside the EU or Germany. As a result, this might lead to sanctions by the US government in case rivalries between the US and China arise. EU-shortfalls and dependencies – such as PFAS or ESG-restrictions – are creating limitations and further increasing dependencies.
- d. Recruiting skilled personnel remains another challenge, especially with regard to the inherently classified nature of information within the defence industry. In this regard, the capacity of governmental approval processes for handling classified information must be significantly strengthened.
- e. Finally, establishing new production capacities in many cases requires environmental approval, which according to EU and national legislation require the publication of approval documents. This, however, opens up the possibility of delicate defence-related information on production layouts entering the public domain, and therefore other parts of the world. This needs to be restricted in accordance with the blueprint legislation for LNG terminals, as effected by the German Federal Government in the summer of 2022.


With respect to the European dimension, the EU has provided a new boost for joint European armament acquisition by installing a Commissioner for Defence and Space, and by establishing a "European Defence Industry Programme" (EDIP). This brings several new ideas on how to foster European defence



- ▲ **At the BDSV General Assembly in November 2023, Defence Minister Pistorius stated: “We not only want to maintain the already strong defence industry in Germany, but also [to] strengthen it further. It is our task as the Federal Government to ensure and promote the performance, competitiveness and resilience of your industry.” [Credit: Rheinmetall]**

cooperation, but also comes with an interventionist toolbox, which will be applicable in the event of an agreed upon crisis. The intellectually correct analysis that cooperation in armaments will provide gains in efficiency is not at all new; it has been contemplated under buzzwords such as “pooling & sharing” or “permanent structured cooperation” for decades now. Nevertheless, this analysis never truly translated into wide-scale efficiency gains, due to obviously stronger drivers

at work at the national level of EU member states. Here we are mainly referring to powerful industrial interests, not in the least on the side of industrial enterprises which belong directly or indirectly to their respective governments. This is also the reason, why “level playing field” conditions in the European defence ecosystem have not prevailed thus far. Therefore, it is vitally important that armament efforts begin with a converging and decisive intention by member states in their capacity as customers for defence materiel. Only with this prerequisite fulfilled, can industries align themselves for the implementation of such wishes. This must in turn be supported by the intention of EU governments to harmonise standards for technological features, for design, and for export control regulations. Only with such alignment between member states, will the European Commission have a chance to effectively support cooperation by funding R&D, finding more partners for the respective products, and mobilising additional sources of finance.

From a practical defence industry perspective, the situation will not develop along the lines recently stated in a report written by the renowned Kiel Institute for World Economy (Kiel Report Nr. 1 of Sept. 2024), which came to the conclusion that if processes remain as they are, the outfitting of the German armed forces to the status which they deserve, would require, in some cases, up to 70 or even 100 years. In fact, German security and defence industries regard themselves as absolutely fit for reaching the necessary goals for our deterrence and defence capabilities. More than ever, this needs clear budgetary signals, as well as the proper legislative framework. 



**SAVE THE DATE:
20/21 January 2026
in Brussels**

21st Life Cycle Management in NATO Conference and Exhibition



**MITTLER
REPORT**

Fast and large-scale delivery is a priority

ES&T interview with Hensoldt CEO, Oliver Dörre



[Credit: HENSOLDT]

ES&T: Mr Dörre, in the National Security and Defence Strategy adopted on 4 December 2024, the arms industry is promised broad support. What form of support do you need?

Dörre: Above all, we need planning security at three levels. First, adequate funding for the Bundeswehr. I expect the federal government to maintain defence spending at a minimum of 2% of GDP, regardless of any special funds. However, I believe that we should

be aiming for 3 to 3.5%. We still face capability gaps that are several times larger than the special fund for the Bundeswehr. Second, we would like to see a consistent implementation of the security and defence industry strategy, including systematic and sustainable funding of key technologies. And third, we need stability in export policy. Even if Germany and Europe rearm, it won't be enough to keep our engine running in the long term. To do that, we also need exports, for which there must be clear and permanently reliable guidelines.

ES&T: You have to do a lot of research to keep your products up to date. Do you find the right environment for that in Germany? Do you rely more on European institutions?

Dörre: The environment in Germany, where we work closely with institutes, universities and the military technical departments, is still excellent. At the same time, however, we also pursue a very targeted international partnership strategy. We consciously maintain our network in Germany and link it to the international scientific community where it makes sense for our topics and those of our customers. An important aspect of this is our participation in multinational programmes, for example as part of the European Defence Fund (EDF), to which we make significant contributions.

- ▶ **HENSOLDT's TRML air defence radar has proven itself in action against all types of targets.**

[Credit: HENSOLDT]

ES&T: Your group is internationally positioned. Don't you also need a corresponding European strategy?

Dörre: As a company, we have that, of course! One of my first official acts last year was to define three priorities that guide our strategic approach: Firstly, delivery capability; second, digitisation; and third, internationalisation. In addition to the partnership strategy mentioned, the last point involves focusing our market presence with a clear emphasis on Europe and NATO. We want to generate 80% of our sales here by 2030. The EU's defence strategy will now develop with the designated commissioner.

ES&T: What impetus do you expect from the EU's Defence Commissioner?

Dörre: An EU Defence Commissioner can certainly improve the necessary coordination of European security policy and military procurement. It is important that there are no duplicate structures or even competition with NATO. In addition, he has to create trust in order to balance joint capability development with the currently increasing sovereign interests of nations.

ES&T: In recent years, the Hensoldt Group has been restructured to meet the demands of modern warfare. What was the result of this restructuring and has it already proven itself?

Dörre: As the CEO responsible for around 8,000 employees, I not only have to look at the current situation, but also take future trends into account. The defence landscape is developing and changing profoundly and at enormous speed. This requires anticipation and agility: we cannot afford to rest





▲ **The Pegasus signal intelligence system offers a globally unique intelligence capability based on German key technology. [Credit: HENSOLDT]**

on our laurels, impressive as they are in the short history of Hensoldt. In view of the increase in defence budgets across the EU and in all NATO countries, there is a palpable sense of urgency to deliver quickly and on a large scale. In addition, the trend towards hardware-based to software-defined systems is obvious. Data is already as important as ammunition. Capabilities are developed and presented using service-oriented system architectures. This digital transformation requires us

to move increasingly away from a product-oriented portfolio and towards a solution-oriented range of services. In addition, it is imperative that we expand in the value chain and expand our system capabilities, which the integration of ESG GmbH has given an enormous boost to. Furthermore, new, innovative players are entering the market. Continuously increasing our competitiveness and working together in partnerships are therefore becoming more and more important.

ES&T: What conclusions have you drawn from this for your company?
Dörre: Under the heading 'Hensoldt 2.0', we initiated an organisational realignment last year that aligns our way of working with the changes in our environment as described above. In essence, it's about: Two business units - 'Radar & Electromagnetic Warfare' and 'Optronics' - will focus on the product business: Quantitative



◀ **HENSOLDT supplies optronic systems for the Puma infantry-fighting vehicle, which significantly increase the combat value of the platform. [Credit: HENSOLDT]**

scaling and the further development of our portfolio are on the agenda. A new division, 'Multi-Domain Solutions', is dedicated to the development of system solutions, oriented towards and across the domains of land, sea, air and space, as well as cyber. And finally, a 'Services & Training' division will drive forward the existing product-related maintenance business and systematically develop new service models.

ES&T: The buzzword is 'Software-Defined Defence' (SDD). Defence is increasingly determined by software and the processes of designing, developing and introducing military projects must be adapted accordingly. What about the digitalisation of products in your area of responsibility?

Dörre: 'Software-defined defence' is the guiding principle of modern armed forces, according to which the advantages of software – short development cycles, flexible adaptability, scalability – should be used to increase the performance of defence systems. This is particularly relevant to us, because many of our systems already produce data that needs to be further processed in new applications. So, we are at the source. That's a strong position.

We have been working on the digitisation of our products for years, also incorporating AI, for example in data evaluation and data fusion. We are currently combining this work to develop a completely new generation of sensors that offer our customers greatly increased performance through networking, AI-supported evaluation and distribution, further developed hardware with edge computing and storage capabilities, and software-defined configuration. We are systematically expanding the advantages of this approach and making them available to our customers.

ES&T: Is this a consequence of the experiences of the war in Ukraine?

Dörre: Absolutely, but not only. The experiences in Ukraine have strongly influenced the development of technology and operational doctrine, but beyond that, digitisation is a megatrend that has been going on for years. A good example of this is the Future Air Combat System (FCAS) programme, in which we are working together with partners from German industry on key technologies such as digitised, software-configurable systems, AI-based allocation and evaluation processes, sensor fusion and networked system-of-systems architectures. These are also the big topics in a similar form in land-based systems such as Main Ground Combat System (MGCS). Overall, we must not see the specific experiences in Ukraine – as formative as they may currently be – as normative for the development of capabilities of the Bundeswehr and the Alliance. That would be too restrictive.

ES&T: In Germany, the framework for economic activity is discussed. Is the Federal Republic of Germany an attractive location for you?

Dörre: Absolutely! You can always improve something, but we find the qualified and motivated applicants we need to implement our growth targets. In addition, the environment is very good in terms of technology and science. With our subsidiaries in Europe and South Africa, we have an international company footprint. But we must not forget that we work in a very sensitive area in which resilience and national sovereignty play a major role. Investments in the defence industry pay off twice: they directly enhance the security of our citizens and indirectly strengthen Germany's economic power.

The questions were asked by Rolf Clement.



▲ [Federal Chancellor Olaf Scholz speaking at the MSC 2024 on 17 February 2024 \[Credit: MSC / Kuhlmann\]](#)

Countering the hypersonic threat

Doug Richardson

Recent years have seen the emergence of multiple hypersonic weapon designs, primarily from China, Russia, and the US. While several designs have already entered active service, they remain a significant challenge for most existing ground-based air defence (GBAD) systems to intercept. As such, the hypersonic threat has triggered a rush for bespoke solutions to this unique problem.

Little more than half a decade ago, hypersonic missiles were in danger of becoming the latest challenge to be faced by defence planners. A 2018 report by the US Government Accountability Office (GAO) warned that “China and Russia are pursuing hypersonic weapons because their speed, altitude, and manoeuvrability may defeat most missile defence systems, and they may be used to improve long-range conventional and nuclear strike capabilities,” and noted that “There are no existing countermeasures.” This is no longer the case. Today, work is under way in the US, Western Europe, Israel, Japan, and South Korea to develop anti-hypersonic defences.

Hypersonic speeds are usually considered to be Mach 5 or more, with speeds of Mach 10 or more classified as high hypersonic, though such missile velocities are not a recent development. The German A-4 (V-2) ballistic missile used against London and Antwerp 80 years ago briefly reached Mach 5 during its trajectory. As the range of subsequent ballistic missiles increased, so did their velocity, but like the A-4, these weapons followed a predictable trajectory.

With recent ballistic missiles, this is not the case any longer. What are termed ‘quasi-ballistic missiles’ or ‘semi-ballistic missiles’ can use a low trajectory that may be primarily ballistic, but have the ability to manoeuvre, including changes in direction and range, and may fly at a lower trajectory in order to maintain a higher speed, thereby giving the target less time to react, at the cost of reduced range.

Although Russia has boasted about having attacked several targets in Ukraine by means of hypersonic missiles in March, April, and May 2022, the weapon used was the Kh-47M2 Kinzhal (AS-24 ‘Killjoy’), an air-launched version

of the ground-launched 9K720 Iskander (SS-26 ‘Stone’) short-range ballistic missile. Kinzhal is thought to use the same propulsion system and payloads as the ground-based weapon. However, it is important to note that Kinzhal, while capable of attaining hypersonic speeds, behaves more like a traditional ballistic missile threat, rather than an HGV or HCM.



▲ **Illustration shows the key design features and flight phases of a representative hypersonic boost-glide vehicle (HGV). [Credit: USAF / Airman Magazine]**



▲ **Illustration shows the key design features and flight phases of a representative hypersonic cruise missile (HCM). [Credit: USAF / Airman Magazine]**

AUTHOR

Doug Richardson is an editor of our sister magazine European Security and Defence.

The threat defined

There are two basic forms of hypersonic missile. The simpler technique involves mounting one or more unpowered hypersonic glide vehicles (HGVs) onto a single-stage or multi-stage rocket booster. Once the initial rocket-powered boost phase of flight is over, the HGV begins its glide phase. HGVs are typically released at altitudes from around 50 km to more than 100 km with the precise altitude, velocity, and flight path angle chosen to enable the vehicle to glide in the upper atmosphere until the target is reached.



▲ **A camera aboard the SpaceX Starship records the build-up of plasma as the vehicle re-enters the atmosphere at the end of its flight on 14 March 2024. [Credit: SpaceX]**

An HGV has no built-in propulsion system, but reaches its initial speed from a booster rocket, and may enter space during this phase of flight. The HGV is based on a configuration optimised to reduce drag and produce lift. After separating from the spent booster, it glides through the atmosphere. Being unpowered, an HGV will gradually lose speed during its glide phase, slowing to around Mach 5–7, or even to supersonic speeds. Its mid-course/glide-phase flight is unpredictable, and may involve significant manoeuvres in the terminal flight phase.

The second and more complex class of weapon is a hypersonic cruise missile (HCM). Powered by an air-breathing propulsion system such as a scramjet, these weapons use an aerodynamic configuration able to generate lift from the rarified atmosphere that is equal to its weight, or slightly greater than its weight if the vehicle is manoeuvring. Yet there is a potential downside to the use of scramjet propulsion since these powerplants are sensitive to airflow disturbances, a factor that can limit their ability to perform extremely sharp manoeuvres.

The problem for defences

Three characteristics of hypersonic weapons make these systems difficult to counter: their speed and manoeuvrability, low flight paths, and unpredictable trajectories. The altitude range for hypersonic flight is typically around 20 to 60 km, well above the ceilings of most aircraft and cruise missiles,

but below the heights at which many anti-ballistic missile (ABM) systems can engage ballistic missile re-entry vehicles. In both cases, the ability of the threat to manoeuvre in the later stages of flight makes their target hard for the defender to predict.

A traditional subsonic cruise missile flies at around Mach 0.6–0.7, so the total flight time from launch to impact at a location some 1,200 km away is about one hour. However, at sea level, Mach 5 corresponds to around 5,600–6,000 km/h, gradually diminishing by around 5–6% at high altitude. At these speeds, a missile could cover a similar distance in around ten minutes.

This combination of high speed, high altitude, manoeuvrability, and minimal warning time will stress even the best of today's air defences. In a 2020 presentation, Jeff Sexton – Architecture Design Director at the US Missile Defence Agency (MDA) at the time – described hypersonic defence as being “highly complex and challenging, analogous to the challenge undertaken by ballistic missile defence in the 1980s and 1990s”.

HGVs typically enter their glide phase at altitudes that are much lower than those associated with ballistic missiles. This creates significant tracking challenges for ground-based radars, since the horizon of a ground-based radar is limited by the curvature of the Earth. When a low-flying threat travelling at Mach 5 or higher crosses the radar horizon, current defensive weapons may not have time to respond.

Hypersonic weapons blur the distinction between BMD and air/cruise missile defence (A/CMD). Since hypersonic threats fly within the atmosphere, countering them is probably best considered a new and complex form of air defence rather than an expansion of BMD.



▲ **A SpaceX Falcon 9 launch vehicle lifts off from Space Launch Complex 40 at Cape Canaveral Space Force Station on 14 February 2024 to orbit six satellites, two of which were prototypes for the MDA's Hypersonic and Ballistic Tracking Space Sensor (HBTSS). [Credit: MDA]**

Since the first hypersonic threats were ballistic missiles, these could be countered by the fielding of modern long-range SAM systems. On 5 May 2023, the Ukrainian Ministry of Defence announced that it had used a recently-delivered Patriot system to shoot down a Kinzhal aeroballistic missile launched by a MiG-31K flying over Russian territory. Dedicated ABM systems such as THAAD could be adapted to cope with hypersonic missile targets, but would be able to defend only a small area.

Detecting hypersonic targets

The current US BMD system uses a relatively small number of surface-based radars to track incoming weapons. Since the coverage of these radars is constrained by the horizon, they could only detect and track hypersonic threats while the latter are in the final stages of flight. As a result, the time available to the defences for the tasks of computing a

- ▶ **Northrop Grumman's Next-Generation Overhead Persistent Infrared (OPIR) polar-orbiting satellites are intended to provide early-warning coverage of the potential flight paths of ICBMs aimed at US territory. [Credit: Northrop Grumman]**

fire-control solution and taking further part in an engagement is limited, meaning there is little prospect of being able to launch a second defensive missile if the first fails to kill the attacker.

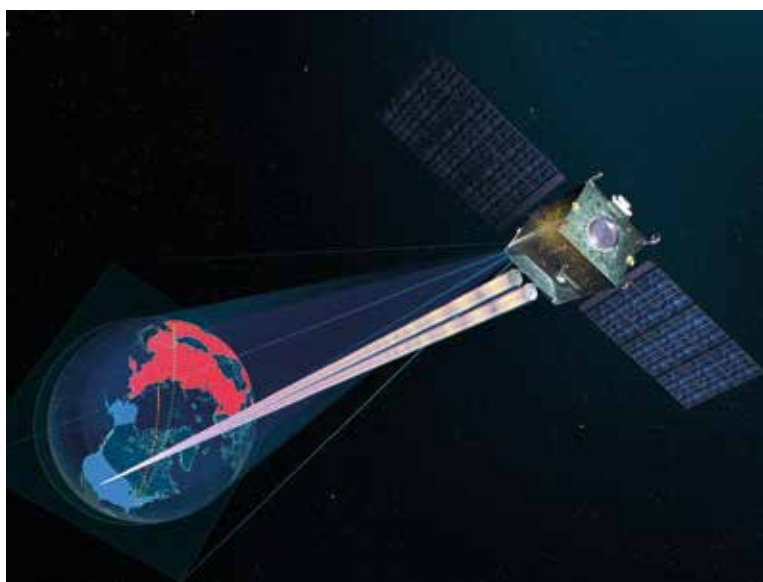
The plasma sheath that forms around a missile in hypersonic flight can cause a significant change in the weapon's radar cross section (RCS), but such effects are hard to predict. They will probably result in significant time-varying attenuation of radio frequency (RF) energy, decreasing the probability of detection. It may also create time-varying amplitude and phase effects on individual pulses of radar energy, and between different pulses, causing intra-pulse and inter-pulse modulation phenomena that will further degrade target detection.

This ability of plasma to attenuate RF energy had a significant effect during the recovery of space vehicles from the 1960s onwards. As spacecraft re-entered the atmosphere, radio communications became impossible for several minutes. Yet these spacecraft were configured and flown in a manner that created the high levels of aerodynamic drag needed to slow them from an initial velocity of up to Mach 30 or more to the point where winged flight or parachute recovery became possible. As a result, they created substantial amounts of plasma. However, for the designers of a hypersonic weapon, drag is not a useful effect, but a drawback, so the chosen configuration will be designed to minimise drag, so this could reduce the amount of plasma generated, and thus the resulting reduction in RCS.

A new class of sensor

Space-based sensors will be able to detect hypersonic, ballistic, and other advanced threats much earlier than terrestrial radars. A major component in any anti-hypersonic

defence is likely to be a resilient and persistent network of space-based sensors able to detect, classify, and track all threats, irrespective of their direction and trajectory. Such a network needs to be able to track a hypersonic weapon throughout its entire trajectory, allowing an initial engagement at a relatively early stage of the threat missile's flight, followed by a second shot should the first fail. It also needs to assess whether the intended target was hit. Current US Overhead Persistent Infrared (OPIR) missile warning satellites such as the Space-Based Infrared System (SBIRS) and Defence Support Programme (DSP) are intended to detect missile and space launches, but have limited capability to deal with large numbers of near-simultaneous launches. The infrared (IR) sensors they carry monitor a region of the IR spectrum that matches the thermal emission



of newly-launched missiles. That same region also includes the IR energy created by hypersonic flight, but the heat signature of a hypersonic missile is a tenth or less of that of a thrusting rocket stage.

In FY2014, the US Missile Defence Agency (MDA) was directed to develop a hit-and-kill assessment capability, so in April 2014 it began the Space-based Kill Assessment (SKA) project. To speed the development and deployment of hardware, it opted to host a network of small sensors on commercial satellites. The resulting add-on package incorporated a multispectral sensor with three fast-frame infrared detectors capable of capturing the intercept signature. This hardware is connected to Command and Control (C2) elements of the US Missile Defence System (MDS).

As a first step, the US Department of Defense (DoD) has integrated the tracking capabilities of existing space-based, ground, and naval radars. In 2018, the MDA began the Hypersonic and Ballistic Tracking Space Sensor (HBTSS) programme to address the requirement to detect and track hypersonic and ballistic missiles. Working in conjunction with the US Space Force (USSF), the Space Development Agency (SDA), and Space Systems Command (SSC), it intended to develop an OPIR sensor able to provide fire-control-quality data whose sensitivity, track quality of service (QoS), and low

latency would allow the engagement and defeat of advanced missile threats, including hypersonic weapons.

In January 2021, contract agreements with Northrop Grumman and L3Harris covered the creation of prototype demonstration space vehicles. This work was to result in the launch of the HBTSS prototype satellites into low Earth orbit (LEO), followed by early orbit testing to evaluate, characterise, and validate their performance. Given the urgency of the requirement, and the need to maintain the planned launch schedule, the HBTSS programme used high technology readiness-level components whenever possible, and took advantage of existing government capabilities in order to minimise development activities.



- ▲ **Artist's impression showing a US Navy vessel launching SM-6 and Glide Phase Interceptor missiles to engage hypersonic targets. [Credit: Raytheon]**

On 14 February 2024, the US MDA and SDA launched six satellites to LEO from Cape Canaveral Space Force Station in Florida. Two (one from each contractor) were prototypes for the MDA's HBTSS, and four were the final SDA Tranche 0 (T0) Tracking Layer satellites of the SDA's Proliferated Warfighter Space Architecture (PWSA).

Initial on-orbit testing of the two prototype satellites involved several weeks of tests and checkout procedures to ensure the satellites are operating and communicating with the other systems as expected. This is expected to lead to two years of on-orbit testing. Planned flight test events and other targets of opportunity will be used to characterise and validate HBTSS satellite performance. Once this on-orbit testing has been completed, the responsibility for fielding and operational HBTSS system will be transferred to USSF, and MDA will continue the development of the next generation of space-based fire-control sensors suitable for missile defence.

The definitive HBTSS fire-control capability will form part of the PWSA, which is expected to include a tracking layer able to detect, track, and target advanced missile threats, including hypersonic missiles. This tracking layer will involve Wide Field of View (WFOV) satellites able to view large portions of the globe, and will include Northrop Grumman's planned

- ▶ **DARPA's Glide Breaker programme is intended to provide a regional capability to engage hypersonic threats. [Credit: DARPA]**

Next-Generation OPIR polar-orbiting satellites. Often referred to as NextGen Polar (NGP), the latter are intended to monitor the northern polar region, the shortest route for a missile to travel toward the United States from Russia, and the most difficult region to monitor from space. The NGP satellites will operate in highly elliptical orbits, and incorporate what Northrop Grumman describes as "new resiliency features to stay in the fight in contested scenarios".

If the satellite network detects a threat launch, it will send sensor measurement data to the BMDS Overhead Persistent Infrared Architecture (BOA), which will generate track data with accuracy needed to cue the HBTSS. Once the latter has acquired a hostile HGV or HCM and collected precision angle measurements, this data will be processed by HBTSS, BOA, and Command, Control, Battle Management, and Communications (C2BMC) to provide track information of fire-control quality.

The US search for anti-hypersonic defences

The US Navy's Sea-Based Terminal (SBT) programme uses the Aegis Baseline 9 Weapon System and the SM-6 missile to defend high-value assets both at sea and ashore against advanced threats in the terminal phase of flight. "Aegis SBT is the only active defence available today to counter hypersonic missile threats," Air Force General Glen D. VanHerck (ret), former commander of US Northern Command (NORTHCOM) and the North American Aerospace Defence Command (NORAD) told the Senate Armed Services Subcommittee on Strategic Forces in May 2023.

The US had planned the Regional Glide Phase Weapon System (RGPWS) as its first anti-hypersonic programme, and aimed to field this in the early 2030s; however in February 2021, the MDA announced it now favoured a nearer-term project called the Glide Phase Interceptor (GPI). In November 2021, the MDA selected Lockheed Martin, Northrop Grumman, and Raytheon Technologies to conduct accelerated concept designs for this concept. These multiple awards would allow a competitive risk-reduction phase that would explore rival industry concepts and identify what promised to be the most effective and reliable GPI for regional hypersonic defence. The missile would be a naval weapon compatible with the US Navy's shipboard Vertical Launch System (VLS), and would be integrated with a modified Baseline 9 Aegis Weapon System.



Competitive contracts for GPI studies were awarded to Raytheon Technologies and Northrop Grumman in mid-2022, and by 2023 the MDA was ready to begin developing GPI hardware. In 2027, the MDA hopes to conduct a preliminary design review, then select one contractor for product development.

Intended to intercept lower-altitude hypersonic missiles during their glide phase of flight, the GPI will bridge the gap between the Standard Missile SM-3, which destroys incoming missiles outside Earth's atmosphere, and the SM-6, which engages targets during their terminal phase of flight.

According to Julie Leeman, Raytheon's GPI programme director: "We have the technology today to be able to do this, and we have the ability to upgrade as the threat evolves and as technology evolves... We're leveraging as much as we possibly can from our prior and current SM (Standard Missile) programmes, so we can focus on the aspects that are unique to GPI."

A GAO report published in June 2022 noted that "In general, intercept systems must be able to outperform their target in order to complete an intercept, often by a significant margin. Consequently, in order to achieve an intercept of a hypersonic target, a new GPI missile would have to operate in hypersonic flight conditions while also exceeding adversary hypersonic systems in key areas, such as speed or manoeuvrability."

While current plans suggest that the GPI might be fielded in the early 2030s, in its Fiscal 2024 National Defence Authorization Act, the US Congress has demanded that initial operational capability be achieved by the end of 2029, followed by full operational capability by the end of 2032. It set the goal of having "not fewer than 24" GPI systems in service by the end of 2040. In August 2023, the US and Japan announced that they planned to begin discussions on a GPI co-operative development programme.

The Defense Advanced Research Projects Agency's (DARPA) 'Glide Breaker' programme is intended to create a regional missile-defence capability in areas where US troops and resources are deployed. In February 2020, Aerojet Rocketdyne announced that it had been selected by DARPA to develop the propulsion system for the Glide Breaker interceptor under a contract worth up to USD 19.6 million.

Phase 1 of the programme developed the propulsion technology needed to achieve hit-to-kill against highly-maneuvrable hypersonic threats. This will require that DARPA has described as a "divert-and-attitude-control-system-propelled kill vehicle".

Phase 2 is focused on developing and demonstrating a divert attitude control system (DACS) for a kill vehicle. It focused on quantifying aerodynamic jet interaction effects created by hypersonic air flows around an interceptor kill vehicle, and the efflux created by the kill vehicle's DACS. Boeing was selected in September 2023 to be the prime contractor for Phase 2, which is expected to run for four years and have a total value of USD 70.6 million and will involve wind tunnel experiments and flight trials.

Europe seeks an anti-hypersonic solution

In 2019, the Council of the European Union approved the Timely Warning and Interception with Space-based Theater surveillance (TWISTER) missile-defence project for development under the Permanent Structured Co-operation (PESCO) initiative. This had the goal of developing a multi-role interceptor to tackle emerging threats.

According to OCCAR (Organisation Conjointe de Coopération en matière d'Armement / Organisation for Joint Armament Co-operation), the planned endoatmospheric interceptor must be able to operate in different air levels, and will require the development of "a new aerodynamic and actuator system for high manoeuvrability, highly agile guidance concepts, and advanced sensor/seeker systems".



▲ **This MBDA artwork shows how the kill vehicle of its proposed Aquila interceptor using a side-firing thruster to bring it to an interception. [Credit: MBDA]**

Two European teams proposed solutions to the problem of engaging hypersonic threats. MBDA led the HYDIS (HYper-sonic Defence Interceptor Study) project. Involving participation by France, Germany, Italy, and The Netherlands, and partially funded by the European Defence Fund (EDF), this project proposed an architecture and technology-maturation concept study for an endo-atmospheric interceptor.

The HYDEF (HYper-sonic DEFence) consortium is made up of 14 companies from seven nations – SONACA (Belgium), LKE (Czech Republic), Diehl Defence (Germany), NAMMO (Norway), ILOT and ITWL (both from Poland), and SMS, EM&E, GMV, Instalaza, INTA, Navantia and Sener (all from Spain), and Beyond Gravity (Sweden). SMS is responsible for the project management within the HYDEF project, while Diehl Defence is in charge of the technical implementation from the development of the overall system to the interceptor itself. In July 2022, the European Commission selected the HYDEF interceptor programme to be the first European programme for defence against hypersonic threats.

A contract between OCCAR and SMS (as programme co-ordinator) was signed on 31 October 2023. During the initial three-year phase, a concept study will assess the feasibility of the project. It will lead to MDR (pre-feasibility) and PRR (feasibility or Phase A), with a parallel activity on the early maturation of critical technologies and designs. The proposed system will incorporate networked sensors – some of

which will be space-based – and the interceptor system. It is intended to be able to detect and intercept HCMs and HGVs

The HYDEF endo-atmospheric interceptor will incorporate the latest technologies in propulsion, aerodynamics, advanced guidance, cutting-edge sensors and actuator systems in order to create an interceptor with maximum manoeuvrability and the capability to engage and destroy hypersonic threats.



▲ **Rafael's SkySonic will team a booster stage with a powered kill vehicle. This company artwork suggests that separation may occur while the booster is still thrusting. [Credit: Rafael]**

MBDA's candidate for the task of intercepting complex missile threats, including hypersonic weapons, had been its three-stage Aquila interceptor. In March 2023, the company announced that it intended to keep working on the system, but estimated that the cost of bringing this from the current concept phase to a marketable system would cost "billions" of Euros and need strong government support from partner nations. At the 2023 Paris Air Show, MBDA stated that it was studying three multi-stage interceptor architectures – two of which were a three-stage configuration, and one a two-stage. One of the three-stage proposals would involve air-breathing propulsion.

Other nations need anti-hypersonic defences

Announced in February 2021, the Arrow-4 missile defence system is being jointly developed by Israel and the US. Intended to counter endoatmospheric and exoatmospheric threats, including MIRV-equipped ballistic missiles, and HGVs or HCMs, it is expected to replace the existing Arrow-2 systems. In July 2021, IAI (Israel Aerospace Industries) announced that Israel had entered into a Memorandum of Understanding with Lockheed Martin to collaborate on air and missile defence.

A lower-tier system able to engage hypersonic threats was announced by Rafael Advanced Defence Systems in June 2023. The project had been under way for several years, but flight trials had not yet begun. The system is expected to incorporate what the company describes as "a synchronised sensor system capable of accurately identifying and locating the threat throughout its trajectory", and an interceptor that can "swiftly reach the target, minimising uncertainty associated with target location" and be able to "exhibit

exceptional manoeuvrability and operate on a non-ballistic trajectory".

While the sensor system will be based on an adapted version of existing radars, the Rafael SkySonic vertically-launched two-stage interceptor will be an all-new development. Its solid-propellant booster will release a kill vehicle that will incorporate a rocket motor to be used mostly in the last phase of the engagement. Manoeuvrability will be provided by a combination of aerodynamic control surfaces and some form of lateral-thrust subsystem.

On 25 April 2023, South Korea approved the development of an improved version of its Hanwha Aerospace/LIG Nex1 L-SAM multi-layered missile defence system. The planned L-SAM 2 system will include a high-altitude interceptor missile and a glide phase interceptor, and is intended to allow interception altitudes of 180 km. Like the L-SAM, the new programme is being managed by South Korea's Agency for Defence Development (ADD), and has been budgeted at KRW 2.71 trillion for the ensuing three years.

Hypersonic flight has its drawbacks

While hypersonic speeds create advantages for the attacker, it is worth noting that they are accompanied by a number of disadvantages which the designers of hypersonic missiles must face. An intercontinental-range hypersonic glider experiences extreme aerothermal conditions when it flies at around Mach 20 following atmospheric re-entry. These include extreme pressure and vibration modes, and temperatures of more than 2,000°C, while the atmosphere surrounding the vehicle dissociates into a plasma. Although ballistic-missile re-entry vehicles experience similar conditions during atmospheric re-entry, these are relatively short-lived – typically for tens of seconds. Hypersonic weapons must survive such stressing conditions for many minutes, facing potential problems that stress the limits of current guidance, control, and materials technologies. They must be built using advanced materials able to cope with these temperatures while remaining mechanically strong and able to protect its guidance hardware and other interior systems. This problem will also be faced by radomes or optical windows associated with the weapon's guidance systems. As a result of their speed within the atmosphere, hypersonic weapons are likely to have significant infrared signatures.

The faster the hypersonic speed, the greater these problems will become. Michael Griffin, a former US Under Secretary of Defence for Research and Engineering, has described hypersonic vehicles as being relatively fragile during their cruising flight, and fairly easy to destabilise. Even minor damage could result in rapid destruction.

Given the harsh environment associated with hypersonic speeds, it will be difficult for an HGV or HCM to deploy decoys or other countermeasures. As a result, the defences these threats must face will not encounter the often-difficult task of discrimination between warheads and penetration aids, a long-standing problem faced by ABM systems. The sky may prove a lonely place for hypersonic attackers.



Accelerated growth of defence capacities and higher investments

Interview with Thomas Gottschild,
Managing Director of MBDA Deutschland GmbH

ES&T: Mr Gottschild, on 4 December 2024 the German government adopted a new security and defence industry strategy. What is your assessment of this document?

Gottschild: I welcome the security and defence industry strategy paper as an important intermediate step and a positive signal for strengthening our industry. For the first time, the industry's demand for a plannable workload has been included. What remains indispensable for us is the creation of sustainable planning security, adequate and stable funding, and continuous orders to equip our soldiers for the future.

ES&T: According to the National Security and Defence Industrial Strategy, a security and defence industry that is capable of performing in all situations must be responsive and resilient in order to be able to counter any disruptions on the world market or in global trade. How is MBDA preparing for this challenge?

Gottschild: For the defence industry, a basic level of utilisation in production is essential in order to be able to maintain sufficient capacity at all times and without delay, as you say, to be responsive and resilient. Similarly, the resilience of supply chains, technologies and innovations, as well as the availability of competent skilled workers, requires increased continuity in order to achieve long-term economies of scale and avoid bottlenecks, for example in the procurement of raw materials. In this context, I consider the development of national capacities to be imperative.

ES&T: The strategy pledges broad support for the defence industry. What kind of support do you need?

Gottschild: The identification of key technologies for the security and defence industry, the national availability of which is of significant national security interest, is a clear signal. We need to start working with the new federal government on implementation without delay to avoid any further loss of time. What I would like to see is planning security, very specifically accompanied by continuous orders and a stable framework for solid financial resources and funding for our small and medium-sized suppliers as well. The defence budget is one of the central challenges facing the Federal Republic.

ES&T: Is a national strategy sufficient? Isn't a document like this needed at the European level?

Gottschild: A clear national focus is a prerequisite for the clear representation of German interests at the European level. In this context, it makes sense for the federal government and industry to work closely together. Incidentally, this is already the case with our European partners.



[Credit: MBDA]

The member states, acting on the basis of a common political will, must be the primary drivers of European cooperation projects and the European defence agenda in general.

ES&T: In my view, closer coordination between member states with a relevant defence industry is much more important than a European security and defence industrial strategy. Do you expect new impetus from the EU's defence commissioner?

Gottschild: The fact that the EU has appointed a commissioner for defence and space for the first time shows the importance attached to these areas. I share Commissioner Kubilius's call for a robust European defence, accelerated growth in defence capacities and higher investments. At the same time, these investments must be targeted very specifically and focused on the most pressing capability gaps. The European Defence Industrial Programme (EDIP) will make a significant contribution to this. The programme promotes both joint procurement and the expansion of production capacities in Europe, for example in the area of air defence and missiles. It is essential here that a clear focus is placed on European capabilities. Only in this way will Europe be able to strengthen its defence in the long term. I am also hoping for important impetus from the planned white paper on EU defence policy, which Commissioner Kubilius, together with the EU High Representative for Foreign Affairs and Security Policy, Kaja Kallas, intends to present within the first hundred days in office.

ES&T: What has your company learned from the war in Ukraine?

How are you implementing these lessons?

Gottschild: The course of the war in Ukraine makes it clear that we need new capabilities, for example to defend against drones and hypersonic weapons, and at the same time deep strike capabilities to be able to operate far behind enemy lines with conventional means. To realise these demanding armaments projects, we rely on cooperation. We are seeking new collaborations, for example with Rheinmetall for both lasers and interceptor missiles for drones. We are working with IAI on the Arrow project for the German Air Force. Another example is the cooperation with Kongsberg on the 3SM missile, which is to be launched as the next generation of an anti-ship missile. In the HYDIS project, we are working with European partners to develop a missile to defend against hypersonic weapons. For example, NSPA and COMLOG, a joint venture between MBDA Germany and Raytheon, have signed a contract to supply GEM-T guided missiles for the PATRIOT air defence system. The missiles will be manufactured in Germany to support security of supply in the face of increased demand and to replenish stocks.

ES&T: The future battlefield will be characterised by hypersonic weapons, artificial intelligence and the inclusion of space in the war effort. Where do you see the biggest challenges here?

Gottschild: We have to keep pace with the development of highly modern types of weapons – in all areas. The cycles have become very fast. In particular, artificial intelligence and machine learning play a prominent role. They are megatrends both for the technological development of our products and for the digitalisation in product development itself. Swarm technology is also the way forward for complex systems, for example for innovations in the field of unmanned flight, such as drones or so-called ‘remote carriers’, which can make a valuable contribution to security precautions. However, we also have to close the capability gap in the area of hypersonic defence because hypersonic technology is proliferating worldwide. An increasing number of nations are producing hypersonic missiles, which is why we have to position ourselves accordingly on the defence side.

ES&T: Can MBDA products contribute to the timely realisation of the politically demanded and militarily necessary ‘readiness for war’ and what is absolutely necessary to achieve this?

Gottschild: Driven by the war in Ukraine and the conflicts in the world, we see a great need for equipment, which is now also being translated into orders. MBDA is actively shaping the changing times. In the past twelve months, contracts have been concluded with MBDA for the manufacture and delivery of up to 1,000 Patriot GEM-T missiles as part of the European Sky Shield Initiative (ESSI), 2,600 PARM weapon systems and several thousand Brimstone guided missiles and Meteor guided missiles. Recently, and before the end of the year, the budget committee also approved the basic overhaul 2 for TAURUS, as one of a total of 38 25-million-euro templates. We are aware of our responsibility and are making our industrial contribution to increasing the ammunition stockpile and ‘readiness for war’. The fulfilment of these orders, the ramp-up required for this and the increase in capacity are some of the challenges we are currently working on. In addition, the aim is to equip the Bundeswehr and armed forces in general with new, modern capabilities. In this context, it is important to learn from the lessons of current conflicts and to use new technologies in a targeted manner when developing future weapon systems. This requires not only an optimisation of capacity utilisation in industry, but also an adequate national R&T budget in order to maintain and further develop technological expertise and competence in Germany.

ES&T: The framework conditions for economic activity are being discussed in Germany. Do you consider the Federal Republic of Germany an attractive location?

Gottschild: A lot of things have become faster, easier and more direct in the past two years. I am convinced that together we can and will master the security challenges and shape a sustainable future for defence.

At MBDA, we are ready to do our part through innovation, investment and our close cooperation with government, the Bundeswehr and our European partners.

The questions were asked by Rolf Clement



▲ **HYDIS is co-funded by the European Union under the European Defence Fund, with France, Germany, Italy, and the Netherlands participating. [Credit: MBDA]**



Solving Intricate Military Problems

AI can handle the flood of information

Last year, PwC and Strategy& launched an initiative to significantly increase our commitment to defence and security. ES&T spoke with Dr. Germar Schröder, head of the Public Sector Practice of Strategy& and the PwC/Strategy& initiative for defence, PwC partner André Keller and Ludwig Biller, director at Strategy&.

ES&T: Ahead of the Munich Security Conference, we caught up with experts from the consulting firm Strategy& to hear their views on the key issues facing the defence industry. You are set to have a big presence at this year's conference. Why is this?

Dr. Germar Schröder: PwC and Strategy& launched an initiative last year to significantly increase our commitment for defence and security. We are very conscious of this sector's importance. This involves strengthening our capabilities in key areas, and we are investing significantly in defence through leadership to further expand our leading market position as a trusted



[Credit: PwC]

advisor to the defence community. Ludwig and André will introduce two studies from the range of these activities. We are also involved in various events at the MSC.

ES&T: AI is sure to have a major impact on the defence sector. Do you see it as game-changing?

Ludwig Biller: AI certainly opens completely new paradigms.



[Credit: PwC]

It promises capabilities that fundamentally alter mission effectiveness, speed, precision, and the scale of military operations. Right now, traditional decision-making processes are often constrained by human cognitive limits, and struggle to keep pace with a continuous flow of intelligence reports, sensor feeds, and cyber threats.

But AI can handle this flood of information to solve intricate military problems. The US, China, Russia and others are investing heavily in this and a race is developing – AI is a must to maintain a deterring and warfighting edge.

Pillars to forge a competitive, future-fit and high-performing German and European defence industry

▲ Main pillars for the future European defence industry [Source: PwC]



ES&T: How is Europe, and Germany specifically, doing in this global AI race?

Ludwig Biller: Competing with China and the US across the board is not feasible. Germany should instead build on its reputation for ethical governance to lead responsible AI development with a unified national defence AI strategy that aligns with its industrial and civilian ecosystems together with its European partners.

ES&T: In what concrete ways do you see AI reshaping military operations by 2030?

Ludwig Biller: The applications are of course vast. Predictive decision-making with enhanced situational awareness will greatly reduce the time between observation and action. AI-powered enhancement of autonomous systems, for example in finding or altering routes based on threat intelligence, can boost operational effectiveness. AI will also strengthen dynamic resource management through faster, leaner logistics. We expect too that AI will play a crucial role in supporting cross-military system collaboration and in determining battlefield superiority, and that AI-driven cyber capabilities will be used in the first line of national defence.

ES&T: Where do you see the main barriers to AI deployment?

Ludwig Biller: The Western Alliance must first ensure that AI is deployed responsibly in the defence domain. Only ethical AI can ensure global legitimacy and trust. A human-in-the-loop approach will play a key role here. We also need reliable and high-quality data to train and enhance AI applications, as we face highly regulated and compartmentalised data in the defence sector. Private capital will

be vital as public research budgets are often dwarfed by investment rounds. And lastly, the AI research and vendor landscape in Europe is highly fragmented.

ES&T: Aside from AI, what is the top priority for Germany and Europe?

André Keller: After decades of downsizing in European defence, the war in Ukraine and heightened geopolitical tensions have made one thing clear – the credibility of NATO deterrence rests on the availability of ammunition, equipment, and major military assets in member states' armed forces. This requires a European defence industry capable of realising its full potential.



[Credit: PwC]

ES&T: And how can Europe achieve this goal in the current environment?

André Keller: By becoming more efficient, innovative, and resilient. Various pragmatic solutions are critical – for example, improving the availability of production capacities, fostering a more active role for the industry in its own transformation, enhancing European collaboration, achieving targeted consolidation, expanding financing options, and making the industry more attractive to work in. The aim is to bolster Europe's defence capabilities while also strengthening the sovereignty of European states within NATO.

EUROPEAN DEFENCE DAILY

Security Policy and Defence Sectors: Regular News Update
Aktuelle Nachrichten aus den Bereichen Sicherheitspolitik und Rüstung



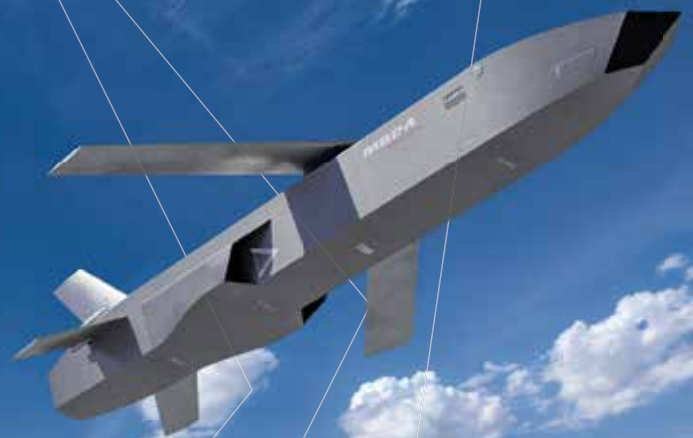
The European Defence Daily **Newsletter**
summarises the news and articles published
in the last 24 hours from all Mitter Report media.

Register now!



MITTLER
REPORT

RCM²



RCM² für hohe Durchsetzungsfähigkeit in stark umkämpften und verteidigten Einsatzgebieten

Der neue RCM² Remote Carrier Multidomain Multirole Effector von MBDA erhöht in einem auftragsbasierten Effektor-Verbund die Durchsetzungsfähigkeit in stark umkämpften oder verteidigten Einsatzgebieten. Von welcher Plattform aus RCM² gestartet wird und durch welche Domäne die Remote Carrier dirigiert werden, ist flexibel und an den operativen Bedarf anpassbar. RCM² ist sowohl für ein breites Einsatzspektrum, als auch auf Kampfmasse ausgelegt.



German Heron TP (GHTP)

Unmanned Aerial System (UAS) for strategic reconnaissance

- In-service with the German Armed Forces
- Operation and accommodation into German airspace already today
- World's first fully certified system in this size class
- Meeting today's and tomorrow's operational requirements of the German Armed Forces in the field of remotely piloted air systems
- Capability enhancement by signal-intelligence sensors, maritime radar and additional advanced mission equipment



Picture source: Israel Aerospace Industries