

## The NATO Summit in Washington

NATO Summit: a Stress Test to the Alliance  
Isabel Ferreira Nunes

NATO at 75: Defence and Deterrence in the Euro-Atlantic Area  
Patricia Daehnhardt

NATO, Always a Step Behind?  
Hanna Ojanen

The American Friend  
Carlos Gaspar

NATO's Washington Summit 2024: A Nordic View  
Tuomas Forsberg

Critical Infrastructure Protection  
Daniel Fiott

NATO's Digital Transformation: No Leap Forward, Just Strong Pledge  
Artur Gruszczak

DIRETORA  
Isabel Ferreira Nunes  
COORDENADOR EDITORIAL  
Luís Cunha  
CENTRO EDITORIAL  
António Baranita e Luísa Nunes  
PROPRIEDADE, DESIGN GRÁFICO E EDIÇÃO  
Instituto da Defesa Nacional

ISSN 2182-5327  
Depósito Legal 340906/12

idn Instituto  
da Defesa Nacional

Calçada das Necessidades, 5, 1399-017 Lisboa  
Telf: +351 211 544 700  
idn.publicacoes@defesa.pt

# The NATO Summit in Washington

## NATO Summit: a Stress Test to the Alliance

Isabel Ferreira Nunes

Director of the National Defence Institute.

The Washington Summit of July 2024 reiterated the common interests of a long-lasting Euro-Atlantic peace, collective defence, deterrence and a sense of belonging to a defence community of destiny. At a time when war grasses Europe's soil, the importance of NATO is even greater as a significant strategic player and a driver for innovation and entrepreneurship in the technological domain. Currently, the Euro-Atlantic community faces one of its biggest challenges, due to the unprovoked and unlawful invasion of Ukraine, with three effects from the political and strategic point of view. First, it strengthened the **strategic purpose** and **utility** of the Alliance. Second, it led to the enlargement of NATO to two new Members States. Third, it made defence spending an indicator of strategic relevance and ability to pursue international actorness. From the operational perspective, NATO's final declaration focused on the leadership stand of nationally provided headquarters, which places responsibility on those allies that already host them; enhancing rapid response in terms of force projection, supply and sustainability, placing pressure on national capacity building, joint production and procurement; strengthening the forward presence of land-based forces and protection of critical infrastructures, in particular, those that guarantee connectivity and governance continuity of allied institutions and economies.

Russia's revisionist policies allow the Alliance to regain **strategic purpose and relevance** moving from out-of-area operations, to the defence of NATO's territory. The more complex NATO's institutional and functional design becomes, the higher the need for better coordination, cooperation and interoperability among the 32 allied countries. The notion of NATO's Forward Land Forces reinforces the implementation of the concept of enhanced forward presence. The Alliance has evolved in terms of institutional and functional design, agreeing in new instruments to mitigate conventional, as well as hybrid and cyber threats with the establishment of a NATO Integrated Cyber Defence Centre. The Defence Innovation Accelerator for the North Atlantic and NATO's Innovation Fund will foster innovation programmes, accelerate dual-use innovation capacity across the Alliance, and help develop means to lessen the impact of disruptive technologies. NATO's Washington Summit Declaration reiterated the imperative for expanding "forces, capabilities, resources and infrastructure" in line with NATO defence planning. Collective and joint procurement and production, as reiterated during the Summit, may have a transformative effect on how defence industries evolve and defence policies of allied countries help streamline that effort. Defence industries

need further investments to increase the production of high-end defence products, but entrepreneurs assess thoroughly the risks associated with those investments, for which adequate planning, sustainability and business continuity are required to guarantee investors the return on investment. Better synchronization is needed between constructing probable conflict and crisis scenarios, capacity building and defence planning. NATO Defence Planning in the short and medium term poses a challenge to the Euro-Atlantic technological and industrial base and may constitute a test to investors in the production of critical capabilities, such as those identified during NATO's Summit (munitions and air and missile defence). The continuation of war in the East approached Ukraine from Western partners and standards in terms of weapon systems, capabilities, training and interoperability among partners and allied countries. The support of Euro-Atlantic allies, together with that of Australia, South Korea, New Zealand and Japan to the war effort, has been having an impact on armaments stockpiles of donors, with two consequences. First, it presses for the rapid replacement of the defence equipment transferred to the East. Second, it is giving the incentive to defence industries to develop and produce at a faster pace and technologically upgrade themselves to guarantee the Euro-Atlantic technological edge. Defence policies, technologies and industries have to be aligned with the new international dynamics, comprehending the modernization of the armed forces, capacity building and a better resilience of states, societies and economies. Armed forces and defence industries now face shorter cycles of innovation, research, development and production to meet new immediate strategic and operational demands of crisis management and warfare. Developments in warfare,

the digitalization of defence and advancements in military technology transformed the ways military mobility, force protection, deterrence, surveillance or situational awareness are conducted. Those developments not only result in a more efficient military presence, but also in the capacity to introduce new dual-use technologies and capabilities. This connects military needs with commercial offer, markets and users, making the defence industries market more attractive. Western societies are risk averse, with aging populations and with smaller recruitment bases, but the automatization, quantum technology and digitalization of defence will enable to do more with less manpower. In this context, scientific communities and technological and industrial bases, that support defence economy, must ensure those advancements to acquire and sustain technological and military advantages, individually or collectively. This will give NATO a better strategic advantage towards the military ambitions of a traditional power, such as Russia, and those of an emergent one, such as China. The **Alliance's enlargement to northern Europe**, through Finland's and Sweden's change from informal alignment to formal integration in NATO, signals a renewed and broader commitment to collective defence. Due to their historical experience, geographical proximity and military expertise, these countries are likely to contribute effectively with pre-emptive, preventive and actual response measures to Russia's ambitions. Their integration in NATO adds to the Euro-Atlantic security, not only military strength and resilience, but also increases NATO's political and military footprint in the Baltic and in the North Sea. During the Washington Summit, the prospect of NATO's enlargement to Ukraine focused on the need for a more structured approach to the pre-accession conditions for an endurable

peace and security. The creation of NATO Security Assistance and Training to coordinate train and equip will add consistency to allied and partner pledges and coherence to support to Ukraine. The proposal for the creation of a NATO-Ukraine Joint Analysis, Training and Education Centre will connect knowledge with operational practice, innovation and warfare experience. To this decision, one must add the financial support to security assistance measures (equipment, training and assistance) with the creation of a €40 billion funding, within the next year and the appointment of a NATO Senior Representative in Ukraine, confirmed during the Summit. An increase in **defence spending** will enable the Alliance to better deter and defend. Since the beginning of war in Ukraine in 2022, the average expenditure on defence by European Allies and Canada increased from 1,70% of GDP to 2,00% in 2024 and the number of countries evolved from 9 to 22 of the 32 allied countries. However, the public's perception of the need to invest in defence remains low. A survey conducted by DataPraxis and YouGov in 2022, a critical year due to the invasion of Ukraine, showed that from the respondents inquired in 10 EU-NATO countries, only two countries scored a percentage above 50% in favour of more defence spending. With a war declared to the "collective West", NATO allies must meet this challenge by adding meaning to collectiveness. This means showing solidarity, cohesion, resilience, unity and unquestionable trust in the principle of mutual defence. Defence is not solely military defence, but also the embracing of a whole-of-defence and whole-of-society posture, that contributes to protecting our values and ensuring the freedom of our democracies.

## NATO at 75: Defence and Deterrence in the Euro-Atlantic Area

**Patricia Daehnhardt**

Advisor at the National Defence Institute and  
Integrated Researcher at IPRI-NOVA.

NATO's Washington summit last week confirmed not only how crucial the Atlantic Alliance remains for Euro-Atlantic security but also NATO's continued ability in the last three decades to adapt to growing international geopolitical instability. The Alliance has come full circle in these series of strategic adaptations: from various enlargement processes to engaging in expeditionary operations in the 1990s and 2000s to its original purpose of NATO as a collective defence and deterrence alliance. Russia's ongoing war against Ukraine has strengthened transatlantic unity and NATO's enlargement to Finland and Sweden (and the notion of the Baltic Sea as a 'NATO lake') is a clear sign of that. The Alliance has adopted new regional defence plans, NATO's missile shield is strengthened by a new US ballistic missile defence site in Poland and NATO will establish a command structure in Finland, and, on the sides of the summit, there was an announcement that the US will station long-range missiles in Germany. Allies have increased their defence spending, with 23 allies fulfilling the NATO defence investment pledge of 2% of GDP defence spending agreed upon 10 years ago, from 9 allies 5 years ago. So, NATO's 75th anniversary is a cause for celebration. But the summit was a dampened celebration given the urgency of increased defence spending and burdensharing, a stronger NATO-Ukraine relationship, and a clearer positioning towards China's increasingly assertive actions.

First, the Washington Summit Declaration adopted a Defence

Industrial Capacity Expansion pledge, confirming the trajectory towards increasing defence spending and burdensharing and plans to boost defence and deterrence capabilities on the Alliance's eastern flank. NATO allies committed to cooperate more and better regarding defence industrial investment and production based on more coordinated, effective defence industrial competency to enhance interoperability and standardization, and promote specialization across allied defense industrial bases. Ensuring defence trade and investment among allies will help to overcome short to medium industry needs, even if in the long-term allied preference for strengthening national defence industrial bases will prevail. But this presupposes that industries on both side of the Atlantic receive long-term commitments from governments through joint multi-year procurement contracts and that national defence industries consider coordinated efforts toward defence procurement, production and capacity needs when responding to the Alliance's overall defence industrial gaps. European allies have little alternative but to increase their defence budgets by spending even more and better on defence, develop their defence industries and deepen European defence industrial cooperation. This is best done through developing a European pillar in NATO, building a European defense, not outside, but within NATO and signalling to the US – still the biggest contributor to NATO's military spending and the nuclear protector – that Europeans will work towards effectively Europeanizing NATO regardless of whether Biden (or another Democratic candidate) or Trump becomes the next US president.

Secondly, NATO's role regarding support for Ukraine was upgraded with the adoption of a new comprehensive security package. The US-led Ukraine Defense Contact Group or Ramstein

format was replaced by a more institutionalised NATO-Ukraine format that from now on will coordinate long-term aid to Ukraine for financial support, weapons delivery and training of Ukrainian military personnel. This new NATO Security Assistance and Training for Ukraine (NSATU), will support the transformation of Ukraine's defence and security forces, 'enabling its further integration with NATO', as stated in the Final Communiqué. Jens Stoltenberg, the outgoing Secretary General, managed to get NATO members to commit to €40 billion financial package for this year, despite stopping short of the original €100 billion that he had originally proposed. But, as at the 2023 Vilnius summit, this year's summit fell short of a membership invitation. US Secretary of State Anthony Blinken's metaphor of a 'well-lit, unimpeded and short bridge' to Ukraine's NATO membership is open to many interpretations as it can be seen as a connecting device as much as a critical infrastructure vulnerable to enemy attack. Stating that Ukraine's path to NATO membership is 'irreversible' was a way to bypass the question of invitation but it did not change last year's formula that Ukraine will become a member of the Alliance only 'when allies agree and the conditions are met', suggesting this will not occur as long as Russia chooses to maintain its unprovoked war against Ukraine, or desincentivise Russia to stop it.

Finally, the growing interconnectedness between the euro-atlantic area and the Indo-Pacific. While this is not to be seen as a remake of the 'global NATO' debates of the 2000s, the Washington Summit Declaration clearly acknowledges the commonality of interests between the 32 NATO allies and the Indo-Pacific-4, namely Japan, South Korea, Australia and New Zealand in dealing with the growing alignment between Russia and China. Russia continues to represent



the biggest threat to NATO, not only in military but also hybrid warfare terms. The Final Communiqué used an unusually harsh wording regarding China's role in the war in Ukraine: China's growing assertiveness represents a threat to the IP-4 but is also manifest in the wider euro-Atlantic area, through military exercises in Belarus during the month of July or actively enabling the Russian war industrial capacity.

To conclude, the Washington summit gave NATO a more relevant role both in deciding on NATO's industrial policies to speed up defence industrial capacity in allied countries and regarding coordination of support for Ukraine. All we need now is for the allied countries to implement and deliver on these pledges, including the United States after the 2025 presidential election.

## NATO, Always a Step Behind?

**Dr Hanna Ojanen**

Research Director, Tampere University, Associate Professor, Finnish National Defence University

The Washington Summit ends with a sigh of relief: no-one was publicly criticizing the outcome, a strong and united front was kept on Russia, President Biden was doing relatively fine, the Alliance could list a number of ways it strengthens its deterrence and defence. And, just ahead of the Summit, NATO also managed to secure a new Secretary General.

In fact, NATO is outstanding among international organisations in its capacity of strategic communication, always delivering clear messages that speak to the successes and strengths of the organisation. So also, this time, even though the wordings aimed at making Ukraine somehow closer to membership, the "irreversible path" and the "bridge" to membership, may not be that convincing

as metaphors – in these times, bridges are unfortunately targets, too.

Still, NATO seems to stay a step behind, reacting to what others do rather than making others react to what it does.

And there are several good reasons for this. First and obvious, NATO cannot risk being seen as escalating the conflict, it cannot risk taking steps that could lead to making its member states part of the war and targets to Russian aggression. Thus, NATO members are not sending troops to Ukraine; thus, Ukrainian membership is a matter of the future, not of today. The Summit Declaration speaks about a "defensive Alliance" that "does not seek confrontation, and poses no threat to Russia", and that does not "make NATO a party to the conflict".

A second reason to the reactive mood may be the nature of the industry, so to say: defence is a slowly moving field where quick turns may be impossible and may also be inadvisable.

Finally, a third reason may be found in the membership of the organisation, in particular in how decision-making crucially depends on the United States.

The position of the USA in NATO is central in many ways. In fact, one could speak about a cobweb-kind of structure inside the formal structure of a military alliance of 32 member states, one where the USA is in the centre and ties the other members to itself also by bilateral means, such as Defence Cooperation Agreements. Not that this would go against the will of the other member states, quite to the contrary – they do wish to keep the USA firmly committed to their defence and thus understand that ways and solutions that suit the US have to be found. But the US is not a country that one can lure into deeper multilateral cooperation including, for instance, decision-making forms that may entail loss of sovereignty for the participating states.

The decisions on enlargement are taken by unanimity, which is different from the usual consensus decision-making. Unanimity really means that all member countries need to say yes, while consensus means that it is enough if no-one is publicly against. There is a good reason for this, as enlargement is something that may profoundly change an organisation. This is why decisions about it are made by unanimity even in the European Union. One could argue, though, that membership of Ukraine in NATO would have less consequences for the organisation itself than its membership would have on the EU.

Yet, NATO is not capable of exceptional turns such as departing from how it normally thinks about enlargement and opting instead for a decisive move that would completely change the play, namely taking Ukraine in as a member even if it is at war. This way of stepping ahead instead of merely reacting could be just the move that helps Ukraine win the war – after all, NATO is militarily superior to Russia.

What NATO now does falls short of this exceptionalism. Certainly, more support to Ukraine was promised, but one could think that the bilateral pledges and political commitments could in the long run complicate the picture. Above all they weaken the idea of multilateralism that is something that the Alliance as an international organisation should be particularly concerned about.

Staying behind and limiting action to reaction may be wise. But if action was needed, what could trigger it, where could change come from in these circumstances? The Europeanisation of NATO is being talked about, with a stronger European voice and more concrete responsibility of European defence being taken by Europeans. This strengthens NATO. The EU model for defence cooperation that is developing will, however, be very different from that

of NATO as it comprises, for the first time in history, supranational elements. Whether this inspires NATO to look at new forms of decision-making in the future is an open question.

At the same time, one change may come from political changes within the countries. The rise of populism and nationalism linked to a growing politicization of defence may increase the volatility of decisions in the field. Defence policy has for long been a question that has hardly been discussed in politics, that is, hardly appearing as a topic in elections or a topic where the political parties would have different opinions. This may be changing and the increasing defence expenditure is one reason for the increased political debate. At the same time, nationalism also brings with it less trust in multilateralism and international organisations and less interest in spending for longer-term security concerns.

In these circumstances, more would be needed for the NATO to find the way to send an invitation to Ukraine. Instead of a bridge, the Summit might in the end serve as a stepping stone for new thoughts and new initiatives.

## The American Friend

**Carlos Gaspar**

Full Professor at UAL. Advisor at the National Defence Institute and Researcher at IPRI-NOVA.

The North Atlantic Treaty Organization (NATO) summit in Washington, which marked the seventy-fifth anniversary of the signing of the North Atlantic Treaty, is marked by the need to consolidate the cohesion of the Atlantic Alliance at a critical juncture, on the eve of the presidential election in the United States. The three main themes of the transatlantic summit were the strengthening of NATO, with an emphasis on strengthening European deterrence and capabilities

in the framework of collective defence; relations with Indo-Pacific partners, represented at the highest level in Washington; and the question of Ukraine. In all these areas, the essential thrust of the decisions was to make the most of NATO as an indispensable pillar of the order of democracies, in a framework of convergence between the allies, regardless of the differences between Hungary and Turkey.

First, Western officials wanted to underline the significant increase in the capabilities of European allies in responding to Russia's resurgence as an existential threat to their security. Burden-sharing is a factor of permanent internal tension in the Atlantic Alliance, since the United States continues to bear most of the costs of NATO, despite the fact that European allies may have the necessary means to guarantee Europe's conventional defence.

In 2014, when the North Atlantic Council set the new targets for defence spending, only three NATO states spent more than two per cent of gross domestic product on defence. Ten years later, two-thirds of the allies meet this goal: Italy, Spain and Portugal are at the tail of the Alliance, while some of the countries most exposed to Russia's strategic pressure have exceeded three percent. In 2024, NATO began to consider the old goal as the minimum that allies should spend on defense.

At the same time, on the sidelines of the summit, the United States and Germany signed the bilateral agreement that provides, for the first time since the end of the Cold War, for the installation of new US long-range strategic missiles on German territory, starting in 2026. This decision, which has the support of the Christian Democratic opposition in the Federal Republic, not only means a significant strengthening of NATO's nuclear deterrent capacity, but also

underpins the indivisibility of European and US security.

More importantly, the entry of Sweden – which participated for the first time as a member of the annual summit – and Finland, completes Northern Europe's integration into NATO and strengthens allied capabilities in a crucial sub-region. The enlargement of the Atlantic Alliance, in response to Russia's invasion of Ukraine, shows its credibility as a guarantor of collective defence and the strength of the multilateral ordering model of the community of Western democracies.

Secondly, the United States and its European allies converged in the recognition of the growing strategic interdependence between the Euro-Atlantic area and the Indo-Pacific space, expressed both in an unprecedented position against the People's Republic of China, and in the meeting between NATO, the European Union and the four Indo-Pacific partners (IP4) - Japan, South Korea, Australia and New Zealand, whose Heads of State and Government have been present at NATO summits since 2022.

The Japanese Prime Minister summed up the position of the United States' Asian allies in one sentence: 'What is happening today in Ukraine, may happen tomorrow in Asia.' Conversely, the phrase could have been said by Konrad Adenauer the day after North Korea's invasion of South Korea. In 1950, the North Korean intervention had the support of Moscow and Beijing, an alliance that has been reconstituting since Russia's invasion of Ukraine. In the Summit Declaration, for the first time, NATO denounces China for being a "decisive enabler" in supporting Russia and prolonging the war in Europe.

China has chosen the dates of the NATO summit to hold the first military maneuvers of the People's Liberation

Army (PLA) in Belarus, at the gates of Europe. Beijing has formally protested criticism of the Washington Declaration, which it considers typical of the Cold War mentality.

Thirdly, the United States and Germany confirmed the joint strategy that frames the allied position in the Russo-Ukrainian War. NATO, on the one hand, seeks to increase the political, military and financial support indispensable for Kyiv to be able to continue to resist Moscow and, on the other hand, continues to postpone the beginning of the formal process of Ukraine's entry into the Atlantic Alliance, in contrast to the European Union that has already started official talks for the accession of the largest European state. The Washington Declaration expresses support for Ukraine 'on its irreversible path towards full and complete Euro-Atlantic integration, including NATO membership', and the Secretary General said that it is not a question of if, but when Ukraine will join - the same formula that the President of the United States used thirty years ago to express his support for a future entry of Poland, the Czech Republic and Hungary into the Atlantic Alliance. However, although the text insists that the summit's decisions are 'a bridge to the accession' of Ukraine - a '*passerelle*' in the French version - the date for the start of this process and its formal framework, which should provide for a Membership Action Plan (MAP), remain to be defined.

All the decisions of the Washington summit converge on the need to ensure the permanence of the United States as NATO's indispensable ally, with the benefit of an inventory of the result of the next presidential election. All political leaders have an obligation to know that if the President of the United States had been different on February 24, 2022, nothing would have been the same,

starting with the unity of Europeans, built by their American friend.

## NATO's Washington Summit 2024: A Nordic View

**Tuomas Forsberg**

Professor, Tampere University, Finland.

NATO's Washington Summit in 2024 was the first at which Sweden attended as a full member of the Alliance and for Finland, it was the second. Both these new Nordic members of NATO can be satisfied with the summit meeting including the role they are having in the alliance. They wanted to enter a strong, not a weak alliance and find NATO's role now crucial both in its support for Ukraine as well as providing security to its members. They agree on NATO's view of Russia as the most significant and direct threat to NATO and its hardened rhetoric on China as an enabler of Russia's aggression.

Although both countries have entered the alliance only recently, the mindset from a military non-aligned country to a member of an alliance has changed quickly. Nearly 30 years of membership in the European Union and partnership with NATO that got enhanced particularly after 2014 have facilitated this shift. Public opinion in both countries demonstrate strong support for key alliance goals. According to the pre-summit survey, 83 per cent of Finns and 68 per cent of Swedes consider the Alliance to be important for the future security of their country. They are also countries that are willing to spend 2 per cent or more of their GDP to defence.

The key focus for Finland and Sweden at the Washington Summit was laid on the way they are going to be fully integrated into the alliance. In practice, the summit confirmed that both countries will be placed under the Joint Forces Command

Norfolk instead of Brunssum where they were first put. This will further facilitate Nordic defense cooperation that has been intensified since late 2000s and make full use of the new geostrategic depth in the North. Besides, it underscores the priority of both countries to preserve a strong transatlantic link in the area and take care of their security interests in the Arctic in addition to the Baltic Sea that remains of key importance to them. In conjunction of the Washington Summit, Baltic Sea states agreed to develop their cooperation on naval sea mines. The key point for Finland was also the mention that NATO presence will be developed in Finland which translates into a new NATO land command and arrangements concerning Forward Land Forces.

Another issue that both Finland and Sweden together with other allies particularly in Russia's vicinity wanted to lift up was NATO's readiness to counter diverse hybrid threats. The Summit Declaration pointed out that "hybrid operations against Allies could reach the level of an armed attack" and hence lead the Alliance to invoke Article 5. It was specially mentioned that Russia's hybrid actions, sometimes through proxies, may include "sabotage, acts of violence, provocations at Allied borders, instrumentalisation of irregular migration, malicious cyber activities, electronic interference, disinformation campaigns and malign political influence, as well as economic coercion".

Both Finland and Sweden have been steadfast supporters of Ukraine in its defensive struggle against Russia. The summit was deemed as successful in demonstrating unity in this regard, although Hungary's Victor Orban was not on board with NATO's policy. At Washington Summit, the allies agreed that they will support Ukraine militarily with at least €40 million annually

and they simultaneously announced decisions or deliveries of several aid packages to strengthen particularly Ukraine's air defence. But the level of the Alliance's military assistance to Ukraine could have been higher and, more importantly, NATO's commitment to long-term support on this level, in line with the slogan "as long as it takes", was not fully reaffirming.

While both Finland and Sweden were firmly advocating more military assistance to Ukraine, they were not among those who first would invite Ukraine to NATO as a full member of the alliance despite being committed to Ukraine's NATO membership as a future political goal that was deemed as irreversible in the Summit Declaration. Both countries, as new members, fully support NATO's open-door policy and they have concluded a bilateral security cooperation agreement with Ukraine, thereby building a bridge for Ukraine's NATO membership. However, both Finland and Sweden are wary of taking any swift steps towards Ukraine's full membership at least as long as the war continues.

Although NATO's Washington Summit was successful in demonstrating unity and purpose of the Alliance, commentators could not avoid discussing the elephant in the room, namely the repercussions of the possible or even likely return of Donald Trump as the US president in 2025. At the same time, despite Finland and Sweden having not only joined the Alliance but strengthened their bilateral relationship with the US by concluding defence cooperation agreements, there is much more uncertainty than ever before on the future US commitment to defend its European allies. Once often skeptical about the role of the US in world politics in general, even the Finnish and Swedish publics that used to support military non-alignment and a kind of equidistance to the superpowers have now adopted a much more favourable view of the US.

The Nordic state leaders, Finland's President Alexander Stubb and Sweden's Prime Minister Ulf Kristersson, were hopeful in their public statements that the alliance will remain strong also in the future independently of who will be the next US president, but underneath, worries exist. For Finland and Sweden, NATO membership has been regarded as an important step to boost their security and stabilize Northern Europe in face of Russia's aggressive behavior. Yet, NATO membership is only one layer in the dense network of various bilateral and multilateral defence arrangements that have been developed not in competition but in cooperation with NATO along with national defence.

## Critical Infrastructure Protection

**Daniel Fiott**

Head of the Defence and Statecraft Programme at the Centre for Security, Diplomacy and Strategy (CSDS), Vrije Universiteit Brussel

As one would expect, the communiqué from the Washington NATO Summit covered all of the major issues facing the alliance after 75 years of its existence. Yet, although most of the attention has focused on how the alliance is dealing with the war on Ukraine and European security, it is easy to overlook NATO's continued work on critical infrastructure protection. Indeed, the summit communiqué contains all of the right political messages on the threats faced by the alliance in terms of hybrid warfare, the cyber and space domains and ensuring the protection of critical undersea infrastructure. The communiqué also stresses the importance of critical infrastructure for NATO's ability to sustain and supply forces – thus rightfully linking critical infrastructure with military logistics.

NATO leaders made clear that one core way of enhancing critical infrastructure protection is to boost resilience by 'increasing the Alliance's collective

awareness, preparedness and capacity across all hazards and in all domains'.<sup>1</sup> The Alliance also made clear that the risks to critical infrastructure protection come from state and non-state actors and that any attack on the Alliance's critical infrastructure could give cause to invoke Article 5 of the Washington Treaty. From the perspective of deterrence, this is an important message for NATO to keep reiterating to adversaries and rivals.

Nevertheless, after the Washington Summit serious work will be needed to enhance NATO's approach to critical infrastructure protection. For one thing, the Alliance places a great deal of importance on strengthening its ability to deter, detect and respond to threats to critical infrastructure. It is not hard to see why this approach is essential. Estonia was struck by a nationwide cyberattack in 2007, China is seeking to control large parts of Europe's telecommunications and electric vehicle sectors and the Nordstream II and Balticconnector pipelines were struck too. It is no surprise that critical infrastructure protection has become increasingly important for NATO, not least as such infrastructure are vital for Euro-Atlantic security. Although infrastructure such as digital networks, cables, pipelines and satellites have long been seen as the basis for globalisation, today we need to see them more as the fundamental building blocks and arteries of Western power.

However, NATO is coming to understand that such infrastructure is "vulnerable by design" – it is this inherent vulnerability that makes infrastructure "critical". Yet, our understanding of critical infrastructure and what it means to protect it, is still in its early stages. Responding to vulnerabilities in critical infrastructure is made harder by at least four factors. First, the geographical vastness involved in certain infrastructure. For example, Norway's total gas pipeline network amounts to nearly 9,000 kms when put together.<sup>2</sup> Second, the complexity



of technology systems – the US Naval Institute estimates that approximately US\$10 trillion in transactions are made using digital undersea cables each day.<sup>3</sup> Third, the importance of critical raw materials and components – one consultancy claimed that the average car in 2022 contained up to US\$ 500 worth of semiconductor chips.<sup>4</sup> Finally, intra- and inter-sectoral vulnerabilities which can be summed-up as the legal, regulatory and technological gaps that appear in and between infrastructure sectors.

NATO is becoming increasingly aware of these intricacies. In 2016, the Alliance agreed on 7 Baseline Requirements for enhancing resilience including the need to protect communications, energy and transportation systems, as well as ensuring the continuity of government services. The Alliance is also increasing its focus on detection and awareness: in May 2024, NATO established a “Maritime Centre for the Security of Critical Undersea Infrastructure” at NATO Maritime Command (MARCOM) in Northwood, United Kingdom<sup>5</sup>. In the same month, NATO convened the first meeting of the “Critical Undersea Infrastructure Network” that it created.<sup>6</sup> These steps should be applauded, but there is no escaping the fact that the Washington Summit was a missed opportunity to underline the importance of NATO-EU cooperation in critical infrastructure protection.

As the major guarantor of Europe’s economic security, the years ahead will demand much closer EU-NATO cooperation in core areas like energy, transport, banking, health, the digital sector, space and more. Only the EU has the regulatory and financial muscle to ensure critical infrastructure protection in Europe (e.g. EU Chips Act, 5G Toolbox, Cybersecurity Act and more), even if member states and allies ultimately remain on the frontline. True, the Alliance and the EU are already working together on critical infrastructure: they created

a “Task Force on Resilience of Critical Infrastructure” in January 2023 and a first assessment report of the task force was published in June 2023. Yet this is not ambitious enough.

In the years ahead, NATO and the EU need to jointly invest in a far more ambitious outreach strategy to the business community – economic operators are literally on the frontline of critical infrastructure protection, but they are not even name-checked at major summits. Only by working with economic operators can NATO and the EU jointly understand the technological and regulatory risks involved in multiple sectors. Both NATO and the EU repeat the “whole-of-society” or “whole-of-government” mantras frequently, but they are not yet necessarily living up to this logic in their own relations. This must change if the Alliance and Union are really serious about protecting critical infrastructure.

## References

<sup>1</sup> NATO, “Washington Summit Declaration”, 10 July 2024. See: [https://www.nato.int/cps/en/natohq/official\\_texts\\_227678.htm?selectedLocale=en](https://www.nato.int/cps/en/natohq/official_texts_227678.htm?selectedLocale=en).

<sup>2</sup> “The Oil and Gas Pipeline System”, *Norwegian Petroleum*. See: <https://www.norskpetsroleum.no/en/production-and-exports/the-oil-and-gas-pipeline-system/#:~:text=in%20the%20UK,-,The%20total%20length%20of%20the%20Norwegian%20gas%20pipeline%20network%20is,the%20neutral%20and%20independent%20operator>.

<sup>3</sup> Long, M.L., “Information Warfare in the Depths: An Analysis of Global Undersea Cable Networks”, *US Naval Institute*. See: <https://www.usni.org/magazines/proceedings/2023/may/information-warfare-depths-analysis-global-undersea-cable-networks>.

<sup>4</sup> Jiravachara, P. “How Semiconductor Plays as a Crucial Element for Economy”, *Deloitte*, March 2022. See: <https://www2.deloitte.com/th/en/pages/about-deloitte/articles/semiconductor-eng.html>.

<sup>5</sup> NATO, “NATO officially launches new Maritime Centre for Security of Critical Undersea Infrastructure”, 28 May 2024. See: <https://mc.nato.int/media-centre/news/2024/nato-officially-launches-new-nmcscui>.

<sup>6</sup> NATO, “NATO holds first meeting of Critical Undersea Infrastructure Network”, 23 May 2024. See: [https://www.nato.int/cps/en/natohq/news\\_225582.htm](https://www.nato.int/cps/en/natohq/news_225582.htm).

## NATO’s Digital Transformation: No Leap Forward, Just Strong Pledge

**Artur Gruszczak**

Professor, Chair of National Security, Jagiellonian University in Krakow

Over the past 75 years NATO has pursued a strategy of technological advancement aiming to gain substantial military leverage in the context of the Alliance’s core purposes. Technology has been considered as a key component of a credible defence and deterrence posture and as an enabler for transformation. However, the past two decades saw stagnation in research, development and implementation (R&D&I) endeavours that would lead to the emergence and advancement of military and dual-use technologies aiming to increase and enhance the Alliance’s offensive and defensive capabilities. The Washington Summit upheld the commitment to defence innovation through the development of industrial capacity and acceleration of digital transformation.

Digital transformation was introduced to a strategic debate in the late 2010s. It was intended to strengthen NATO multi-domain operations. It addressed the digitalization of defence, connectivity

and interoperability, data-driven frameworks, C4ISR architecture, and digital leadership. The Strategic Concept adopted at the Madrid Summit in 2022 stipulated that NATO “will expedite [...] digital transformation, adapt the NATO Command Structure for the information age and enhance [...] cyber defences, networks and infrastructure.” The 2022 Strategic Concept addressed risks, challenges and opportunities generated mostly by emerging and disruptive technologies (EDTs) in the context of the changing nature of conflicts, their impact on the evolution of warfare and on the global strategic balance.

At the Washington Summit it was underlined that NATO has been making constantly and progressively endeavours to accelerate innovation and improve technology adoption. NATO remains utterly determined to maintain the military-technological edge, being an essential enabler of the Allies’ ability to deter and defend against challengers and adversaries. Experimentation, more rapid adoption of emerging technologies, and overarching digital transformation are among NATO’s defence innovation priorities. It is quite telling that the Washington Summit Declaration contains direct reference to a revised Artificial Intelligence Strategy and new Quantum and Biotechnology Strategies, documents which provide selected highly sensitive technologies with a framework for responsible R&D&I activities and thus promote principles of their responsible use. It is important to highlight that artificial intelligence (AI), quantum technologies, as well as biotechnology and human enhancement (BHE) technologies, belong to those categories of EDTs that most probably will transform the state, economy and society, exerting a tremendous impact on security and defence.

The Summit reaffirmed strong support for the two key projects aiming to enable a ‘digital leap’ in Euro-Atlantic defence R&D&I sector. First, it is the

Defence Innovation Accelerator for the North Atlantic (DIANA), a civil-military project that zooms in on cutting-edge EDTs, including: artificial intelligence, big-data processing, quantum-enabled technologies, autonomous systems, human enhancement solutions and novel materials. It started in early 2022, shortly after Russia’s full-scale invasion of Ukraine, and currently constitutes a network of more than 200 affiliated accelerator sites and test centres. So far five pilot projects have been launched, looking forward to achieve full operability in 2025. Second, it is NATO Innovation Fund, a civil-military multi-sovereign venture capital fund, where 24 Member States support innovative undertakings working on dual-use EDTs in areas key to the Allies’ security. So far, NATO Innovation Fund declared to invest 1 billion euros in start-ups and to foster technological cooperation.

In Washington, Heads of State and Government affirmed their commitment to further invest in civil-military innovation ecosystems. Moreover, they endorsed a new NATO Industrial Capacity Expansion pledge seeking to expedite transatlantic cooperation in order to strengthen and further defence industrial capacity and production in Member States. Corresponding with the rise in military spendings across the Alliance, partly due to the increasing commitment to meet the two percent target, and because of the growing demand on armaments delivered to Ukraine for its defence against Russia’s invasion, the pledge embraces diverse long-term initiatives and actions. They concern in the first place national plans to strengthen industrial capacity yet they also seek to facilitate and invigorate international cooperation within the Alliance and with NATO’s partners, through the elimination of barriers to trade and investment, implementation of interoperability standards, and expedition of multinational procurement.

They also emphasise the relevance of securing defence-critical supply chains and protecting them from the hostile influence and disruption.

The Washington Summit has not neglected the Alliance’s digital transformation. Heads of State and Government reaffirmed their backing for this ambitious yet demanding and intricate project. They underlined the relevance of technological modernization, optimization and transformation which should help NATO strengthen its ‘digital backbone’ to improve the Alliance’s communications and information infrastructure and make it more efficient, interoperable and resilient. However, this project raises certain concerns about the responsible use of cutting-edge emerging and disruptive technologies, especially regarding ethical, legal, societal, political, economic and environmental matters. Moreover, as Simona Soare pointed out, its implementation is hampered by “the long time frames for digital transformation (into the 2030s), the lack of progress in crucial procedural components (not least procurement and budgetary alignment), challenges around data sovereignty and accessibility, and persistent underinvestment in digital capabilities for defence across Europe.” These dilemmas were elegantly circumvented in statements of NATO officials and delegates from Member States.

The Alliance must strike the right balance between risks and threats, on the one side, and opportunities and benefits, on the other side. Efforts at mitigating risks while maximising chances for a qualitative technological leap will be yet another test and task for the Alliance in coming years if not decades.