

The Secretary General's
Annual Report

2023

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# FOREWORD





Press conference with NATO Secretary General Jens Stoltenberg and Ukrainian President Volodymyr Zelenskyy. Kyiv, Ukraine, April 2023.

The most important lesson from the war in Ukraine is that North America and Europe must stand together. In a more dangerous world, we need our transatlantic Alliance more than ever. Without NATO, there is no security in Europe.

Opening remarks by NATO Secretary General Jens Stoltenberg at the Munich Security Conference. Munich, Germany, 18 February 2023.

Russia's war of aggression against Ukraine rages on, there is a new war in the Middle East, and Allies face greater competition from authoritarian states, including China. In addition, we still face a range of other threats to our security, including terrorism, cyber attacks and climate change. The world has become more dangerous, but NATO is stronger.

In 2023, NATO grew bigger and more capable. Finland became a NATO Ally, and we have just welcomed Sweden as well. We continued to strengthen our defences. At our Summit in Vilnius, we agreed robust new plans to defend every inch of Alliance territory. These plans are backed by hundreds of thousands of troops and highly capable air and naval forces at a high state of readiness – and with eight battlegroups on our eastern flank, stretching from the Baltic to the Mediterranean Sea, scalable to brigade size.

In 2023, defence spending increased by an unprecedented 11% across Europe and Canada. Since we agreed the Defence Investment Pledge in 2014, European Allies and Canada will have spent more than USD 600 billion extra on defence. In 2024, we expect two-thirds of Allies to meet or exceed the target of investing 2% of Gross Domestic Product in defence. At the Vilnius Summit, we agreed the Defence Production Action Plan, to ramp up production and replenish our stocks of weapons and ammunition. Billions of dollars of contracts have already been signed with defence industry. This will mean more security for Allies, more supplies for Ukraine, and more highly skilled jobs across Europe and North America.

In addition to strengthening our own collective defence, NATO continues to support Ukraine. Ukraine must prevail as an independent, sovereign

nation. If Putin wins, this would send a dangerous message to authoritarian leaders around the world that they can achieve their objectives through war and violence. Supporting Ukraine is not charity, it is in our own security interest.

At the Vilnius Summit, we brought Ukraine closer to NATO than ever before. We established the NATO-Ukraine Council where we meet to discuss and take decisions on our common security interests, as equals. We are helping to transition Ukraine from Soviet-era to NATO equipment and standards. We have also removed the requirement for a Membership Action Plan, significantly shortening Ukraine's path to membership. All Allies agree that Ukraine will become a member of NATO.

China is watching our actions closely. China does not share our values, it challenges our interests, and Beijing is increasingly aligned with Moscow. We will continue to trade and engage with China, but we must manage the risks and prepare for enduring competition.

NATO is a regional alliance that faces global challenges, so our partnerships around the world are essential for our security. We continue to work closely with the European Union on a wide range of security issues. We are also deepening our

cooperation with our partners in the Indo-Pacific – Australia, Japan, New Zealand and the Republic of Korea – and I have appointed a group of experts to review NATO's approach to our southern neighbourhood.

2024 marks the 75<sup>th</sup> anniversary of the NATO Alliance. In all those years, the bond between Europe and North America has kept our nations secure and our people safe. At the Washington Summit in July, we will send a powerful message of unity, solidarity and resolve – to prevent war and preserve peace.

Jens Stoltenberg NATO Secretary General



#### Why NATO Was Founded

The North Atlantic Treaty Organization was founded in 1949 in the aftermath of the Second World War. Its purpose is to safeguard the freedom and security of all its members by military and non-military means. The principle of collective defence is central to NATO's founding document – the North Atlantic Treaty. This principle, enshrined in Article 5 of the Treaty, binds NATO Allies together, declaring an armed attack against any one of them 'an attack against them all'. NATO strives to secure a lasting peace in Europe, based on common values of democracy, individual liberty, human rights and the rule of law.

#### **NATO Member States**

In 2023, NATO's Allies represent one billion people and roughly half the world's economic and military might. Together, NATO Allies are stronger and safer together than they would be alone.

Twelve founding members signed the North Atlantic Treaty in 1949: Belgium, Canada, Denmark, France, Iceland, Italy, Luxembourg, the Netherlands, Norway, Portugal, the United Kingdom and the United States.

The Treaty also allows for other European countries to join the Alliance, if all existing Allies agree. Any prospective member is required to share NATO's core values and have the capacity and willingness to contribute to security in the Euro-Atlantic area.

Since 1949, a further 20 countries have joined NATO: Greece and Türkiye (1952), Germany (1955), Spain (1982), Czechia, Hungary and Poland (1999), Bulgaria, Estonia, Latvia, Lithuania, Romania, Slovakia and Slovenia (2004), Albania and Croatia (2009), Montenegro (2017), North Macedonia (2020), Finland (2023) and Sweden (2024).

In 2022, Finland and Sweden submitted official letters of application to become NATO Allies. In July of that year, after completing accession talks, NATO Allies signed the Accession Protocols for both countries, which then became Invitees with the right to attend NATO meetings. After Allies had ratified Finland's Accession Protocol according to their national procedures, Finland became NATO's 31st member country in April 2023. At the time of printing, the accession process for Sweden was also complete.

#### NATO's 2022 Strategic Concept

Alongside the North Atlantic Treaty, the Strategic Concept is NATO's second most important guiding document. It reaffirms NATO's values and purpose, and provides an overall assessment of the security environment. It also shapes and drives NATO's strategic adaptation and its future political and military development. NATO Leaders endorsed the current Strategic Concept - which will guide the Alliance through the next decade and beyond - at the 2022 Madrid Summit.

The 2022 Strategic Concept recognises that the Euro-Atlantic area is not at peace, stating instead that the Alliance's security environment is characterised by strategic competition, pervasive instability and recurrent shocks. Russia and terrorism represent the two main threats to Allied security. The Strategic Concept also recognises that the People's Republic of China's (PRC) stated ambitions and coercive policies challenge Allied interests, security and values, and it further identifies a number of security challenges that the Alliance needs to tackle, including responding to climate change as a defining challenge of our time with profound impacts on Allied security.

The Strategic Concept establishes three core tasks for NATO: deterrence and defence; crisis prevention and management; and cooperative security. These tasks are essential and complementary to ensure NATO can fulfil its main purpose: to ensure the collective defence and security of all Allies.

The Concept reiterates that the transatlantic bond between Allied countries from Europe and North America remains key to Allied security. NATO is the unique, essential and indispensable transatlantic forum for consulting, coordinating and acting on all matters related to Allied individual and collective security.



Treaty



Spain

















#### For Those Who Serve

NATO's ambitions, clearly expressed in the North Atlantic Treaty, are simple: 'to safeguard the freedom, common heritage and civilisation of [its] peoples, founded on the principles of democracy, individual liberty and the rule of law'.

Achieving that mission since the signing of the Treaty in 1949 has required immense hard work and sacrifice.

In 2023, the security and freedom of NATO's one billion citizens continued to rely on the endeavours of the Alliance's soldiers, sailors and aircrew. Their willingness to put themselves in harm's way on our behalf, day after day, is an extraordinary gift. Whether it is patrolling the North Atlantic Ocean, NATO's land borders or the skies over the Alliance's eastern flank, their skill and professionalism make peace and security possible.

There can be no security without strong defences. And no strong defences without capable armed forces.

As we prepare for the Alliance's 75<sup>th</sup> anniversary, and at a time of great change, the men and women of our armed forces are what allow us to look to the future with confidence. Without them, there would be no NATO.

We thank them and honour them.





# NATO IN 2023

## ADAPTING AT A CRITICAL TIME

VILNIUS SUMMIT | SOMMET

11-12 VII 2023



We will not let authoritarian states break down the rules-based international order. We will support Ukraine for as long as it takes. And we will not let terrorists crush our free and open societies. We will stand united to protect our values and our people.

Remarks by NATO Secretary General Jens Stoltenberg at the ceremony at the Memorial for the 22 July 2011 Acts of Terrorism. Oslo, Norway, 31 May 2023.

2023 was a challenging but successful year for the Alliance. NATO welcomed its 31st Ally, Finland, and took important decisions to strengthen the Alliance's collective defence and adapt to the new security reality.

In 2023, Moscow continued its brutal war of aggression against Ukraine, bringing violence and death to the heart of Europe while, at the same time, seeking to divide NATO. In doing so, it underestimated both the determination of the people of Ukraine and Allied unity. Ukraine has steadfastly defended its population, and liberated more than half of the territory occupied by Russia in the early stages of the war.

Throughout 2023, Allies have been unwavering in their solidarity with Ukraine. Together with the majority of members of the United Nations, they remain fully committed to Ukraine's sovereignty, independence and territorial integrity within its internationally recognised borders. During his visits to Kyiv in April and September, the Secretary General agreed on the importance of a just and sustainable peace, and reaffirmed that NATO stands with Ukraine, now and for the long term. NATO has continued to support Ukraine's right to self-defence and brought Ukraine closer to NATO, with strengthened political relations and enhanced practical support.

#### Shattered Peace: Responding to Russia's Aggression

NATO tried to build a partnership with Russia for decades. Over the past decade, however, Russia has continuously violated the norms and principles that have contributed to a stable and predictable European security order. Russia's brutal and illegal war of aggression against Ukraine, launched in February 2022, has shattered the hard-earned peace in Europe.

As NATO's 2022 Strategic Concept makes clear, the Russian Federation is the most significant and direct threat to Allies' security, and to peace and stability in the Euro-Atlantic area. Russia seeks to establish spheres of influence and direct control through coercion, subversion, aggression and annexation. It uses conventional, cyber and hybrid means against NATO and its partners. Its coercive military posture, rhetoric and proven willingness to use force to pursue its political goals undermine the rules-based international order. The Russian Federation is modernising its nuclear forces and expanding its novel and disruptive dual-capable delivery systems, while employing coercive nuclear signalling. It aims to destabilise countries to our East and South. In the High North, its capability to disrupt Allied reinforcements and freedom of navigation across the North Atlantic is a strategic challenge to the Alliance. Moscow's military build-up, including in the Baltic, Black and Mediterranean Sea regions, along with its military integration with Belarus, challenge the Alliance's security and interests.

In light of its hostile policies and actions, NATO cannot consider Russia to be a partner. Any change in the relationship depends on Russia halting its aggressive behaviour and fully complying with international law. NATO remains willing to keep open channels of communication with Moscow to manage and mitigate risks, prevent escalation and increase transparency. NATO does not seek confrontation and poses no threat to Russia.

At the Vilnius Summit in July, Allies agreed to continue to consult on and assess the implications of Russia's policies and actions for Allied security, and respond to Russian threats and hostile actions in a united and responsible way.

## The Vilnius Summit: An Enduring Bond

On 11-12 July 2023, NATO Leaders gathered in Vilnius, Lithuania to take important decisions on the Alliance's future – including how best to continue NATO's adaptation to the new security environment. In doing so, they built on the historic decisions taken a year earlier at the NATO Summit in Madrid.

NATO Leaders took major steps to strengthen Allied deterrence and defence; enhance resilience and protect critical infrastructure; adapt to emerging security challenges; and reinforce cooperation with partners in the Indo-Pacific region.

## Stronger, Safer: The Alliance's Deterrence and Defence

At the Vilnius Summit, Allied Leaders agreed to implement the largest reinforcement of collective defence in a generation, enhancing NATO's ability to defend all Allies in every domain: land, maritime, air, cyberspace and space. Given major changes to NATO's security environment in recent years – and the Alliance's renewed focus on deterrence and defence – Allies agreed to an updated and strengthened set of regional defence plans.

To execute the plans – the most comprehensive since the end of the Cold War – Allies are transforming the NATO Response Force and increasing the number



NATO's relevance to global security skyrocketed in 2023. Our team helped ramp up support to Ukraine, implement new defence plans, safeguard security in the Balkans and enhance our response to terrorism.

#### Tom Goffus (United States)

Assistant Secretary General, Operations Division NATO Headquarters, Brussels, Belgium

of high-readiness forces to well over 300,000. NATO is also boosting its ability to reinforce its forces, including with more pre-positioned equipment, more forward-deployed capabilities such as air defence, and strengthened command and control.

NATO is ready, willing and able to defend every inch of Allied territory. To that end, NATO Leaders agreed to strengthen the NATO Command Structure to ensure that it is sufficiently agile, resilient and well-staffed to execute its new defence plans.



Leaders also agreed a new Defence Investment Pledge, making an enduring commitment to investing at least 2% of Gross Domestic Product (GDP) annually in defence, and affirming that in many cases expenditure beyond 2% of GDP will be needed in order to remedy existing shortfalls and respond to a more contested security order.

Leaders also endorsed a new Defence Production Action Plan to accelerate joint procurement, boost production capacity, and increase Allied interoperability. Allies are further increasing their stockpiles of munitions and equipment and prepositioning them, informed by the longstanding NATO Defence Planning Process, and in turn providing industry with the long-term certainty it needs to be able to boost production.

#### **Boosting Support for Ukraine**

#### Elevating Political Dialogue with Kyiv

Allied Leaders took landmark decisions at the Vilnius Summit to strengthen political and practical support for Ukraine. Leaders reaffirmed that the security of Ukraine is of great importance to Allies: a strong, independent Ukraine is vital for the stability of the Euro-Atlantic area. The full-scale war of aggression against Ukraine that Russia launched on 24 February 2022 represents the gravest threat to Euro-Atlantic security in decades.

In full support of Ukraine's right to choose its own security arrangements, Allied Heads of State and Government stated that Ukraine's future is in NATO.



In 2023, I contributed to the development of the Defence Production Action Plan, subsequently endorsed at the Vilnius Summit. I'm proud to have been involved in this important and enduring project.

#### Béatrice Lurquin (Belgium)

Officer, Policy, Plans and Partnerships Section,
Defence Investment Division
NATO Headquarters, Brussels, Belgium

Ukraine has become increasingly interoperable and politically integrated with the Alliance, and has made substantial progress on reforms. Allies recognised that Ukraine's path to full Euro-Atlantic integration has moved beyond the need for the Membership Action Plan, and have therefore decided to waive this requirement, simplifying Kyiv's path to membership. In November, the Allies recommended priority reforms for Ukraine's adapted Annual National Programme. The Alliance is committed to supporting Ukraine in making these reforms on its path towards future membership and to regularly assessing progress. Allies will be in a position to

President of Türkiye Recep Tayyip Erdoğan, President of Ukraine Volodymyr Zelenskyy, Prime Minister of the United Kingdom Rishi Sunak and President of the United States Joe Biden at the inaugural session of the NATO-Ukraine Council at the Vilnius Summit. Vilnius, Lithuania, July 2023,





Supreme Allied Commander Transformation General Philippe Lavigne with NATO Secretary General Jens Stoltenberg and Ukraine's Minister of Defence Rustem Umerov on the sidelines of the NATO-Ukraine Council at NATO Headquarters. Brussels, Belgium, October 2023.

extend an invitation to Ukraine to join the Alliance when they agree and conditions are met.

Allies and Ukraine have established the NATO-Ukraine Council, a new joint body where Allies and Ukraine sit as equal members to advance political dialogue, cooperation, and Ukraine's membership aspirations. Its crisis consultation mechanism was first invoked in July, when Russia unilaterally withdrew from the Black Sea Grain Initiative and launched missile strikes aimed at stopping Ukraine's agricultural exports, on which hundreds of millions of people worldwide depend. The NATO-Ukraine Council became fully operational in the second half of 2023, with Defence and Foreign Ministers meeting in the new format, and with the establishment of a committee structure to support dialogue and joint action in areas such as

Euro-Atlantic security, defence capacity building, interoperability, resilience, innovation and strategic communications.

#### **Enhancing Practical Support**

Heads of State and Government have directed NATO to assist Ukraine by expanding NATO's Comprehensive Assistance Package for Ukraine into a multi-year programme. This multi-year programme will continue to deliver on immediate assistance needs for the war in Ukraine, while undertaking longer-term projects designed to assist Ukraine with its post-war recovery. NATO has developed a long-term, multi-year strategy for the Comprehensive Assistance Package, leading to numerous projects to bolster the strength and resilience of Ukraine's defence and security sector.

These long-term projects are broadly focused along three lines of effort: recovery and reconstruction, institutional transformation, and transitioning Ukraine towards interoperability with NATO.



A Ukrainian soldier fires a rifle under the supervision of a Norwegian Army instructor. United Kingdom, April 2023.

The Package's multi-year work strands are developed based on input from Ukraine itself and have identified the following priorities:

- 1) Increasing interoperability;
- 2) Establishing a NATO-Ukraine Joint Allied Training and Education Centre;
- 3) Rebuilding damaged military infrastructure (including three training sites);
- 4) Demining Ukrainian territory and strengthening Ukraine's own demining capabilities;
- 5) Defence procurement reform;
- 6) Rehabilitation of injured veterans and reintegration of veterans into civilian life.



Russia's invasion of Ukraine has triggered a global security crisis. It's been an honour to contribute to NATO's support for Ukraine alongside my colleagues on the Comprehensive Assistance Package.

#### Dr Svitlana Kobzar (Belgium)

Officer, Comprehensive Assistance Package for Ukraine, Operations Division NATO Headquarters, Brussels, Belgium

#### **NATO's Practical Support for Ukraine at a Glance**

As Ukraine exercises its right to self-defence, enshrined in Article 51 of the United Nations Charter, NATO Allies have provided unprecedented support.

Thanks to considerable financial support from Allies and partner countries, NATO has taken on a crucial role providing non-lethal assistance to Ukraine. This support takes the form of short-term material assistance and longer-term projects designed to rebuild the Ukrainian defence and security sector, helping Ukraine in its transition towards interoperability with NATO.

NATO has delivered assistance since the beginning of Russia's war of aggression. This support is typically based on urgent requirements identified by Ukraine, which are then communicated to NATO. In 2023, the Comprehensive Assistance Package and its Trust Fund coordinated the delivery of EUR 117 million in nonlethal material aid to Ukraine. An additional EUR 117 million worth of material aid is under contract and will be delivered to Ukraine in the near future.

Aid delivered in 2023 included fuel, medical kits, counter-drone systems, chemical, biological, radiological and nuclear protective equipment, Starlink systems, shelters, power generators and bridging systems. By repurposing the Afghan National Army Trust Fund, Allies and partners transferred around USD 24 million to the Comprehensive Assistance Package Trust Fund and provided Ukraine with EUR 10 million in-kind contributions of equipment, including clothing and medical supplies.

The Comprehensive Assistance Package also continued to coordinate NATO's medium- and long-term assistance to Ukraine. The medium- and long-term efforts – defined as requiring between two and five years for completion - support Ukraine's efforts to transform its defence and security sector, moving away from Soviet-era systems towards NATO standards. Projects are developed in close coordination with Ukraine, and implemented thanks to substantial financial and political support from Allies and partners.

#### Military Rehabilitation Centres

NATO, through its Comprehensive Assistance Package, in cooperation with the UK Ministry of Defence, has undertaken a project to establish medical rehabilitation centres across Ukraine. Through this project, a pre-war medical centre damaged during the hostilities was restored and transformed into a rehabilitation centre. In October, the first patients – all wounded veterans – were admitted for treatment. By the end of year, the centre was able to treat roughly 300 veterans at any one time. The next phase of the project involves identifying and upgrading four more sites as a step towards creating a nationwide network of rehabilitation centres – centres which will be able to train the next generation of doctors and surgeons, in turn helping to create a strong and sustainable military healthcare system.

#### **NATO-Ukraine Innovation Cooperation**

NATO and Ukraine have also made good progress on innovation. In May, NATO hosted the first NATO-Ukraine High-Level Innovation Dialogue with Mykhailo Fedorov, Ukraine's Deputy Prime Minister for Innovation, Education, Science and Technology Development. This event marked the beginning of a new phase of cooperation. In November, Allied Foreign Ministers agreed to establish innovation and emerging and disruptive technologies as one of the pillars of cooperation between NATO and Ukraine under the NATO-Ukraine Council.



Mykhailo Fedorov, Deputy Prime Minister of Ukraine for Innovation, Education, Science and Technology Development, and David van Weel, NATO Assistant Secretary General for Emerging Security Challenges, at the launch of the NATO-Ukraine High-Level Innovation Dialogue. Brussels, Belgium, May 2023.

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#### Preparing for a World of Strategic Competition

At the Vilnius Summit, Allies also took steps to continue preparing NATO for a world of rising strategic competition. In order to boost resilience, Allies agreed the 2023 Alliance Resilience Objectives, building on the 2021 Strengthened Resilience Commitment. These new objectives are designed to strengthen NATO and Allied preparedness against strategic shocks and disruptions, boost the ability to ensure continuity of government and essential public services, and facilitate civil support to military operations. Allies will also use the objectives to shape their own national goals and implementation plans.

The threat to critical undersea infrastructure is real and developing. Subsea data and energy cables are potentially as vulnerable as they are vital. For that reason, Allied Leaders agreed to establish NATO's Maritime Centre for the Security of Critical Undersea

Infrastructure within NATO's Maritime Command in Northwood, United Kingdom. Leaders also agreed to set up a network that brings together NATO, Allies, the private sector and other relevant actors to improve information-sharing and exchange best practices. NATO continued to work closely with the European Union, through the NATO-EU Task Force on the Resilience of Critical Infrastructure.

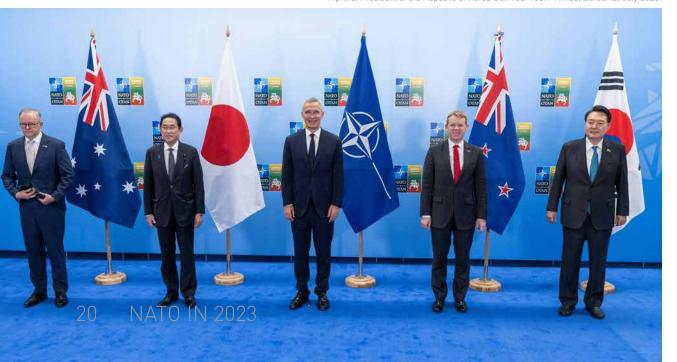
The ability to detect, prevent and respond to malicious cyber activities is as important as ever — which is why Allies strengthened their commitment to NATO's Cyber Defence Pledge, with ambitious new goals to boost national cyber defences. They also launched NATO's new Virtual Cyber Incident Support Capability to support national mitigation efforts in response to significant malicious cyber activities.

## Addressing Cross-Regional Challenges in the Indo-Pacific and in NATO's Southern Neighbourhood

The Indo-Pacific remains an important focus for NATO; developments in the region can directly affect Euro-Atlantic security. Allies welcomed Heads of State and Government from NATO's four Indo-Pacific partners – Australia, Japan, New Zealand and the Republic of Korea – to the Vilnius Summit. This was the second time they have participated in a NATO summit (after the 2022 Madrid Summit). The four partners share the Alliance's commitment to

international law and the rules-based international order, and make a significant contribution to security in the Euro-Atlantic area, including through their support to Ukraine. NATO pledged to further strengthen dialogue and cooperation with its partners in the Indo-Pacific, including on cyber defence, new technologies, maritime security, climate change and countering disinformation.

NATO Secretary General Jens Stoltenberg (centre) with the Heads of State and Government of NATO's partners from the Indo-Pacific region: from left to right, Prime Minister of Australia Anthony Albanese, Prime Minister of Japan Fumio Kishida, Prime Minister of New Zealand Christopher Hipkins, President of the Republic of Korea Suk Yeol Yoon. Vilnius, Lithuania, July 2023.



#### NATO and the People's Republic of China

NATO and the People's Republic of China (PRC) are not partners. The Alliance does not consider the PRC an adversary and remains open to constructive engagement.

NATO's Strategic Concept makes clear that Allies consider the PRC's stated ambitions and coercive policies a challenge to Allied interests, security and values. At the Vilnius Summit, NATO Leaders addressed the PRC's opaque military developments, technological advances, malicious cyber and hybrid activities, confrontational rhetoric and disinformation.

Allies are also aware of the potential security implications of supply-chain disruptions. As the war in Ukraine has demonstrated Allies' dangerous dependence on Russian gas, NATO is working to assess potential dependence on other assertive authoritarian regimes for sustaining NATO's supply chains, technology or infrastructure. Allies are working to reduce strategic vulnerabilities, and manage associated risks. NATO will continue to defend the rules-based order – a global system based on international law, norms and values, not force.

The Alliance is working to address challenges posed by the PRC to Euro-Atlantic security. In line with the Strategic Concept, Allies are boosting their shared awareness, enhancing their resilience and preparedness, and protecting against the PRC's coercive tactics and efforts to divide the Alliance. The deepening strategic partnership between the PRC and Russia remains concerning and runs counter to Allied values and interests. The Alliance has continued to call on the PRC to play a constructive role as a permanent member of the United Nations Security Council, to condemn Russia's war of aggression against Ukraine, to abstain from supporting Russia's war effort in any way, to cease amplifying Russia's false narrative blaming Ukraine and NATO for Russia's war of aggression against Ukraine, and to adhere to the purposes and principles of the United Nations Charter.

In 2023, NATO continued to engage with the PRC, including through a meeting between the Chair of the NATO Military Committee, Admiral Rob Bauer, and senior political and military officials from the PRC on the margins of the Shangri-La Dialogue in Singapore. A number of exchanges also took place between officials on subjects such as arms control, disarmament and non-proliferation, and Russia's war against Ukraine.

In Vilnius, NATO Leaders also addressed threats and challenges from the Alliance's southern neighbourhood, including the Middle East and North Africa and the Sahel regions. Insecurity in these regions has a direct impact on the security of all Allies, too often allowing the proliferation of terrorist groups and destabilising and coercive interference by strategic competitors. Allies launched a deep and

comprehensive reflection on existing and emerging threats and challenges in NATO's southern neighbourhood. An independent group of experts was established in October to analyse challenges and opportunities for engagements with NATO partners, international organisations and other relevant actors in the region.



# DETERRENCE AND DEFENCE





Finnish artillery units fire howitzers during exercise Northern Forest. Rovajärvi, Finland, May 2023

## There should be no doubt that NATO is ready, willing and able to defend every inch of Allied territory.

Joint press conference by NATO Secretary General Jens Stoltenberg with President of Latvia Edgars Rinkēvičs. Brussels, Belgium, 16 November 2023

#### A New Era of Collective Defence

NATO is modernising for a new era of collective defence – and continuing to build on steps taken following Russia's illegal and illegitimate annexation of Crimea in 2014. Since 2020, adaptation has been guided by the implementation of two major military concepts: the Concept for Deterrence and Defence of the Euro-Atlantic Area, focusing on the present; and the NATO Warfighting Capstone Concept, offering a guide over the long term. Following the onset of Russia's war of aggression against Ukraine in 2022, the Alliance has further accelerated the adaptation of its deterrence and defence posture.

At the 2022 Madrid Summit, and with the adoption of the 2022 Strategic Concept, NATO set a new baseline for its deterrence and defence posture in line with its 360-degree approach, across the land, air, maritime, cyberspace and space domains, and against all threats and challenges.

One of the most visible decisions from Madrid was Allies' commitment to deploying additional robust,



2023 was a landmark year for modernising NATO's plans, capabilities and command structures, and agreeing objectives for resilience. I feel privileged to have played my part in building a more robust Alliance.

#### Jörg See (Germany)

Deputy Assistant Secretary General, Defence Policy and Planning Division NATO Headquarters, Brussels, Belgium in-place and combat-ready forces to NATO's eastern flank. In 2023, Allies continued delivering on this commitment. There are now eight fully operational multinational battlegroups in Bulgaria, Estonia, Hungary, Latvia, Lithuania, Poland, Romania and Slovakia. These battlegroups are working closely with forces in their respective host nations and are supported by an ambitious exercise programme focused on large-scale collective defence scenarios. Allies have shown they can rapidly reinforce these battlegroups up to brigade level, clearly demonstrating that NATO is ready, willing and able to defend every inch of Allied territory.

At the Vilnius Summit, NATO Leaders agreed additional significant measures to further enhance NATO's deterrence and defence posture in all domains, including by strengthening forward defences and the Alliance's ability to rapidly reinforce any Ally. These decisions included agreeing on a new generation of regional defence plans that significantly improve NATO's ability and readiness to deter and defend against any threats, including at short or no notice.

#### The New 'Family' of Plans

NATO has always had defence plans in place to deter threats and defend Allies. Given changes in the security environment – and a renewed focus on deterrence and defence – the Supreme Allied Commander Europe has created a new 'family' of collective defence plans. These include a strategic plan for the defence of the Alliance, as well as domain-specific and regional military plans.

The regional plans NATO Leaders agreed at the 2023 Vilnius Summit are the most comprehensive and detailed since the Cold War. These plans direct how NATO will deter and defend against both Russia and terrorist groups, explaining how, in the event of a crisis, Allied forces would respond faster and at a greater scale.

There are three regional plans: one for the North, the Atlantic and the European Arctic; one for the centre, covering the Baltic region and central Europe; and a southern plan for the Mediterranean and Black Sea region. This new generation of regional defence plans aims to significantly improve the coherence of NATO's collective planning with Allies' national planning of their forces,



Deterrence and defence of NATO territory is what Allied Command Operations does every day. It is also the most important thing we do. The new 'family' of plans represents the next level of planning for defence against threats in a post-Cold War era.

### Maj Gen Matthew Van Wagenen (United States)

Deputy Chief of Staff, Operations, Allied Command Operations

Supreme Headquarters Allied Powers Europe, Mons, Belgium

posture, capabilities, and command and control. The plans also ensure that Allies can deliver the right forces at the right time in the right places.

## NATO's Military Presence in the East of the Alliance

Symbols depicted on the map do not necessarily indicate geographical location. In 2023, Sweden was a NATO Invitee. It became an Ally in March 2024.

## Forward Presence Battlegroups and Multinational Headquarters



#### 8 Multinational Battlegroups (BG):

**Mission:** Strengthening NATO's deterrence and defence

Multinational BG Bulgaria. Framework nation: Italy

Multinational BG Estonia. Framework nation: United Kingdom

Multinational BG Hungary. Framework nation: Hungary

Multinational BG Latvia. Framework nation: Canada

Multinational BG Lithuania. Framework nation: Germany

Multinational BG Poland. Framework nation: United States

Multinational BG Romania. Framework nation: France

Multinational BG Slovakia. Framework nation: Czechia

#### Multinational Headquarters (HQ):

Mission: Command and control of deployed NATO troops

**HQ Multinational Corps-NE.** Host nation: Poland

HQ Multinational Division-North. Host nation: Denmark, Latvia

HQ Multinational Division-NE. Host nation: Poland

**HQ Multinational Division-Centre.** Host nation: Hungary

HQ Multinational Corps-South. Host nation: Romania

**HQ Multinational Division-SE.** Host nation: Romania

HQ Multinational Brigade-SE. Host nation: Romania

#### **Contributing nations:**

Albania, Belgium, Bulgaria, Canada, Croatia, Czechia, Denmark, Estonia, France, Germany, Greece, Hungary, Iceland, Italy, Latvia, Lithuania, Luxembourg, Montenegro, Netherlands, North Macedonia, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, United Kingdom, United States

#### **Tailored Forward Presence**



Mission: Strengthening NATO's deterrence and defence

**Location:** Bulgaria, Romania

Contributors: Bulgaria, Canada, France, Germany, Hungary, Italy,

Luxembourg, Poland, Portugal, Romania, Spain,

Türkive

#### **NATO Force Integration Units**



Mission: Facilitating the rapid deployment of Allied forces to

the eastern part of the Alliance, support collective defence planning and assist in coordinating training

and exercises

Location: Bulgaria, Estonia, Hungary, Latvia, Lithuania, Poland,

Romania, Slovakia

Contributors: 27 Allies and partner nations

#### Air Defence



Mission: Strengthening NATO's air defences
Location: Estonia, Latvia, Poland, Romania, Slovakia

Contributors: France, Italy, Spain

#### Joint Intelligence, Surveillance and Reconnaissance



Mission: Supporting decision-makers with timely information

and intelligence

Contributors: Belgium, Bulgaria, Czechia, France, Germany, Greece,

Italy, Norway, Poland, Spain, Türkiye, United Kingdom, United States, NATO (NATO Intelligence, Surveillance

and Reconnaissance Force, AWACS aircraft)

**AWACS Patrols** 



detection of air threats

Contributors: France, Greece, Italy, Türkiye, United Kingdom, NATO

**AWACS** aircraft

#### **Air Policing**



Mission: Protecting the airspace of the eastern flank of the

Alliance

Location: Bulgaria, Estonia, Lithuania, Poland, Romania

Contributors: Belgium, France, Germany, Italy, Netherlands, Poland,

Portugal, Romania, Spain, Türkiye, United Kingdom,

**United States** 

#### **Carrier Strike Groups**



and in the air

**Location:** The Atlantic Ocean, the Baltic, Mediterranean and

North Seas

Contributors: France, Italy, Spain, United Kingdom, United States

#### **Amphibious Task Force**



Mission: Strengthening NATO's deterrence and defence at sea

and on land

**Location:** The Atlantic Ocean, the Baltic, Mediterranean and

North Seas

Contributors: France, Italy, Spain, United Kingdom, United States



Minister of Defence of Germany Boris Pistorius, NATO Secretary General Jens Stoltenberg, President of Lithuania Gitanas Nausėda and Minister of Defence of Lithuania Arvydas Anušauska visit troops participating in exercise Griffin Storm 2023. Lithuania, June 2023.

Allies also agreed to continue implementing the NATO Force Model that has delivered a larger pool of dedicated combat-capable forces — including forces at high readiness — in support of the Alliance's three core tasks. Following that decision, more forces have been available for the NATO Force Model, linking forces and capabilities directly to the new regional plans as well as in support of NATO's 360-degree posture. The NATO Force Model also leverages in-place forces, including national home defence forces and multinational deployments.

As part of the NATO Force Model, Allies are establishing a new multinational and multi-domain Allied Reaction Force. The Allied Reaction Force is a high-readiness force, signalling Alliance solidarity and contributing to NATO's posture in peacetime, crisis and conflict. It is a multi-domain force built around a light infantry brigade and maritime, air, special operations forces, cyber, space, logistics and strategic communications elements.



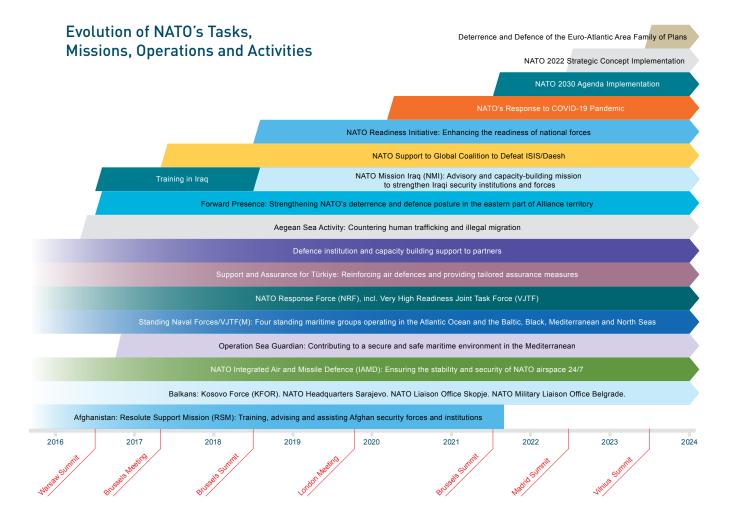
I was honoured last year to contribute to NATO's work on posture, forces, and command and control – in turn, helping to strengthen the Alliance's deterrence and defence.

#### Julien Kita (France)

Head, Defence Capabilities, Defence Policy and Planning Division NATO Headquarters, Brussels, Belgium NATO's command and control is also being strengthened to ensure that it is sufficiently agile. resilient and staffed to execute agreed plans. Allies and NATO's military authorities have been working on revising NATO's command and control in its entirety, including the NATO Command Structure, the NATO Force Structure and national functions.

The adaptation of NATO's command and control aims to improve NATO's ability to conduct exercises, to manage NATO's posture in peacetime and in the transition to crisis and conflict, and to conduct the full spectrum of missions, including large-scale multidomain operations for collective defence. NATO's strengthened command and control will include three equally capable Joint Force Commands, located in Brunssum, the Netherlands; Naples, Italy; and Norfolk, Virginia, in the United States.

A credible Alliance deterrence and defence posture relies on the ability to deliver military reinforcements. In 2023, NATO Leaders decided to accelerate their efforts to improve a wide spectrum of functions many of them logistics-related – across the Supreme Allied Commander Europe's Area of Responsibility. These include better reinforcement and sustainment of Allied forces into and across Alliance territory, including through the prepositioning of ammunition and equipment, and improved mobility.





German Air Force Eurofighter Typhoons conduct tactical manoeuvres during a training exercise. Skies over Germany, July 2023.

#### The Skies Above: Deterrence and Defence in the Air

NATO's Integrated Air and Missile Defence is a vital part of the Alliance's effort to deter and defend its territory, populations and forces against all air and missile threats and from all strategic directions. This mission takes place through peacetime, crisis and

conflict, and contributes to the Alliance's indivisible security and freedom of action, including NATO's ability to reinforce its territory.

## NATO's Enhanced Air Policing in Response to Russian Drone Incursions

Established in 1961, the NATO Air Policing mission is a permanent peacetime task preserving the security of Allied airspace all year round and demonstrating Allied solidarity. NATO currently maintains five air policing missions – for Albania, the Baltic States, Montenegro, North Macedonia and Slovenia – as well as airborne surveillance and interception capabilities in Iceland. As part of broader assurance measures introduced following Russia's illegal annexation of Crimea in 2014, Allies provide additional assets to enhance the NATO Air Policing mission along NATO's eastern flank.

Following Russia's withdrawal from the Black Sea Grain Initiative in July, Russia began to attack Ukraine's grain and port infrastructure with missiles and drones. This included the targeting of infrastructure in the Danube region close to Romania's border. In September, drone debris was discovered just inside the Romanian border, with two further airspace violations by Russian drones soon afterwards.

These incidents were determined to be unintentional, but the increased risk posed by Russian air and missile activity near NATO's borders resulted in a decision to boost Allied vigilance in the region.

Following the original incident, the United States deployed additional F-16 fighter aircraft to Romania to enhance the NATO Air Policing mission. NATO also deployed two Airborne Warning and Control System surveillance planes to Lithuania, where they flew missions monitoring Russian military activity near the Alliance's borders.



A student pilot from the Belgian Air Force prepares to take off for a training sortie during the Euro-NATO Joint Jet Pilot Training Program. Sheppard Air Force Base, United States, April 2023.

Russia's war of aggression against Ukraine demonstrated the crucial importance of air and missile defence. Allies have strengthened deployments of aircraft and surface-based air and missile defence units. They have enhanced air policing and vigilance activities, including air patrol missions on NATO's eastern flank. The Alliance maintains a high level of airborne alert and intelligence, surveillance and reconnaissance coverage.

Allies have also agreed to further improve the readiness, preparedness and interoperability of NATO's Integrated Air and Missile Defence through regular training and a rotational presence of modern air defence systems and capabilities across the Supreme Allied Commander Europe's Area of Responsibility, with an initial focus on the east of the Alliance.

NATO faces an increasingly complex air and missile threat environment as a result of the proliferation of air and missile capabilities, ranging from simple drones to sophisticated hypersonic missiles. The Alliance is closely monitoring developments by both state and non-state actors.

Hypersonic systems are one of nine key emerging and disruptive technologies identified by Allies. The Alliance conducts regular assessments of the threat

posed by hypersonic systems including observation of their use by Russia in Ukraine. NATO and Allies continue to work together to maintain awareness of developments in hypersonic missile technology and develop defences against these systems.

The threat to NATO's European populations, territory and forces posed by the proliferation of ballistic missiles is also increasing. In response to this threat, Allies have reaffirmed their commitment to the full development of NATO Ballistic Missile Defence. This is designed to counter ballistic missiles emanating from outside the Euro-Atlantic area, especially from Iran. The aims of NATO Ballistic Missile Defence are purely defensive.

NATO Ballistic Missile Defence is based on voluntary national contributions, including nationally funded interceptors and sensors, and hosting arrangements. Command and control is commonly funded by all Allies. The United States remains a key contributor to NATO Ballistic Missile Defence through its European Phased Adaptive Approach. NATO Ballistic Missile Defence assets are currently located in Germany, Romania and Türkiye, with Spain hosting four Ballistic Missile Defence-capable ships, and the second Aegis Ashore site close to completion in Poland.



Allied flags at the signing of the operational memorandum of understanding marking the creation of the NATO Space Centre of Excellence. Paris, France, January 2023.

#### Above It All: Deterrence and Defence in Space

Space is an increasingly contested domain, marked by irresponsible behaviour by some actors, malicious activities, and the growth of counter-space capabilities by potential adversaries and strategic competitors to NATO. The information and services delivered via space are increasingly essential for the Alliance's prosperity and security. Satellites are critical, for instance, in helping to predict or assess the impact of natural disasters, facilitating financial transactions, providing Internet access and assessing the impact of climate change.

The Alliance is responding to this new reality. At the Vilnius Summit, NATO Leaders agreed to further integrate space into planning, exercising and executing multi-domain operations. Allies have also committed to enhancing the sharing of space data, products and services within NATO.

The NATO Space Centre at Allied Air Command in Ramstein, Germany, delivers regular analysis to support NATO's situational awareness and decision-making. NATO has also improved its space domain

awareness by integrating multiple national data feeds into a common space picture and deepening its relationship with Allies' national space centres.

Given the rapidly increasing role of the commercial sector in providing space data, products and services, NATO is taking steps to engage space companies in a strategic dialogue and increase its engagements with this vital sector.

At the Vilnius Summit, Allies underlined their commitment to upholding international law and supporting efforts to reduce space threats by promoting norms, rules and principles of responsible space behaviours. NATO Leaders also reaffirmed that hostile operations to, from or within space could reach the level of armed attack and could lead to the invocation of Article 5 of the North Atlantic Treaty.



## Enhanced NATO Response Force / Very High Readiness Joint Task Force

\*

Mission: Ready to deploy at short notice for crisis

management or collective defence

Commanding HQ: Allied Joint Force Command Naples

Contributors: Enhanced NATO Response Force (NRF): 28 Allies

Very High Readiness Joint Task Force (VJTF):

28 Allies

#### **Standing Naval Forces / VJTF (Maritime)**



Mission: Providing the Alliance with a continuous naval

resence

**Location:** The Atlantic Ocean, the Baltic, Mediterranean and

**North Seas** 

Contributors: Standing NATO Maritime Groups (SNMG1 & 2), Standing

NATO Mine Countermeasures Groups (SNMCMG1 & 2). Belgium, Canada, Croatia, Denmark, Estonia, France, Germany, Greece, Italy, Latvia, Netherlands, Norway, Poland, Portugal, Romania, Spain, Türkiye, United

Kingdom, United States

#### **Ballistic Missile Defence**



Mission: Protecting NATO's populations, territory and forces

Location: Germany, Poland, Romania, Spain, Türkiye

Contributors: United States (US Aegis BMD-capable ships, Aegis

Ashore, BMD Tracking sensor, Aegis Ashore -under

construction), NATO (Allied Air Command)

#### Regional Hub for the South



Mission: Enhancing understanding of the regional dynamics

in Africa and the Middle East. Assist NATO in

harmonising activities in the South.

**Location:** Allied Joint Force Command Naples

Contributors: 19 Allies contribute with Voluntary National Contributions and reassigned JFC Naples staff

#### Support and Assurance for Türkiye



Mission: Reinforcing air defences and providing tailored

assurance measures for Türkiye

Location: Türkiye

Contributors: Spain (Patriot surface-to-air missile batteries),

Poland (maritime patrol reconnaissance aircraft),

NATO (AWACS aircraft).

#### **AWACS Patrols**



Mission: Patrolling the skies over eastern Europe for early

detection of air threats

Contributors: France, Greece, Italy, Türkiye, United Kingdom,

**NATO AWACS aircraft** 

#### **Maritime Patrol Aircraft**



Mission: Vigilance activities, protecting critical undersea

infrastructure, supporting maritime situational

awareness

**Location:** The Atlantic Ocean, the Baltic, Black, Mediterranean

and North Seas

Contributors: Denmark, France, Germany, Greece, Italy, Norway,

Poland, Portugal, Spain, Türkiye, United Kingdom, United States, NATO (Allied Maritime Command, Allied

Air Command)

#### **Iceland Peacetime Preparedness**



Mission: Protecting Iceland's airspace

Location: Iceland

Contributors: Norway, United States

## Forward Presence Forces and Multinational Headquarters



8 Multinational Battlegroups (BG):

Mission: Strengthening NATO's deterrence and defence

Location: Bulgaria, Estonia, Hungary, Latvia, Lithuania, Poland,

Romania, Slovakia

Multinational Headquarters (HQ):

Mission: Command and control of deployed NATO troops
Location: Denmark, Hungary, Latvia, Poland, Romania

Contributing nations: See detailed map on page 26

#### **Tailored Forward Presence**



Mission: Strengthening NATO's deterrence and defence

Location: Bulgaria, Romania

Contributors: See detailed map on page 26

#### **NATO Force Integration Units**



Mission: Facilitating the rapid deployment of Allied forces to the eastern part of the Alliance, support collective

defence planning and assist in coordinating training

and exercises

Location: Bulgaria, Estonia, Hungary, Latvia, Lithuania, Poland,

Romania, Slovakia

**Contributors:** 27 Allies and partner nations

#### Air Defence



Mission: Strengthening NATO's air defences
Location: Estonia, Latvia, Poland, Romania, Slovakia

Contributors: France, Italy, Spain

#### **Air Policing**



Mission: Protecting the airspace of the eastern flank of the

Alliance

Location: Bulgaria, Estonia, Lithuania, Poland, Romania

Contributors: See detailed map on page 26

#### **Carrier Strike Groups**



Mission: Strengthening NATO's deterrence and defence at sea

and in the air

Location: The Atlantic Ocean, the Baltic, Mediterranean and

North Seas

Contributors: France, Italy, Spain, United Kingdom, United States

#### **Amphibious Task Force**



Mission: Strengthening NATO's deterrence and defence at sea

and on land

Location: The Atlantic Ocean, the Baltic, Mediterranean and

North Seas

Contributors: France, Italy, Spain, United Kingdom, United States

#### Joint Intelligence, Surveillance and Reconnaissance



Mission: Supporting decision-makers with timely information

and intelligence

Contributors: Belgium, Bulgaria, Czechia, France, Germany, Greece,

Italy, Norway, Poland, Spain, Türkiye, United Kingdom, United States, NATO (NATO Intelligence, Surveillance

and Reconnaissance Force, AWACS aircraft)

All maps are based on commercial data. Digital Map Data® Collins Bartholomew LTD (2014). The boundaries and names shown and the designations used do not imply official endorsement or acceptance by NATO. Due to size limitations, some inserts may have been added to the maps to include other geographical areas.

Note: Map data display contributions by Allies in 2023.



A soldier participates in the cyber exercise Locked Shields 2023, hosted by the NATO Cooperative Cyber Defence Centre of Excellence. Tallinn, Estonia, April 2023.

#### Cyberspace: Contested at All Times

Cyberspace is heavily contested at all times. Malign actors, incluing potential adversaries and strategic competitors, increasingly seek to destabilise the Alliance through malicious cyber activities and campaigns, while Russia's war against Ukraine has highlighted the extent to which cyber has become a feature of modern conflict.

NATO must counter significant and growing cyber threats, including to Allied democratic systems and critical infrastructure. NATO is determined to employ the full range of capabilities in order to deter, defend against and counter the wide spectrum of cyber threats.



NATO Secretary General Jens Stoltenberg opens the first NATO Annual Cyber Defence Conference. Berlin, Germany, November 2023.

#### First Annual Cyber Defence Conference

Cyber defence is a political, military and technical task. The first NATO Cyber Defence Conference, held in Berlin in November, brought together decision-makers to discuss how to further shape cyberspace in line with Allied values, ensure freedom of manoeuvre in this domain and enhance the resilience of Alliance networks. In his opening remarks, the Secretary General underscored that cyberspace is where strategic competition is playing out and where the Alliance directly faces Russian and the PRC's threat actors every day.



Civilian teams participating in the cyber defence exercise Locked Shields 2023. Tallinn, Estonia, April 2023.

The Alliance continues to promote a free, open, peaceful and secure cyberspace, and pursue efforts to enhance stability and reduce the risk of conflict, by ensuring that international law is respected and by supporting voluntary norms of responsible state behaviour in cyberspace.

At the Vilnius Summit, Allies adopted a new concept to enhance the contribution of cyber defence to NATO's overall deterrence and defence. The concept further integrates NATO's three cyber defence levels – political, military and technical – ensuring civil-military cooperation at all times through peacetime, crisis and conflict, as well as engagement with the private sector.

Allies also restated and enhanced NATO's Cyber Defence Pledge, and committed to ambitious new national goals to further strengthen national cyber defences as a matter of priority, including critical infrastructure. Finally, Allies launched NATO's Virtual Cyber Incident Support Capability to support national mitigation efforts in response to significant malicious cyber activities.



An Explosive Ordnance Disposal dog handler conducts training during exercise Engineer Thunder 23. Lithuania, September 2023.



A Polish Army Explosive Ordnance Disposal specialist approaches a suspected improvised explosive device during exercise Northern Challenge 23. Keflavík, Iceland, October 2023.

#### Terrorism: A Persistent Threat

Terrorism remains the most significant and pressing asymmetric threat to the security of the citizens of NATO, and to international peace and stability. In 2023, the Alliance continued to implement the Action Plan to Enhance NATO's Role in the International Community's Fight Against Terrorism. At the Vilnius Summit, NATO Leaders decided to update the Action Plan as well as NATO's 2012 Counter-Terrorism Policy Guidelines, and to reassess the areas where NATO can provide civil-military assistance to partners.

In October, Assistant Secretary General for Operations Tom Goffus was appointed to be the Secretary General's Special Coordinator for Counter-Terrorism. This new position has been created to ensure that NATO's response to terrorism remains effective and coherent.

NATO continued to support Allies in the development of capabilities to counter the terrorist threat and manage the consequences of terrorist attacks. These capabilities include among others: Counter Improvised Explosive Devices, Counter Unmanned Aircraft Systems, Biometrics, Technical Exploitation, and Battlefield Evidence. This support is delivered through the NATO Defence Against Terrorism Programme of Work, which funds innovative and pioneering projects, addresses shortfalls and strengthens interoperability.

In 2023, NATO continued to engage with partner countries on countering terrorism through a range of Defence Capacity Building packages, counterterrorism dialogues, and customised training programmes; it also cooperated with international organisations such as the European Union and the United Nations through joint projects and regular exchanges.

NATO has been stepping up its support to five partner countries which benefit from a Defence Capacity Building package - namely Bosnia and Herzegovina, Jordan, Mauritania, the Republic of Moldova and Tunisia. The areas of cooperation include strategic-level counter-terrorism training and education, addressing small arms and light weapons, strategic communications, terrorists' misuse of the Internet, and maritime aspects of counter-terrorism. Additional counter-terrorism consultations also continued with NATO partners such as Algeria, Australia, Colombia, Iraq, Kuwait, Morocco, Qatar and the Republic of Korea. The NATO-Istanbul Cooperation Initiative Regional Centre in Kuwait has hosted two NATO counter-terrorism courses over the past two years, benefiting participants from Gulf Cooperation Council and Istanbul Cooperation Initiative countries.



An electronic systems specialist prepares a jamming device during the Counter Unmanned Aircraft Systems
Technical Interoperability Exercise 23. The Netherlands, September 2023.

# Countering Unmanned Aircraft in the Fight against Terrorism

The use of unmanned autonomous systems – or drones – by both state and non-state actors is increasing fast. NATO has been working hard in response to support Allies in developing solutions in this domain.

Exercises, as ever, are an important part of that response. One such exercise, the NATO Counter-Unmanned Aircraft Systems Technical Interoperability Exercise, coorganised by the NATO Communications and Information Agency and the Netherlands in September, saw the participation of more than 40 companies. The exercise validated the NATO Counter Unmanned Aircraft Systems architecture, with the goal of allowing companies to integrate their products through NATO standards and produce a common and interoperable recognised 'air picture'.



In 2023, I was able to contribute to the NATO Communications and Information Agency's incredible work on Counter Unmanned Aircraft Systems. This included helping to plan and organise a major interoperability exercise in the Netherlands.

#### Cedric Lefevre (France)

Principal Technician, Joint Intelligence, Surveillance and Reconnaissance Centre

NATO Communications and Information Agency, The Hague, The Netherlands



A Belgian weapons intelligence team collecting Level 1 Exploitation Weapons Technical Intelligence during exercise Ardent Defender. Gagetown, Canada, October 2023.

## Technical Exploitation in Exercises

State and non-state actors use both conventional and unconventional means to achieve their objectives. 'Technical exploitation' is a capability that takes weapons, electronic devices or other equipment collected or captured by NATO forces and uses scientific methods to unlock useful data and intelligence.

Technical exploitation was used to great effect by NATO forces in Afghanistan to counter the use of improvised explosive devices. Today, NATO is adapting the capability to face new threats such as drones, attacks on critical infrastructure and adversaries acting under the cover of anonymity.

In 2023, NATO organised the first related multinational live exercises in Canada and Iceland and conducted experiments on how to collect and exploit material contaminated with chemical agents in Slovakia.



A panel held at NATO Headquarters on the topic of addressing Russia's manipulation of history and false historical narratives, in the framework of the NATO-Ukraine Platform on Countering Hybrid Threats. Brussels, Belgium, December 2023.

# **Grey Zone: Addressing Hybrid Threats**

In a security environment characterised by strategic competition, pervasive instability and recurrent shocks, Allies continue to be confronted by hybrid, cyber and other asymmetric threats, and by the malicious use of emerging and disruptive technologies.

Russia has intensified its hybrid actions against NATO Allies and partners, including through proxies. Russia's main tactics include interference in democratic processes, political and economic coercion, widespread disinformation campaigns, malicious cyber activities, instrumentalisation of migration, and illegal and disruptive activities by Russian intelligence services. In 2023, Allies developed tailored response options to counter Russian hybrid threats, ensuring that the Alliance and Allies are better able to deter and defend against such attacks.

The PRC's hybrid activities – including malicious cyber activities and disinformation, economic coercion, and political influence – continued to target Allies and seek to harm the security of the

Alliance. New technologies have increased the potency of these hybrid challenges. In April, NATO Foreign Ministers approved a comprehensive assessment of hybrid challenges to Euro-Atlantic security emanating from the PRC, including long-term hybrid strategy, capabilities and tactics. In November, Allies also agreed comprehensive preventive and response options to counter the PRC's hybrid activities.

In December, Finland hosted NATO's annual Hybrid Symposium, which included training for NATO's Counter Hybrid Support Team. NATO also continued to cooperate closely with the European Union as an essential strategic partner in addressing the challenges posed by hybrid threats. The European Centre of Excellence for Countering Hybrid Threats continued to facilitate these contacts.

NATO Allies tested responses to hybrid threats as part of Crisis Management Exercise 2023, and other high-level training events at NATO Headquarters.



A group of Lithuanian infantry on the move during exercise Engineer Thunder 23. Pabrade, Lithuania, September 2023.



The British Army's Royal Lancers conduct mounted reconnaissance with the Polish Territorial Defence Force's 2nd Lubelska (Lublin) Brigade.

Estonia, July 2023. Photo credit: The Royal Lancers.

# Transparency and Risk Reduction: Conventional Arms Control in Europe

Russia's war of aggression against Ukraine continued to undermine Euro-Atlantic security and has seriously eroded the conventional arms control architecture in Europe. Russia has demonstrated a disregard for the fundamental treaties that had helped to maintain peace and security in the Euro-Atlantic area since the end of the Cold War, through military build-ups on its borders beginning in 2021.

Allies continued to implement their conventional arms control obligations and commitments in the Euro-Atlantic area, in spite of Russia's withdrawal from the Treaty on Open Skies in December 2021 and from the Conventional Forces in Europe Treaty in November 2023.

In a North Atlantic Council statement, issued on 7 November, Allies condemned Russia's decision to withdraw from the Conventional Forces in Europe Treaty. They pointed out that Russia's withdrawal was the latest in a series of actions that systematically undermined Euro-Atlantic security.

Russia continues to demonstrate disregard for arms control, including key principles of reciprocity, transparency, compliance, verification and hostnation consent, and seeks to undermine the rulesbased international order. As a consequence, Allied States Parties intend to suspend the operation of the

Conventional Forces in Europe Treaty for as long as necessary, in accordance with their rights under international law. This is a decision fully supported by all NATO Allies.

Despite this suspension of the Conventional Forces in Europe Treaty in response to Russia's actions, Allies reiterated their continued commitment to reducing military risk, and preventing misperceptions and conflicts. Allies remain united in their commitment to effective conventional arms control as a key element of Euro-Atlantic security, taking into account the prevailing security environment and the security of all Allies.

Allies will continue to consult on – and assess the implications of – the current security environment and its impact on the security of the Alliance, making use of NATO as a platform for in-depth discussion and close consultation on arms control efforts.



United States Air Force personnel assigned to the 31st Civil Engineer Squadron, and members of an Italian Air Force Explosive Ordnance Disposal team during exercise Toxic Trip 23. Koksijde Air Base, Belgium, September 2023.

# Defending against Weapons of Mass Destruction and Chemical, Biological, Radiological and Nuclear Threats

NATO has continued to work with Allies, partners and other international organisations to combat the proliferation of weapons of mass destruction and to defend and deter against chemical, biological, radiological and nuclear threats. The Alliance remains a bulwark of the rules-based international order and continues to uphold and strengthen the international architecture that prevents the spread of weapons of mass destruction. However, the environment for pursuing this work has become more challenging.

As reiterated in the Vilnius Summit Communiqué, Allies have a strong and enduring commitment to the Treaty on the Non-Proliferation of Nuclear Weapons and its full implementation across its three pillars: non-proliferation, disarmament, and peaceful uses of nuclear energy.

Allies continued to actively support progress in the context of the Treaty on the Non-Proliferation of Nuclear Weapons Review Process and the Treaty's universalisation and full implementation. Allies seek to create the security environment for a world without nuclear weapons, including by supporting the entry into force of the Comprehensive Nuclear-Test-Ban Treaty and the voluntary cessation of fissile material

production for use in nuclear weapons. In 2023, NATO hosted an international workshop on the role of trust in the verification of nuclear disarmament, bringing together international experts to discuss NATO's research in this field.

On 2 November, however, Russia withdrew its ratification of the Comprehensive Nuclear-Test-Ban Treaty, while the PRC remains the only permanent member of the United Nations Security Council not to voluntarily declare a moratorium on the production of fissile material.

NATO Allies continue to pursue all elements of strategic risk reduction, to increase confidence-building and predictability through dialogue, increasing understanding, and establishing effective crisis management and prevention tools.

Being fully committed to the Treaty on the Non-Proliferation of Nuclear Weapons as the only credible path to nuclear disarmament, NATO and Allies are opposed to the Treaty on the Prohibition of Nuclear Weapons. This treaty remains at odds with the existing non-proliferation and disarmament architecture, lacks a verification mechanism and does not reflect the increasingly challenging security environment.



Personnel of NATO and partner countries attend a Belgian Royal Air Force-led demonstration on decontaminating aircrew during exercise Toxic Trip 23.

Koksijde Air Base, Belgium, September 2023.

Allies continued their support to the full implementation and strengthening of the Biological and Toxin Weapons Convention and the Chemical Weapons Convention as pillars of the rules-based international order.

NATO and Allies have continued to work on the practical implementation of NATO's Chemical, Biological, Radiological and Nuclear Defence Policy, adopted in 2022. In 2023, NATO pursued efforts to increase civil-military interaction, strategic communications and partnerships. NATO also focused on augmenting the chemical, biological, radiological and nuclear defence capabilities of Allies and partners through training held by the NATO School in Oberammergau, Germany, the Joint Chemical, Biological, Radiological and Nuclear Defence Centre of Excellence in Vyškov, Czechia, and the NATO-Istanbul Cooperation Initiative Regional Centre in Kuwait. Germany assumed the annually rotating role of Framework Nation of NATO's Combined Joint Chemical, Biological, Radiological and Nuclear Defence Task Force.



French paratroopers with the First Parachute Chasseur Regiment relax following an exercise with soldiers from the Estonian Defence League.
Rutja, Estonia, October 2023.



Participants of an international conference organised by NATO and Jordan on small arms and light weapons control in the Middle East and North Africa. Amman, Jordan, October 2023.

# Countering Illicit Small Arms, Light Weapons, and Mines

Countering the impact of illicit manufacturing and trafficking of small arms and light weapons, as well as preventing contamination from landmines, improvised explosive devices and remnants of war, continue to be a priority.

NATO's engagement on small arms and light weapons and mine action applies a regional approach. NATO's Defence Capacity Building packages for Bosnia and Herzegovina, Jordan, Mauritania and Tunisia include enhancing these partners' capacity to manage ammunition stockpiles, destroy surpluses and train staff.

NATO continued to support coordination and information-sharing on efforts in Small Arms and Light Weapons Control through its Euro-Atlantic Partnership Council Ad-Hoc Working Group on Small Arms and Light Weapons and Mine Action as well as regular exchanges with other relevant international organisations. In 2023, NATO also focused on raising awareness of the scale of mine and unexploded remnants of war contamination on the territory of Ukraine as a result of Russia's war of aggression.



A Dutch F-16 Fighting Falcon fighter takes off for NATO's annual nuclear exercise Steadfast Noon. Northern Italy, October 2023.

# Ensuring Credible, Safe, Secure and Effective Nuclear Deterrence

NATO Heads of State and Government restated their position, at the Vilnius Summit, that as long as nuclear weapons exist, NATO will remain a nuclear alliance. They highlighted that NATO's strategic nuclear forces are the supreme guarantee of the security of the Alliance, and that NATO's nuclear deterrence posture relies on the United States' nuclear weapons forward-deployed in Europe and national contributions of dual-capable aircraft.

NATO has continued work to ensure the credibility, effectiveness, safety and security of its nuclear deterrent mission. At a meeting of the Nuclear Planning Group in June, Defence Ministers discussed the nuclear aspects of the current security environment, including Russia's continued reckless nuclear rhetoric and violation of its international commitments, Iran and the Democratic People's Republic of Korea's nuclear and missile developments, and the PRC's rapid and opaque nuclear expansion. Ministers also discussed the

ongoing adaptation of NATO's nuclear posture and planning, including the modernisation of NATO's nuclear capability and increase in the flexibility and adaptability of the Alliance's nuclear forces, while exercising strong political control at all times.

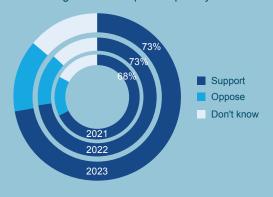
NATO's Nuclear Planning Group Staff Group visited the United States in January. The group toured several National Nuclear Security Administration facilities, which contribute to the sustainment, modernisation and surety of the United States' nuclear weapons. The North Atlantic Council also visited nuclear bases in France and the United Kingdom in April to see their respective independent strategic nuclear forces.

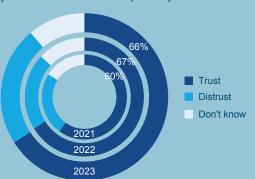
In October, NATO held its annual nuclear exercise Steadfast Noon 2023. The exercise took place over southern Europe, with up to 60 aircraft taking part, including advanced fighter jets and US B-52 bombers.

# A high majority of Allied citizens support NATO maintaining nuclear weapons capability

These responses were to the question: "NATO's goal is a world without nuclear weapons. As long as non-NATO nations such as Russia and China maintain their nuclear weapons, NATO will retain its nuclear capability. To what extent do you support or oppose NATO maintaining nuclear weapons capability on this basis?"

These responses were to the question: "How much do you trust NATO to act responsibly as a nuclear force?"

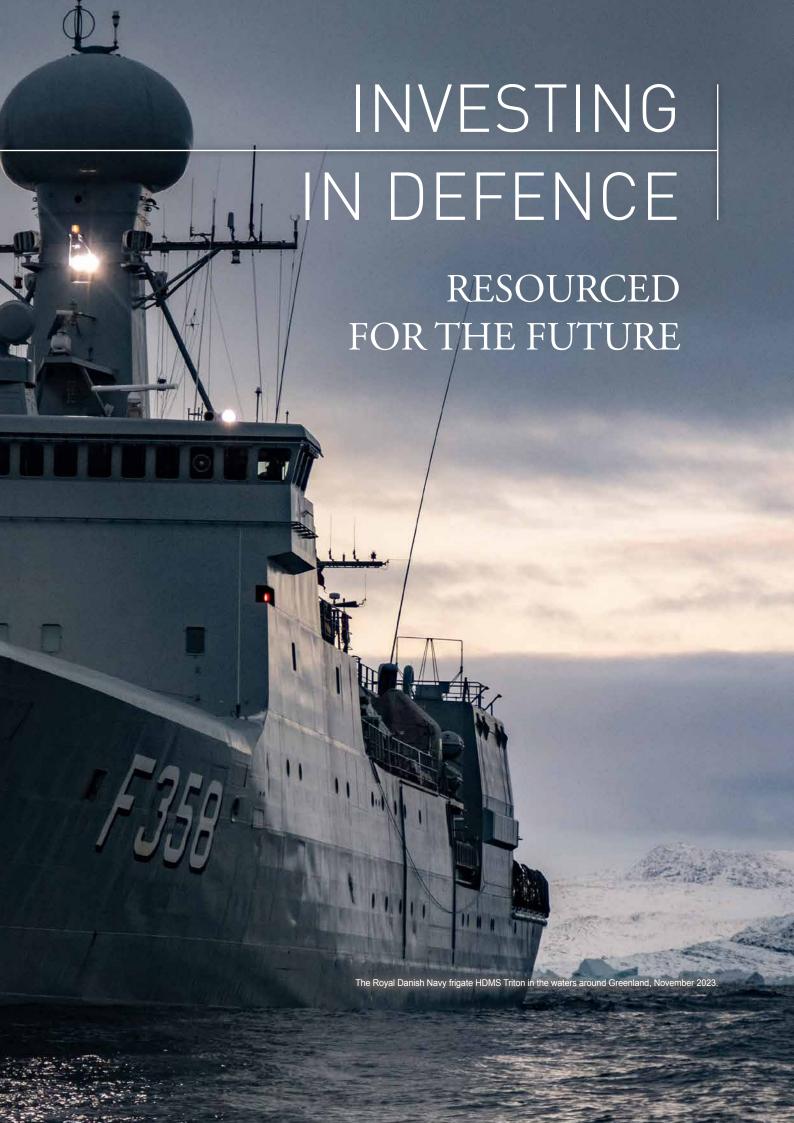




Turkish Air Force F-4E Phantom II fighter-bombers cut through the skies during exercise Poggio Dart 23. Skies over Poggio Renatico, Italy, December 2023.







#### Russia's war in Ukraine demonstrates that we cannot take peace for granted. And that we must invest more in our security.

NATO Secretary General Jens Stoltenberg at a joint press conference with the Presidents of Lithuania, Poland and Romania, and the Prime Ministers of Albania, Belgium, the Netherlands and Norway. The Hague, the Netherlands, 27 June 2023.

The reality of a war being fought in Europe has given new urgency to the Alliance's defence investment efforts. Allies cannot afford to be complacent. At the Vilnius Summit, Heads of State and Government recognised the importance of continuing to invest in defence and meeting their commitments, including by fulfilling longstanding major equipment requirements and the NATO Capability Targets. They also acknowledged the importance of resourcing NATO's new defence plans and force model, and contributing to NATO operations, missions and activities.

#### The 2014 Defence Investment Pledge and the 2023 Vilnius Defence Investment Pledge

At the Wales Summit in 2014, Allied Heads of State and Government agreed the Defence Investment Pledge, calling for all Allies to meet the NATO-agreed guideline of spending 2% of their Gross Domestic Product (GDP) on defence by 2024. The Pledge also called for Allies to spend at least 20% of annual defence expenditure on major new equipment, including related research and development, within the same time frame.

At the 2022 Madrid Summit, Allies reaffirmed their commitment to the Defence Investment Pledge in its entirety. In 2023, at the Vilnius Summit, Heads of State and Government made a commitment to investing at least 2% of their GDP annually on defence. They also committed to investing at least 20% of defence budgets on major equipment, including related research and development, recognising that this should be met in conjunction with a minimum of 2% of GDP on annual defence expenditure. They also affirmed that, in many cases, Allies will need to spend more than 2% of GDP on defence if they are to remedy existing shortfalls and meet the demands of a more contested security order.

In 2023, Allies continued to increase their defence spending, further develop their forces and capabilities, and contribute to Allied operations, missions and activities. European Allies and Canada increased defence spending for the ninth consecutive year. Defence spending increased by 11% in real terms compared to 2022.

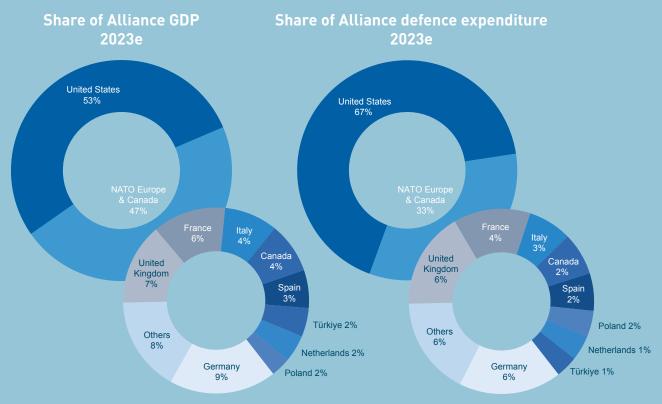
In 2023, 11 Allies met the guideline of spending 2% of their GDP on defence and in early 2024 this number increased to 18 - this, in contrast, to only three Allies meeting the guideline in 2014.1

The United States accounted for 53% of the Allies' combined GDP and 67% of combined defence expenditure. Total NATO military spending in 2023 is estimated to have been around USD 1.1 trillion.

Allies also made progress on their commitment to allocating 20% or more of their defence expenditure to major capabilities. Twenty-eight Allies met the NATO-agreed 20% guideline compared to seven in 2014.

Allies' accelerated investment strengthens the deterrence and defence of the Alliance. It allows the delivery of more of the heavier, high-end capabilities NATO needs, and improves the readiness, deployability, sustainability and interoperability of Allied forces. Continuing to invest in the right capabilities will be critical in the years ahead.

For all the graphs in this chapter of the report, it should be noted that Iceland has no armed forces. The figures presented at aggregate level may differ from the sum of their components due to rounding. All figures for 2023 are estimates. Data presented captures Allied expenditure in 2023 and therefore excludes Sweden, which became a NATO Ally in 2024.



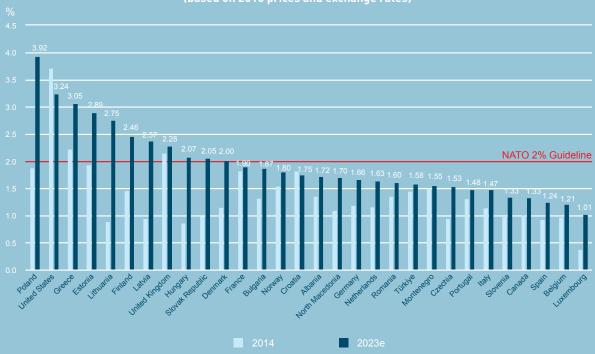
Based on current prices and exchange rates. Figures for 2023 are estimates.

# NATO Europe and Canada - defence expenditure



Notes: Figures for 2023 are estimates. The NATO Europe and Canada aggregate from 2017 onwards includes Montenegro, which became an Ally on 5 June 2017, from 2020 onwards includes North Macedonia, which became an Ally on 27 March 2020, and from 2023 onwards includes Finland, which became an Ally on 4 April 2023.

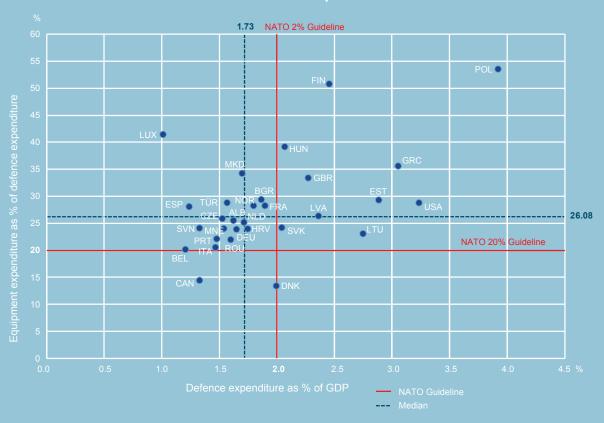
# Defence expenditure as a share of GDP (%)



## Equipment expenditure as a share of defence expenditure (%)

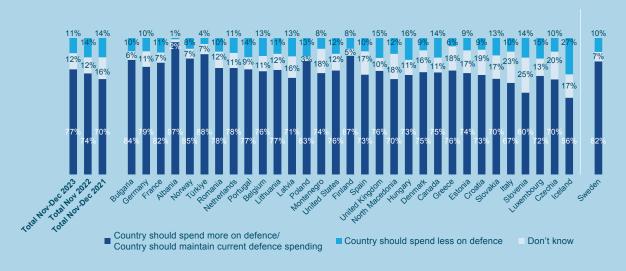


# Defence expenditure as a share of GDP and equipment expenditure as a share of defence expenditure - 2023e



# Public support for defence spending increased in 2023

An increasing majority of Allied citizens (77%) think that defence spending should either be maintained at current levels or increased. Only 12% think less should be spent on defence.



Note: Further NATO polling is available in 'Listening to Citizens: Continued Support for the Alliance in 2023' on page 69.







A Czech soldier completing a mud crawl during an obstacle course, known as "Czech Mudness 23". Lithuania, November - December 2023

Military forces are necessary to protect our security. But they are not enough. Strong societies and robust economies are our first line of defence. So we must secure our cyberspace, supply chains and critical infrastructure.

Speech by NATO Secretary General Jens Stoltenberg at the SAMAK Nordic Summit. Helsinki, Finland, 28 February 2023.

# Deterrence and Resilience: Two Sides of the Same Coin

Resilience is a key element of the Alliance's deterrence and defence. Recognising that, in 2023, Allied Leaders agreed to adopt a set of Resilience Objectives. The first of their kind, these objectives will help to strengthen NATO's and Allied preparedness against strategic shocks and disruptions in a coordinated way, while accounting for the needs of individual Allies. Among other things, the objectives aim to boost both Allies' and NATO's ability to ensure continuity of government and essential services, and provide civil support to military operations in peace, crisis and conflict. Allies intend to use these objectives to guide the development of national resilience goals and implementation plans.

NATO has a comprehensive resilience toolbox for reinforcing Allied and partner resilience-building efforts. In particular, it draws on the unique capability of the NATO Resilience Civil Experts pool.



In 2023, I was honoured to help Allies and partners in their efforts to build resilience, including supporting enhanced training and education for NATO Resilience Civil Experts.

#### Skaiste Masalaityte (Lithuania)

Programming Support Officer,
NATO Resilience Civil Experts Programme,
Enablement and Resilience Section,
Defence Policy and Planning Division
NATO Headquarters, Brussels, Belgium



Healthcare professionals participate in a workshop organised by NATO's Interallied Confederation of Medical Reserve Officers. Helsinki, Finland, June 2023.

The pool consists of hundreds of subject-matter experts with in-depth technical knowledge of civil protection, communications, transportation, health, energy, and food and water supply. Over the years, experts have contributed to NATO decision-making processes and to the development of important

policy frameworks, such as the NATO Baseline Requirements for National Resilience.<sup>2</sup> Experts also deploy to Allied and partner countries as part of the Resilience Advisory Support Teams and play an important role in training exercises.



Closing session at the 2023 NATO Resilience Symposium, hosted by the Latvian government. Riga, Latvia, April 2023.

## NATO Resilience Symposium

The 2023 NATO Resilience Symposium, co-organised by the NATO International Staff and Allied Command Transformation, and hosted by the government of Latvia, welcomed over 250 Allied and partner civilian and military leaders, policymakers and experts in resilience. This annual event allows participants to share their views, exchange best practices, strengthen existing relationships and forge new ones. The Symposium provided an opportunity to take stock as NATO and Allies continue to enhance their collective resilience.

<sup>2</sup> The seven baseline requirements for resilience are: assured continuity of government and critical government services; resilient energy supplies; ability to deal effectively with uncontrolled movement of people; resilient food and water resources; ability to deal with mass casualties and disruptive health crises; resilient civil communications systems; and resilient civil transportation systems.



The NATO Resilience Advisory Support Team hosts a plenary session with resilience experts from NATO and the Republic of Moldova. Chisinau, Moldova, February 2023.

# Partnering for Resilience: Cooperation with the European Union, Ukraine and the Republic of Moldova

Cooperation with partners remains an important element of NATO's work on resilience. NATO and European Union staffs have expanded their work together by setting up a Task Force on the Resilience of Critical Infrastructure, allowing them to respond to the multiple and cross-cutting threats to critical infrastructure belonging to Allies and European Union member states. This has provided a forum for staffs to discuss threats and challenges to critical infrastructure in the Euro-Atlantic area across four sectors: energy, transport, digital infrastructure and space. They produced a shared assessment, which is available to the public.<sup>3</sup>

NATO and Ukraine have organised a number of training events to discuss best practices and enhance Ukraine's preparedness. This included Ukraine's participation in a course for first responders at the Joint Chemical, Biological, Radiological and Nuclear Defence Centre of Excellence in Vyškov, Czechia, as well as advice from resilience experts on Ukraine's National Action Plan for resilience.

At the Republic of Moldova's request, NATO

provided a Resilience Advisory Support Team to help Moldovan authorities conduct a national resilience self-assessment. The Resilience Advisory Support Team's work will contribute to improving preparedness for civil emergencies and to enhancing national resilience.

<sup>3</sup> EU-NATO Task Force on the Resilience of Critical Infrastructure, Final Assessment Report: <a href="https://www.nato.int/nato\_static\_fi2014/assets/pdf/2023/6/pdf/EU-NATO\_Final\_Assessment\_Report\_Digital.pdf">https://www.nato.int/nato\_static\_fi2014/assets/pdf/2023/6/pdf/EU-NATO\_Final\_Assessment\_Report\_Digital.pdf</a>



Snipers from the United States Parachute Regiment's Second Battalion moving across open ground during exercise Joint Viking. Norway, March 2023.

# Increasing Societal Resilience and Protecting Citizens against Hostile Information

NATO and Allies remain a target for Foreign Information Manipulation and Interference, including disinformation. Hostile information activities seek to influence citizens' decision-making, undermine democracy, deepen divisions within and between NATO members and, ultimately, weaken the Alliance.

NATO's approach to countering Foreign Information Manipulation and Interference is based on understanding and engaging. NATO continuously analyses the information environment to understand what people are saying, hearing and reading about NATO. The Alliance then seeks to engage with audiences directly, providing accurate information in its public communications.

NATO debunks and exposes major cases of disinformation. This includes calling out Russian disinformation about its war against Ukraine through the media, digital outreach, civil society, academia and the private sector. NATO also produces digital content such as 'Kremlin Lies', first aired in 2023.

NATO is also working to strengthen the resilience of societies against hostile information campaigns, developing a network of like-minded partners and international organisations, including the European Union and the G7 Rapid Response Mechanism. The Alliance has deepened its partnerships

with industry, non-governmental organisations, media organisations, social media platforms, civil society and academia. Through a 'whole-of-society approach', NATO seeks to play a key role in countering Foreign Information Manipulation and Interference.



Foreign Information Manipulation and Interference threatens our security. My work helped improve the Alliance's understanding of – and our response to – that threat.

#### Robin El Kady (Germany)

Data Scientist,
Information Environment Assessment,
Public Diplomacy Division
NATO Headquarters, Brussels, Belgium



Attendees at the Seabed Warfare Symposium at NATO Headquarters, which brought together more than 100 experts from across the Alliance and partner countries. Brussels, Belgium, December 2023.

# Beneath the Waves: Enhancing the Security of Critical Undersea Infrastructure

Pipelines and cables connect the world, and are critical to the global economy. The sabotage of the Nord Stream pipeline in 2022 – and damage to the Baltic-connector pipeline and telecommunication cables in October 2023 – highlighted the need to secure critical undersea infrastructure across the Alliance.

The Alliance has taken steps to respond to the threat posed to such infrastructure, creating a Critical Undersea Infrastructure Coordination Cell to improve the exchange of information and best practices between Allies, partners and the private sector. In May, the Secretary General hosted a high-level roundtable on critical undersea infrastructure; this event laid the ground for setting up a dedicated critical undersea infrastructure network between NATO, Allies, the private sector and other relevant actors.

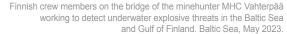
Allies also agreed to establish NATO's Maritime Centre for the Security of Critical Undersea Infrastructure within NATO's Allied Maritime Command in Northwood, United Kingdom. The Centre aims to increase situational awareness and contribute to deterrence and defence in the maritime domain.



Recognising the developing threat,
NATO took important decisions in 2023
to protect critical undersea infrastructure.
I was privileged to be part of an
experienced team supporting these
crucial efforts.

#### Annamaria Cantore (Italy, Lithuania)

Temporary staff member,
Critical Undersea Infrastructure Coordination Cell,
Emerging Security Challenges Division
NATO Headquarters, Brussels, Belgium





A ship flying the NATO flag patrols the seas around an oil platform. North Sea, off the coast of Norway, March 2023.





President of the European Commission Ursula von der Leyen, Prime Minister of Norway Jonas Gahr Støre, NATO Secretary General Jens Stoltenberg and CEO of Equinor Anders Opedal on the Troll A offshore natural gas platform. Off the west coast of Norway, March 2023.

### Advancing Energy Security and Adapting to the Energy Transition

Russia's war of aggression against Ukraine exacerbated a global energy crisis – and has radically changed the energy security landscape. In response, Allies have taken decisive measures to reduce their reliance on Russian fossil fuels, enhance energy efficiency and accelerate the transition to low-carbon energy sources.

As Russia's war of aggression moved into its third winter season, the Kremlin continued to attack critical energy infrastructure in an effort to break Ukraine's resolve. NATO has continued its support to Ukraine, including with regard to the protection of energy infrastructure. Regular engagements with Ukraine, including at the NATO-Ukraine Council, contributed to that process.

To enhance Allies' strategic awareness of key risks to energy security, NATO staff conducted in-depth assessments on the Alliance's energy needs and identified lessons from Russia's attacks against Ukraine's critical energy infrastructure. This work benefited from extensive cooperation with experts from the International Energy Agency, the European Union and Ukraine.

Throughout 2023, NATO continued to support Allies and partners with tailored training and exercises on critical energy infrastructure protection and resilience. In October, NATO and the United States Naval Postgraduate School organised a training course for Ukraine in the field of critical energy infrastructure and resilience. In November, the Energy Security Centre of Excellence in cooperation with the European Union Joint Research Centre organised CORE 2023-Baltic, a major table-top exercise aimed at supporting the protection and resilience of critical energy infrastructure in the Baltic region.

# NATO's Work to Support Allied Energy Transition

Around the world, the energy transition is taking place at an unprecedented pace - changing the way energy is produced, transported, stored and consumed. At the Vilnius Summit, Allied Leaders called for NATO to take an active role by endorsing the "Energy Transition by Design" initiative. The purpose of this initiative is to ensure that the Alliance's adaptation to the energy transition takes place in a planned, coordinated and coherent manner with a view to ensuring interoperability and military effectiveness of NATO forces. To do this, NATO also intends to bring together partner countries, international organisations, academia and industry stakeholders. NATO's Energy Transition by Design was one of the main themes of the 2023 iteration of NATO's Annual Roundtable on Energy Security.



NATO Ministers of Defence, NATO Deputy Secretary General Mircea Geoană (far right) and NATO Assistant Secretary General for Emerging Security Challenges David van Weel (far left) at the signing ceremony of the NATO Climate Change and Security Centre of Excellence during the Vilnius Summit. Vilnius, Lithuania, July 2023.

# Addressing the Impact of Climate Change on Security

NATO has continued to implement its commitment to becoming the leading international organisation when it comes to understanding and adapting to the impact of climate change on security. NATO is committed to combatting climate change by improving energy efficiency, investing in the clean energy transition and leveraging green technologies, while adapting its infrastructure and capabilities to maintain operational effectiveness and a credible deterrence and defence posture in any operating environment.

At the Vilnius Summit, NATO Leaders reinforced their commitment to integrating climate change considerations across NATO's core tasks, publishing three major documents. NATO's 2023 Climate Change and Security Impact Assessment contributed to strengthening Allies' awareness of the impact of climate change on their security; the Compendium of Best Practices provided concrete examples of Allies' efforts to adapt to climate change, while maintaining interoperability and operational effectiveness, and reducing their environmental footprint; finally, NATO's Greenhouse Gas Emissions Mapping and Analytical Methodology offered guidelines and a calculation tool, facilitating mitigation efforts. NATO also developed a prototype Climate Change and Security Risk Management Framework analytical software designed to help the Alliance manage climate change risks alongside other security challenges.

Climate change and security also remained a priority for NATO's engagement with other international organisations including the European Union, the United Nations and the World Bank Group. The Secretary General led a NATO delegation to the 28<sup>th</sup>

meeting of the Conference of the Parties to the United Nations Framework Convention on Climate Change hosted by the United Arab Emirates. Dialogue also increased with partner countries: in January, Kuwait hosted a conference on climate change and security at the NATO Istanbul Cooperation Initiative Regional Centre.

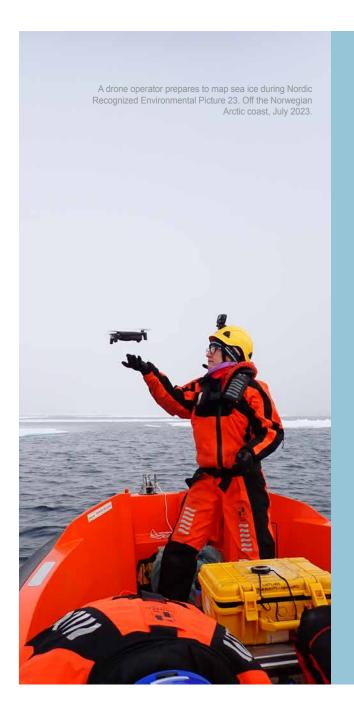


In 2023, Allied militaries had to respond to increasingly frequent climate hazards, enhance their energy efficiency efforts, all while ensuring military effectiveness in a deteriorated security environment. I am proud to be part of the team that keeps climate and energy security at the top of NATO's agenda.

#### Katarina Kertysova (Slovakia)

Officer,

Climate and Energy Security Section, Emerging Security Challenges Division NATO Headquarters, Brussels, Belgium



# NATO's Maritime Research on Climate Change

The NATO Science & Technology Organization has developed a series of initiatives to explore the impact of climate change on security, along with clear adaptation and mitigation measures. In 2023, the Science & Technology Organization's Centre for Maritime Research and Experimentation developed a unique programme of work focusing on the issue. The Centre has set up a department to leverage its expertise on maritime research and Arctic studies to boost NATO's understanding of the relationship between climate change and security. The new department will assess how climate change will affect future maritime capabilities within NATO, helping to guide the design of future platforms, sensors, systems and capabilities and contributing to NATO environmental standards. The creation of the NATO Arctic Climate Observatory has boosted experiments in critical areas. In July, the NATO Research Vessel "Alliance" deployed several deep oceanographic and acoustic recorders to monitor long-term temperature, salinity and ambient noise evolution in the Fram Strait and the northern Norwegian Sea.







Andrea Mitchell, NBC News' Chief Foreign Correspondent, with NATO Secretary General Jens Stoltenberg at the NATO Public Forum on the sidelines of the Vilnius Summit. Vilnius, Lithuania, July 2023.

We (...) see authoritarian states seeking to undermine our freedom and way of life. (...) Spreading disinformation, sowing division and undermining democracy. Our response must be to work even more closely together in NATO.

Statement by NATO Secretary General Jens Stoltenberg during a joint press conference with the Prime Minister of North Macedonia, Dimitar Kovačevski.

21 November 2023, Skopje, North Macedonia.

A strong and successful Alliance depends on the support and understanding of its citizens. NATO pursues this through tailored communications and engagement with a wide range of international media and key opinion formers, through digital outreach on multiple platforms, and through a clear and consistent brand identity.

As well as explaining to citizens what NATO is and does, NATO also works to counter Foreign Information Manipulation and Interference, including disinformation. NATO's approach relies on fact-based and credible public communications.

#### 2023 Communications Highlights

#### **Vilnius Summit Communications**

The 2023 NATO Summit in Vilnius attracted huge worldwide interest. The Secretary General's opening remarks and press conferences were carried live by more than 118 television networks around the world, with a potential reach of 1.7 billion people. To engage with younger audiences, NATO shared exclusive behind-the-scenes content on Instagram and Facebook and collaborated with influencers from Baltic countries. The 'NATO in Russian' team engaged Russian-speaking audiences with exclusive interviews on social media with experts and journalists from the event. NATO branding throughout the city served as a reminder and expression of thanks to citizens and tourists in Vilnius in advance of and throughout the summit.

NATO also organised a Public Forum at the Vilnius Summit; this brought together high-level speakers, including heads of state and government, ministers, officials from Allied and partner countries, NATO officials, international security experts, thinktanks, non-governmental organisations, youth networks, content creators, academic institutions, parliamentarians, industry and military entities from Allied countries. More than 500,000 people watched the event online. It reached almost 2 million people via social media and had a potential reach of around 2.2 billion people through broadcast media.

#### **NATO Public Forum YouTube Studio**

NATO partnered with YouTube to run a professional studio as part of the NATO Public Forum in the margins of the Vilnius Summit. A group of young content creators conducted interviews with a range of prominent speakers and participants at the Public Forum. Maria Efrosinina (Ukrainian television host and media personality), Jack Kelly (British founder and CEO of TLDR News) and Paul de Miko (Lithuanian content creator) were the three influencers selected to conduct interviews.

The video interviews were published on NATO's and the content creators' own YouTube channels, gathering over 200,000 views. This initiative also raised interest on the creators' other online platforms, generating over 2 million views and 150,000 likes across their different channels.

#### **Senior Communicators Network**

NATO continued to expand and strengthen its growing community among the 31 Allies and Invitee Sweden.4 The NATO Senior Communicators Conference - held from 30 November to 1 December - brought communications professionals from a wide range of NATO bodies together at NATO Headquarters in Brussels. The annual conference serves as a platform for coordination and collaboration among Alliance communications leadership and professionals. Participants were briefed on existing multilateral approaches and national best practices to respond to Foreign Information Manipulation and Interference. They discussed how NATO is tackling disinformation and explored communications challenges and opportunities as the Alliance approaches its 75th anniversary in April 2024 and the Washington Summit in July 2024.



In 2023, I was proud to help convene senior communications officials from across the Alliance for a conference on Foreign Information Manipulation and Interference. This demonstrated NATO's power as a platform for discussing the challenges we share.

#### Tom Morin-Robinson (Canada)

Programme Officer, Public Diplomacy Division NATO Headquarters, Brussels, Belgium

# **Engaging Youth**

Engaging with young people is vital to the future of the Alliance - so that the next generation knows what NATO is and why it matters to their security. In 2023, NATO continued its Protect the Future campaign, led by 10 young online creators from Estonia, Latvia, Lithuania and Poland. To discover more about how the Alliance protects its citizens and territory, the creators travelled to NATO Headquarters and met with the Secretary General. They also attended the Vilnius Summit and took part in a range of military exercises and opportunities, including visiting the aircraft carrier USS Gerald R. Ford.

# Protect the Future: Young content creators

#### The **10** influencers:

- produced 573 pieces of content generating
   6 million video views
- generated over **340,000** social media engagements
- had an estimated online organic reach of more than 25 million people



<sup>4</sup> Sweden became a NATO Ally in March 2024.

# **Gaming against Disinformation**

In Warsaw in November, NATO held its first gaming tournament as part of the Protect the Future campaign. Hosted by NATO Assistant Secretary General for Public Diplomacy Marie-Doha Besancenot and Polish actor Maciej Musial, the competition brought gaming experts together with NATO officials to explain the work of the Alliance – particularly its response to disinformation – on the gaming channel Twitch. This was a new way to engage different audiences.



Soldiers at the NATO Gaming Tournament, where the challenges included games exploring themes such as countering disinformation and reconciling differences in a multinational organisation. Warsaw, Poland, October 2023.

# 2023 NATO Youth Summit: NextGen Freedom & Security

On 5 June, young people from NATO Allies and further afield joined a transatlantic conversation at the NATO Youth Summit. The conversation, organised by NATO and the University of William & Mary, took place simultaneously online, in Brussels and in Washington, D.C. The event was an opportunity to exchange views and explore how NATO addresses challenges that the next generation sees as critical to their security.

The issues covered ranged from disinformation to the latest technologies, and from climate change to national security. The event generated over 50,000 viewers across digital and social media channels, 150,000 social media engagements and reached 8.4 million people across social media. Of the online attendees, 45% were female, and 85% were 18 to 35 years old.



The NATO Secretary General, Jens Stoltenberg, participates in a panel at the Munich Security Conference alongside the Prime Minister of Denmark, Mette Frederiksen, the President of the Republic of Moldova, Maia Sandu, the President of Finland, Sauli Niinistö and the President of the German Marshall Fund of the United States, Heather A. Conley. Munich, Germany, February 2023.

# Raising Awareness across the Alliance and Beyond

#### **Press Tours**

In 2023, 81 media from 21 Allies and 8 partner countries participated in NATO press tours. NATO-sponsored press tours provide media with first-hand access to NATO's missions, exercises, operations and deployments. They help show the breadth of NATO's work to protect Allied populations and territory against any threat from any direction. In 2023, media had the opportunity to:

- observe Allied forces training in extreme conditions in the High North;
- observe the arrival of NATO reinforcements on the eastern flank;
- accompany NATO's KFOR forces as they maintain a safe and secure environment in Kosovo;
- follow military and industry experts as they train and test undersea unmanned systems for submarine detection:
- witness Cyber Coalition 23, one of the world's largest cyber defence exercises;
- engage with industry and NATO experts on the latest counter-drone technologies and watch these technologies work together to detect, identify, counter and neutralise malicious drones; and
- follow Allied ships and aircraft training to protect the remote Faroe Islands.

# 2023: Press and Media Engagements in Numbers

**Almost 15,000** reports on NATO in key international media with a potential, cumulative reach of billions of people

Almost 3,000 media queries

**Almost 300** interviews by the Secretary General and Deputy Secretary General

**54** press tours

Indicative increases in digital audience from 2022

up by 113%

in up by 28%

o up by 20%

**up by 10%** 

**If** up by 4%

Total flagship social media community: **up by 15%** to 5.9 million users

# The NATO Information and Documentation Centre

The NATO Information and Documentation Centre in Kyiv has worked to increase awareness and understanding of NATO and of NATO-Ukraine cooperation for more than 25 years. Throughout Russia's invasion of Ukraine, the office has engaged with Ukrainian audiences explaining Allied support to their country. The Centre also supports Ukrainian civil society through various public diplomacy projects, such as the "Games of Heroes" event.

#### **Public Diplomacy Grants**

To promote public understanding of the Alliance, NATO co-sponsors conferences, seminars, workshops and other public diplomacy activities through a series of discretionary grants. In 2023, NATO issued 207 grants across 36 countries. It invited non-governmental organisations, think-tanks and universities from NATO member and partner countries to develop innovative ways to build awareness on NATO's mission, priorities and values. Grant support ranged from events and publications to more innovative projects such as podcasts, digital tools, roadshows, interactive platforms and games. They also included projects aimed at increasing societal resilience against disinformation.

#### Communications in the Russian Language

In 2023, NATO continued its outreach to selected Russian-language audiences, despite restrictions on media and increasing repression against civil society and opposition voices inside Russia. NATO did this both digitally and in-person through visits to NATO Headquarters, briefings and other events.

Since the war against Ukraine began, many Russian citizens have moved to Allied and partner countries. NATO continues to invest in – and substantially grow – its outreach to Russian civil society, prodemocracy activists and younger influencers, as well as more established opinion formers, independent analysts and foreign-based journalists. In 2023, NATO intensified its outreach to influential YouTube channels, an important source of information for Russian-language audiences.

NATO also continued to expand its social media presence in the Russian language, growing its 'HATO πο-русски', or 'NATO in Russian', family of social media accounts to include a Telegram channel and Twitter Spaces.



The "Games of Heroes" team of adaptive Ukrainian athletes and war veterans visit NATO Headquarters to partake in a cross-fit competition.

Brussels, Belgium, November 2023.



By engaging with different audiences and explaining NATO's role and mission, I'm proud that – in the face of foreign disinformation – I'm able to help strengthen the resilience of Allied societies.

#### **Beaudine Verhoek (Netherlands)**

Officer, Policy, Plans and Campaigns Public Diplomacy Division NATO Headquarters, Brussels, Belgium

# 'NATO-Russia: Setting the Record Straight'

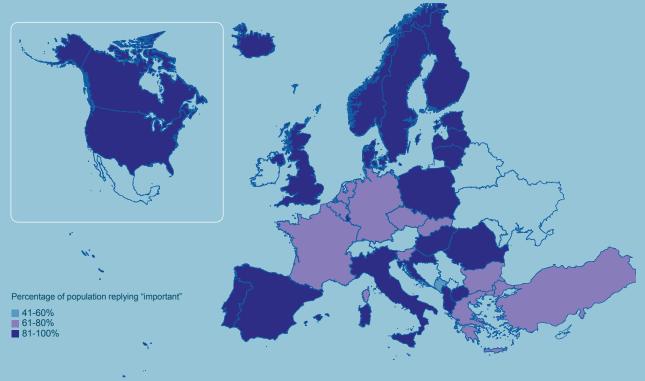
The 'NATO-Russia: Setting the Record Straight' page of the NATO website exposes and debunks aggressive and ongoing Russian disinformation against the Alliance. It counters falsehoods with facts using a mixture of satellite images, factsheets and interviews. NATO also produces digital content such as the 'Stop the Lies, Stop the War' video.

# Listening to Citizens: Continued Support for the Alliance in 2023

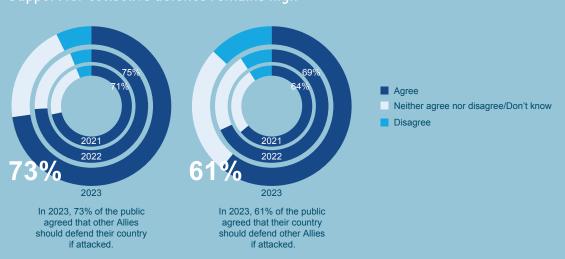
In 2023, NATO commissioned surveys across all 31 Allies to understand citizens' perceptions of NATO and to monitor trends in comparison to 2022.<sup>5</sup> Sweden was also included in the survey.<sup>6</sup> The data for 2023 was collected between 1 November and 6 December.

#### Strong belief in the value of NATO and the transatlantic bond

Support for the transatlantic bond remains strong. As in 2022, 82% of citizens believe collaboration between North America and Europe on safety and security matters is important.



#### Support for collective defence remains high

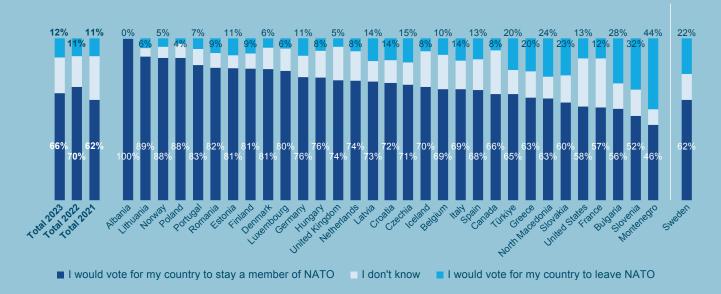


Based on surveys of 30,925 adults conducted by Agenda and Yonder in 31 NATO member countries and Sweden between 1 November and 6 December 2023. Base size and fieldwork period for previous surveys: 2022 base: 30,993, fieldwork 7-29 November; 2021 base: 28,909, fieldwork 12 November - 2 December. Interviews were conducted online, except for Albania and Montenegro where a telephone methodology was used due to the limited penetration of online panels in these countries. In all countries polled online, a sample of at least 1,000 respondents per country was achieved. In nations surveyed by telephone at least 500 individuals per country were interviewed. Quotas for gender, age and region were set and post-weighting was applied to ensure the samples for each country were representative of the adult population (aged 18+). Total results (across all Allies polled) were weighted to the population distribution of NATO. Data collected in Sweden are not included in calculation of the 2023 NATO total. The surveys referenced are based on non-probability sampling, with an indicative margin of error of ± 3%. Due to rounding, results will not always add up to 100%. For more information see <a href="https://www.nato.int/SGReport/2023/audience-insight-en/">https://www.nato.int/SGReport/2023/audience-insight-en/</a>.

<sup>6</sup> Sweden was included in the survey for the second time in 2023 to benchmark citizens' perceptions of NATO. When this survey was conducted, Sweden was a NATO Invitee. Data from Sweden are not included in the calculation of the NATO total.

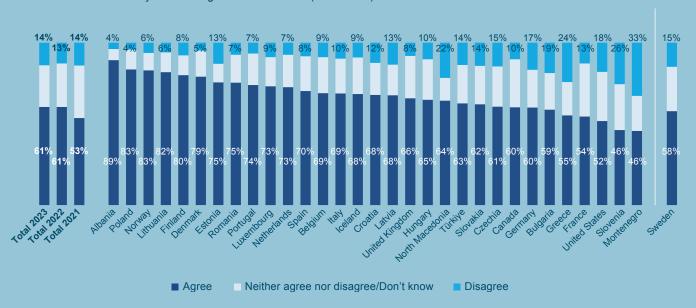
# Support for NATO remains high

Most citizens would vote for their country to remain a member of NATO in a referendum (66%). The graph below shows responses to the question "If you could vote for or against your country's membership in NATO, how would you vote?".



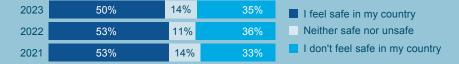
#### NATO keeps us safe

Agreement that NATO membership makes foreign attack less likely remains elevated since 2021 (61%), with only 14% disagreeing with the statement. The graph below shows agreement with the statement "Our membership in NATO makes it less likely that a foreign nation will attack (COUNTRY)".



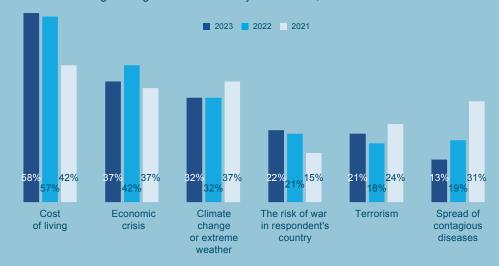
#### Perceptions of safety among Allied citizens

The majority of Allied citizens feel safe in their country. However, feelings of safety have declined since 2022 (50%, compared to 53% in 2022).



#### Cost of living and economic crisis remain primary concerns for Allied citizens

Alliance-wide, cost of living remains a concern for the majority of Allied citizens (58%), and concern about the risk of war remains significantly higher than in 2021 (22%). These data show responses to the question "Which of the following are of greatest concern to you?" in 2023, 2022 and 2021.



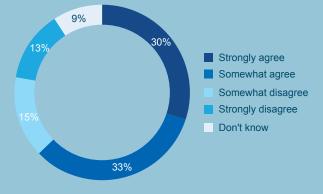
Support for assisting Ukraine is high and a majority of Allied citizens consider Russia's war against Ukraine to have affected the safety and security of their country.

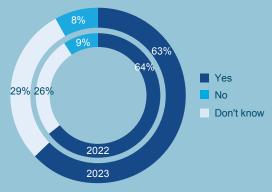
Agreement with Allied nations continuing to support Ukraine is high (63%).

These responses were to the question: "Regarding Russia's war against Ukraine, do you agree or disagree with (COUNTRY) continuing to provide support to Ukraine?"

63% of Allied citizens consider Russia's invasion of Ukraine to have affected the safety and security of their country.

These responses were to the question: "In your opinion, has Russia's war against Ukraine affected the safety and security of (COUNTRY)?"\*





\*Asked as 'Russia's invasion of Ukraine' in 2022





Technologies like artificial intelligence, autonomous systems, biotech and quantum are changing the character of conflict as much as the industrial revolution. As our strategic competitors invest heavily, they are becoming new arenas for global competition. So we must constantly sharpen our technological edge. By developing and adopting new technologies.

> Speech by Secretary General Jens Stoltenberg at the NATO-Industry Forum. Stockholm, Sweden, 25 October 2023.

## Investing in Cutting-Edge and Interoperable Capabilities

Interoperability is the ability to operate collectively to achieve common goals, including by using standardised equipment. Interoperability is what makes coordination and cooperation by multinational forces possible - and, as such, is crucial to NATO's ability to do its job.

The Alliance carries out a vast range of multinational missions and tasks, for which it requires cutting-edge and interoperable capabilities. At the Vilnius Summit, Allies renewed their commitment to improving the interoperability of their forces, including by boosting investment in the right capabilities.

To support this endeavour, NATO has developed a flexible, scalable and adaptable multinational instrument called High Visibility Projects. These projects seek to address one or more key NATO defence planning priorities and provide Allies with dedicated staff support across the full project lifecycle. This multinational approach has enabled Allies — and, in some instances, partners — to close key capability gaps, save money and ensure interoperability by design.

In 2023, several projects achieved key milestones and significantly contributed to NATO's strengthened deterrence and defence posture. Highlights included:

- 10 Allies, in collaboration with industry, <sup>7</sup> launched a project to develop and field a modular system for ground-based air defence.
- NATO created a rapid-acquisition track to guide Allies' purchase of existing ground-based air defence systems.

- 12 Allies<sup>8</sup> agreed to develop a variety of tools to ensure NATO's ability to ensure mobility across all terrain. This is important as the ability to manoeuvre over land - including across streams and rivers – together with the ability to hinder an adversary's own movement are essential to combat effectiveness.
- The Belgian-led Multinational Ammunition Warehousing Initiative continued to support the pre-positioning of munition stockpiles for NATO's multinational battlegroups on the Alliance's eastern flank. Twelve more Allies joined the initiative in 2023, bringing the total participation to 23 Allies9 and Invitee Sweden.
- The Initial Alliance Future Surveillance and Control initiative was established in 2023 with the aim of ensuring the delivery of next-generation Airborne Warning and Control System (AWACS) aircraft and related capabilities when the NATO AWACS fleet retires around 2035. Thirteen nations initially signed a Letter of Intent to launch this initiative, with another seven Allies indicating over the course of 2023 their ambition to join the initiative. 10 In July, seven Allies established the Initial Alliance Future Surveillance and Control programme and assigned the NATO Support and Procurement Agency as the programme management agency and contracting authority. In November, NATO announced a strategy to procure the Boeing E-7A Wedgetail aircraft. The first of these aircraft is expected to be delivered in 2031.

Denmark, Germany, Greece, Hungary, Italy, the Netherlands, Norway, Slovenia, Spain, the United Kingdom.

Belgium, Croatia, Finland, Germany, Greece, Italy, Latvia, the Netherlands, Romania, Spain, the United Kingdom, the United States

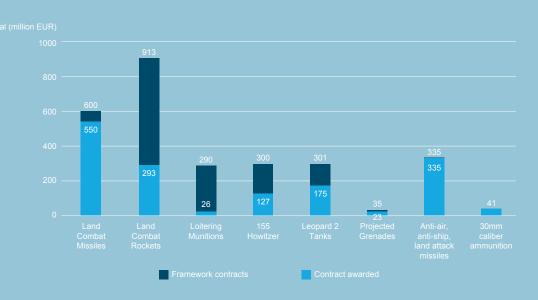
Belgium, Bulgaria, Canada, Czechia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Italy, Latvia, Lithuania, Luxembourg, the Netherlands, Norway, Poland, Romania, Slovakia, Slovenia, Spain, the United Kingdom.

<sup>10</sup> Belgium, Germany, Luxembourg, the Netherlands, Norway, Romania,

- The Multinational Multi Role Tanker Transport fleet celebrated Initial Operational Capability at the fleet's homebase in Eindhoven, the Netherlands. The fleet provides round-the-clock air-to-air refuelling for NATO and Allied planes and helicopters, completing more than 583 missions in 2023 alone. In 2023, participating nations<sup>11</sup> also ordered an additional aircraft – for delivery in 2026 – which will bring the fleet up to 10 aircraft. The aircraft's design makes it suitable for use in a range of other transport missions including medical evacuation.
- The NATO Flight Training Europe project continued to provide state-of-the-art pilot training, reducing costs and increasing interoperability. The project leverages existing training facilities while also providing a framework for adding new training locations and capacity. This includes the full spectrum of training required for fighter jet, helicopter and transport pilots, as well as those who remotely pilot uncrewed aircraft. In 2023, Germany and the United Kingdom joined the 10 existing participants.<sup>12</sup> Three new training campuses have been added in Greece, Hungary and North Macedonia.

## **Aggregating Munition Demand**

The provision of munitions to boost Allied stockpiles was a key issue in 2023. NATO has dedicated frameworks in place: the Battle Decisive Munition projects for the land and air domains, designed to help Allies procure supplies together. Allied National Armaments Directorates have taken significant steps to ensure more robust munition stockpiles. For land battle munitions, the Alliance has created framework contracts worth EUR 2.4 billion and EUR 1 billion, including to buy 155mm artillery shells, anti-tank guided missiles and main battle tank ammunition.



<sup>11</sup> Belgium, Czechia, Germany, Luxembourg, the Netherlands, Norway.

<sup>12</sup> Belgium, Czechia, Greece, Hungary, Italy, Montenegro, North Macedonia, Romania, Spain and Türkiye.



A United States Navy aviation electrician does maintenance work on an MH-60 Seahawk helicopter on the deck of USS Mount Whitney. Black Sea. June 2023



United States Air Force A-10C Thunderbolt IIs prepare to launch on a training mission during exercise Swift Response 23. Thessaloniki, Greece, May 2023.

## **Aviation and Air Capabilities**

NATO needs aeronautical capabilities it can deploy in all possible terrain and environments - and the infrastructure, systems and services to support them.

NATO's Aeronautical Communications, Navigation and Surveillance Strategy gives the Alliance a common vision to share with partners and other relevant actors, fostering interoperability and bolstering resilience. It focuses on the reinforcement and evolution of a resilient ground, air and spacebased system of systems across the Alliance, based on national communications, navigation and surveillance systems, and guided by the Alliance's security and defence needs.

NATO also assesses Allies' and partners' airworthiness systems and their associated aviation authorities, helping to ensure the safety of Allied aircraft during operations. By 2023, 21 Allies, Invitee Sweden and four partners had been recognised as airworthy; the remaining Allies are expected to be recognised over the next three years.

Cooperation with international organisations continued in 2023 through the NATO Aviation Committee. These include the International Civil Aviation Organization, the European Organisation for the Safety of Air Navigation and the International Air Transport Association. Topics of exchange ranged from the implementation of 'Flexible Use

of Airspace' across all regions, to the facilitation of data-sharing and military flight information exchange, to the impact of climate change on NATO air activities, among others.



NATO Deputy Secretary General Mircea Geoană (left) and Allied Defence Ministers sign initiatives to strengthen NATO's deterrence and defence in the air domain. Brussels, Belgium, October 2023.



A NATO AWACS aircraft on the tarmac. Šiauliai Air Base, Lithuania, September 2023

## Intelligence, Surveillance and Reconnaissance Capabilities

In 2023, NATO significantly bolstered its intelligence, surveillance and reconnaissance capabilities. Central to this progress is the Alliance Future Surveillance and Control initiative. This initiative is pioneering a sophisticated multi-domain surveillance and control architecture, in an effort to create a seamlessly integrated, network-centric 'system of systems'. This development is designed to harmonise capabilities across multiple domains, significantly boosting the Alliance's strategic and operational adaptability.

Another aspect of this transformation is the evolution of the Alliance Ground Surveillance system, which plays a pivotal role in enhancing NATO's intelligence, surveillance and reconnaissance capabilities. The fleet of five Phoenix aircraft provides persistent aerial surveillance over extensive areas, operating effectively regardless of weather or light conditions. In 2023, NATO worked to upgrade the system's capabilities to prepare for the era succeeding the Phoenix's operational life, aiming to diversify data sources and broaden the capabilities under the Alliance's umbrella. 2023 was also marked by a strategic shift towards a 'platformagnostic' approach, represented by the transition from the NATO Alliance Ground Surveillance Force to the NATO Intelligence, Surveillance and Reconnaissance Force. This transition signifies a broader and more flexible operational scope,

#### **Unified Vision 2023**

Unified Vision 2023, the latest iteration of NATO's largest Joint Intelligence, Surveillance and Reconnaissance exercise, marked a significant milestone in enhancing the Alliance's intelligence capabilities. Focused on a complex, simulated crisis scenario accentuated by natural disasters, Unified Vision 2023 brought together intelligence experts from across Europe and North America. The exercise's primary goal was to refine the timeliness, accuracy and effectiveness of intelligence-sharing among Allies. The exercise employed an extensive array of assets, including 25 maritime, land, air and space assets such as commercial satellites; the NATO Alliance Ground Surveillance system; aircraft such as the F-16 and Tornado; and various unmanned aerial vehicles, alongside naval frigates.



Aircrew from the Netherlands, Türkiye and the United States monitor the skies in an AWACS aircraft. Poland, September 2023.

enabling the integration of a diverse spectrum of sensors and data sources. It underlines NATO's commitment to a dynamic and responsive intelligence, surveillance and reconnaissance architecture.

In 2023, 18 Allies<sup>13</sup> and Invitee Sweden have launched the Alliance Persistent Surveillance from Space initiative. This initiative aims to establish a virtual constellation – 'Aquila' – of both national and commercial space assets such as satellites, leveraging the latest advances in commercial space technology. It is designed to help streamline data collection, sharing and analysis among NATO Allies and with the NATO command structure, while generating cost savings. The initiative leverages technologies like artificial intelligence and machine learning tools to manage large volumes of data and deliver them swiftly and accurately to NATO decision-makers and military commanders.



Geospatial mapping is an increasingly sophisticated and important feature of NATO decision-making. I'm delighted to have played my part in boosting the Geographic Information Systems literacy at NATO HQ.

#### Pino Nobile (Italy)

Head, Geospatial Section, Situation Centre, Operations Division NATO Headquarters, Brussels, Belgium

<sup>13</sup> Belgium, Bulgaria, Canada, Finland, France, Germany, Greece, Hungary, Italy, Luxembourg, the Netherlands, Norway, Poland, Romania, Spain, Türkiye, the United Kingdom and the United States.



United States marines conducting weapon drills together in the woods. Bardufoss, Norway, March 2023.

### **Land Capabilities**

Russia's war against Ukraine underlined the importance of land capabilities. Allies reflected this in their focus on land armaments efforts in 2023, further accelerating the development of cutting-edge capabilities across the land domain, to include intensive testing and implementation of emerging and disruptive technologies.

NATO intensified its work in a range of areas, including active and passive protection of forces and platforms; the effective use of non-lethal capabilities; direct and indirect fire; military engineering; and surface-based air and missile defence. Highlights included:

- The introduction of new standards for unmanned ground platforms data exchange protocols, improving NATO's capabilities for multinational and safe use of such platforms. New standards have also been put in place for mobility and survivability of ground platforms, allowing interoperable employment of intelligent systems. Through these standards, continuously validated through tests, ground forces are able to adapt to new technologies while remaining interoperable.
- The continuous development of standards for a common fire control software, enabling accurate and safe firing, and an Alliance-wide indirect fire (artillery and mortar) Command and Control interoperability. The annual Defender Dynamic Front exercise series tested these capabilities and standards.
- The development of standards to ensure the best use of Low/Scalable-Intensity Directed Energy capabilities without causing harm to living organisms.
- The testing, through the NATO Military Engineering Centre of Excellence, of a standard adaptor to connect different national floating bridges in order to cross 'wide-wet' gaps such as rivers.

## Ammunition Interchangeability

Ammunition interchangeability, for small and large-calibre arms, remains a key challenge. NATO has a well-established system for the qualification of small arms ammunition for interchangeability, through the 'form and fit' standards and testing procedures implemented by NATO regional test centres in the United Kingdom and the United States. This centralised qualification system facilitates both national and multinational acquisition of interchangeable ammunition through the NATO Support and Procurement Agency's Ammunition Support Partnership Initiative.



Chair of the NATO Military Committee Admiral Rob Bauer (right) visits exercise Griffin Storm 2023. Lithuania, June 2023.



A Greek submarine sails in formation with the Spanish frigate ESPS Numancia and the Turkish frigate TCG Barbaros during exercise Dynamic Manta 23. Waters around Sicily, Italy, February 2023.

## Maritime Capabilities

In 2023, NATO Defence Ministers endorsed the Digital Ocean Vision, a pioneering initiative to enhance NATO's maritime situational awareness from seabed to space through the exploitation of emerging and disruptive technologies. This initiative aims to contribute to Alliance deterrence and defence, including the security of critical undersea infrastructure. The Digital Ocean initiative was developed by the Conference of National Armaments Directors to transform Allied maritime domain awareness by enhancing coordination between national and Allied capabilities, ranging from satellites to autonomous systems below, on and above the sea.

Operational experimentation remains key to achieving interoperability, interchangeability and accelerating capability development. A key event in 2023 was the Experimentation and Prototyping Augmented by Maritime Unmanned Systems exercise hosted by Portugal. This was the largestever exercise involving maritime unmanned systems, bringing together contributions from 26 Allies and partners, with over of 90 unmanned systems and 10 Allied warships.

NATO's Dynamic Messenger exercise dovetailed with the Experimentation and Prototyping Augmented by Maritime Unmanned Systems exercise. The Dynamic Messenger exercise, in its second year, integrated unmanned systems and sensors into Standing NATO Maritime Forces. Allies deployed these systems to conduct simulated anti-submarine warfare, intelligence, surveillance and reconnaissance, environmental assessments and to protect critical undersea infrastructure.

Thinking beyond 2050, the sustainability of Allied warships is an important concern and the NATO Naval Armaments Group continued to work to identify a sustainable future fuel type for NATO warships. In November, a symposium on the topic was held in Ostend, Belgium, with over 200 leading experts from industry across the Alliance, exchanging ideas, identifying new technologies and providing Allies with valuable considerations to inform decision-making.

Within the context of the establishment of the new Climate Change and Security Centre of Excellence in Canada, the Centre for Maritime Research and



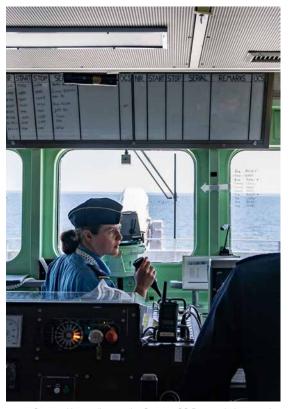
USS Mount Whitney moves into formation during exercise BALTOPS 23. Baltic Sea, June 2023.

Experimentation conducted two sea trials in the Arctic sea: Nordic Recognized Environmental Picture and Arctic Climate Observatory 2023. The former focused on understanding the consequences of scattered ice floes on underwater acoustic propagation; the latter paved the way

for a long-term Arctic oceanographic-acoustic underwater observatory. Both activities contributed to the understanding of the new Arctic operational environment.

# Monitoring and Protection of Critical Undersea Infrastructure

NATO has further modernised its ability to monitor and survey the seabed, including critical undersea infrastructure. The Centre for Maritime Research and Experimentation has launched the Data Knowledge and Operational Effectiveness project, funded by Allied Command Transformation, to provide enhanced capabilities in the framework of seabed-to-space situational awareness exploiting all the information available. By processing immense volumes of information, fused from a variety of sources and generated from monitoring a very large number of assets, the system aims to anticipate future behaviours and identify threats.



German Navy sailors on the German GS Bayern during exercise BALTOPS 23. Baltic Sea, June 2023.

## **Enhancing Intelligence and Security**

NATO works to ensure that the Alliance remains secure across all its domains and agencies, and that decision-making is properly informed by accurate, relevant and timely intelligence. Throughout 2023, while the main intelligence priority was Russia's war against Ukraine, NATO's Joint Intelligence and Security Division continued to deliver strategic intelligence analysis on a broad range of topics to support the North Atlantic Council and the Military Committee.

Intelligence played a key role in informing NATO's senior leadership decision-making process, which in addition to the war in Ukraine, also included issues related to the threat from terrorism and the instability in the South, among other issues. Intelligence production also included the challenges posed by the PRC, cyber threats,

threats to undersea infrastructure, and a wide range of additional regional and cross-cutting issues affecting NATO Allies and partners.

In 2023, NATO finalised the implementation of the 2020-2023 Strategy for the NATO Intelligence Enterprise. The strategy has resulted in the significant improvement of NATO's capacity to retain information advantage over potential adversaries. Building on these achievements and with a focus on five key areas – security, intelligence production, communication and information systems, workforce, and intelligence enterprise governance and management - the Alliance initiated the development of the Strategy for 2024-2030. This will ensure the continuous enhancement of intelligence and security in support of NATO decision making processes.

### Working with Industry

Defence production and cooperation with industry is a key priority. NATO remains committed to effective cooperation with the defence industry. As the Secretary General stated in his address to the annual NATO-Industry Forum in November: "Cooperation between NATO, Allies and industry is growing stronger by the day. Because now more than ever, security is a shared responsibility."

The main conduit for NATO to engage with industry is the NATO Industrial Advisory Group, which brings together representatives from the Defence Industry Associations of Allied and partner countries. The Advisory Group launched 12 new studies in 2023 covering topics such as counter-mobility, counterrockets, artillery and mortar technologies, and combat air platforms. The Group also published a report analysing production capacity and supply chains in the new security environment. This work provided a consolidated view of the status of Allies' defence industries, the current and future challenges these industries face and possible actions to address them, and informed the development of the Defence Production Action Plan.



NATO Secretary General Jens Stoltenberg addresses the 2023 NATO-Industry Forum. Stockholm, Sweden, October 2023.

#### The Defence Production Action Plan

At the 2023 Summit, Allied Heads of State and Government endorsed NATO's first Defence Production Action Plan. The Plan underscores the strategic importance of sustaining defence industrial production capacity in peacetime, crisis and conflict, and sets out a number of specific actions and projects to enable the Alliance to bolster engagement with the defence industry.

The Defence Production Action Plan focuses on three main pillars of activity: aggregating demand, understanding the defence industry and increasing interoperability. The aggregation of demand provides industry with clear long-term, predictable requirements that can be converted into firm orders and contracts. The plan also highlights the need for NATO to have a clear understanding of the complexities of the defence industry, including its composition, drivers, incentives and principles. Finally, the plan stresses the importance of interoperability and standardisation, with an initial focus on land battle-decisive munitions.

## A Changing World: Investing in Innovation and Data

Today, the world faces a series of interconnected and multifaceted security challenges. Climate change, scarcity of resources, economic instability and hostile threats from state and non-state actors are shaping the wider security and defence environment. At the same time, technologies such as artificial intelligence and quantum computing look set to change the way people live and work, as well as the way countries understand notions of defence.

A key part of NATO's response to this changing world is about innovation: identifying, developing and deploying dual-use emerging and disruptive technologies to help the Alliance address the challenges it faces. This, in turn, means valuing

and understanding the diverse ecosystems and connections that lead to innovation throughout the Alliance, fostering and protecting them, and doing everything possible to help them positively shape the security environment of tomorrow.

In 2023, NATO accelerated efforts to implement and adopt data exploitation and artificial intelligence technologies in areas as diverse as cyber defence, situational awareness, information environment assessment, critical undersea infrastructure security, the response to climate change and imagery analysis.

NATO's approach to emerging and disruptive technologies, including artificial intelligence is



Drones on the ground during NATO's Counter-Unmanned Aircraft System Technical Interoperability Exercise. The Netherlands, September 2023.



Family photograph of experts from government, industry and academia at NATO's first Responsible Innovation in Defence and Security Conference. Brussels, Belgium, November 2023.

guided by Principles of Responsible Use. Together with Belgium, Luxembourg and the Netherlands, NATO hosted the first NATO Responsible Innovation Conference in Defence and Security to engage world-leading experts on artificial intelligence, biotechnology and human enhancement, sustainability, and how the Alliance's own innovation initiatives operationalise their responsible principles.

NATO's Data and Artificial Intelligence Review Board – established in 2022 – brings together an interdisciplinary group of experts from NATO Allies to help govern the responsible development and use of artificial intelligence and data across NATO. In 2023, the Board worked on standards, assessments and toolkits for the certification of artificial intelligence applications to security and defence, and their responsible use. In practice, these include quality controls, riskmitigation practices and practical tools that will help align new projects with NATO's Principles of Responsible Use.

### **Quantum Technologies**

Quantum technologies could have farreaching implications for security and defence, requiring NATO to become quantum-ready, and to prepare both for the challenges and opportunities of quantum. This, in turn, requires fostering a competitive innovation ecosystem, cooperating on technology development, ensuring NATO has a skilled workforce, and accelerating experimentation and adoption.

In November, Foreign Ministers endorsed NATO's Quantum Strategy, which focuses on achieving a quantum-ready Alliance able to accelerate the development and adoption of quantum technologies, while protecting itself from quantum-enabled attacks.

In February, Defence Ministers formally recognised next-generation communications networks – such as 6G and Internet of Things sensor networks – as technologies with strategic impact for the Alliance. They also noted the nexus between NATO's work on emerging and disruptive technologies on the one hand, and climate change security and energy

resilience agendas on the other, and endorsed a renewed focus on operational experimentation with emerging and disruptive technologies. In December 2023, NATO completed its first study on investment by strategic competitors and potential adversaries into emerging and disruptive technologies across the Alliance.

## Preparing for the Future: the NATO Warfighting Capstone Concept and the 2023 Strategic Foresight Analysis

Allied Command Transformation is NATO's strategic warfare development command. Its mission is to lead the strategic warfare development of military structures, forces, capabilities and doctrines. Allied Command Transformation drives the full implementation of the NATO Warfighting Capstone Concept, adopted in 2021. This Concept provides a vision for the Alliance's long-term warfare development. In that context, Allied Command Transformation continues to leverage innovation, experimentation, wargaming and emerging and disruptive technologies, in order to maintain NATO's



An illustration of the objectives of the NATO Warfighting Capstone Concept. Norfolk. United States. April 2023.

military edge over potential adversaries. A public version of the concept was released in 2023.13

As part of the efforts to understand the challenges the Alliance will face in the upcoming years, in February Allied Command Transformation also issued the Strategic Foresight Analysis 2023. The Analysis identifies pervasive competition as a key component that will likely shape future strategic environments. In the most likely scenario envisaged by the Analysis, the current low level of global cooperation will endure, competition will intensify, and the extent and frequency of structural disruptions will increase. The Strategic Foresight Analysis 2023 will serve to prepare the Alliance to continue thriving in a complex, congested, commercialised, and contested security environment.<sup>14</sup>

<sup>14</sup> The NATO Warfighting Capstone Concept: <a href="https://www.act.nato.int/our-work/nato-warfighting-capstone-concept/">https://www.act.nato.int/our-work/nato-warfighting-capstone-concept/</a>

<sup>15</sup> Strategic Foresight Analysis: https://www.act.nato.int/wp-content/uploads/2024/01/SFA2023\_Final.pdf

### The Defence Innovation Accelerator for the North Atlantic (DIANA)

The Defence Innovation Accelerator for the North Atlantic (DIANA) is part of a wider response to the innovation challenge. DIANA works directly with leading innovators and entrepreneurs – from early-stage start-ups to more mature companies – supporting the success of their businesses, giving them access to testing environments, connecting them to defence experts and providing grant funding.

DIANA collaborates with a fast-growing network of accelerator sites and test centres in innovation clusters across the Alliance. DIANA's Managing Director, Professor Deeph Chana, is supported by an interdisciplinary team of experts from NATO countries, and the staff will grow steadily until it reaches full operating capability in 2025.

In June 2023, DIANA launched its initial challenges for innovators in three key areas: energy resilience, secure information-sharing, and undersea sensing and surveillance. The application window closed at the end of August, by which time over 1,300 applicants – more than 90% of them start-ups or small-and-medium-sized enterprises – had submitted proposals. Forty-four companies from



NATO Assistant Secretary General for Emerging Security Challenges and DIANA's interim Managing Director David van Weel (left) marks the handover to incoming Managing Director Professor Deeph Chana. London, United Kingdom, March 2023.

across the Alliance were selected to join DIANA's initial accelerator programme. DIANA will launch more challenges for innovators in 2024.

### **DIANA's Accelerator Programme**

DIANA's ambition is to create a new alliance of innovators and entrepreneurs who can help equip NATO with the tools it needs to preserve peace and security. It does this by issuing 'challenges' in specific problem areas identified by Allies and asking innovators to suggest solutions.

The 44 companies selected in 2023 from across the Alliance are trailblazers in fields as diverse as robotics, ocean sensors, quantum technologies and energy-generating textiles.



A DIANA staff member at the UK Innovation and Tech Show Brussels, Belgium, March 2023

DIANA's accelerator programme is designed

to equip them with the skills and knowledge to navigate the world of 'deep tech', dual-use innovation. It includes a six-month, hands-on 'bootcamp' to support their development from early-stage start-ups into viable dual-use ventures. Through a combination of lectures, workshops and mentorship, participants gain a comprehensive understanding of the dual-use landscape and learn how to successfully navigate both commercial and defence markets. They are also introduced to potential investors and end-users.

In the programme's pilot year, the 44 companies are being supported by accelerator sites in Boston (Mass Challenge), Copenhagen (Deep Tech Lab – Quantum), Seattle (PNW MAC), Tallinn (Tehnopol) and Turin (Takeoff Plug and Play).

#### **NATO Innovation Fund**

The NATO Innovation Fund is the world's first multisovereign venture capital fund, and will invest patient risk capital directly into start-ups, and indirectly into other venture capital funds developing cutting-edge technological solutions.

Established as a separate body from NATO, the NATO Innovation Fund is designed to operate as an impact-prioritising investor and provide the necessary support to its founders for up to 15 years. The NATO Innovation Fund is unique in combining the timelines to invest at an early stage with the ability to boost innovative capacity and facilitate the adoption of technological solutions across the Alliance.

Participating Allies agreed to domicile the NATO Innovation Fund in Luxembourg. The Netherlands was selected as the Headquarters of the Fund's investment management arm. In addition to Amsterdam, further regional offices are planned across the participating Allies, including in Poland and the United Kingdom.

In July, the NATO Innovation Fund closed on its EUR 1 billion flagship fund, with contributions from 23 Allies.16 Allies welcomed Finland into the NATO Innovation Fund after it became an Ally in 2023. They will also welcome Sweden's participation upon its accession to NATO in 2024. The first meeting of the NATO Innovation Fund Limited Partner Committee took place in Budapest, Hungary in September.



NATO Assistant Secretary General for Emerging Security Challenges
David van Weel meets with Allied delegates and NATO Innovation
Fund representatives. Budapest, Hungary, September 2023.

#### **Digital Transformation**

Following the endorsement of NATO's Digital Transformation Implementation Strategy at the Vilnius Summit, NATO has taken a number of steps to support the transformation of the Alliance into a more data-driven organisation – including addressing the governance, standardisation, management, quality and security of data, and by developing NATO standards for digital technology. Allied Command Transformation continued to play an essential role in these developments.

<sup>16</sup> Belgium, Bulgaria, Czechia, Denmark, Estonia, Finland, Germany, Greece, Hungary, Iceland, Italy, Latvia, Lithuania, Luxembourg, the Netherlands, Norway, Romania, Poland, Portugal, Slovakia, Spain, Türkiye and the United Kingdom.



The NATO Research Vessel 'Alliance' operating at the sea ice margin during the Nordic Recognized Environmental Picture 2023 and Arctic Climate Observatory 2023 sea trials. Arctic Ocean, July 2023

## Key Activities of NATO's Science & Technology Organization

The NATO Science & Technology Organization delivers innovation, advice and scientific solutions to meet the Alliance's evolving needs. In 2023, the Organization included a network of over 5,000 national researchers, scientists and engineers conducting a research portfolio of more than 300 activities. The Science & Technology Organization's Collaborative Programme of Work is NATO's primary platform for defence research collaboration, allowing individual Allies to fund joint projects on topics relevant to Alliance core tasks and cutting across scientific disciplines. Key areas of work in 2023 included: cognitive warfare (led by Norway), hypersonics (Germany and the Netherlands), climate change and security (Canada, the Netherlands, Norway) and quantum technologies (Denmark, Italy, the Netherlands).



For more than 70 years, NATO has stayed at the forefront of technology. Part of my job involves communicating the nature of emerging and disruptive technologies to decision-makers. I'm proud that, in 2023, my work informed and enhanced related NATO strategies.

#### Georgiana Dragomir (Romania)

Strategy Officer, Strategy and Policy Branch, NATO Science & Technology Organization NATO Headquarters, Brussels, Belgium

#### **Technology Trends Report 2023-2043**

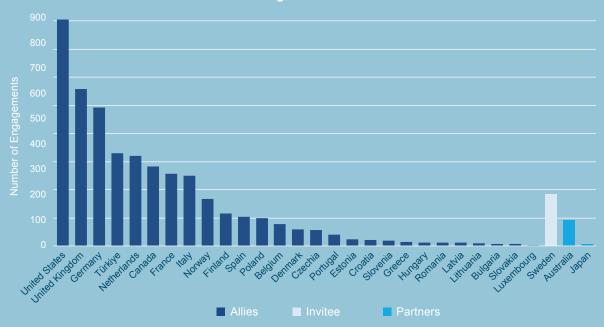
In March 2023, the NATO Science & Technology Organization published its flagship Science and Technology Trends 2023-2043 Report. This is a two-volume review of current developments and forecasts based on open-source data and the insights of the Organization's wider network.

Updated every two years, this publication provides key takeaways for an expert audience and in-depth technology assessments on 10 emerging and disruptive technology areas. It was informed by over 1,000 publications and a survey of hundreds of scientists and engineers. For the first time, it incorporates analysis from an artificial intelligence-enabled analysis model of open-source publications to understand 'weak technology signals' which could point to game-changing, next-generation technologies.

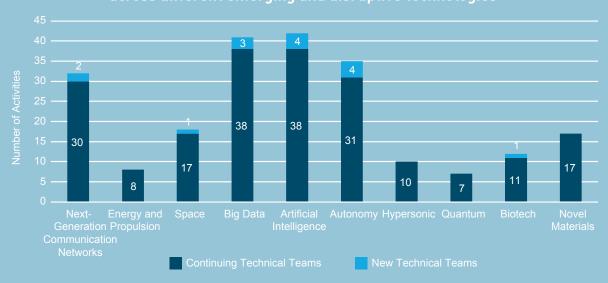
The key insights and findings of the report are as follows:

- Over the next 20 years, four overarching characteristics will define advanced military technologies: intelligence, interconnectivity, decentralisation and digitalisation. These, in turn, will lead to military capabilities that are increasingly autonomous, networked, multi-domain and precise.
- Technology will be increasingly dual-use, i.e. developed and drawn from the commercial sector.
- Individual technologies should not be considered in isolation: it is the combination of new technologies that enhances opportunities and threats.
- At the same time, new technologies bring important operational, interoperability, ethical, legal and moral concerns, which the Alliance must address.

## Engagement with the Science & Technology Organization's Collaborative Programme of Work in 2023



## Total number of 2023 STO Technical Team Activities across different emerging and disruptive technologies





NATO Secretary General Jens Stoltenberg and German Defence Minister Boris Pistorius meet with personnel participating in exercise Air Defender 2023. Air Base Jagel, Germany, June 2023.

## Key NATO and Allied Multinational Exercises in 2023

A rich and varied exercise programme ensures that NATO multinational troops are interoperable and have regular opportunities to work side-by-side. In 2023, NATO conducted a total of 130 exercises, varying in scope, duration and form. Allies conducted 1,029 national exercises. Among the exercises conducted in 2023, 154 were open to observation and participation from partner nations and international organisations.

During exercises, Allied forces train and test their readiness and responsiveness to a range of threats, whatever direction they may come from. NATO and Allied military exercises are visible demonstrations of NATO's ability to project power across the Alliance and rapidly reinforce any Ally that comes under threat. Exercises also provide a platform for testing innovations.

Exercises are planned well in advance and vary from live exercises in the field to computer-assisted, classroom-based exercises. Allies are fully committed to, and abide by, international obligations regarding transparency, predictability, arms control and confidence-building measures. Exercise schedules are published in advance on NATO's website. Allies also regularly go further than their obligations, by offering international organisations and non-NATO countries the opportunity to observe exercises even if the exercises do not reach the threshold that makes such invitations mandatory.

#### Crisis Management Exercise 2023

The NATO Crisis Management Exercise tests Alliance consultation and decision-making procedures at the strategic political-military level. The most recent Crisis Management Exercise was held between 9 and 14 March 2023, the 23<sup>rd</sup> such exercise since 1992. The exercise comprised a comprehensive response to a complex civil-military scenario set in a hybrid environment and involved civilian and military staffs in Allied and Invitee capitals, at NATO Headquarters and in Strategic Commands. As with previous such exercises, the 2023 Crisis Management Exercise involved no deployed forces. The exercise also included staff-to-staff exchanges with the European External Action Service, the European Commission and the General Secretariat of the European Council and the Council of the European Union.



Ships from Standing NATO Maritime Group Two alongside the world's largest aircraft carrier, the USS Gerald R. Ford, during exercise Sage Wolverine. Mediterranean Sea, August 2023.



A German Navy sailor during a simulated exercise as part of BALTOPS 23. Baltic Sea, June 2023.



Czech soldiers from NATO's multinational battlegroup in Lithuania tackle an assault course. Lithuania, December 2023.



A group of United States Air Force mechanics maintain an F-16 Fighting Falcon fighter jet on the tarmac while another F-16 Fighting Falcon fighter jet takes off during exercise Air Defender 23. Germany, June 2023



Brigadier Nick Cowley, Commander of the United Kingdom Armed Forces' 16th Air Assault Brigade, plunges into icy cold water to experience part of the Cold Weather Course during exercise Joint Viking 23. Norway. March 2023.



A Swedish mechanised infantry soldier during exercise Aurora 23.

Gotland, Sweden, April 2023.

## NATO Exercises (Selected)

DESCRIPTION	DATE IN 2023	LOCATION
DYNAMIC MANTA 23  An annual maritime exercise testing submarine warfare and anti-submarine warfare capabilities. Ships, submarines as well as aircraft and personnel from nine Allied nations (Canada, France, Germany, Greece, Italy, Spain, Türkiye, the United Kingdom and the United States) converged in the central Mediterranean Sea for anti-submarine warfare and surface warfare training.	27 February – 10 March	Mediterranean Sea, Italy
STEADFAST COBALT 23 This is NATO's largest Communications and Information Systems exercise. It aims to plan, prepare, establish, test, evaluate and validate the Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance services provided to support the NATO Response Force 2024, ensuring that it's ready to deploy, communicate and operate if activated for a NATO-led mission.	20 March – 5 May	Netherlands
NOBLE JUMP 23  Each year, the Jump exercise series tests the readiness and responsiveness of NATO's spearhead force – the Very High Readiness Joint Task Force. Around 2,200 troops from seven Allies (Belgium, Czechia, Germany, Latvia, Luxembourg, the Netherlands and Norway) participated in exercise Noble Jump 23, with logistical support provided by Italy, as host nation.	17 April – 12 May	Sardinia, Italy
DYNAMIC MONGOOSE 23  An annual NATO-led anti-submarine warfare exercise. Dynamic Mongoose 2023 took place in the seas between Iceland and Norway. In 2023, Iceland served as the primary host nation. In addition to Iceland, 11 Allied nations participated: Canada, Denmark, France, Germany, the Netherlands, Norway, Poland, Portugal, Spain, the United Kingdom and the United States.	24 April – 5 May	Iceland
CWIX 23  The NATO Coalition Warrior Interoperability exploration, experimentation, examination exercise is NATO's premier interoperability exercise, and is designed to solve interoperability challenges by testing NATO and national Communications and Information Systems, with particular emphasis on those that will deploy within the NATO Response Force. It is also designed to stimulate innovation and improve the interoperability of people, processes and technology. The exercise was held at its main site at the Joint Force Training Centre in Bydgoszcz, Poland and remotely across 13 time zones. The 2023 iteration of the exercise was the largest to date, with approximately 2,000 participants from 36 nations.	5 – 23 June	Bydgoszcz, Poland
DYNAMIC MESSENGER 23  This exercise aims to test the interoperability of new maritime unmanned systems, ensuring that Allies can work together to counter current and future security challenges. Dynamic Messenger 23 was the second iteration of this exercise series gathering more than 2,000 civilian and military personnel on shore and on board ships as part of the exercise. Fourteen NATO Allies, including host nation Portugal, participated in the exercise, together with Sweden. The exercise was conducted under the joint leadership of Allied Command Transformation in the United States and Allied Maritime Command in the United Kingdom.	18 – 29 September	Portugal
STEADFAST JUPITER 23 Steadfast Jupiter 2023 was NATO's largest and most complex computer-assisted command post exercise to date. It was designed to test NATO's defence posture, warfighting readiness and multi-domain operational capabilities – the integration of land, air, maritime, cyberspace and space to achieve orchestrated effects. Nearly 7,000 military and civilian personnel from NATO and partner countries participated in the exercise. Additionally, eight NATO Centres of Excellence and seven international or non-governmental organisations participated.	10 – 19 October	27 locations across Europe and North America

DESCRIPTION DATE IN 2023 LOCATION

#### **DYNAMIC MARINER 23**

An annual maritime exercise training the maritime component of the NATO Response Force. The exercise involved more than 6,000 personnel from 14 NATO Allies (Belgium, Canada, France, Germany, Greece, Italy, the Netherlands, Poland, Portugal, Romania, Spain, Türkiye, the United Kingdom and the United States). It featured a diverse range of naval and air assets – approximately 30 warships (including an Italian aircraft carrier), submarines and helicopters. Dynamic Mariner 23 was vital training for the Italian Navy, as it prepared to take over the NATO Response Force Maritime element in 2024.

23 October – Mediterranean Sea, 6 November Italy

#### **CYBER COALITION 23**

NATO's flagship cyber exercise led by Allied Command Transformation aims to enhance NATO's, Allies' and partners' ability to defend their networks and operate together in cyberspace. The exercise provides a unique platform for collaboration, experience-sharing, best practices and experimentation. Cyber Coalition 2023 involved 170 participants on-site at the Estonian Cyber Range as well as more than 1,300 cyber defenders from 35 NATO Allies and partners.

27 November – Estonia 1 December

#### STEADFAST JACKAL 23

A SHAPE-sponsored computer-assisted command post exercise at the operational and tactical levels to train and evaluate Eurocorps as a NATO Joint Task Force Headquarters for 2024. Steadfast Jackal 23 involved over 800 participants from 18 Allies. Additionally, partners such as Azerbaijan, Bosnia and Herzegovina, Georgia, Jordan, Morocco, Tunisia and Uzbekistan were invited to observe the exercise to ensure military transparency and foster dialogue and cooperation.

28 November – Norway 7 December

Norway and Spain

#### Allied National Exercises (Selected)

DESCRIPTION DATE IN 2023 LOCATION

#### **JOINT WARRIOR 23-1**

Exercise Joint Warrior is a UK-led multinational exercise in which the Joint Expeditionary Force, NATO and partner nations' formations, units and their staffs can participate. It takes place in spring and autumn each year over a two-week period, historically off the coast of North West Scotland. The spring 2023 iteration of the exercise was designed as the maritime domain's contribution to Joint Viking 23, a large-scale land-focused training event led by the Norwegian Armed Forces in the High North. Participating nations included Canada, Denmark, France, Germany, the Netherlands, Norway, Poland, Spain, the United Kingdom and the United States.

4 – 16 March United Kingdom and Norway

#### **MARE APERTO 23-1**

An Italian-led live maritime exercise tailored to achieve comprehensive and highly realistic training of maritime forces. The exercise involved over 6,000 personnel from 23 nations (12 Allies and 11 partners) as well as ships, submarines, aircraft, helicopters and amphibious units.

13 April – 6 May Mediterranean Sea,

#### **HEMEX-ORION 23**

Hemex-Orion 23 aimed to train French armed forces in a joint and combined framework, based on a realistic and demanding scenario that takes into consideration the multiple domains of conventional and hybrid warfare. The exercise, conducted over several months, concluded its fourth and last phase on 5 May 2023, involving around 12,000 personnel and assets from several NATO Allies including Belgium, France, Germany, Greece, Spain, the United Kingdom and the United States. The drills focused on improving NATO forces' readiness through joint training on land and in the skies. Troops from Allied countries exercised different scenarios, including simulated urban combat, operational planning, logistical support, chemical, biological, radiological and nuclear defence capabilities, medical evacuation and air mobility.

14 April – 5 May

France

#### **DEFENDER 23**

Defender 23 was a United States European Command-directed, multinational, joint exercise designed to build readiness and interoperability between US forces, NATO Allies and partners. The exercise demonstrated the US military's ability to rapidly deploy combat-credible troops and equipment to the European theatre. Defender 23 involved more than 7,000 United States and 17,000 multinational personnel from over 20 Allied and partner nations.

22 April – 23 June Europe

#### **BALTOPS 23**

An annual US-led multinational maritime exercise giving NATO Allies and partners a chance to practise large-scale maritime and amphibious operations. Led by the US Navy's Sixth Fleet, the exercise was controlled by Naval Striking and Support Forces NATO, NATO's maritime operational staff. Twenty nations, 50 ships, more than 45 aircraft and 6,000 personnel participated in the 2023 iteration of BALTOPS. While Finland has participated in previous iterations of the exercise, 2023 marked the first time the country participated as a NATO Ally.

4 – 16 June Baltic Sea, Germany

#### **AIR DEFENDER 23**

Exercise Air Defender 23 was the largest deployment exercise of air forces in NATO's history. Over 10,000 exercise participants from 25 nations with 250 aircraft, including 23 different types of aircraft, were involved in air operations in European airspace under the command of the German Air Force. This large-scale exercise tested the Alliance's ability to react to potential threats and defend NATO air space, and to ensure the safety of Allies. Exercise Air Defender 23 was linked to NATO's exercises Ramstein Guard 23 and Ramstein Dust 23. Training missions primarily took place over the North Sea, the Baltic Sea and southern Germany.

12 – 23 June Germany

#### **BREEZE 23**

A Bulgarian-led annual maritime exercise that aims to enhance interoperability between the navies of participating countries. The exercise dates back to 1996. The exercise involved vessels, aircraft and personnel from 13 countries (Albania, Belgium, Bulgaria, France, Georgia, Greece, Italy, Latvia, Poland, Romania, Türkiye, the United Kingdom and the United States).

13 – 22 October Bulgaria

#### **STRONG BALKAN 23**

An Albanian-led exercise that aims to strengthen Special Operations Forces' capabilities, strengthen cooperation and exchange knowledge and experience. The exercise involved Special Operations Forces from seven NATO Allies (Albania, Bulgaria, Greece, Montenegro, North Macedonia, Romania and Türkiye) as well as observers from NATO partner Bosnia and Herzegovina. The exercise saw the forces train in complex scenarios such as freefall parachute jumping, fast-roping from helicopters, vehicle interdiction, sniping and building clearance.

31 October – Albania 10 November

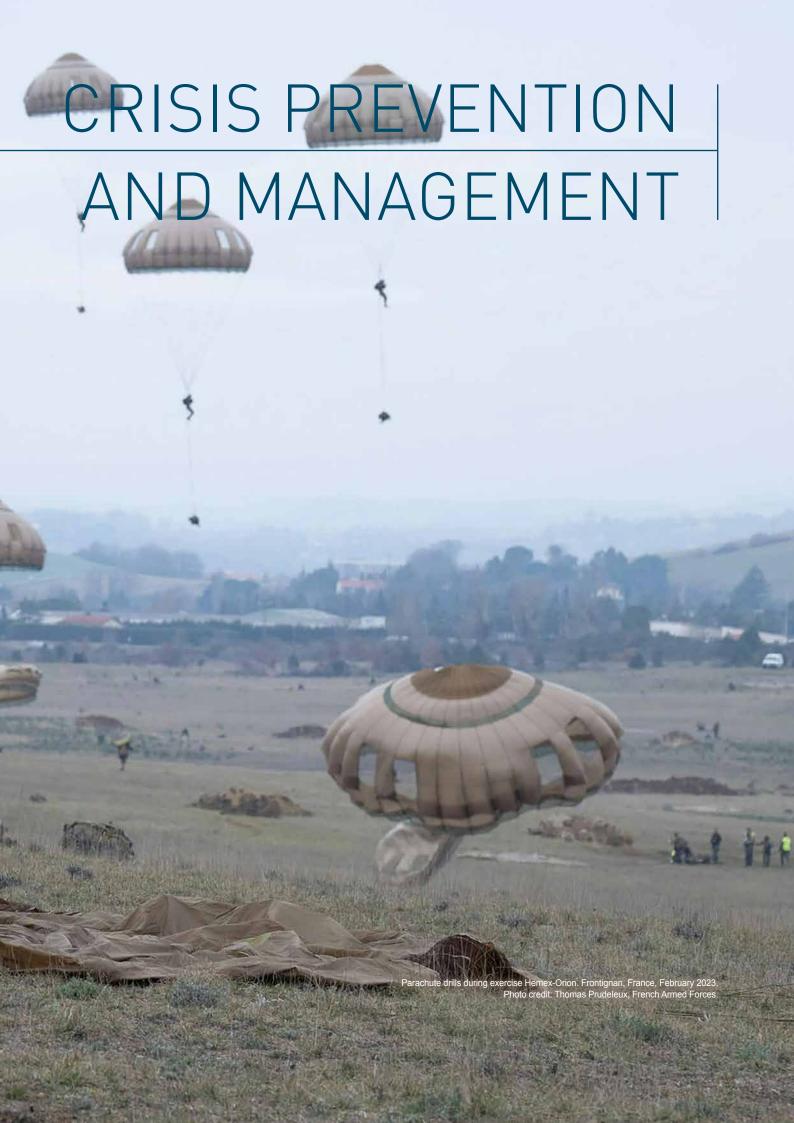
#### NUSRET 2

A Turkish-led exercise that aims to train planning, execution and evaluation of mine warfare. It is designed to enhance the interoperability of mine warfare elements from different countries. Units from the Turkish Naval and Air Force Commands and the Coast Guard Command, along with elements from 15 countries as well as observer personnel, took part in the nine-day exercise.

28 November – 6 December

Türkiye





## Through our military presence, and our cooperation with Allies and partners, we are a strong force for stability (...).

Joint press conference by NATO Secretary General Jens Stoltenberg with Prime Minister of North Macedonia Dimitar Kovačevski. Skopje, North Macedonia, 21 November 2023.

Crisis prevention and management is one of NATO's three core tasks. The 2022 Strategic Concept stresses that Allies have a shared interest in contributing to stability and managing conflicts together, through NATO. The Alliance is committed to preventing and responding to crises when these have potential to affect Allied security.

Prevention of crises and conflicts is a sustainable way to contribute to stability and Allied security. NATO is committed to crisis prevention, including through training and capacity-building programmes.

These programmes support partners in their efforts to become more capable, more secure and better prepared to respond to crises at home and abroad. The Alliance has decades worth of accomplishments in building defence institutions and capacity with partners in NATO's neighbourhood and beyond.

NATO also has unique capabilities and expertise in crisis management, including coordinating, conducting, sustaining and supporting multinational crisis response operations.

### NATO Operations, Missions and Activities

NATO contributes to peace and security on the international stage. It promotes democratic values and is committed to the peaceful resolution of disputes. When diplomatic efforts fail, NATO has the capacity to undertake crisis management operations and other military missions, either alone or in cooperation with other countries and international organisations.

NATO's Operation in Kosovo

NATO's presence in Kosovo remains crucial for the stability of the Western Balkans region. The mandate for NATO's role in Kosovo stems from United Nations Security Council Resolution 1244, adopted in 1999. Since then, the NATO-led Kosovo Force has continued its work to help maintain a safe and secure environment for all communities in Kosovo and freedom of movement, in close cooperation with the European Union, the United Nations and other international actors. The Secretary General reinforced NATO's strong commitment to the mission during his visit to the Kosovo Force in November, as part of a larger visit to the Western Balkans.

In 2023, the Kosovo Force played a critical role in ensuring stability in Kosovo amid heightened tensions and increased volatility in northern

In 2023, NATO continued its missions in Kosovo and Iraq, as well as its operations and activities at sea, while also acting to respond to disasters in Allied countries.



I'm proud to have supported NATO's presence in Kosovo in 2023. Despite increased tensions, the Kosovo Force continued to engage with all communities to help maintain a safe and secure environment.

Col Salvatore Mascoli (Italy)

Chief Public Affairs Officer, Kosovo Force Kosovo Force Headquarters, Pristina, Kosovo



Personnel of the NATO-led Kosovo Force complete the removal of several vehicles blocking a road. Northern Kosovo, January 2023.

Kosovo. In the aftermath of violence in May and September, Allies deployed about 1,000 reserves to the mission, providing the largest reinforcement in a decade. This allowed the Kosovo Force to triple the number of patrols and quadruple its presence in northern Kosovo. As of 31 December, 27 Allies and partners provided approximately 4,700 troops to the mission, including deployed reserves. In October, Major General Özkan Ulutaş from Türkiye took over command of the mission from Italy's Major General Angelo Michele Ristuccia.

In addition to the Kosovo Force, NATO continued to provide capacity-building support to the security organisations in Kosovo through the NATO Advisory

and Liaison Team, a civilian and military team of approximately 40 personnel from 13 countries. In 2023, the team offered advice and assistance in areas such as medical support, logistics, procurement, budget execution and human resources management.

NATO remains committed to supporting the European Union–facilitated dialogue between Belgrade and Pristina. The dialogue is the main platform for finding a solution that respects the rights of all communities, and building a lasting peace, which benefits security across Kosovo and stability throughout the Western Balkans region.



NATO Secretary General Jens Stoltenberg with Kosovo Force Commander Major General Özkan Ulutaş. Camp Nothing Hill, Kosovo, November 2023.



Outgoing Commander of NATO Mission Iraq Lieutenant General Giovanni Maria Iannucci of Italy (left) watches as the Commander of Allied Joint Force Command Naples, Admiral Stuart Munsch of the United States, passes the Mission's flag to the incoming Commander, Lieutenant General José Antonio Agüero Martínez of Spain. Baghdad, Iraq, May 2023.

### NATO Mission Iraq

NATO Mission Iraq was established upon Iraqi request in October 2018. It remains the cornerstone of NATO's engagement in the wider Middle East. It is a non-combat advisory and capacity-building mission, which supports Iraq in strengthening its security forces and institutions, so that Iragis themselves are better able to stabilise their country, fight terrorism and prevent the return of ISIS/Daesh. NATO Mission Iraq coordinates closely with the United States-led Operation Inherent Resolve, the United Nations and the European Union.

NATO Mission Iraq advises relevant Iraqi defence and security officials in the Ministry of Defence, the Ministry of Interior's Federal Police Command, the Office of the National Security Advisor and the Prime Minister's National Operations Centre. The mission also advises Iraq's professional military education institutions in the greater Baghdad area.

Specific areas of focus include policy and strategy; force generation and development; resource management; Women, Peace and Security; leadership development; and good governance in the security sector. All activities of NATO Mission Iraq are agreed upon by the Iraqi government and conducted in full respect of Iraq's sovereignty and territorial integrity.

In May, Lieutenant General Agüero Martinez from Spain took over mission command from Lieutenant General lannucci from Italy.



A Finnish Navy crew member prepares to lower a remotely operated underwater vehicle used for mine-clearing. Baltic Sea, May 2023.

### NATO Operations and Activities at Sea

NATO operations and activities at sea serve to maintain maritime security, which is key to Allies' peace and prosperity. NATO's naval forces contribute to deterrence and defence, crisis prevention and management, and cooperative security. NATO works together with partners and other international organisations in the maritime domain to enhance maritime situational awareness, build maritime capacity and provide a safe and secure maritime environment.

In 2023, NATO's Standing Naval Forces continued to be an important instrument of credible deterrence and defence at sea. Following Russia's war of aggression against Ukraine, the Alliance designated the Standing Naval Forces as the maritime component of the NATO Very High Readiness Joint Task Force. As such, the Standing Naval Forces play an important part in enhancing the Alliance's forward defences and maintaining a credible deterrent and effective defensive capability, as well as in contributing to maritime situational awareness.

Following damage to undersea infrastructure in the Baltic Sea in September, NATO stepped up patrols in the area. Following Hamas's brutal attacks against Israel in October, NATO's Standing Naval Forces, alongside Allied assets, closely monitored the situation and provided maritime situational awareness in the eastern Mediterranean.



I work as an Information
Systems Technician, fitting NATO
communication systems in Allied vessels.
I really enjoy meeting sailors from
different navies and making sure they
have all they need to do their job.

## Chief Petty Officer Nicole Woodall (United States)

Information Systems Technician, Communications and Information Systems Support Unit NATO Communications and Information Agency, Northwood, United Kingdom

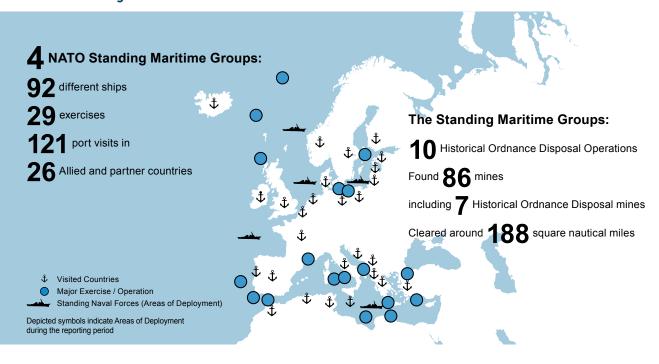


The United Kingdom Royal Navy destroyer HMS Diamond joins other multinational NATO naval units patrolling the Mediterranean Sea as part of NATO's deterrence posture. Eastern Mediterranean Sea, October 2023.

Operation Sea Guardian in the Mediterranean supports maritime situational awareness and efforts to counter the threat of terrorism in the region. Operation Sea Guardian also contributes to capacity-building for partners and Allies by fostering regional maritime security through training, exercises, key leader engagements and port visits. In 2023, Operation Sea Guardian undertook six focused operations involving both surface and subsurface vessels and maritime patrol aircraft.

In the Aegean Sea, NATO continued to contribute to ongoing international efforts to address the refugee and migrant crisis. Allied ships regularly provided information, surveillance and reconnaissance to help Greece, Türkiye and FRONTEX - the European Union's Border and Coast Guard Agency – prevent human trafficking.

#### **NATO Standing Maritime Presence 2023**



## NATO's Euro-Atlantic Disaster Response Coordination Centre

The Euro-Atlantic Disaster Response Coordination Centre is NATO's principal civil emergency response mechanism. It functions as a clearing-house, coordinating international requests by affected countries and offers of assistance. The Centre supports NATO Allies and partners; it works closely with the national authorities of countries coping with emergencies and keeps in contact with first responders within the United Nations and the European Commission to ensure complementarity of efforts.

Requests for assistance to the Euro-Atlantic Disaster Response Coordination Centre continued to increase in 2023, with the Centre handling more than 10 requests. Most of these related to humanitarian needs caused by Russia's ongoing war of aggression against Ukraine, while others were triggered by emergencies in Allied countries.

In 2023, the Euro-Atlantic Disaster Response Coordination Centre was also busy winding down the activities of the Pandemic Response Trust Fund. Set up in 2020 as part of NATO's comprehensive response to the COVID-19 pandemic, this Trust Fund provided a funding mechanism and a stockpile of medical equipment and supplies to support Allies and partners in need. By the end of 2023, 31 different projects were implemented through the Trust Fund, directing medical supplies to where they were needed the most, in a fast and efficient manner. Ten Allies and partners benefitted from help through the Pandemic Response Trust Fund. Most Allies as



The Euro-Atlantic Disaster Response Coordination Centre is a platform for Allies and partners to show solidarity with each other. Following the 2023 earthquakes in Türkiye, the Centre provided assistance to thousands of people caught up in the disaster.

#### Katrien Vanhamme (Belgium)

Deputy Head, Euro-Atlantic Disaster Response Coordination Centre, Operations Division NATO Headquarters, Brussels, Belgium

well as four partners provided assistance – both equipment and funding – through this instrument. This proved to be a low-cost and flexible vehicle for Allied solidarity and support.

## **NATO Supports Slovenia in Countering Floods**

In August, NATO was called to support Slovenia in the aftermath of the most catastrophic floods in its modern history. Following a request by the authorities in Ljubljana, the Euro-Atlantic Disaster Response Coordination Centre arranged with Spain the mobilisation of a CH-47 Heavy Lift Helicopter with 25 crew and supporting staff to the affected areas. A few days later, Slovenia updated its request to NATO, asking for modular bridges. Following intense coordination by the Euro-Atlantic Disaster Response Coordination Centre, bridges were delivered bilaterally by Allies.



A Spanish helicopter deployed in Slovenia in response to devastating floods. Skies over Slovenia, August 2023.

## NATO Support to Earthquake Relief Efforts in Türkiye

On 6 February 2023, Türkiye suffered the deadliest natural disaster on Alliance territory since the foundation of NATO when two powerful earthquakes hit the southern part of the country. NATO Allies and partners stepped in to respond to calls for assistance.

Through the Euro-Atlantic Disaster Response Coordination Centre, Türkiye requested support in the form of emergency medical teams, search and rescue teams and field hospitals. Within 24 hours, around 1,400 emergency response personnel started deploying to Türkiye to reinforce the national response. Assistance was provided by more than 20 NATO Allies and partners – including then-Invitee Finland and Invitee Sweden and, for the first instance of humanitarian cooperation, NATO partner Japan.

As part of a NATO-coordinated air bridge, Allies and partners also flew around 10,000 tents, blankets and pieces of medical equipment from Pakistan to Türkiye. Allied Command Operations set up temporary shelters for 8,000 people in Antakya, Define and Iskenderun. The shelters, built by the NATO Support and Procurement Agency, included heating, power generators and medical treatment areas. They were mainly used to provide classrooms and housing for students, teachers and governmental workers.

"In your time of need, NATO stands with Türkiye," Secretary General Stoltenberg said as he visited the affected areas a few days after the earthquakes. "This is true and deep solidarity," he said.



A NATO Operational Liaison Reconnaissance Team in Türkiye in the aftermath of the earthquake Türkiye February 2023



NATO Secretary General Jens Stoltenberg surveys earthquake damage in Antakva. Hatav province. Türkiye. February 2023.



NATO Support and Procurement Agency staff prepare winter tents to ship to Türkiye as part of Allied earthquake relief efforts.

Taranto, Italy, February 2023.

## The Euro-Atlantic Disaster Response Coordination Centre in Ukraine

The Euro-Atlantic Disaster Response Coordination Centre continued to coordinate urgent assistance for Ukraine, particularly in response to emergency medical needs. The Pandemic Response Trust Fund helped strengthen Ukraine's healthcare system in different ways. Emergency ventilators and ambulances, for instance, were purchased and supplied using funds donated by Allies and partners, with the assistance from the NATO Support and Procurement Agency. NATO also established tactical medicine training for Ukrainian paramedics and emergency medical teams in Romania. In 2023, roughly 200 Ukrainian medics participated in this programme.

In June, following the destruction of the Nova Kakhovka dam in the southern part of the country, Ukraine asked NATO for help in limiting the humanitarian, environmental and economic impact. Through the Euro-Atlantic Disaster Response Coordination Centre, Allies were able to provide critical aid such as water filters, pumps, generators and shelters.



Ukrainian soldiers under the supervision of Polish instructors learn how to service Leopard tanks at the Leopard Training Centre in Świętoszów, Poland, October 2023.

## Contributing to Crisis Prevention: Investing in Education, Capacity-Building and Good Governance

The Strategic Concept emphasises the importance of partner contributions to NATO-led crisis management and underlines the intention to further enhance support for partners by increasing the size and scope of capacity-building assistance to partners in the Alliance's neighbourhood and beyond. It also stresses the importance of good governance and recognises the links between weak governance, instability and terrorism.

While NATO must always remain ready, when necessary, to deploy troops to manage crises, such operations are not necessarily best placed to address the underlying factors contributing to insecurity and instability. In line with this, a number of tools have been developed to assist partners in building their own defence capacities, ensuring that partner forces are able to provide for their own security, capable of participating in NATO-led operations, and interoperable with Allied forces.

In recent years, this has included stepping up efforts to build the capacity of NATO partners in areas such as counter-terrorism, stabilisation, countering hybrid attacks, crisis management, peacekeeping and defence reform.

## The Individually Tailored Partnership Programme and the Planning and Review Process: Promoting Interoperability, Setting Common Goals

#### **Individually Tailored Partnership Programme**

To streamline NATO's work with partners and ensure coherent delivery of NATO's various partnership efforts, the Alliance has created the Individually Tailored Partnership Programme. The Programme brings together all aspects of NATO's collaboration with a single partner into a strategic and goaloriented framework.

The Individually Tailored Partnership Programmes are agreed with individual countries on a voluntary basis and approved by the North Atlantic Council. The process spans a cycle of four years. It comprises key outputs and includes provisions for effective monitoring, evaluation and potential adjustments throughout the cycle. All NATO partners are expected to transition to the Individually Tailored Partnership Programme.17

#### **Planning and Review Process**

Within the framework of the Individually Tailored Partnership Programme, a partner can also choose to deepen cooperation with NATO by participating in the Planning and Review Process. The Planning and Review Process provides a structured approach for enhancing interoperability and capabilities of partner forces that could be made available to the Alliance for multinational training and exercises, and that could cooperate alongside NATO Allies in crisis response operations. The Planning and Review Process also serves as a planning tool to guide and measure progress in security, defence and military transformation and modernisation efforts of an individual partner country.

Fourteen partner nations are currently participating in the Planning and Review Process.<sup>18</sup> All Allies who joined the Alliance after 1995 participated in the Planning and Review Process.

<sup>17</sup> This excludes Afghanistan, Belarus and Russia.

<sup>18</sup> Armenia, Austria, Azerbaijan, Bosnia and Herzegovina, Georgia, Ireland, Jordan, Kazakhstan, Malta, the Republic of Moldova, Serbia, Switzerland, Tunisia and Ukraine.



Head of the NATO Liaison Office to Moldova Michaela Simakova and the Republic of Moldova's Minister of Defence Anatolie Nosatii oversee the delivery of essential equipment to the Non-Commissioned Officer School in Chisinau. Chisinau, Moldova, October 2023.

# Boosting Training and Capacity-Building

The Defence and Related Security Capacity Building Initiative is a dynamic programme providing tailored and practical assistance to partners to help improve their defence and security capacities in areas where NATO can make a difference. Efforts are focused on strategic-level advice in defence and related security reform, institution-building, defence capability and local forces development, as well as specific projects in support of these objectives.

The Defence and Related Security Capacity Building Initiative is financed through the NATO Civil Budget as well as a dedicated Defence Capacity Building Trust Fund. Additionally, by repurposing the Afghan National Army Trust Fund, Allies and partners have transferred USD 9.5 million to the Defence Capacity Building Trust Fund and supported partners, supplying equipment and vehicles.

The Defence and Related Security Capacity Building Initiative has become even more relevant following the launch of Russia's war of aggression against Ukraine. In 2023, the Defence Capacity Building packages for Georgia and the Republic of Moldova were enhanced. In addition, a new Defence Capacity Building package for Bosnia and Herzegovina was approved. Together, these steps increased NATO's tailored support to partners to enhance their resilience against Russian malign interference.

# The Defence and Related Security Capacity Building Initiative at a Glance

#### Bosnia and Herzegovina

Bosnia and Herzegovina and NATO have a longlasting partnership characterised by mutually beneficial and wide-ranging cooperation. Over the years, NATO has supported the country through a variety of partnership tools to promote defence and related security sector reform and good governance. NATO's Planning and Review Process, the Building Integrity initiative, and the Defence Education Enhancement Programme are key among NATO's defence and security cooperation initiatives in Bosnia and Herzegovina.

At the 2022 Madrid Summit, Allies endorsed a set of tailored support measures. These include practical support to help strengthen Bosnia and Herzegovina's resilience and ability to counter potential malign influences in light of the changed security environment in Europe. This resulted in the first-ever Defence Capacity Building package for Bosnia and Herzegovina; the package includes 12 areas of cooperation including crisis management, cyber defence and counter-terrorism.

<sup>19</sup> Since the establishment of the Defence Capacity Building Trust Fund, 28 Allies, Invitee Sweden and five partners (Austria, Ireland, Japan, Qatar and Switzerland) have provided financial contributions totalling approximately 67 million EUR.

#### Georgia

Georgia is one of NATO's closest partners, and an aspiring member of the Alliance. Over time, a broad range of practical cooperation has supported Georgia's reform efforts and its goal of Euro-Atlantic integration.

The Substantial NATO-Georgia Package is NATO's main tool for practical cooperation with Georgia. Since its endorsement at the Wales Summit in 2014, it has grown to become one of NATO's largest capacity-building packages. In the context of the deteriorating security environment resulting from Russia's war of aggression against Ukraine, which has significantly affected Georgia, the Substantial NATO-Georgia Package was further enhanced in 2023 in line with the Madrid Summit decisions to provide tailored support to Georgia.

The implementation of the package and its 18 initiatives has continued to enhance Georgia's defence capabilities and improve interoperability. Two new initiatives, which focused on training facilities and chemical, biological, radiological and nuclear defence, were endorsed by NATO Defence Ministers in February.



A student participates in an equipment demonstration during a visit to the NATO-Georgia Joint Training and Evaluation Centre Krtsanis, Georgia, November 2023.

#### Iraq

The Defence Capacity Building package for Iraq continued to be implemented by, with and through NATO Mission Iraq. The package outlines seven priority areas of assistance: security sector reform; countering improvised explosive devices; explosive ordnance disposal and de-mining; civilmilitary planning support to operations; cyber defence; military medicine and medical assistance; military training; and civil emergency planning and preparedness.

In 2023, NATO Mission Iraq and NATO experts provided assistance to Iraqi defence planning through quarterly onsite workshops. A multi-year trust fund project to deliver training on planning, programming, budgeting and execution to the Ministry of Defence's civilian force was also established and will commence its work in 2024.

The Defence Capacity Building package and NATO Mission Iraq continued to advise Ministry of Defence reform leadership bodies, including the Ministerial Reform Committee, chaired by civilian authorities. NATO Mission Iraq advisors provided consistent and regular advice and mentoring to these bodies and its members to help them develop coherent and comprehensive reforms.

#### Jordan

In 2023, NATO continued to contribute to strengthening Jordan's security and defence capabilities in areas such as resilience, interoperability with NATO and reforms in the Armed Forces. Through the Defence and Related Security Capacity Building Initiative, NATO also increased its support to Jordan's counter-terrorism efforts.

In January, the first NATO counter-terrorism 'train-the-trainer' course was conducted with the Jordanian Military Counter-Terrorism and Extremism Centre, based on the NATO Counter-Terrorism Reference Curriculum. In May, the Royal Jordanian Navy in Aqaba hosted a NATO-supported workshop, which gathered NATO Allies and several international organisations to discuss Jordan's maritime security.

NATO remained committed to supporting the integration of servicewomen in the Jordanian Armed Forces by sponsoring a number of activities, including staff officer courses.



NATO officials and Jordanian Armed Forces personnel during the first-ever NATO 'train-the-trainer' counter-terrorism programme in Jordan. Amman, Jordan, January 2023.

#### Mauritania

The Defence Capacity Building package for Mauritania, endorsed at the Madrid Summit in 2022, aims to support Mauritania's efforts in maintaining its stability and reform-oriented approach to the defence and security sector.

In 2023, the implementation of the package began in six areas: Special Operations Forces; maritime security; intelligence; military career transition; stockpile management and small arms and light weapons; and military education.

Training and advisory activities included NATO support to Mauritania in enhancing small arms and light weapons marking and tracing capacities, and support for the management of ammunition disposal. NATO also continued to support the country in reforming its professional military education institution. In June, the Commander of the Joint Military Academy of Mauritania, General Dah Sidi Mohamed El Agheb, visited the NATO Headquarters and the Royal Military Academy of Belgium to discuss curriculum development and ways to strengthen cooperation among military academies.



Meeting between the NATO Assistant Secretary General for Operations, Tom Goffus, and the Commander of the Joint Military Academy of Mauritania, General Dah Sidi Mohamed El Agheb.

Brussels. Belgium, June 2023.

#### Republic of Moldova

NATO's practical support for the Republic of Moldova focuses on strengthening its defence and security sector capacities, on reforming and modernising the National Army, and enhancing its related capabilities. In the context of a deteriorating security environment, NATO Defence Ministers endorsed the Enhanced Defence Capacity Building Package in February, seeking to address additional requirements identified by Moldova, and support Moldova's whole-of-government approach to resilience, security, and defence. The Package has a broad scope and includes cross-cutting topics such as cyber security and strategic communications.

NATO has continued to deliver advisory support and material assistance to a variety of recipients in Moldova, including the Ministry of Defence, the National Army, the Ministry of Internal Affairs and the State Chancellery, in line with the enhanced ambition of the package.

NATO also continued to support the professionalisation of the non-commissioned officer corps, leading to the approval of new legislation that establishes a better career path, and improves recruitment and retention processes.

#### Tunisia

In 2022, NATO Heads of State and Government endorsed the update of the Defence Capacity Building package for Tunisia. In 2023, the implementation of 11 initiatives continued in areas such as the Women, Peace and Security agenda and support on the disposal of obsolete ammunition. Good progress was also achieved in English Language Training force preparation, cyber security and building integrity. In addition, the package promotes the interoperability of selected army, navy

and air force units of the Tunisian Armed Forces and bolsters Tunisia's capacity to counter the threat posed by improvised explosive devices and terror groups more broadly.

Through NATO's Science for Peace and Security Programme, NATO also continued to progress towards the delivery of a mobile laboratory to support the detection, identification and monitoring of chemical agents.

#### The United Nations

Practical cooperation between NATO and the United Nations under the Defence and Related Security Capacity Building Initiative has continued to make progress. The initiative includes the objective of building long-term UN sustainability in peace-support operations in four key areas: military performance evaluation; medical care; countering improvised explosive devices; and signals and information and communications technology.

On military performance evaluation systems, NATO experts supported the development of United Nations military headquarters evaluations and military performance data management systems. NATO experts reinforced United Nations experts in delivering counter-improvised explosive devices

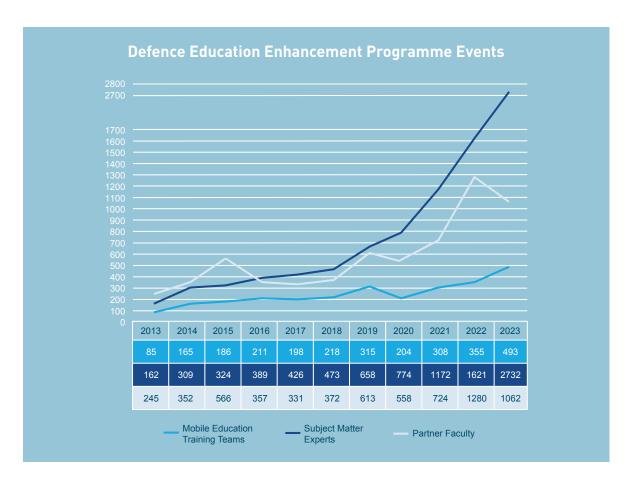
training to United Nations troop-contributing countries in Cameroon, Rwanda, Senegal and Uganda. In the domain of military medicine, NATO completed the delivery of a field medical officers training package.

On signals, information and communications technology, NATO delivered a series of 'train-the-trainer' courses at the UN regional training hub in Entebbe, Uganda, as well as advisory and mentoring support for instructors. The Virtual Instructor Led Training capability was formally inaugurated at an opening ceremony in November and represents a major contribution to developing the UN's training and education proficiency and self-sustainability.

# Investing in Education

NATO's Partnership Training and Education Centres provide valuable educational and training capabilities to the Alliance in the security and defence domains. The community is made up of 34 centres in Allied and partner nations and plays a key role in implementing NATO's partnership programmes, including by offering courses and training support in critical areas such as defence reform, crisis management, law of armed conflict, and military trauma life support.

NATO supports military education in 15 partner nations through the Defence Education Enhancement Programme. The Programme helps partners to build, develop and reform their professional military education institutions by establishing validated common references for military education. The impact of Russia's aggression against Ukraine has resulted in a growing demand for such support by partner nations, often aimed at the development of the noncommissioned officer corps and its professional military education.



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<sup>20</sup> Armenia, Azerbaijan, Bosnia and Herzegovina, Colombia, Georgia, Iraq (as part of NATO Mission Iraq), Jordan, Kazakhstan, Mauritania, the Republic of Moldova, Mongolia, Morocco, Serbia, Tunisia and Ukraine.

# Building Integrity: Strengthening Good Governance

Marking its 15th anniversary in 2022, NATO's Building Integrity Initiative supports NATO, Allies and partner countries in promoting good governance and integrity within the defence and related security sector. The primary goal of the programme is to establish efficient and effective institutions that uphold the principles of integrity, transparency and accountability.

NATO's 2022 Strategic Concept underscores the significance of good governance as essential for implementing the Alliance's three core tasks. This reaffirms NATO's dedication to democracy, good governance and robust institutions. The Strategic Concept also acknowledges the tendency of terrorists to take advantage of weak governance. Given the evolving security landscape, the significance of bolstering good governance and integrity remained highly relevant in 2023.

#### **Building Integrity Self-Assessment Questionnaire and Peer Review Process**

The NATO Building Integrity Self-Assessment Questionnaire and Peer Review Process is a diagnostic tool to strengthen the management of defence resources. It offers users the opportunity to assess good practices and recommendations for improvement. As more countries use these tools, the NATO Building Integrity programme continues to consolidate its country-specific approach, ensuring that the reforms that nations undertake will be sustainable in the long term.

# Achievements of NATO Building Integrity in 2023

- · NATO completed the Building Integrity Peer Review Process for Colombia. The NATO Deputy Secretary General submitted the final Report with NATO recommendations to the Colombian Defence Minister during his visit to NATO Headquarters in September. Colombia completed the process for the second time.
- NATO continued the Peer Review Process for Jordan and the Republic of Moldova.
- · NATO successfully completed the Peer Review visit for Iraq through in-country consultations in December 2023. This achievement represents a significant milestone for the Ministry of Defence of Iraq in the fields of integrity and good governance.
- · NATO launched the Peer Review Process for Georgia, after the country submitted the Self-Assessment Questionnaire in 2022.
- · Consultations with Armenia took place to revitalise cooperation, including discussions on the completion of the Self-Assessment and Peer Review Process.
- Significant progress was also made in developing institutional capabilities for good governance, accountability and prevention of corruption in the process of the lifecycle management of Small Arms and Light Weapons and their ammunition and in compiling a second volume of the Building Integrity Compendium of Best Practices.

# **Helping Ukraine Battle Corruption**

Fighting corruption and supporting good governance is a top national priority for Ukraine, including through continued cooperation with NATO's Building Integrity initiatives. In 2023, NATO engaged with over 10 national defence and security institutions and delivered extensive tailored education and training outreach to over 800 people. The impact of NATO's engagements contributed to the establishment of the Building Integrity Training Centre at the Donetsk State University of Internal Affairs and to a national initiative to embed the NATO Building Integrity Academic Discipline across defence educational institutions. High-level events led by the Kharkiv National University of Internal Affairs, Dnipropetrovsk State University of Internal Affairs and the Building Integrity Training and Education Centre of the National Defence University helped promote good governance and integrity efforts across Ukraine.



# PARTNERSHIPS



In a more dangerous world, where security is not regional anymore but truly global, and China and Russia are coming closer, it is even more important that we work closely with our partners all around the world.

Remarks by NATO Secretary General Jens Stoltenberg at the 2023 NATO Youth Summit. Brussels, Belgium, 5 June 2023.

NATO's partnerships are essential to the way NATO works. They play an important role in supporting NATO's three core tasks and its 360-degree approach to security. In a more complex and unpredictable strategic landscape, it is even more important that NATO and its partners work together to address common security challenges, protect the global commons and enhance resilience. NATO's partnerships are based on mutual respect and interest.

NATO has active partnerships with 35 countries worldwide and several international organisations.<sup>21</sup> Partners are engaged in a number of core activities,

from sharing expertise to building capacity, developing interoperability, and contributing to crisis prevention and management. In 2023, 18 partners took part in 16 NATO-led exercises while 11 contributed over 30 military personnel to the NATO Command Structure and International Military Staff. Partners also supported NATO missions in Iraq and Kosovo, contributed financially to NATO-led Trust Funds, and offered in-kind support through NATO's Partnership Training and Education Centres.

NATO maintains liaison offices in Belgrade, Chisinau, Kuwait, Kyiv, New York, Tbilisi and Vienna, as well as at the NATO Headquarters in Sarajevo.

### 2023 Partnership 360 Symposium

The Partnership 360 Symposium is the largest regular gathering of NATO partners. This year's Partnerships 360 Symposium was held in Madrid, Spain under the banner of 'Understand Better, Adapt Faster, and Prevent Together'. The Symposium brought together more than 240 participants from 53 Allied and partner countries, 10 international and non-governmental organisations, 6 NATO Centres of Excellence and 11 academic institutions and think-tanks. Participants discussed global threat perceptions, information-sharing and efficiencies, capacity-building, crisis prevention and technological innovation.



NATO and the Partnership for Peace Consortium of Defense Academies and Security Studies Institutes host the 12th Clearing House on Defence Education. Bled, Slovenia, June 2023.

<sup>21</sup> Sweden is not counted in this total.



President of Finland Sauli Niinistö with NATO Secretary General Jens Stoltenberg at the accession ceremony of Finland. Brussels, Belgium, April 2023.

# NATO's Open Door Policy

NATO firmly believes that every country should be free to make its own sovereign decisions and to determine its own security arrangements, including whether or not to join a treaty or alliance.

The door to NATO membership is open to any European democracy able to further the principles of the North Atlantic Treaty – individual liberty, democracy and the rule of law – and to contribute to the security of the North Atlantic area.

Article 10 of the North Atlantic Treaty makes clear that the Allies, by unanimous agreement, may invite any such European state to accede. Decisions on membership are the prerogative of the NATO Allies and no third party has a say in this.

NATO's Open Door Policy has been a historic success, strengthening the Alliance as well as

peace and stability in the Euro-Atlantic area. The 2022 Strategic Concept underlines this, and that the security of countries aspiring to become members of the Alliance is intertwined with NATO's own security.

In a historic development, Finland joined the Alliance in 2023. At the time of printing, the accession process for Sweden was also complete. In their Vilnius Summit Communique, Allies stated that Ukraine's future is in NATO and that the Alliance will support Ukraine on its path toward future membership.

The Vilnius Summit Communique also reaffirmed that Allies remain committed to supporting the eventual NATO membership of Georgia. Bosnia and Herzegovina continued its close cooperation with NATO, including through the Reform Programme, without prejudice to a final decision on NATO membership.

#### Finland and Sweden's Path to NATO

NATO, Finland and Sweden share the same values and interests. Over the past decade, they have worked increasingly closely together, in the face of a deteriorating international security environment.

Russia's full-scale invasion of Ukraine shifted public and political opinion in Finland and Sweden decisively in favour of joining the Alliance. Finland and Sweden have impeccable democratic credentials, highly capable armed forces and resilient societies. Geographically, they strengthen NATO's strategic position in the Baltic Sea region and the High North. NATO membership offers Finland and Sweden collective defence and capabilities beyond what any one nation can provide.



A meeting of the Science and Technology Board, held in Finland for the first time. Helsinki, Finland, September 2023



A team of Swedish Air Force rangers pose in front of a JAS-39 Gripen fighter jet. Gotland, Sweden, April 2023.

Finland and Sweden began 2023 as NATO 'Invitees', attending NATO meetings and participating in NATO activities in that capacity. Invitee status lasts from the time Allies sign the Accession Protocol for a prospective new member, until each Allied parliament has ratified the Accession Protocol, after which the country can accede to the North Atlantic Treaty and become an Ally. Invitee status facilitates integration into NATO activities, allowing Invitees to become familiar with new areas of policy-making and cooperation, and enabling them to build the staffing and expertise needed to fulfil their obligations as an Ally. Invitees receive the same information as Allies, and participate in discussions and policy shaping, but without a decision-making role.

In 2023, Türkiye, Finland and Sweden continued their national cooperation based on the trilateral memorandum that they concluded at the Madrid Summit in June 2022, to address the legitimate security concerns raised by Türkiye. Among its provisions, that memorandum established a Permanent Joint Mechanism among the parties to facilitate cooperation and implementation.

Finland acceded to the North Atlantic Treaty on 4 April 2023, becoming the 31st NATO Ally. Finland joined the Alliance 74 years to the day since the signature of the North Atlantic Treaty by the 12 founding NATO Allies; a fitting reminder of the success of NATO's Open Door Policy. Finland was welcomed to the Alliance at a flag-raising ceremony at NATO Headquarters, in the presence of the Finnish President, Foreign Minister and Defence Minister, as well as the Foreign Ministers of all NATO Allies and Sweden.

In their Vilnius Summit Communique, Allies welcomed the agreement reached between the NATO Secretary General, the President of Türkiye and the Prime Minister of Sweden the previous day, and looked forward to welcoming Sweden as a full member of the Alliance.

On 26 December, the Foreign Affairs Committee of Türkiye's Grand National Assembly voted in favour of Swedish accession, which paved the way for the official ratification by the plenary in January 2024. In March 2024, as the 2023 Annual Report went to print, the accession process was completed and Sweden became a NATO Ally.

# A Global Perspective: Bilateral and Regional Partnerships

NATO's network of partnerships has been developing for over 30 years, adjusting the scope, intensity and focus to each partner's interests and capacities, while reflecting NATO's own priorities. NATO cooperates with partners on a bilateral basis, as well as through regional partnership frameworks.

In the Euro-Atlantic area, Allies are actively engaged with 17 partner countries, bilaterally and through the Euro-Atlantic Partnership Council and the Partnership for Peace programme.<sup>21</sup> Among these partners, NATO has developed specific structures for its relationships with Ukraine and Georgia.

NATO's partnership network also extends to 11 partners in the Middle East and North Africa through the Mediterranean Dialogue and the Istanbul Cooperation Initiative.22

The Alliance also cooperates with a range of countries that are not part of these regional partnership frameworks. Referred to as "partners across the globe", they include Australia, Colombia, Iraq, Japan, the Republic of Korea, Mongolia, New Zealand and Pakistan.

<sup>22</sup> Armenia, Austria, Azerbaijan, Bosnia and Herzegovina, Georgia, Ireland, Kazakhstan, Kyrgyz Republic, Malta, the Republic of Moldova, Serbia, Sweden (Invitee), Switzerland, Tajikistan, Turkmenistan, Ukraine, Uzbekistan.

<sup>23</sup> The Mediterranean Dialogue includes Algeria, Egypt, Israel, Jordan, Mauritania, Morocco and Tunisia. The Istanbul Cooperation Initiative includes Bahrain, Kuwait, Qatar and

# NATO Engagement and Cooperation in the Western Balkans

NATO remains strongly engaged in the Western Balkans, a region whose stability is of strategic importance for the Alliance. In November, the Secretary General visited Bosnia and Herzegovina, Serbia and the Kosovo Force Headquarters, and held a joint session with regional Allied Leaders in North Macedonia. The visit conveyed a strong signal of NATO's enduring commitment to peace and stability in the Western Balkans, against the backdrop of a complex regional and global security environment.

In 2023, robust political dialogue and practical cooperation continued with Bosnia and Herzegovina (see page 107).

NATO also maintains high-level political dialogue with Serbia, to address issues relevant for regional security. Partnership cooperation continued with the NATO Military Liaison Office in Belgrade providing support to Serbia's activities within the Partnership for Peace programme.



NATO Secretary General Jens Stoltenberg meets with Serbian scientists who present technology developed in the context of a NATO Science for Peace and Security project. Belgrade, Serbia, November 2023.

# **NATO Headquarters Sarajevo**

Since 2004, NATO Headquarters Sarajevo has been providing advice and assistance to Bosnia and Herzegovina's authorities in implementing defence and security sector reforms. It also provides logistic and other support to the European Union-led operation EUFOR Althea under the Berlin Plus arrangements. As NATO's engagement with Bosnia and Herzegovina continued to expand in 2023 - including through the approval of a Defence Capacity Building package - NATO Headquarters Sarajevo redoubled its efforts in support of the Ministry of Defence, the Armed Forces of Bosnia and Herzegovina, and the Ministry of Security, providing advisory assistance on a host of reform activities.



The NATO Secretary General, Jens Stoltenberg, meets the Commander of the European Union Force in Bosnia and Herzegovina, Major General Helmut Habermayer (right), and Commander of NATO Headquarters Sarajevo, Brigadier General Pamela McGaha (left). Camp Butmir, Bosnia and Herzegovina, November 2023.



Representatives from Allied and partner countries meet in Moldova to exchange views on defence capacity building programmes. Chisinau, Republic of Moldova, December 2023.

# Cooperation with the Republic of Moldova

NATO and the Republic of Moldova have a longstanding relationship based on political dialogue and practical cooperation. At the Vilnius Summit, Allies reaffirmed their support for the territorial integrity and sovereignty of Moldova and its right to decide its own future and foreign policy course. Allies remain committed to supporting Moldova as it advances its European integration.

In 2023, NATO and Moldova intensified both practical cooperation (see page 110) and political dialogue through bilateral visits and engagements. The NATO Liaison Office in Chisinau played an important role in promoting political dialogue and practical cooperation between NATO and Moldova, and in increasing public awareness about NATO in Moldova through public diplomacy activities. Opened in 2017 in response to a request from the authorities of the Republic of Moldova, the NATO Liaison Office serves as the official diplomatic mission and representation of NATO in Moldova. In 2023, the NATO Liaison Office organised and supported public engagements, including the annual conference 'NATO Days', and engaged with civil society through workshops and lectures in schools across the country.



NATO is committed to supporting Moldova's political independence, integrity and European ambitions. In 2023, I was privileged to contribute to that strategic conversation.

#### Michaela Guerard Šimák (Slovakia)

Head, NATO Liaison Office in the Republic of Moldova Chişinău, Moldova

# NATO's Engagement in the South Caucasus

The evolving security environment has had a significant impact on NATO's partners in the South Caucasus. Through the Secretary General's Special Representative for the Caucasus and Central Asia, Javier Colomina, NATO continued active engagement with Heads of State and Ministers, diplomats and civil society from across Armenia, Azerbaijan and Georgia. NATO expressed support for the territorial integrity, political independence and sovereignty of each of these three partners.

NATO has encouraged both Armenia and Azerbaijan to engage constructively through the various formats in place and stressed the importance of addressing humanitarian issues. NATO has also sought to support stronger partnership relations with both Armenia and Azerbaijan through the development of Individually Tailored Partnership Programmes. NATO's engagement with the three countries of the South Caucasus is supported by the NATO Liaison Office in Tbilisi, Georgia.



The Secretary General's Special Representative for the Caucasus and Central Asia, Javier Colomina, at a public event during an official visit to Georgia. Tbilisi, Georgia, December 2023.

# NATO's Partners in the Middle East and North Africa

NATO has an extensive network of partners in the Middle East and North Africa through the Mediterranean Dialogue and the Istanbul Cooperation Initiative partnership frameworks.

In 2023, NATO strengthened its political dialogue with partners in the Middle East and North Africa on issues of common concern such as Russia's invasion of Ukraine and its spill-over effects in the region.

In light of the recent crisis in the Middle East, NATO further engaged with regional partners in different fora, including at ministerial level with Defence Minister of Israel Yoav Gallant and, separately, at North Atlantic Council level with the King of Jordan, Abdullah II ibn AI Hussein. Throughout the year, senior NATO officials conducted visits to Bahrain, Israel, Jordan, Kuwait, Mauritania, Qatar, Tunisia and the United Arab Emirates. They also engaged with other relevant actors in the region, including Lebanon, Oman and Saudi Arabia.



Defence University during his visit to the Kingdom of Saudi Arabia.

Riyadh, Saudi Arabia, December 2023.

NATO and its Middle Eastern and North African partners continued to cooperate on a wide array of issues, ranging from counter-terrorism, small arms and light weapons, and countering improvised explosive devices to crisis management, civil preparedness, resilience and the Women, Peace and Security agenda.

At the Vilnius Summit, NATO Heads of State and Government launched a reflection process on existing and emerging threats and challenges, and opportunities for engagements with partner nations, international organisations and other relevant actors in the Middle East and North Africa and Sahel regions. The Secretary General appointed an independent group of experts to reflect on NATO's approach to its southern neighbourhood and help guide future decision-making.

NATO and Kuwait continued to leverage the opportunities provided by the NATO-Istanbul Cooperation Initiative Regional Centre based in Kuwait. The Centre provides a forum where Allies and Gulf countries can meet to discuss topics of mutual interest and relevance. It also offers education and training for Istanbul Cooperation Initiative partners as well as Oman and Saudi Arabia. NATO has also begun work to establish a NATO Liaison Office in Amman, Jordan, in close coordination with the Jordanian authorities.

Given the importance of the Sahel to Euro-Atlantic security, the Alliance continued to engage with Mauritania and relevant international and regional organisations.



Meeting of the North Atlantic Council in Defence Ministers' Session, together with Invitee Sweden and the Defence Minister of Israel by video conference. Brussels, Belgium, October 2023.



His Majesty King Abdullah II ibn Al Hussein of the Hashemite Kingdom of Jordan meets NATO Secretary General Jens Stoltenberg at the Alliance's Headquarters. Brussels, Belgium, November 2023.



NATO Secretary General Jens Stoltenberg in the cockpit of an F-2 fighter during his visit to Japan. Iruma Air Base, Japan, January 2023.

#### Partners in the Indo-Pacific

NATO's Strategic Concept states that the Indo-Pacific region is important to NATO, as developments in the Indo-Pacific can directly affect Euro-Atlantic security. In 2023, the leaders of NATO's four partners in the Indo-Pacific – Australia, Japan, New Zealand and the Republic of Korea – participated in the NATO Summit in Vilnius, joining Allies in a session with the leadership of the European Union.

The discussion addressed a wide range of common security challenges, including the global implications of Russia's continued war of aggression against Ukraine. This was the second time that the four Indo-Pacific Leaders had participated in a NATO Summit as a group, following their presence at the NATO Summit in Madrid in 2022. Earlier in the year, the partners in the Indo-Pacific also joined Allies for the April 2023 meeting of Foreign Ministers.

Throughout 2023, Allies and the partners in the Indo-Pacific worked together to deepen their political dialogue and cooperation. The North Atlantic Council met at Ambassadorial level with these partners four times, focusing on resilience, strategic perspectives on regional security, the rules-based international order, hybrid challenges and countering disinformation. NATO Allies and the four partners also increased their practical cooperation across a range of areas.

In parallel, NATO has continued to cooperate with each of the partners in the Indo-Pacific on a bilateral basis. In 2023, Australia, Japan and the Republic of Korea agreed their respective Individually Tailored Partnership Programme with NATO, presenting an ambitious programme of activities for the next four years.



NATO is a regional alliance with a global outlook. In 2023, I was happy to contribute to the strengthening of NATO's relations with its partners in the Indo-Pacific region and its outreach to other countries across the globe.

#### Sophie Briquetti (France)

Political Officer, Global Partnerships Section, Political Affairs and Security Policy Division NATO Headquarters, Brussels, Belgium



Admiral Rob Bauer, Chair of the NATO Military Committee, at the 25th annual Indo-Pacific Chiefs of Defence Conference. Fiji, August 2023.

# Cooperation with Other International Organisations at a Glance

NATO is strongly committed to multilateralism and close cooperation with other international organisations. The Alliance engages with the European Union, the United Nations, the Organization for Security and Co-operation in

Europe and the African Union. It also maintains regular dialogue with other organisations including the International Committee of the Red Cross, the Organisation for Economic Co-operation and Development and the World Bank.

#### The European Union

NATO-European Union cooperation has become more relevant than ever in the context of Russia's war on Ukraine, with the two organisations demonstrating common resolve and achieving unprecedented levels of cooperation.

In January, Secretary General Jens Stoltenberg, the President of the European Council, Charles Michel, and the President of the European Commission, Ursula von der Leyen, signed a third Joint Declaration on NATO-European Union cooperation. In the Declaration, the three leaders resolved to address in particular growing geostrategic competition, resilience, protection of critical infrastructure, emerging and disruptive technologies, space, the security implications of climate change and Foreign Information Manipulation and Interference.

Political dialogue between the two organisations was further enhanced by the Secretary General's participation in the European Council in June, and the participation of the Presidents of the European Commission and of the European Council in the Vilnius Summit in July. Throughout the year, regular interaction between the Secretary General and his European Union counterparts, participation in



I am delighted to have been able to contribute to the strengthening of the partnership between NATO and the European Union in 2023. In an era of growing geo-strategic competition, NATO – EU partnership is more important than ever.

#### Oliver Đajić (Slovenia)

Policy Officer, Multilateral Organisations, Political Affairs and Security Policy Division NATO Headquarters, Brussels, Belgium

President of the European Council Charles Michel, NATO Secretary General Jens Stoltenberg and President of the European Commission Ursula von der Leyen following the signing of the third Joint Declaration on NATO-European Union Cooperation. Brussels, Belgium, January 2023.



ministerial meetings and reciprocal briefings fostered mutual situational awareness and coherence of efforts, particularly in supporting Ukraine and in addressing defence production gaps.

Practical cooperation continued to intensify through the implementation of the 74 proposals for common action. NATO and the European Union continued the practice of parallel and coordinated exercises, whereby respective staffs engaged in the preparations and the implementation of exercises EU Integrated Resolve 2023 and NATO's Crisis Management Exercise 2023.

Dialogue between the military staffs of the two organisations was also enhanced, including through reciprocal participation of their senior military authorities in respective Chiefs of Defence meetings.

#### The United Nations

NATO and the United Nations have continued to bolster their longstanding cooperation. Broad political dialogue continued, including with interaction between Secretary General Jens Stoltenberg and United Nations Secretary-General Antonio Guterres. In 2023, NATO and the United Nations held comprehensive expert-level staff talks to deepen dialogue in existing and emerging areas of cooperation, such as climate change and security, tackling disinformation, and countering terrorism. The dialogue on Women, Peace and Security and its associated human security agenda remains an integral part of the relationship.

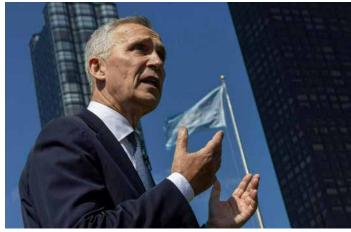
NATO continued to support United Nations peace operations, including through its multi-year training package that serves to strengthen the United Nations' capacity to mount and sustain peacekeeping operations. The training package is the first of its kind for an international organisation partner of NATO and provides expertise in key areas for improving peacekeeper protection, including



In 2023, I helped enhance cooperation between NATO and the European Union through mutual briefings on challenges such as climate change, malicious cyber activities and the need to build resilience.

#### Lt Col Marie-Claude Osmond (Canada)

Staff Officer, Cooperative Security Division, NATO International Military Staff NATO Headquarters, Brussels, Belgium



NATO Secretary General Jens Stoltenberg visits the United States to attend the 75th Session of the United Nations General Assembly.

New York, United States, September 2023.

countering improvised explosive devices, medical care, military performance evaluation processes, and signals and communications.

#### The Organization for Security and Co-operation in Europe

In the current challenging security environment, the OSCE remains an important partner for NATO – and all Allies are participating states of the Organization. In 2023, regular high-level political dialogue and practical cooperation continued in areas of mutual interest – including the Western Balkans, Ukraine, the South Caucasus and Central Asia – as well as

on issues such as counter-terrorism, climate change and security, human trafficking, and the Women, Peace and Security agenda. The NATO Liaison Office in Vienna, established in 2018, continued to support and facilitate regular exchange of information between the two organisations.

#### The African Union

The African Union is a key interlocutor for NATO in the Alliance's southern neighbourhood, particularly when it comes to tackling shared security threats and challenges. The partnership between the two organisations is grounded in shared values and interests. This cooperation encompasses a wide range of activities, including operational support, education and training, as well as structural assistance to the African Union and the African Standby Force. NATO's Senior Military Liaison Officer in Addis Ababa remains the central coordinating authority and hub for all NATO military activities involving the African Union.

In 2023, NATO and the African Union held their eighth military-to-military talks at the African Union Headquarters, discussing the global security environment and security challenges, the ongoing cooperation between the two organisations, NATO's support to the African Standby Force, and education, training and exercises. NATO remained committed to helping facilitate support for strategic lift requests from the African Union for their peace missions, particularly the African Union Transition Mission to Somalia.

# Advancing Science for Peace and Security

The Science for Peace and Security Programme supports activities that foster practical cooperation on security-related science and innovation. It creates opportunities for research and knowledge exchanges among scientists in NATO and partner countries, aiming to identify solutions to emerging security challenges. Its cooperative initiatives build lasting and valuable networks within the scientific community and make key contributions to Allied priorities, such as increasing support to scientific partners in Ukraine in the wake of Russia's full-scale invasion, exploring the potential of emerging and disruptive technologies – particularly in the realm of quantum technologies – and supporting NATO's Energy Transition by Design Initiative.

In 2023, the Science for Peace and Security Programme continued supporting the implementation of approximately 100 multi-year research and development projects and received nearly 250 proposals for new activities. There were a number of highlights in 2023, including:

- Scientific cooperation with Ukraine: Since 2014, Ukraine has been the largest beneficiary of the Science for Peace and Security Programme. In 2023, Ukraine and NATO agreed to prioritise collaboration on advanced technologies, as well as on energy security and digital resilience.
- Continued emphasis on innovation and emerging and disruptive technologies: As worldwide investment in a number of key emerging and disruptive technologies surged in 2023, the Science for Peace and Security Programme was



A Ukrainian researcher tests an unmanned aerial vehicle-based system to detect landmines, which is being developed with support from NATO's Science for Peace and Security Programme. Kharkiv, Ukraine, June 2023. Photo credit: Vyacheslav Madiyevskyy.



Opening session of NATO's Science for Peace and Security Programme Information Day. Tbilisi, Georgia, May 2023.

particularly busy cooperating on the development of quantum technologies, engaging with nearly 40 universities and research institutes in NATO member and partner countries on 12 multi-year projects.

- Supporting NATO's Energy Transition by Design Initiative: Preparing for the global shift away from fossil fuels to renewable sources of energy is a priority for NATO. The Programme is supporting projects to help smooth this energy transition, including by funding projects to develop novel and sustainable technologies for converting carbon emissions in the atmosphere into a wide variety of chemicals and fuels.



In 2023, I was privileged to work with a dedicated and dynamic team supporting the scientific community in implementing research projects that contribute to Allied and partner priorities.

#### Jane Patient Bradbrooke (United Kingdom)

Project Assistant,
Science for Peace and Security Programme,
Emerging Security Challenges Division
NATO Headquarters, Brussels, Belgium

# **Demining Robots**

The NATO Science for Peace and Security Programme has been supporting demining projects for many years. The 'Demining Robots' project – a collaboration between experts from research institutes in Italy, Jordan, Ukraine and the United States – was completed in September. The primary goal of the project was to demonstrate the feasibility of a safe landmine-and improvised explosive device-detection system by using a team of cooperative robotic vehicles, each carrying specialised sensors. This novel approach allows for the collection of data covering a wide range of parameters and involves zero risk to human life.

Ukraine is now considered the most heavily mined country on earth, and Ukrainian authorities have spoken about a severe shortage of personnel and equipment capable of clearing the minefields. In this context, the further development of this project could have an immediate and positive impact.



Preliminary test for the navigation of one of the Demining Robots platforms. Kharkiv, Ukraine, January 2023.





#### We exist not only to defend and protect our lands, but also our people in all their infinite variety.

Remarks by NATO Secretary General Jens Stoltenberg at the "Proud at NATO" online conference, 17 May 2023.

NATO's 2022 Strategic Concept highlighted that the Women, Peace and Security and Human Security agendas are key cross-cutting areas of work that must be integrated in all three core tasks of the Alliance - and Allies reaffirmed this principle at the 2023 Vilnius Summit. To achieve this goal, they stressed the importance of supporting the operationalisation of both agendas through robust policies and guidelines, and through continued cooperation with partners, international organisations and civil society.

Partnerships continue to be indispensable to implement both agendas at NATO and beyond. In 2023, tailored goals on Women, Peace and Security and Human Security were included in NATO's Individually Tailored Partnership Programmes with Ireland, Japan, the Republic of Korea and Switzerland. In addition, Colombia associated itself with NATO's Policy on Women, Peace and Security, illustrating the country's strong commitment to this agenda as part of its partnership with NATO. Recent missions by the Secretary General's Special



The Secretary General's Special Representative for Women. Peace and Security, Irene Fellin, at the Vilnius Summit. Vilnius, Lithuania, July 2023

Representative for Women, Peace and Security have included visits to Australia, Georgia, the Republic of Korea and Ukraine, which provided scope to improve synergies between NATO and partners.

# Support to Ukraine on Women, Peace and Security

NATO and Ukraine cooperate closely in the fields of Human Security and Women, Peace and Security. In 2023, NATO conducted a research project on 'Russia's War Against Ukraine: Targeting Civilians as a Tactic of War'. The project assessed the experiences of Ukrainians living through Russian attacks, collated efforts and practices used to protect them, and recommended ways in which NATO and NATO Allies could support Ukraine in improving those efforts.

The Secretary General's Special Representative for Women, Peace and Security also commissioned an assessment report on the needs of the Armed Forces of Ukraine through a gender lens. The assessment identified concrete findings and recommendations related to gender, designed to inform NATO's tailored support to Ukraine.

In May, the Special Representative, together with the Belgian Permanent Representative to NATO and Save the Children UK Fund, hosted a photo exhibition on the impact of Russia's war against Ukraine on children. In October, the Special Representative also hosted an event on sexual violence against men and boys focused on Ukraine.



A Finnish soldier during exercise Northern Forest. Northern Finland, May 2023.

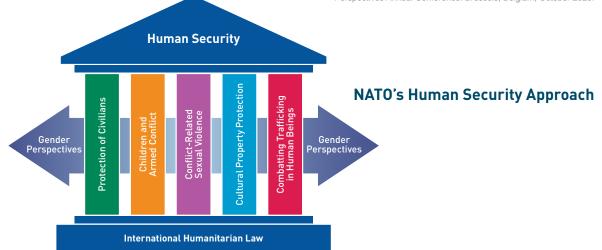
# **Human Security**

In 2023, in line with its Human Security Approach and Guiding Principles, NATO continued to include considerations for the comprehensive safety and security of women, men, girls and boys into all stages and levels of Alliance operations, missions and activities. In the Vilnius Summit Communiqué, Allies emphasised that the Human Security agenda provides great impetus for the adoption of a more comprehensive view of the human environment and contributes to lasting peace and security.

Human Security at NATO encompasses five areas of work: protection of civilians; preventing and responding to conflict-related sexual violence; combatting trafficking in human beings; children and armed conflict; and cultural property protection.



From left to right: Lieutenant Colonel Jane Male and Lieutenant Colonel Françoise Verbanck, respectively Chair and Deputy Chair of the NATO Committee on Gender Perspectives' Executive Committee, Admiral Sir Keith Blount, Deputy Supreme Allied Commander Europe, and Lieutenant Colonel Katherine Prudhoe, Gender Advisor for the NATO International Military Staff, at the NATO Committee on Gender Perspectives Annual Conference. Brussels, Belgium, October 2023.



In 2023, NATO prioritised efforts to ensure the Alliance has robust frameworks in place to further operationalise Human Security. Stepping up the Alliance's contributions to international efforts under United Nations Security Council Resolution 1612 (2005), NATO Leaders endorsed the first Policy on Children and Armed Conflict. They also endorsed an updated Policy on Combatting Trafficking in Human Beings, ensuring that considerations on the risk of human trafficking are fully integrated in military planning; and that any risk is duly assessed and mitigated from the outset. These policies also provide opportunities for additional genderresponsive training and education.

NATO also addressed the issue of Cultural Property Protection. A conference was held at NATO Headquarters to assess the implications of the protection of cultural property in armed conflict for NATO Allies, and efforts continued to advance NATO's contribution in this area.



Deputy Secretary General Mircea Geoană and Secretary General's Special Representative for Women, Peace and Security Irene Fellin at the conference on Cultural Property Protection and NATO: Experiences, Practices and Trends. Brussels, Belgium, February 2023.

# Women, Peace and Security

NATO is committed to the implementation of the Women, Peace and Security agenda. Since the first NATO/Euro-Atlantic Partnership Council Policy on Women, Peace and Security was agreed in 2007, NATO has integrated gender perspectives into its day-to-day work, understanding that it increases effectiveness in all operations, missions and activities.

The 2023 Vilnius Summit Communiqué reaffirmed Allies' determination to consistently implement the policy and to foster the principles set out by the United Nations Security Council. Allies also agreed to assess and update the Women, Peace and Security Policy. This decision supports the vision set out in the 2022 Strategic Concept to future-proof the Alliance, and to boost efficiency and relevance in a changing security environment.

In implementing the Women, Peace and Security Action Plan endorsed in 2021, NATO's institutional framework has been strengthened - with an increased number of relevant focal points, regular engagements, events and discussions. Gender perspectives have been increasingly integrated into NATO activities with the use of gender analysis and sex-disaggregated data.



High-level women's breakfast with the participation of Allied Foreign and Defence Ministers. Vilnius, Lithuania, July 2023.



A German Air Force A400M pilot prepares for an air-to-air refuelling mission during exercise Air Defender 23. Germany, June 2023.

The Alliance has also enhanced efforts to include gender perspectives in its work on emerging challenges, such as terrorism and climate change. For instance, NATO assessed aspects of gender as part of the second edition of the Climate Change and Security Impact Assessment. This noted the different ways in which climate insecurity impacts men, women, boys and girls and the risk of climate change exacerbating pre-existing vulnerabilities.

2023 also saw the establishment of a new three-year term for the Civil Society Advisory Panel on Women, Peace and Security at NATO. The Panel provides an opportunity for continuous and systematic engagement with civil society on areas of relevance to the Agenda.

Finally, on the margins of the Vilnius Summit, the Secretary General's Special Representative hosted a high-level breakfast to discuss women's leadership, particularly in Ukraine. Participants included Allied Foreign and Defence Ministers, as well as civil society leaders. This meeting underscored the Alliance's commitment to gender equality, as a reflection of our core values.



Highlighting women as strong agents of peace and security is more important than ever. In 2023, I was happy to be able to support efforts to update NATO's Women, Peace and Security Policy.

#### Elif Ünlü (Türkiye)

Intern, Human Security Unit, Office of the Secretary General NATO Headquarters, Brussels, Belgium

# Conference 2023

Research by the United Nations suggests that women who work in science and technology often face multiple obstacles, including smaller research grants compared to their male colleagues, and having shorter, less well-paid careers.

On 8 February, the NATO Science & Technology Organization hosted the Women and Girls in Science Conference 2023 at NATO Headquarters, highlighting NATO's commitment to advancing the role of women in science and technology.

The conference – marking the United Nations International Day of Women and Girls in Science – was an opportunity to celebrate the achievements of women and girls in science and to promote gender equality in science, technology, engineering and mathematics education and careers.

In his remarks to the conference, Deputy Secretary General Mircea Geoană noted that "in today's more competitive and very dangerous world, technology is moving at a dizzying pace," and that "we cannot afford to leave half of the population behind."



Young scientists participating in the Centre for Maritime Research and Experimentation's School Programme in La Spezia speak on a panel at the NATO Science & Technology Organization's Women and Girls in Science conference. Brussels, Belgium, February 2023.

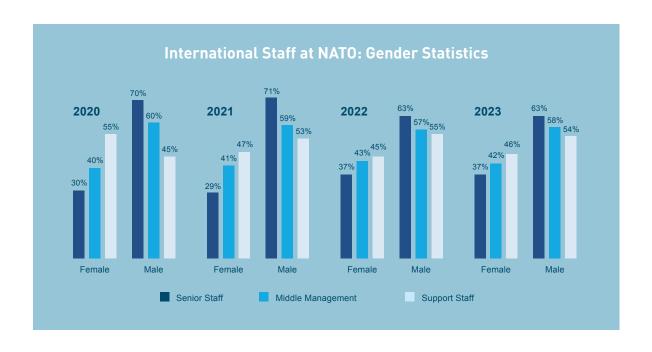
# Gender Balance by the Numbers

Allies have repeatedly emphasised the importance of advancing gender equality as a reflection of the Alliance's common values of individual liberty, democracy, human rights and the rule of law. In the same vein, NATO is dedicated to promoting women's full, equal and meaningful participation in all aspects of peace and security, and at all levels. In 2023, NATO maintained efforts to create a fully inclusive and enabling work environment, where all members of NATO's diverse workforce can reach their full potential.

There is more work to do to achieve full gender parity. However, progress has been made – and the trend is positive, in particular with regards to decision-making positions: in 2023, women held 37.4 per cent of all senior positions in NATO's International Staff. The International Military Staff Office of the Gender Advisor continues to collate data on the recruitment and retention of men and women in Allied armed forces as well as their policies to support women's participation.



A Swedish Army soldier during exercise Aurora 23. Gotland, Sweden, May 2023.







NATO is history's most successful defence alliance. Precisely because we have managed to stick together. Despite our differences. But also because we have changed when the world has changed.

Speech by NATO Secretary General Jens Stoltenberg at the 75th Nordic Council. Oslo, Norway, 31 October 2023.

# **NATO Headquarters**

NATO Headquarters in Brussels houses the Alliance's International Staff and International Military Staff, along with 31 Allied delegations and military representations, 18 partner missions and staff from several NATO agencies. It is the central forum for the discussions and consultations that shape NATO policy and practice.



My role involves working with colleagues to ensure NATO Headquarters remains 'fit for purpose'. In 2023, this included implementing decisions taken at the Madrid Summit to increase common funding.

#### **Christina Tkalec (Canada)**

Executive Officer, Executive Management Division NATO Headquarters, Brussels, Belgium

# **Energy Consumption**

NATO recognises that it has a responsibility to be sustainable in the production and consumption of energy, including at its Headquarters. In this context, there are a number of completed, ongoing or planned energy-related initiatives. These include the optimisation of the Headquarters co-generation plant; tests of alternative heating systems; the adjustment of set-point temperatures in offices; the adjustment of the level of humidity in all spaces; and tailored hours for heating and ventilation. In 2023, NATO Headquarters' gas consumption decreased by around 45% due to these activities, although this was partially offset by an increase in electrical consumption.

In 2023, work also advanced to develop an ambitious solar panel farm at NATO Headquarters and install charging stations for electric vehicles. The official NATO Headquarters vehicle fleet is in the process of being replaced by electric vehicles.

# **Business Continuity Management**

Business continuity efforts at NATO are driven by a clear and ambitious vision: to ensure that its essential mission persists under any circumstances and that NATO emerges even stronger when facing a disruption.

In 2023, the North Atlantic Council approved the Business Continuity Management Strategic Training Plan. This plan serves as the cornerstone for fostering a continuity-by-design mind-set across all levels of the Organization, at all times. It acknowledges the importance of continuous training and preparedness, emphasising the need for proactive measures not just to mitigate risks, but also to transform challenges into opportunities for growth.

### **Translation Service**

NATO's Translation Service continued in 2023 to make sure official documents are available promptly in both official languages – English and French – and is on call 24/7.



Beyond translation into NATO's official languages, the Service outsourced translations of a further 20 languages, the newest of which was Mandarin.

In 2023, the Translation Service recruited an in-house Russian translator to ensure that Russian translations of major statements can be issued at the same time as the English and French versions. Having an official NATO translation reduces the risk of disinformation. Russian translation of NATO tweets also helps the Alliance to reach a wider audience.

## Non-NATO outsourcing combinations





Translation is an important feature of life at NATO Headquarters. In 2023, I was extremely proud to lead the team that introduced artificial intelligence-based machine translation, paving the way for other ambitious projects.

#### Raphaël Prono (France)

Head, Client and Delivery Management, Translation Service, Executive Management Division NATO Headquarters, Brussels, Belgium



Meeting of Allied Ministers of Foreign Affairs and of Sweden at NATO Headquarters. Brussels, Belgium, April 2023.

#### North Atlantic Council

The North Atlantic Council is the main political decision-making body in NATO. It brings together high-level representatives from 31 Allied countries across Europe and North America to consult and coordinate on issues of common interest and concern. Because decisions are made on the basis of consensus, the policies agreed in the Council are considered the expression of the collective will of all NATO Allies. Consensus decision-making is a fundamental principle that has been accepted as the sole basis for decision-making in NATO since the creation of the Alliance in 1949. Consensus decision-making means that there is no voting at NATO. Consultations take place until a decision that is acceptable to all is reached.

The Council is chaired by the Secretary General and its decisions have the same status whether the meeting takes place during a Summit of NATO Heads of State and Government or in permanent session at the level of Ambassadors.



NATO Secretary General Jens Stoltenberg with Chair of the NATO Military Committee Admiral Rob Bauer. Brussels, Belgium, April 2023.

#### **Council Secretariat**

The Council Secretariat supports the Secretary General and Deputy Secretary General in facilitating political consultations and decision-making processes, monitoring the implementation of Council taskings, as well as providing end-to-end support to bilateral meetings and travel arrangements.

It provides for the planning and coordination of the North Atlantic Council agenda, organisational proceedings and administrative arrangements related to the preparation, conduct and follow-up to meetings at ambassadorial, ministerial and summit level. It also serves the Nuclear Planning Group, the NATO-Ukraine Council, the NATO-Georgia Commission and other bodies.

The Council Secretariat handles the protocol aspects of the Secretary General's and the Deputy Secretary General's official engagements both at NATO Headquarters and abroad. It handles all organisational aspects of external Council engagements, including the planning, organisation and conduct of visits, ministerial meetings and summits. The Protocol section also advises the International Staff, International Military Staff, Allied Delegations, Partner Missions and external parties on NATO protocol principles and procedures.

#### International Staff

NATO's International Staff — which consisted of 1,352 civilians<sup>24</sup> in 2023 — supports the Alliance's decision-making process by facilitating dialogue, policy development, and policy and programme implementation. In 2023, NATO started work on a new Human Resources Strategy (2024–2030) to align staff requirements with the needs of the NATO 2030 Agenda and the 2022 Strategic Concept.

The strategy focuses on a series of key objectives, including:

- attracting a diverse, digitally literate, motivated and highly qualified talent community;
- enabling people to be more flexible and change-ready for an ever-evolving geopolitical environment;
- adapting the work environment and fostering a culture of innovation;
- advancing the leadership and management culture, well-being and professional development of the NATO workforce to foster retention, engagement and resilience.

# Office of Legal Affairs

The Office of Legal Affairs is an independent office within the NATO International Staff at Headquarters in Brussels. Headed by the Legal Adviser, its multinational team of lawyers provide legal counsel to the Secretary General and Allies across the NATO committee structure and defend NATO's legal interests in internal and external fora. The Office of Legal Affairs advises on high-profile international defence and security matters and policy, facilitates consensus among Allies on strategic legal issues, negotiates and drafts international treaties, advises on privileges and immunities, and works on other administrative law matters typical of a large international organisation. The Office works closely with legal advisers NATO-wide and in Allied capitals.

# Promoting Diversity, Inclusion and Accessibility

NATO derives its strength from its people and a diverse workforce in all its forms. NATO employees demand respect, equity, inclusion, accessibility, and a work environment free of harassment, bullying and discrimination. NATO is determined to ensure these rights are respected and reflected in its organisational practices.

In 2023, NATO's International Staff started the planning process for the 2024-2030 Diversity, Inclusion and Accessibility Action Plan, building on already strong foundations. The Plan is centred on three themes: more diversity, in-depth inclusion and enhancing accessibility through cross-cutting initiatives.

In 2023, NATO carried out a number of concrete actions to advance diversity and inclusion, including to:

- · Advance geographic and gender diversity in recruitment: NATO fostered targeted and improved outreach, developing digitally accessible training material to prepare for the assessments, and removing constrictive language from vacancy notices. Training on unconscious bias was provided, in order to facilitate more equitable assessments.
- · Focus on disability inclusion and accessibility: NATO Staff revisited various existing reasonable accommodation practices, including facilities and infrastructure adaptations, and put in place new ones for staff living with disabilities.

NATO Staff Resource Groups - including Proud@NATO/LGTBQ+ Resource Group, Elevate Diversity/Race and Ethnic Diversity Resource Group, and the Working Parents' Resource Group – continued their activities to support a psychologically safe work environment. They brought constructive incremental changes through conferences, policy advice, professional networking opportunities, sports events such as 'Run for All', and providing support to local communities.











Press conference with General Christopher Cavoli, Supreme Allied Commander Europe, Admiral Rob Bauer, Chair of the NATO Military Committee, and General Philippe Lavigne, Supreme Allied Commander Transformation. Brussels, Belgium, May 2023.

# **NATO Military Authorities**

In 2023, over 7,000 military and civilian personnel, from all 31 Allies, worked collectively across NATO's military structures to support the Alliance in fulfilling its three core tasks.

The Military Committee is the senior military authority within NATO. It comprises the Chiefs of Defence of NATO Allies. The current Chair of the Military Committee, Admiral Rob Bauer from the Royal Netherlands Navy, has served in this capacity since June 2021. The Chair is NATO's most senior military officer and is the principal military adviser to the Secretary General and the conduit through which consensus-based advice from NATO's 31 Chiefs of Defence is brought forward to the political decision-making bodies of NATO. The NATO Chiefs of Defence meet at least three times a year. The Military Committee also meets in permanent session on a day-to-day basis at the level of military representatives who act on behalf of their Chiefs of Defence.

The International Military Staff is the executive body of the Military Committee. It comprises approximately 500 dedicated military and civilian personnel from NATO's Allied and partner countries. The Director General is elected by the NATO Chiefs of Defence to head the Alliance's International Military Staff for a term of three years. Since July 2022, the Director

General of the International Military Staff has been Lieutenant General Janusz Adamczak from the Polish Armed Forces. The International Military Staff is responsible for preparing assessments and analysis on NATO military issues, identifying areas of strategic and operational interest and proposing courses of action.



The Director General of the NATO International Military Staff, Lieutenant General Janusz Adamczak, and the International Military Staff. Brussels, Belgium, February 2023.



The NATO Military Committee during a visit to Allied Command Transformation. Norfolk, Virginia, United States, March 2023.

## **NATO Command Structure**

The NATO Command Structure and the NATO Force Structure enable the Alliance to carry out its core functions. The strategic role of the NATO Command Structure is to command and control the Alliance's joint operations. It primarily consists of Allied Command Operations and Allied Command Transformation, as well as their subordinate commands and headquarters.

Allied Command Operations has its main headquarters in Mons, Belgium and other, subordinate command headquarters across several NATO nations. Under the command of the Supreme Allied Commander Europe, it is responsible for the planning and execution of all Alliance operations and missions. The Supreme Allied Commander Europe also assumes the overall command of operations at the strategic level and issues strategic military direction to the subordinate commanders. Since July 2022, the Supreme Allied Commander Europe has been General Christopher G. Cavoli, from the United States Army.

Allied Command Transformation has its main headquarters in Norfolk, Virginia, in the United States, with subordinate commands in other NATO nations. Since September 2021, the Supreme Allied Commander Transformation has been General Philippe Lavigne, from the French Air and Space Force. Allied Command Transformation leads the transformation of NATO's military structure, forces, capabilities and doctrine. This command also develops innovative concepts, undertakes experimentation and promotes interoperability throughout the Alliance to improve military effectiveness.

The NATO Force Structure encompasses national and multinational forces as well as their associated operational headquarters, placed at the Alliance's disposal on a permanent or temporary basis according to specified readiness criteria. These provide a pool of forces to meet the Alliance's requirements for conducting and sustaining operations.

# **NATO Funding**

NATO is resourced through direct and indirect contributions from Allies. National – or indirect – contributions are the largest, and are borne by individual Allies. These include the forces and capabilities held by each Ally, which can be provided to NATO to fulfil its three core tasks.

Direct contributions finance NATO's budgets, programmes and capabilities in support of objectives, priorities and activities that serve the interests of the Alliance as a whole, such as Allied operations or NATO-wide air defence systems — and cannot reasonably be borne by any single Ally. All Allies contribute to common funding in NATO, based on an agreed cost-share formula, mainly derived from the Gross National Income of Allied countries. This is the principle of common funding and demonstrates burden-sharing in action.

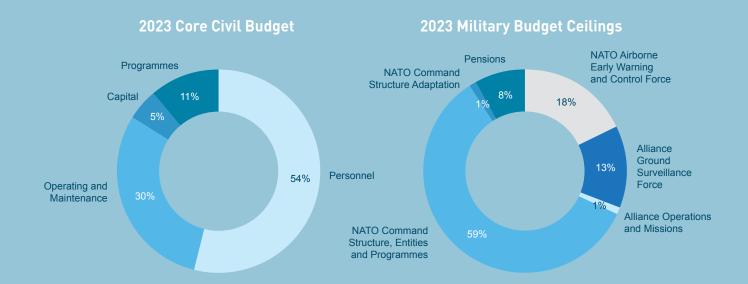
NATO has three principal common-funded elements: the Civil Budget (funding NATO Headquarters), the Military Budget (funding the integrated command structure) and the NATO Security Investment Programme (funding military capabilities).

Decision-making by consensus and well-established governance frameworks are fundamental to the way that common funding is managed at NATO. To this end, financial regulations and an accounting framework are in place and, as a general rule, financial statements are available to the public. The North Atlantic Council approves NATO budgets and investments and exercises oversight over NATO's financial management.

In 2022, Allies agreed to a 30% higher core Civil Budget for 2023, excluding pension liabilities, compared to 2022. The 2023 budget was EUR 308.7 million – 54% of which was personnel-related expenses, 30% was for expenditures for NATO Headquarters operations, 11% was for programmes and the remaining 5% was for capital investments.

In 2023, the International Staff continued improving the overall accountability and transparency of its resources management. The Civil Budget objective-based budgeting framework enables Allies to match the resources provided to the Civil Budget with the objectives achieved during the financial year. The Secretary General continued managing resources economically, efficiently and productively through tracking of efficiencies across NATO services and operations throughout the year.

The Military Budget supports NATO's fulfilling of its three core tasks and fosters interoperability across the Alliance. It funds the operation of selected common-funded capabilities, the integrated command structure, Alliance operations and missions, and collective training and exercises. It consists of 38 separate budgets, which are financed with contributions from Allies' national defence budgets (in most countries), according to agreed cost-shares. The Military Budget ceiling for 2023 was EUR 1.84 billion.



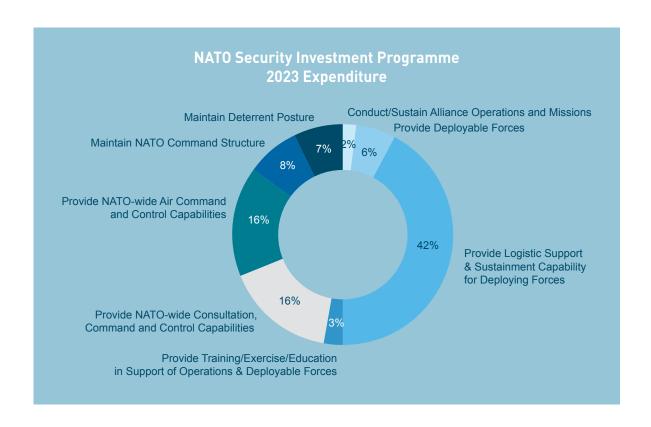
# Strengthening Accountability and Transparency: Internal Oversight

Transparency and accountability are key to ensure effective and efficient use of NATO resources. At the Vilnius Summit, Allies reiterated their commitment to transparency in the context of financial growth and expanded engagements.

The Internal Oversight Service supports the Secretary General in his financial and accountability responsibilities by providing objective and independent oversight services. It covers four key assurance functions: internal auditing; risk management; ethics; and anti-fraud.

The NATO Security Investment Programme funds major construction and command and control systems. It provides installations and facilities such as air defence communication and information systems, military headquarters for the integrated command structure and for deployed operations, as well as critical airfield, fuel systems and maritime infrastructure. The Programme is implemented through capability packages and capability programme plans. Annual funding in 2023 was EUR 1 billion, with over 3,000 common-funded projects worth almost EUR 17.5 billion currently under implementation.

In 2023, the NATO Security Investment Programme continued to deliver capabilities such as satellite communications, cyber security, surveillance and control. Additional investments were devoted to the NATO Command Structure, to include the modernisation of information and technology assets and Headquarters facilities; projects to improve command and control of NATO nuclear capabilities; and facilities to support training, reception and onward movement of NATO forces, among others.





An aerial view of the NATO Satellite Ground Station. Kester, Belgium, June 2023.

# **Agencies and Organisations**

# NATO Communications and Information Agency

The NATO Communications and Information Agency connects the Alliance. It ensures NATO has the secure networks, communications and software needed to safeguard peace and security for all Allies. The Agency enables NATO's digital transformation by delivering the capabilities, services and expertise required to ensure the Alliance is technologically ready for the challenges of the future.

The Agency continues to leverage cutting-edge technology and collaborative partnerships with NATO entities and industry. For instance, in 2023, the Agency's IT modernisation initiative made strides in overcoming technical obsolescence, delivering 6,500 new workstations, laptops, tablets, and other devices to users throughout NATO. In the space realm, the Agency completed the upgrade of four NATO Satellite Ground Stations, doubling the previous satellite communications ground coverage and enabling the Alliance to do more with fewer stations.

To strengthen cyber security, the Agency has upgraded and configured mission-critical cyber security capabilities and systems at 22 NATO sites, increasing its ability to monitor and defend the Alliance's networks from cyber attacks and malicious activity.

The Agency also provides critical support to NATO operations, missions and exercises. In 2023, the Agency enabled information-sharing and connectivity for over 100 NATO and national exercises.

In 2023, the NATO Communications and Information Agency played a significant role in helping Ukraine to reduce cyber risks and improve cyber informationsharing, including by delivering key IT capabilities such as satellite phones and GPS trackers to enhance Ukraine's ability to communicate during Russia's war against Ukraine.

Staff from the NATO Communications and Information Agency participating in exercise Northern Challenge 23.

Keflavik, Iceland, September 2023.



Senior representatives from different NATO entities at the third NATO Digital Workplace conference organised by the NATO Communications and Information Agency. The Hague, the Netherlands, November 2023.



# NATO Support and Procurement Agency

The NATO Support and Procurement Agency's mission is to be the lead organisation for multinational acquisition, support and sustainment to NATO nations. The Agency enables the consolidation and centralisation of functions, allowing its customers to achieve economies of scale, reducing costs, lowering the military logistics footprint, and obtaining efficient support from the commercial sector under a 'ready-to-go' legal framework, all while leveraging the latest technology.

The NATO Support and Procurement Agency is headquartered in Luxembourg, with operational centres in France, Hungary and Italy. It employs more than 1,400 international civilian personnel and oversees approximately 400 contractors supporting NATO's operations and missions. The Agency is customer-funded, operating on a 'no-profit, no-loss' basis. In 2023, the value of the Agency's business activity exceeded EUR 5 billion.

In 2023, the NATO Support and Procurement Agency established or continued to manage several key acquisition and high-visibility projects and programmes. These include the Multinational Multi Role Tanker Transport Fleet and the NATO Airlift Management Programme, based in Hungary, which owns, manages and supports a fleet of three C-17 aircraft on behalf of the Strategic Airlift Capability. The Agency also manages the Central Europe Pipeline System Programme<sup>25</sup>, which provides constant strategic capability to NATO through the operation, maintenance and financing of the largest NATO pipeline and storage network.

In 2023, the Agency established the Next Generation Rotorcraft Capability programme, a new multinational approach towards the study and possible procurement of an innovative future rotorcraft capability. The Agency also provided significant support to Allies in the construction and management of three temporary villages in Türkiye following the devastating earthquakes in February. The villages opened in Antakya, Iskenderun and Defne in May and June, and are capable of hosting up to 8,000 people.



Stacy Cummings, General Manager of the NATO Support and Procurement Agency, leading a panel discussion on 'Future-proofing critical supply chains' at the NATO-Industry Forum.

Stockholm, Sweden, October 2023.



In 2023, I developed and executed initiatives to increase Allies' and partners' ammunition capabilities. I also helped implement innovative procurement strategies to ensure best value for our customers.

## Céline Danielli (France)

Programme Manager, General and Cooperative Services NATO Support and Procurement Agency, Capellen, Luxembourg

<sup>25</sup> Six Allies are members of this Programme: Belgium, France, Germany, Luxembourg, the Netherlands and the United States.

# NATO Science & Technology Organization

The NATO Science & Technology Organization delivers innovation, advice and scientific solutions to meet the Alliance's evolving needs. The Organization comprises seven scientific and technical committees as well as three staff entities: the Centre for Maritime Research and Experimentation in La Spezia, Italy; the Collaboration Support Office in Paris, France; and the Office of the Chief Scientist at NATO Headquarters in Brussels, Belgium. All committees and staff entities are governed by the NATO Science and Technology Board. The NATO Chief Scientist chairs the Board and serves as the scientific advisor to NATO's senior leadership.

In 2023, the Organization included a network of over 5,000 national researchers, scientists and engineers conducting a research portfolio of more than 300 activities. These research projects covered the full spectrum of physical, information and human sciences, and their application over all five of NATO's operational domains of land, air, sea, cyberspace and space. Research areas included advanced vehicle technologies; systems analysis; human factors and medicine; system concepts and integration; modelling and simulation; information systems; sensors and electronics; and maritime research and experimentation.

## **NATO Centres of Excellence**

NATO Centres of Excellence are nationally or multinationally established and sponsored entities, providing recognised high-level expertise and knowledge in defined domains to complement NATO's capabilities. A Centre of Excellence is neither part of the NATO Command Structure nor of other NATO entities, but forms part of the wider framework that contributes to the functioning of the Alliance.

NATO Centres of Excellence promote innovation, through experimentation and recommendations, and improve interoperability among Allies and partners.

In January 2023, Allies signed the operational memorandum of understanding of the Space Centre of Excellence in Paris, France. In July, Allies also signed the founding document establishing the Climate Change and Security Centre of Excellence in Montreal, Canada. Both centres are currently undergoing the process to become the 29<sup>th</sup> and 30<sup>th</sup> NATO-accredited Centres of Excellence.

# Improving Transparency: Archives and Information Management

Transparency is a fundamental principle of democratic nations. NATO is committed to timely and accurate declassification and public disclosure. By preserving and publishing authentic and reliable records, citizens of NATO member countries can have access to factual information about the Alliance.

In 2023, the Alliance declassified and publicly disclosed 23,371 historical NATO documents. In addition, the number of current administrative and policy documents made available to the public continued to increase and included audit reports of financial statements NATO-wide, alongside public versions of the Civilian Staff Regulations and the NATO Policy on Children and Armed Conflict.

The public disclosure programme also regularly reviews thematic collections of particular interest, ensuring that disclosures align with areas of academic and general public interest. A significant achievement this year was the disclosure of a collection of strategic military documents related to NATO's early involvement with Afghanistan from 2001 to 2004, in support of academic research by official military historians of NATO member states.

Improving access to NATO's resources is an important part of the transparency effort. In 2023, the NATO Archives continued to provide digitised archival documents through the NATO Archives Online platform. The NATO Archives also provided public briefing and researcher engagement at NATO Headquarters by welcoming close to 2,500 visitors to the Declassified Centre and Archives Reading Room.

# ANNEXES

Kosovo Force

Defence Expenditure of NATO Countries

# **Kosovo Force**

The NATO-led KFOR mission is to contribute to maintaining a safe and secure environment and freedom of movement for all communities in Kosovo, as mandated by United Nations Security Council Resolution 1244 of 1999. In carrying out its activities, NATO cooperates with and assists the United Nations, the European Union and other international actors, as appropriate, to support the development of a stable and peaceful Kosovo. KFOR also supports the development of professional, democratic and multi-ethnic security structures in Kosovo.

Commander: Major General Özkan Ulutaş

## 27 Troop-contributing Nations (as of October 2023)

Albania	89	Latvia	136
Armenia	57	Lithuania	1
Austria	271	Republic of Moldova	41
Bulgaria	142	Montenegro	2
Canada	5	North Macedonia	60
Croatia	151	Poland	245
Czechia	36	Romania	214
Denmark	35	Slovenia	91
Finland	70	Sweden	3
Germany	70	Switzerland	190
Greece	260	Türkiye	369
Hungary	433	United Kingdom	41*
Ireland	13	United States	593
Italy	869	Total Strength:	4,487

<sup>\*</sup> In October 2023, the UK announced the temporary deployment of around 200 additional soldiers to KFOR, following a request from SACEUR and approval by the North Atlantic Council. These 200 soldiers join the 400-strong British contingent already in country as part of an annual exercise.

# Defence Expenditure of NATO Countries (2014–2023)

NATO collects defence expenditure data from Allies and publishes it on a regular basis. Each Ally's Ministry of Defence reports current and estimated future defence expenditure according to an agreed definition. The amounts represent payments by a national government that have been or will be made during the course of the fiscal year to meet the needs of its armed forces, those of Allies or of the Alliance. In the figures and tables that follow, NATO also uses economic and demographic information available from the Directorate-General for Economic and Financial Affairs of the European Commission and the Organisation for Economic Co-operation and Development.

In view of differences between these sources and national GDP forecasts, and also the definition of NATO defence expenditure and national definitions, the figures shown in this report may considerably diverge from those that are referenced by media, published by national authorities or given in national budgets. Equipment expenditure includes expenditure on major equipment as well as on research and development devoted to major equipment. Personnel expenditure includes pensions paid to retirees.

The cut-off date for information used in this report was 7 February 2024. Figures for 2023 are estimates.

Data presented captures Allied expenditure in 2023 and therefore excludes Sweden, which became a NATO Ally in 2024.

Graph 1: Defence expenditure

(billion US dollars, based on 2015 prices and exchange rates)



Notes: Figures for 2023 are estimates. The NATO Europe and Canada aggregate from 2017 onwards includes Montenegro, which became an Ally on 5 June 2017, from 2020 onwards includes North Macedonia, which became an Ally on 27 March 2020, and from 2023 onwards includes Finland, which became an Ally on 4 April 2023.

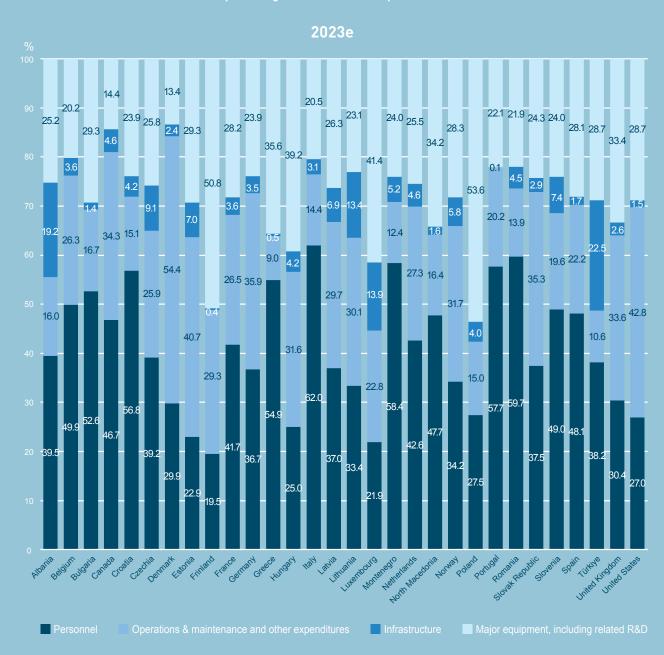
Graph 2: NATO Europe and Canada - defence expenditure (billion US dollars, based on 2015 prices and exchange rates)



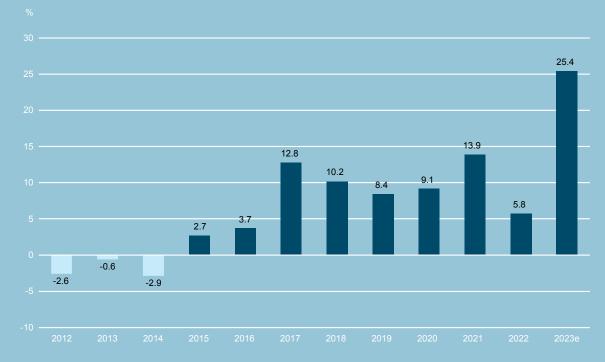
Notes: Figures for 2023 are estimates. Includes enlargements which took place in: 1999 (3 Allies), 2004 (7 Allies), 2009 (2 Allies), 2017 (1 Ally), 2020 (1 Ally), and 2023 (1 Ally).

Graph 3: Main categories of defence expenditure (%)

(percentage of total defence expenditure)



Graph 4: NATO Europe and Canada - major equipment expenditure (annual real change, based on 2015 prices and exchange rates)



Notes: Figures for 2023 are estimates. The NATO Europe and Canada aggregate from 2017 onwards includes Montenegro, which became an Ally on 5 June 2017, from 2020 onwards includes North Macedonia, which became an Ally on 27 March 2020, and from 2023 onwards includes Finland, which became an Ally on 4 April 2023.

 Table 1: Defence expenditure (million national currency units)

Country	Currency unit (million)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023e
	(ITIIIIOTI)			Cui	rent prices						
Albania	Leks	18,788	16,671	16,250	17,199	18,995	21,670	21,348	23,072	25,848	40,256
Belgium	Euros	3,913	3,789	3,848	3,932	4,101	4,253	4,665	5,276	6,551	7,047
Bulgaria	Leva	1,102	1,116	1,186	1,255	1,593	3,771	1,920	2,109	2,672	3,473
Canada	Canadian dollars	20,076	23,900	23,474	30,761	29,025	29,949	31,289	31,976	33,707	37,774
Croatia	Euros	811	804	756	812	805	881	861	1,150	1,219	1,332
Czechia*	Koruny	41,003	47,264	45,598	52,805	59,752	68,373	74,257	84,864	90,859	112,088
Denmark	Kroner	22,769	22,633	24,190	24,961	28,787	29,929	31,962	33,161	38,726	56,169
Estonia	Euros	386	418	450	479	521	569	630	633	778	1,101
Finland	Euros	3,004	3,065	3,089	3,131	3,238	3,483	3,642	3,503	4,485	6,892
France	Euros	39,149	39,199	39,950	40,852	42,748	44,206	46,018	47,702	49,567	53,123
Germany	Euros	34,749	35,898	37,598	40,265	42,127	46,936	51,392	52,431	58,266	68,073
Greece	Euros	3,939	4,073	4,190	4,208	4,560	4,483	4,812	6,764	8,054	6,886
Hungary	Forint	281,402	316,338	362,798	468,765	436,500	636,566	852,321	730,691	1,212,914	1,538,908
Italy	Euros	18,427	17,642	20,226	21,166	21,702	21,042	26,360	28,001	29,901	30,092
Latvia*	Euros	221	254	364	430	601	618	651	696	813	967
Lithuania*	Euros	322	425	575	724	895	977	1,030	1,105	1,649	2,000
Luxembourg	Euros	190	225	213	288	301	341	373	341	438	554
Montenegro	Euros	52	51	56	58	64	66	72	77	82	106
Netherlands	Euros	7,788	7,816	8,234	8,539	9,456	10,778	11,249	11,758	13,189	15,196
North Macedonia	Denars	5,743	5,853	5,770	5,532	6,232	8,029	8,303	10,604	12,899	15,200
Norway	Kroner	48,660	49,529	54,022	56,664	61,349	66,318	68,054	72,483	83,589	91,586
Poland*	Zlotys	31,874	39,940	37,082	37,558	42,824	45,404	52,110	58,304	68,361	133,634
Portugal	Euros	2,263	2,384	2,364	2,424	2,750	2,947	2,867	3,283	3,391	3,909
Romania*	New Lei	9,014	10,337	10,738	14,765	17,183	19,527	21,431	22,029	24,317	25,651
Slovak Republic	Euros	752	889	907	935	1,098	1,610	1,796	1,746	1,983	2,465
Slovenia	Euros	366	361	406	422	463	511	498	645	737	840
Spain	Euros	9,508	10,000	9,014	10,528	11,172	11,281	11,240	12,546	15,610	18,045
Türkiye	Liras	29,727	32,522	38,203	47,323	68,300	79,987	93,910	116,482	203,704	403,474
United Kingdom	Pounds	39,902	38,940	41,590	43,257	45,202	46,509	49,495	52,283	57,269	61,549
United States	US dollars	653,942	641,253	656,059	642,933	672,255	750,886	770,650	824,094	834,977	875,603
					nt 2015 pric						
Albania	Leks	18,894	16,671	16,354	17,061	18,569	20,921	20,468	21,382	21,836	32,037
Belgium	Euros	3,965	3,789	3,775	3,789	3,891	3,965	4,280	4,693	5,502	5,693
Bulgaria	Leva	1,134	1,116	1,148	1,159	1,411	3,174	1,550	1,589	1,733	2,070
Canada	Canadian dollars	19,900	23,900	23,299	29,767	27,640	28,080	29,157	27,551	27,094	29,990
Croatia	Euros	812	804	756	803	781	837	812	1,069	1,035	1,034
Czechia*	Koruny	41,410	47,264	45,083	51,539	56,861	62,629	65,202	72,116	71,137	80,744
Denmark	Kroner	22,868	22,633	24,128	24,606	28,167	28,980	30,069	30,330	32,777	48,272
Estonia	Euros	389	418	440	451	468	493	553	525	555	722
Finland	Euros	3,052	3,065	3,086	3,103	3,146	3,334	3,430	3,229	3,923	5,768
France	Euros	39,595	39,199	39,741	40,430	41,888	42,771	43,293	44,246	44,658	45,464
Germany	Euros	35,394	35,898	37,105	39,147	40,152	43,801	47,077	46,626	49,217	54,089
Greece	Euros	3,927	4,073	4,214	4,221	4,581	4,492	4,863	6,697	7,409	5,999
Hungary	Forint	289,213	316,338	358,070	444,734	394,977	549,708	691,740	557,119	807,755	905,977
Italy	Euros	18,734	17,642	19,769	20,511	21,079	20,248	24,972	26,192	27,161	26,231
Latvia*	Euros	221	254	361	414	557	550	567	584	605	684
Lithuania*	Euros	322	425	566	684	816	867	897	903	1,157	1,296
Luxembourg	Euros	195	225	216	285	293	329	345	301	365	440
Montenegro	Euros	53	51	54	53	57	57	10.245	10.510	11 505	71
Netherlands	Euros	7,796	7,816	8,162	8,340	9,041	10,027	10,245	10,510	11,595	13,158
North Macedonia	Denars	5,858	5,853	5,577	5,201	5,637	7,201	7,345	9,058	10,201	10,946
Norway	Kroner	47,295	49,529	54,900	55,327	56,117	60,997	64,210	58,400	52,587	63,877
Poland*	Zlotys	32,274	39,940	37,018	36,893	41,548	42,743	47,036	49,909	53,058	93,666
Portugal	Euros Now Loi	2,309	2,384	2,324	2,348	2,616	2,755	2,628	2,953	2,905	3,128
Romania*	New Lei	9,309	10,337	10,464	13,748	15,064	16,028	16,897	16,471	16,041	15,243
Slovak Republic	Euros	750	889	912	928	1,069	1,528	1,666	1,582	1,672	1,914
Slovenia	Euros	370	361	403	413	443	478	461	581	624	652
Spain	Euros	9,560	10,000	8,985	10,360	10,858	10,808	10,647	11,577	13,831	15,157
Türkiye	Liras	32,059	32,522	35,330	39,434	48,848	50,240	51,385	49,418	44,085	53,565
United Kingdom	Pounds	40,166	38,940	40,788	41,651	42,702	43,027	43,574	46,084	48,005	48,092
United States	US dollars	660,021	641,253	651,246	626,409	640,087	699,062	704,414	734,749	703,362	703,902
Notes: Figures for	or 2023 are estima	ites.									

These Allies have national laws or political agreements which call for 2% of GDP to be spent on defence annually, consequently future estimates are expected to change accordingly. For past years Allies defence spending was based on the then available GDP data and Allies may, therefore, have met the 2% guideline when using those figures. (In 2018 and 2021, Lithuania met 2% using November 2018 and June 2021 OECD figures respectively).

Table 2: Defence expenditure (million US dollars)

	lable	e z: pe	rence e	xpenai	ture (mi	illion US	dollarsJ			
Country	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023e
			Current pri	ces and ex	change rate	es				
Albania	178	132	131	145	176	197	197	224	231	401
Belgium	5,200	4,204	4,258	4,441	4,845	4,761	5,324	6,245	6,904	7,670
Bulgaria	747	633	671	724	962	2,159	1,121	1,276	1,440	1,933
Canada	18,172	18,689	17,708	23,700	22,399	22,572	23,330	25,502	25,898	28,140
Croatia	1,064	883	837	926	966	1,001	983	1,361	1,285	1,450
Czechia*	1,975	1,921	1,866	2,259	2,750	2,982	3,199	3,915	3,890	5,108
Denmark	4,057	3,364	3,593	3,780	4,559	4,487	4,886	5,274	5,473	8,199
Estonia	514	463	497	541	615	637	719	749	820	1,198
Finland	3,991	3,401	3,418	3,536	3,825	3,900	4,156	4,145	4,726	7,500
France	52,022	43,496	44,209	46,133	50,507	49,493	52,519	56,457	52,238	57,815
Germany	46,176	39,833	41,606	45,470	49,772	52,549	58,652	62,054	61,405	74,085
Greece	5,234	4,520	4,637	4,752	5,388	5,019	5,492	8,006	8,488	7,495
Hungary	1,210	1,132	1,289	1,708	1,615	2,190	2,767	2,410	3,278	4,338
Italy	24,487	19,576	22,382	23,902	25,641	23,559	30,084	33,140	31,512	32,750
Latvia*	294	282	403	485	710	692	743	824	857	1,052
Lithuania*	428	471	636	817	1,057	1,094	1,176	1,308	1,738	2,177
	253	250	236	326	356	381	426	403	461	603
Luxembourg										
Montenegro	69	57	62	65	75	74	83	91	86	115
Netherlands	10,349	8,673	9,112	9,643	11,172	12,067	12,838	13,916	13,899	16,538
North Macedonia	124	105	104	101	120	146	154	204	221	268
Norway	7,722	6,142	6,431	6,850	7,544	7,536	7,228	8,438	8,694	8,788
Poland*	10,107	10,588	9,397	9,940	11,857	11,824	13,363	15,099	15,338	32,165
Portugal	3,007	2,645	2,616	2,738	3,249	3,299	3,273	3,886	3,574	4,254
Romania*	2,691	2,581	2,645	3,643	4,359	4,608	5,056	5,299		5,655
									5,197	
Slovak Republic	999	987	1,004	1,056	1,298	1,802	2,049	2,066	2,090	2,682
Slovenia	487	401	449	477	547	572	568	763	777	914
Spain	12,634	11,096	9,975	11,889	13,200	12,630	12,828	14,849	16,451	19,638
Türkiye	13,577	11,953	12,644	12,971	14,168	14,089	13,396	13,137	12,292	18,965
United Kingdom	65,692	59,505	56,362	55,719	60,380	59,399	63,500	71,927	70,846	77,384
United States	653,942	641,253	656,059	642,933	672,255	750,886	770,650	824,094	834,977	875,603
NATO Europe and Canada		254,422	255,595	275,102	300,167	301,674	325,953	358,822	355,381	
	289,276									429,283
NATO Total	943,218	895,675	911,654	918,035	972,422	1,052,560	1,096,603	1,182,916	1,190,358	1,304,886
NATO Total	943,218						1,090,003	1,182,916	1,190,356	1,304,000
		Cor	nstant 2015	prices and	exchange	rates				
Albania	150	<b>Co</b> 1	nstant <b>2015</b> 130	prices and	exchange	rates	163	170	173	254
Albania Belgium	150 4,400	<b>Co</b> i 132 4,204	130 4,189	prices and 135 4,204	exchange 147 4,317	rates 166 4,400	163 4,750	170 5,207	173 6,106	254 6,317
Albania	150 4,400 643	132 4,204 633	130 4,189 650	prices and 135 4,204 657	exchange 147 4,317 800	rates 166 4,400 1,799	163 4,750 879	170 5,207 901	173 6,106 982	254 6,317 1,173
Albania Belgium	150 4,400	<b>Co</b> i 132 4,204	130 4,189	prices and 135 4,204	exchange 147 4,317	rates 166 4,400	163 4,750	170 5,207	173 6,106	254 6,317
Albania Belgium Bulgaria	150 4,400 643	132 4,204 633	130 4,189 650	prices and 135 4,204 657	exchange 147 4,317 800	rates 166 4,400 1,799	163 4,750 879	170 5,207 901	173 6,106 982	254 6,317 1,173
Albania Belgium Bulgaria Canada	150 4,400 643 15,562	132 4,204 633 18,689	130 4,189 650 18,219	prices and 135 4,204 657 23,278	exchange 147 4,317 800 21,614	rates 166 4,400 1,799 21,958	163 4,750 879 22,801 892	170 5,207 901 21,545 1,174	173 6,106 982 21,187	254 6,317 1,173 23,452
Albania Belgium Bulgaria Canada Croatia Czechia*	150 4,400 643 15,562 892 1,683	132 4,204 633 18,689 883 1,921	130 4,189 650 18,219 831 1,833	prices and 135 4,204 657 23,278 882 2,095	exchange 147 4,317 800 21,614 857 2,312	166 4,400 1,799 21,958 919 2,546	163 4,750 879 22,801 892 2,651	170 5,207 901 21,545 1,174 2,932	173 6,106 982 21,187 1,136 2,892	254 6,317 1,173 23,452 1,136 3,282
Albania Belgium Bulgaria Canada Croatia Czechia* Denmark	150 4,400 643 15,562 892 1,683 3,399	132 4,204 633 18,689 883 1,921 3,364	130 4,189 650 18,219 831 1,833 3,586	prices and 135 4,204 657 23,278 882 2,095 3,657	exchange 147 4,317 800 21,614 857 2,312 4,187	166 4,400 1,799 21,958 919 2,546 4,307	163 4,750 879 22,801 892 2,651 4,469	170 5,207 901 21,545 1,174 2,932 4,508	173 6,106 982 21,187 1,136 2,892 4,872	254 6,317 1,173 23,452 1,136 3,282 7,175
Albania Belgium Bulgaria Canada Croatia Czechia* Denmark Estonia	150 4,400 643 15,562 892 1,683 3,399 431	132 4,204 633 18,689 883 1,921 3,364 463	130 4,189 650 18,219 831 1,833 3,586 488	prices and 135 4,204 657 23,278 882 2,095 3,657 501	exchange 147 4,317 800 21,614 857 2,312 4,187 520	166 4,400 1,799 21,958 919 2,546 4,307 547	163 4,750 879 22,801 892 2,651 4,469 613	170 5,207 901 21,545 1,174 2,932 4,508 582	173 6,106 982 21,187 1,136 2,892 4,872 616	254 6,317 1,173 23,452 1,136 3,282 7,175 802
Albania Belgium Bulgaria Canada Croatia Czechia* Denmark Estonia Finland	150 4,400 643 15,562 892 1,683 3,399 431 3,387	132 4,204 633 18,689 883 1,921 3,364 463 3,401	130 4,189 650 18,219 831 1,833 3,586 488 3,424	prices and 135 4,204 657 23,278 882 2,095 3,657 501 3,443	exchange 147 4,317 800 21,614 857 2,312 4,187 520 3,491	166 4,400 1,799 21,958 919 2,546 4,307 547 3,700	163 4,750 879 22,801 892 2,651 4,469 613 3,806	170 5,207 901 21,545 1,174 2,932 4,508 582 3,583	173 6,106 982 21,187 1,136 2,892 4,872 616 4,353	254 6,317 1,173 23,452 1,136 3,282 7,175 802 6,400
Albania Belgium Bulgaria Canada Croatia Czechia* Denmark Estonia Finland France	150 4,400 643 15,562 892 1,683 3,399 431 3,387 43,935	132 4,204 633 18,689 883 1,921 3,364 463 3,401 43,496	130 4,189 650 18,219 831 1,833 3,586 488 3,424 44,097	prices and 135 4,204 657 23,278 882 2,095 3,657 501 3,443 44,862	exchange 147 4,317 800 21,614 857 2,312 4,187 520 3,491 46,480	166 4,400 1,799 21,958 919 2,546 4,307 547 3,700 47,460	163 4,750 879 22,801 892 2,651 4,469 613 3,806 48,039	170 5,207 901 21,545 1,174 2,932 4,508 582 3,583 49,096	173 6,106 982 21,187 1,136 2,892 4,872 616 4,353 49,554	254 6,317 1,173 23,452 1,136 3,282 7,175 802 6,400 50,448
Albania Belgium Bulgaria Canada Croatia Czechia* Denmark Estonia Finland	150 4,400 643 15,562 892 1,683 3,399 431 3,387	132 4,204 633 18,689 883 1,921 3,364 463 3,401	130 4,189 650 18,219 831 1,833 3,586 488 3,424	prices and 135 4,204 657 23,278 882 2,095 3,657 501 3,443	exchange 147 4,317 800 21,614 857 2,312 4,187 520 3,491	166 4,400 1,799 21,958 919 2,546 4,307 547 3,700	163 4,750 879 22,801 892 2,651 4,469 613 3,806	170 5,207 901 21,545 1,174 2,932 4,508 582 3,583	173 6,106 982 21,187 1,136 2,892 4,872 616 4,353	254 6,317 1,173 23,452 1,136 3,282 7,175 802 6,400
Albania Belgium Bulgaria Canada Croatia Czechia* Denmark Estonia Finland France	150 4,400 643 15,562 892 1,683 3,399 431 3,387 43,935	132 4,204 633 18,689 883 1,921 3,364 463 3,401 43,496	130 4,189 650 18,219 831 1,833 3,586 488 3,424 44,097	prices and 135 4,204 657 23,278 882 2,095 3,657 501 3,443 44,862	exchange 147 4,317 800 21,614 857 2,312 4,187 520 3,491 46,480	166 4,400 1,799 21,958 919 2,546 4,307 547 3,700 47,460	163 4,750 879 22,801 892 2,651 4,469 613 3,806 48,039	170 5,207 901 21,545 1,174 2,932 4,508 582 3,583 49,096	173 6,106 982 21,187 1,136 2,892 4,872 616 4,353 49,554	254 6,317 1,173 23,452 1,136 3,282 7,175 802 6,400 50,448
Albania Belgium Bulgaria Canada Croatia Czechia* Denmark Estonia Finland France Germany	150 4,400 643 15,562 892 1,683 3,399 431 3,387 43,935 39,274	132 4,204 633 18,689 883 1,921 3,364 463 3,401 43,496 39,833	130 4,189 650 18,219 831 1,833 3,586 488 3,424 44,097 41,173	prices and 135 4,204 657 23,278 882 2,095 3,657 501 3,443 44,862 43,438	exchange 147 4,317 800 21,614 857 2,312 4,187 520 3,491 46,480 44,554	166 4,400 1,799 21,958 919 2,546 4,307 547 3,700 47,460 48,603	163 4,750 879 22,801 892 2,651 4,469 613 3,806 48,039 52,238	170 5,207 901 21,545 1,174 2,932 4,508 582 3,583 49,096 51,737	173 6,106 982 21,187 1,136 2,892 4,872 616 4,353 49,554 54,613	254 6,317 1,173 23,452 1,136 3,282 7,175 802 6,400 50,448 60,019
Albania Belgium Bulgaria Canada Croatia Czechia* Denmark Estonia Finland France Germany Greece Hungary	150 4,400 643 15,562 892 1,683 3,399 431 3,387 43,935 39,274 4,358 1,035	132 4,204 633 18,689 883 1,921 3,364 463 3,401 43,496 39,833 4,520 1,132	130 4,189 650 18,219 831 1,833 3,586 488 3,424 44,097 41,173 4,676 1,282	prices and 135 4,204 657 23,278 882 2,095 3,657 501 3,443 44,862 43,438 4,683 1,592	exchange 147 4,317 800 21,614 857 2,312 4,187 520 3,491 46,480 44,554 5,084 1,414	166 4,400 1,799 21,958 919 2,546 4,307 547 3,700 47,460 48,603 4,985	163 4,750 879 22,801 892 2,651 4,469 613 3,806 48,039 52,238 5,396	170 5,207 901 21,545 1,174 2,932 4,508 582 3,583 49,096 51,737 7,431 1,994	173 6,106 982 21,187 1,136 2,892 4,872 616 4,353 49,554 54,613 8,221 2,892	254 6,317 1,173 23,452 1,136 3,282 7,175 802 6,400 50,448 60,019 6,657 3,243
Albania Belgium Bulgaria Canada Croatia Czechia* Denmark Estonia Finland France Germany Greece Hungary Italy	150 4,400 643 15,562 892 1,683 3,399 431 3,387 43,935 39,274 4,358 1,035 20,788	132 4,204 633 18,689 883 1,921 3,364 463 3,401 43,496 39,833 4,520 1,132 19,576	nstant 2015 130 4,189 650 18,219 831 1,833 3,586 488 3,424 44,097 41,173 4,676 1,282 21,936	prices and 135 4,204 657 23,278 882 2,095 3,657 501 3,443 44,862 43,438 4,683 1,592 22,759	exchange 147 4,317 800 21,614 857 2,312 4,187 520 3,491 46,480 44,554 5,084 1,414 23,390	166 4,400 1,799 21,958 919 2,546 4,307 547 3,700 47,460 48,603 4,985 1,968 22,468	163 4,750 879 22,801 892 2,651 4,469 613 3,806 48,039 52,238 5,396 2,476 27,709	170 5,207 901 21,545 1,174 2,932 4,508 582 3,583 49,096 51,737 7,431 1,994 29,063	173 6,106 982 21,187 1,136 2,892 4,872 616 4,353 49,554 54,613 8,221 2,892 30,139	254 6,317 1,173 23,452 1,136 3,282 7,175 802 6,400 50,448 60,019 6,657 3,243 29,107
Albania Belgium Bulgaria Canada Croatia Czechia* Denmark Estonia Finland France Germany Greece Hungary Italy Latvia*	150 4,400 643 15,562 892 1,683 3,399 431 3,387 43,935 39,274 4,358 1,035 20,788 246	132 4,204 633 18,689 883 1,921 3,364 463 3,401 43,496 39,833 4,520 1,132 19,576 282	nstant 2015 130 4,189 650 18,219 831 1,833 3,586 488 3,424 44,097 41,173 4,676 1,282 21,936 401	prices and 135 4,204 657 23,278 882 2,095 3,657 501 3,443 44,862 43,438 4,683 1,592 22,759 459	exchange 147 4,317 800 21,614 857 2,312 4,187 520 3,491 46,480 44,554 5,084 1,414 23,390 618	166 4,400 1,799 21,958 919 2,546 4,307 547 3,700 47,460 48,603 4,985 1,968 22,468 610	163 4,750 879 22,801 892 2,651 4,469 613 3,806 48,039 52,238 5,396 2,476 27,709 629	170 5,207 901 21,545 1,174 2,932 4,508 582 3,583 49,096 51,737 7,431 1,994 29,063 648	173 6,106 982 21,187 1,136 2,892 4,872 616 4,353 49,554 54,613 8,221 2,892 30,139 672	254 6,317 1,173 23,452 1,136 3,282 7,175 802 6,400 50,448 60,019 6,657 3,243 29,107 758
Albania Belgium Bulgaria Canada Croatia Czechia* Denmark Estonia Finland France Germany Greece Hungary Italy Latvia* Lithuania*	150 4,400 643 15,562 892 1,683 3,399 431 3,387 43,935 39,274 4,358 1,035 20,788 246 357	132 4,204 633 18,689 883 1,921 3,364 463 3,401 43,496 39,833 4,520 1,132 19,576 282 471	nstant 2015 130 4,189 650 18,219 831 1,833 3,586 488 3,424 44,097 41,173 4,676 1,282 21,936 401 628	prices and 135 4,204 657 23,278 882 2,095 3,657 501 3,443 44,862 43,438 4,683 1,592 22,759 459 759	exchange 147 4,317 800 21,614 857 2,312 4,187 520 3,491 46,480 44,554 5,084 1,414 23,390 618 905	166 4,400 1,799 21,958 919 2,546 4,307 547 3,700 47,460 48,603 4,985 1,968 22,468 610 962	163 4,750 879 22,801 892 2,651 4,469 613 3,806 48,039 52,238 5,396 2,476 27,709 629 996	170 5,207 901 21,545 1,174 2,932 4,508 582 3,583 49,096 51,737 7,431 1,994 29,063 648 1,002	173 6,106 982 21,187 1,136 2,892 4,872 616 4,353 49,554 54,613 8,221 2,892 30,139 672 1,284	254 6,317 1,173 23,452 1,136 3,282 7,175 802 6,400 50,448 60,019 6,657 3,243 29,107 758 1,438
Albania Belgium Bulgaria Canada Croatia Czechia* Denmark Estonia Finland France Germany Greece Hungary Italy Latvia*	150 4,400 643 15,562 892 1,683 3,399 431 3,387 43,935 39,274 4,358 1,035 20,788 246 357 216	132 4,204 633 18,689 883 1,921 3,364 463 3,401 43,496 39,833 4,520 1,132 19,576 282 471 250	130 4,189 650 18,219 831 1,833 3,586 488 3,424 44,097 41,173 4,676 1,282 21,936 401 628 240	prices and 135 4,204 657 23,278 882 2,095 3,657 501 3,443 44,862 43,438 4,683 1,592 22,759 459	exchange 147 4,317 800 21,614 857 2,312 4,187 520 3,491 46,480 44,554 5,084 1,414 23,390 618 905 325	166 4,400 1,799 21,958 919 2,546 4,307 547 3,700 47,460 48,603 4,985 1,968 22,468 610 962 366	163 4,750 879 22,801 892 2,651 4,469 613 3,806 48,039 52,238 5,396 2,476 27,709 629 996 383	170 5,207 901 21,545 1,174 2,932 4,508 582 3,583 49,096 51,737 7,431 1,994 29,063 648 1,002 334	173 6,106 982 21,187 1,136 2,892 4,872 616 4,353 49,554 54,613 8,221 2,892 30,139 672	254 6,317 1,173 23,452 1,136 3,282 7,175 802 6,400 50,448 60,019 6,657 3,243 29,107 758 1,438 488
Albania Belgium Bulgaria Canada Croatia Czechia* Denmark Estonia Finland France Germany Greece Hungary Italy Latvia* Lithuania*	150 4,400 643 15,562 892 1,683 3,399 431 3,387 43,935 39,274 4,358 1,035 20,788 246 357	132 4,204 633 18,689 883 1,921 3,364 463 3,401 43,496 39,833 4,520 1,132 19,576 282 471	nstant 2015 130 4,189 650 18,219 831 1,833 3,586 488 3,424 44,097 41,173 4,676 1,282 21,936 401 628	prices and 135 4,204 657 23,278 882 2,095 3,657 501 3,443 44,862 43,438 4,683 1,592 22,759 459 759	exchange 147 4,317 800 21,614 857 2,312 4,187 520 3,491 46,480 44,554 5,084 1,414 23,390 618 905	166 4,400 1,799 21,958 919 2,546 4,307 547 3,700 47,460 48,603 4,985 1,968 22,468 610 962	163 4,750 879 22,801 892 2,651 4,469 613 3,806 48,039 52,238 5,396 2,476 27,709 629 996	170 5,207 901 21,545 1,174 2,932 4,508 582 3,583 49,096 51,737 7,431 1,994 29,063 648 1,002	173 6,106 982 21,187 1,136 2,892 4,872 616 4,353 49,554 54,613 8,221 2,892 30,139 672 1,284	254 6,317 1,173 23,452 1,136 3,282 7,175 802 6,400 50,448 60,019 6,657 3,243 29,107 758 1,438
Albania Belgium Bulgaria Canada Croatia Czechia* Denmark Estonia Finland France Germany Greece Hungary Italy Latvia* Lithuania* Luxembourg	150 4,400 643 15,562 892 1,683 3,399 431 3,387 43,935 39,274 4,358 1,035 20,788 246 357 216	132 4,204 633 18,689 883 1,921 3,364 463 3,401 43,496 39,833 4,520 1,132 19,576 282 471 250	130 4,189 650 18,219 831 1,833 3,586 488 3,424 44,097 41,173 4,676 1,282 21,936 401 628 240	prices and 135 4,204 657 23,278 882 2,095 3,657 501 3,443 44,862 43,438 4,683 1,592 22,759 459 759 317	exchange 147 4,317 800 21,614 857 2,312 4,187 520 3,491 46,480 44,554 5,084 1,414 23,390 618 905 325	166 4,400 1,799 21,958 919 2,546 4,307 547 3,700 47,460 48,603 4,985 1,968 22,468 610 962 366	163 4,750 879 22,801 892 2,651 4,469 613 3,806 48,039 52,238 5,396 2,476 27,709 629 996 383	170 5,207 901 21,545 1,174 2,932 4,508 582 3,583 49,096 51,737 7,431 1,994 29,063 648 1,002 334	173 6,106 982 21,187 1,136 2,892 4,872 616 4,353 49,554 54,613 8,221 2,892 30,139 672 1,284 404	254 6,317 1,173 23,452 1,136 3,282 7,175 802 6,400 50,448 60,019 6,657 3,243 29,107 758 1,438 488
Albania Belgium Bulgaria Canada Croatia Czechia* Denmark Estonia Finland France Germany Greece Hungary Italy Latvia* Lithuania* Luxembourg Montenegro Netherlands	150 4,400 643 15,562 892 1,683 3,399 431 3,387 43,935 39,274 4,358 1,035 20,788 246 357 216 59 8,650	132 4,204 633 18,689 883 1,921 3,364 463 3,401 43,496 39,833 4,520 1,132 19,576 282 471 250 57 8,673	nstant 2015 130 4,189 650 18,219 831 1,833 3,586 488 3,424 44,097 41,173 4,676 1,282 21,936 401 628 240 59 9,057	prices and  135 4,204 657 23,278 882 2,095 3,657 501 3,443 44,862 43,438 4,683 1,592 22,759 459 759 317 59 9,254	exchange 147 4,317 800 21,614 857 2,312 4,187 520 3,491 46,480 44,554 5,084 1,414 23,390 618 905 325 63 10,032	166 4,400 1,799 21,958 919 2,546 4,307 547 3,700 47,460 48,603 4,985 1,968 22,468 610 962 366 64 11,126	163 4,750 879 22,801 892 2,651 4,469 613 3,806 48,039 52,238 5,396 2,476 27,709 629 996 383 70 11,368	170 5,207 901 21,545 1,174 2,932 4,508 582 3,583 49,096 51,737 7,431 1,994 29,063 648 1,002 334 71	173 6,106 982 21,187 1,136 2,892 4,872 616 4,353 49,554 54,613 8,221 2,892 30,139 672 1,284 404 68 12,867	254 6,317 1,173 23,452 1,136 3,282 7,175 802 6,400 50,448 60,019 6,657 3,243 29,107 758 1,438 488 79 14,600
Albania Belgium Bulgaria Canada Croatia Czechia* Denmark Estonia Finland France Germany Greece Hungary Italy Latvia* Lithuania* Luxembourg Montenegro Netherlands North Macedonia	150 4,400 643 15,562 892 1,683 3,399 431 3,387 43,935 39,274 4,358 1,035 20,788 246 357 216 59 8,650 106	132 4,204 633 18,689 883 1,921 3,364 463 3,401 43,496 39,833 4,520 1,132 19,576 282 471 250 57 8,673 105	nstant 2015 130 4,189 650 18,219 831 1,833 3,586 488 3,424 44,097 41,173 4,676 1,282 21,936 401 628 240 59 9,057 100	prices and  135 4,204 657 23,278 882 2,095 3,657 501 3,443 44,862 43,438 4,683 1,592 22,759 459 759 317 59 9,254 94	exchange 147 4,317 800 21,614 857 2,312 4,187 520 3,491 46,480 44,554 5,084 1,414 23,390 618 905 325 63 10,032 102	166 4,400 1,799 21,958 919 2,546 4,307 547 3,700 47,460 48,603 4,985 1,968 22,468 610 962 366 64 11,126 130	163 4,750 879 22,801 892 2,651 4,469 613 3,806 48,039 52,238 5,396 2,476 27,709 629 996 383 70 11,368 132	170 5,207 901 21,545 1,174 2,932 4,508 582 3,583 49,096 51,737 7,431 1,994 29,063 648 1,002 334 71 11,662 163	173 6,106 982 21,187 1,136 2,892 4,872 616 4,353 49,554 54,613 8,221 2,892 30,139 672 1,284 404 68 12,867 184	254 6,317 1,173 23,452 1,136 3,282 7,175 802 6,400 50,448 60,019 6,657 3,243 29,107 758 1,438 488 79 14,600
Albania Belgium Bulgaria Canada Croatia Czechia* Denmark Estonia Finland France Germany Greece Hungary Italy Latvia* Lithuania* Luxembourg Montenegro Netherlands Norway	150 4,400 643 15,562 892 1,683 3,399 431 3,387 43,935 39,274 4,358 1,035 20,788 246 357 216 59 8,650 106 5,865	132 4,204 633 18,689 883 1,921 3,364 463 3,401 43,496 39,833 4,520 1,132 19,576 282 471 250 57 8,673 105 6,142	nstant 2015 130 4,189 650 18,219 831 1,833 3,586 488 3,424 44,097 41,173 4,676 1,282 21,936 401 628 240 59 9,057 100 6,808	prices and  135 4,204 657 23,278 882 2,095 3,657 501 3,443 44,862 43,438 4,683 1,592 22,759 459 759 317 59 9,254 94 6,861	exchange 147 4,317 800 21,614 857 2,312 4,187 520 3,491 46,480 44,554 5,084 1,414 23,390 618 905 325 63 10,032 102 6,959	166 4,400 1,799 21,958 919 2,546 4,307 547 3,700 47,460 48,603 4,985 1,968 22,468 610 962 366 64 11,126 130 7,564	163 4,750 879 22,801 892 2,651 4,469 613 3,806 48,039 52,238 5,396 2,476 27,709 629 996 383 70 11,368 132 7,962	170 5,207 901 21,545 1,174 2,932 4,508 582 3,583 49,096 51,737 7,431 1,994 29,063 648 1,002 334 71 11,662 163 7,242	173 6,106 982 21,187 1,136 2,892 4,872 616 4,353 49,554 54,613 8,221 2,892 30,139 672 1,284 404 68 12,867 184 6,521	254 6,317 1,173 23,452 1,136 3,282 7,175 802 6,400 50,448 60,019 6,657 3,243 29,107 758 1,438 488 79 14,600 197
Albania Belgium Bulgaria Canada Croatia Czechia* Denmark Estonia Finland France Germany Greece Hungary Italy Latvia* Lithuania* Luxembourg Montenegro Netherlands North Macedonia Norway Poland*	150 4,400 643 15,562 892 1,683 3,399 431 3,387 43,935 39,274 4,358 1,035 20,788 246 357 216 59 8,650 106 5,865 8,556	132 4,204 633 18,689 883 1,921 3,364 463 3,401 43,496 39,833 4,520 1,132 19,576 282 471 250 57 8,673 105 6,142 10,588	nstant 2015 130 4,189 650 18,219 831 1,833 3,586 488 3,424 44,097 41,173 4,676 1,282 21,936 401 628 240 59 9,057 100 6,808 9,814	prices and  135 4,204 657 23,278 882 2,095 3,657 501 3,443 44,862 43,438 4,683 1,592 22,759 459 759 317 59 9,254 94 6,861 9,781	exchange 147 4,317 800 21,614 857 2,312 4,187 520 3,491 46,480 44,554 5,084 1,414 23,390 618 905 325 63 10,032 102 6,959 11,015	166 4,400 1,799 21,958 919 2,546 4,307 547 3,700 47,460 48,603 4,985 1,968 22,468 610 962 366 64 11,126 130 7,564 11,332	163 4,750 879 22,801 892 2,651 4,469 613 3,806 48,039 52,238 5,396 2,476 27,709 629 996 383 70 11,368 132 7,962 12,469	170 5,207 901 21,545 1,174 2,932 4,508 582 3,583 49,096 51,737 7,431 1,994 29,063 648 1,002 334 71 11,662 163 7,242	173 6,106 982 21,187 1,136 2,892 4,872 616 4,353 49,554 54,613 8,221 2,892 30,139 672 1,284 404 68 12,867 184 6,521	254 6,317 1,173 23,452 1,136 3,282 7,175 802 6,400 50,448 60,019 6,657 3,243 29,107 758 1,438 488 79 14,600 197 7,921 24,832
Albania Belgium Bulgaria Canada Croatia Czechia* Denmark Estonia Finland France Germany Greece Hungary Italy Latvia* Lithuania* Luxembourg Montenegro Netherlands North Macedonia Norway Poland* Portugal	150 4,400 643 15,562 892 1,683 3,399 431 3,387 43,935 39,274 4,358 1,035 20,788 246 357 216 59 8,650 106 5,865 8,556 2,562	132 4,204 633 18,689 883 1,921 3,364 463 3,401 43,496 39,833 4,520 1,132 19,576 282 471 250 57 8,673 105 6,142 10,588 2,645	nstant 2015 130 4,189 650 18,219 831 1,833 3,586 488 3,424 44,097 41,173 4,676 1,282 21,936 401 628 240 59 9,057 100 6,808 9,814 2,579	prices and  135 4,204 657 23,278 882 2,095 3,657 501 3,443 44,862 43,438 4,683 1,592 22,759 459 759 317 59 9,254 94 6,861 9,781 2,605	exchange 147 4,317 800 21,614 857 2,312 4,187 520 3,491 46,480 44,554 5,084 1,414 23,390 618 905 325 63 10,032 102 6,959 11,015 2,902	166 4,400 1,799 21,958 919 2,546 4,307 547 3,700 47,460 48,603 4,985 1,968 22,468 610 962 366 64 11,126 130 7,564 11,332 3,057	163 4,750 879 22,801 892 2,651 4,469 613 3,806 48,039 52,238 5,396 2,476 27,709 629 996 383 70 11,368 132 7,962 12,469 2,916	170 5,207 901 21,545 1,174 2,932 4,508 582 3,583 49,096 51,737 7,431 1,994 29,063 648 1,002 334 71 11,662 163 7,242 13,231 3,277	173 6,106 982 21,187 1,136 2,892 4,872 616 4,353 49,554 54,613 8,221 2,892 30,139 672 1,284 404 68 12,867 184 6,521 14,066 3,223	254 6,317 1,173 23,452 1,136 3,282 7,175 802 6,400 50,448 60,019 6,657 3,243 29,107 758 1,438 488 79 14,600 197 7,921 24,832 3,471
Albania Belgium Bulgaria Canada Croatia Czechia* Denmark Estonia Finland France Germany Greece Hungary Italy Latvia* Lithuania* Luxembourg Montenegro Netherlands North Macedonia Norway Poland* Portugal Romania*	150 4,400 643 15,562 892 1,683 3,399 431 3,387 43,935 39,274 4,358 1,035 20,788 246 357 216 59 8,650 106 5,865 8,556 2,562 2,324	132 4,204 633 18,689 883 1,921 3,364 463 3,401 43,496 39,833 4,520 1,132 19,576 282 471 250 57 8,673 105 6,142 10,588 2,645 2,581	nstant 2015 130 4,189 650 18,219 831 1,833 3,586 488 3,424 44,097 41,173 4,676 1,282 21,936 401 628 240 59 9,057 100 6,808 9,814 2,579 2,612	prices and  135 4,204 657 23,278 882 2,095 3,657 501 3,443 44,862 43,438 4,683 1,592 22,759 459 759 317 59 9,254 94 6,861 9,781 2,605 3,432	exchange 147 4,317 800 21,614 857 2,312 4,187 520 3,491 46,480 44,554 5,084 1,414 23,390 618 905 325 63 10,032 102 6,959 11,015 2,902 3,761	166 4,400 1,799 21,958 919 2,546 4,307 547 3,700 47,460 48,603 4,985 1,968 22,468 610 962 366 64 11,126 130 7,564 11,332 3,057 4,001	163 4,750 879 22,801 892 2,651 4,469 613 3,806 48,039 52,238 5,396 2,476 27,709 629 996 383 70 11,368 132 7,962 12,469 2,916 4,218	170 5,207 901 21,545 1,174 2,932 4,508 582 3,583 49,096 51,737 7,431 1,994 29,063 648 1,002 334 71 11,662 163 7,242 13,231 3,277 4,112	173 6,106 982 21,187 1,136 2,892 4,872 616 4,353 49,554 54,613 8,221 2,892 30,139 672 1,284 404 68 12,867 184 6,521 14,066 3,223 4,005	254 6,317 1,173 23,452 1,136 3,282 7,175 802 6,400 50,448 60,019 6,657 3,243 29,107 758 1,438 488 79 14,600 197 7,921 24,832 3,471 3,805
Albania Belgium Bulgaria Canada Croatia Czechia* Denmark Estonia Finland France Germany Greece Hungary Italy Latvia* Lithuania* Luxembourg Montenegro Netherlands North Macedonia Norway Poland* Portugal	150 4,400 643 15,562 892 1,683 3,399 431 3,387 43,935 39,274 4,358 1,035 20,788 246 357 216 59 8,650 106 5,865 8,556 2,562	132 4,204 633 18,689 883 1,921 3,364 463 3,401 43,496 39,833 4,520 1,132 19,576 282 471 250 57 8,673 105 6,142 10,588 2,645	nstant 2015 130 4,189 650 18,219 831 1,833 3,586 488 3,424 44,097 41,173 4,676 1,282 21,936 401 628 240 59 9,057 100 6,808 9,814 2,579	prices and  135 4,204 657 23,278 882 2,095 3,657 501 3,443 44,862 43,438 4,683 1,592 22,759 459 759 317 59 9,254 94 6,861 9,781 2,605	exchange 147 4,317 800 21,614 857 2,312 4,187 520 3,491 46,480 44,554 5,084 1,414 23,390 618 905 325 63 10,032 102 6,959 11,015 2,902	166 4,400 1,799 21,958 919 2,546 4,307 547 3,700 47,460 48,603 4,985 1,968 22,468 610 962 366 64 11,126 130 7,564 11,332 3,057	163 4,750 879 22,801 892 2,651 4,469 613 3,806 48,039 52,238 5,396 2,476 27,709 629 996 383 70 11,368 132 7,962 12,469 2,916	170 5,207 901 21,545 1,174 2,932 4,508 582 3,583 49,096 51,737 7,431 1,994 29,063 648 1,002 334 71 11,662 163 7,242 13,231 3,277	173 6,106 982 21,187 1,136 2,892 4,872 616 4,353 49,554 54,613 8,221 2,892 30,139 672 1,284 404 68 12,867 184 6,521 14,066 3,223	254 6,317 1,173 23,452 1,136 3,282 7,175 802 6,400 50,448 60,019 6,657 3,243 29,107 758 1,438 488 79 14,600 197 7,921 24,832 3,471
Albania Belgium Bulgaria Canada Croatia Czechia* Denmark Estonia Finland France Germany Greece Hungary Italy Latvia* Lithuania* Luxembourg Montenegro Netherlands North Macedonia Norway Poland* Portugal Romania*	150 4,400 643 15,562 892 1,683 3,399 431 3,387 43,935 39,274 4,358 1,035 20,788 246 357 216 59 8,650 106 5,865 8,556 2,562 2,324	132 4,204 633 18,689 883 1,921 3,364 463 3,401 43,496 39,833 4,520 1,132 19,576 282 471 250 57 8,673 105 6,142 10,588 2,645 2,581	nstant 2015 130 4,189 650 18,219 831 1,833 3,586 488 3,424 44,097 41,173 4,676 1,282 21,936 401 628 240 59 9,057 100 6,808 9,814 2,579 2,612	prices and  135 4,204 657 23,278 882 2,095 3,657 501 3,443 44,862 43,438 4,683 1,592 22,759 459 759 317 59 9,254 94 6,861 9,781 2,605 3,432	exchange 147 4,317 800 21,614 857 2,312 4,187 520 3,491 46,480 44,554 5,084 1,414 23,390 618 905 325 63 10,032 102 6,959 11,015 2,902 3,761	166 4,400 1,799 21,958 919 2,546 4,307 547 3,700 47,460 48,603 4,985 1,968 22,468 610 962 366 64 11,126 130 7,564 11,332 3,057 4,001	163 4,750 879 22,801 892 2,651 4,469 613 3,806 48,039 52,238 5,396 2,476 27,709 629 996 383 70 11,368 132 7,962 12,469 2,916 4,218	170 5,207 901 21,545 1,174 2,932 4,508 582 3,583 49,096 51,737 7,431 1,994 29,063 648 1,002 334 71 11,662 163 7,242 13,231 3,277 4,112	173 6,106 982 21,187 1,136 2,892 4,872 616 4,353 49,554 54,613 8,221 2,892 30,139 672 1,284 404 68 12,867 184 6,521 14,066 3,223 4,005	254 6,317 1,173 23,452 1,136 3,282 7,175 802 6,400 50,448 60,019 6,657 3,243 29,107 758 1,438 488 79 14,600 197 7,921 24,832 3,471 3,805
Albania Belgium Bulgaria Canada Croatia Czechia* Denmark Estonia Finland France Germany Greece Hungary Italy Latvia* Lithuania* Luxembourg Montenegro Netherlands North Macedonia Norway Poland* Portugal Romania* Slovak Republic	150 4,400 643 15,562 892 1,683 3,399 431 3,387 43,935 39,274 4,358 1,035 20,788 246 357 216 59 8,650 106 5,865 8,556 2,562 2,324 832	132 4,204 633 18,689 883 1,921 3,364 463 3,401 43,496 39,833 4,520 1,132 19,576 282 471 250 57 8,673 105 6,142 10,588 2,645 2,581 987	nstant 2015 130 4,189 650 18,219 831 1,833 3,586 488 3,424 44,097 41,173 4,676 1,282 21,936 401 628 240 59 9,057 100 6,808 9,814 2,579 2,612 1,012	prices and  135 4,204 657 23,278 882 2,095 3,657 501 3,443 44,862 43,438 4,683 1,592 22,759 459 759 317 59 9,254 94 6,861 9,781 2,605 3,432 1,030	exchange 147 4,317 800 21,614 857 2,312 4,187 520 3,491 46,480 44,554 5,084 1,414 23,390 618 905 325 63 10,032 102 6,959 11,015 2,902 3,761 1,186	rates  166 4,400 1,799 21,958 919 2,546 4,307 547 3,700 47,460 48,603 4,985 1,968 22,468 610 962 366 64 11,126 130 7,564 11,332 3,057 4,001 1,696	163 4,750 879 22,801 892 2,651 4,469 613 3,806 48,039 52,238 5,396 2,476 27,709 629 996 383 70 11,368 132 7,962 12,469 2,916 4,218 1,848	170 5,207 901 21,545 1,174 2,932 4,508 582 3,583 49,096 51,737 7,431 1,994 29,063 648 1,002 334 71 11,662 163 7,242 13,231 3,277 4,112 1,755	173 6,106 982 21,187 1,136 2,892 4,872 616 4,353 49,554 54,613 8,221 2,892 30,139 672 1,284 404 68 12,867 184 6,521 14,066 3,223 4,005 1,855	254 6,317 1,173 23,452 1,136 3,282 7,175 802 6,400 50,448 60,019 6,657 3,243 29,107 758 1,438 488 79 14,600 197 7,921 24,832 3,471 3,805 2,124
Albania Belgium Bulgaria Canada Croatia Czechia* Denmark Estonia Finland France Germany Greece Hungary Italy Latvia* Lithuania* Luxembourg Montenegro Netherlands North Macedonia Norway Poland* Portugal Romania* Slovak Republic Slovenia Spain	150 4,400 643 15,562 892 1,683 3,399 431 3,387 43,935 39,274 4,358 1,035 20,788 246 357 216 59 8,650 106 5,865 8,556 2,562 2,324 832 411 10,608	132 4,204 633 18,689 883 1,921 3,364 463 3,401 43,496 39,833 4,520 1,132 19,576 282 471 250 57 8,673 105 6,142 10,588 2,645 2,581 987 401 11,096	nstant 2015 130 4,189 650 18,219 831 1,833 3,586 488 3,424 44,097 41,173 4,676 1,282 21,936 401 628 240 59 9,057 100 6,808 9,814 2,579 2,612 1,012 447 9,970	prices and  135 4,204 657 23,278 882 2,095 3,657 501 3,443 44,862 43,438 4,683 1,592 22,759 459 759 317 59 9,254 94 6,861 9,781 2,605 3,432 1,030 458 11,495	exchange 147 4,317 800 21,614 857 2,312 4,187 520 3,491 46,480 44,554 5,084 1,414 23,390 618 905 325 63 10,032 102 6,959 11,015 2,902 3,761 1,186 491 12,049	rates  166 4,400 1,799 21,958 919 2,546 4,307 547 3,700 47,460 48,603 4,985 1,968 22,468 610 962 366 64 11,126 130 7,564 11,332 3,057 4,001 1,696 531 11,993	163 4,750 879 22,801 892 2,651 4,469 613 3,806 48,039 52,238 5,396 2,476 27,709 629 996 383 70 11,368 132 7,962 12,469 2,916 4,218 1,848 511 11,814	170 5,207 901 21,545 1,174 2,932 4,508 582 3,583 49,096 51,737 7,431 1,994 29,063 648 1,002 334 71 11,662 163 7,242 13,231 3,277 4,112 1,755 645 12,846	173 6,106 982 21,187 1,136 2,892 4,872 616 4,353 49,554 54,613 8,221 2,892 30,139 672 1,284 404 68 12,867 184 6,521 14,066 3,223 4,005 1,855 692 15,347	254 6,317 1,173 23,452 1,136 3,282 7,175 802 6,400 50,448 60,019 6,657 3,243 29,107 758 1,438 79 14,600 197 7,921 24,832 3,471 3,805 2,124 723 16,818
Albania Belgium Bulgaria Canada Croatia Czechia* Denmark Estonia Finland France Germany Greece Hungary Italy Latvia* Lithuania* Luxembourg Montenegro Netherlands North Macedonia Norway Poland* Portugal Romania* Slovak Republic Slovenia Spain Türkiye	150 4,400 643 15,562 892 1,683 3,399 431 3,387 43,935 39,274 4,358 1,035 20,788 246 357 216 59 8,650 106 5,865 8,556 2,562 2,324 832 411 10,608 11,783	132 4,204 633 18,689 883 1,921 3,364 463 3,401 43,496 39,833 4,520 1,132 19,576 282 471 250 57 8,673 105 6,142 10,588 2,645 2,581 987 401 11,096 11,953	nstant 2015 130 4,189 650 18,219 831 1,833 3,586 488 3,424 44,097 41,173 4,676 1,282 21,936 401 628 240 59 9,057 100 6,808 9,814 2,579 2,612 1,012 447 9,970 12,985	prices and  135 4,204 657 23,278 882 2,095 3,657 501 3,443 44,862 43,438 4,683 1,592 22,759 459 759 317 59 9,254 94 6,861 9,781 2,605 3,432 1,030 458 11,495 14,494	exchange 147 4,317 800 21,614 857 2,312 4,187 520 3,491 46,480 44,554 5,084 1,414 23,390 618 905 325 63 10,032 102 6,959 11,015 2,902 3,761 1,186 491 12,049 17,954	rates  166 4,400 1,799 21,958 919 2,546 4,307 547 3,700 47,460 48,603 4,985 1,968 22,468 610 962 366 64 11,126 130 7,564 11,332 3,057 4,001 1,696 531 11,993 18,465	163 4,750 879 22,801 892 2,651 4,469 613 3,806 48,039 52,238 5,396 2,476 27,709 629 996 383 70 11,368 132 7,962 12,469 2,916 4,218 1,848 511 11,814 18,886	170 5,207 901 21,545 1,174 2,932 4,508 582 3,583 49,096 51,737 7,431 1,994 29,063 648 1,002 334 71 11,662 163 7,242 13,231 3,277 4,112 1,755 645 12,846 18,163	173 6,106 982 21,187 1,136 2,892 4,872 616 4,353 49,554 54,613 8,221 2,892 30,139 672 1,284 404 68 12,867 184 6,521 14,066 3,223 4,005 1,855 692 15,347 16,203	254 6,317 1,173 23,452 1,136 3,282 7,175 802 6,400 50,448 60,019 6,657 3,243 29,107 758 1,438 488 79 14,600 197 7,921 24,832 3,471 3,805 2,124 723 16,818 19,687
Albania Belgium Bulgaria Canada Croatia Czechia* Denmark Estonia Finland France Germany Greece Hungary Italy Latvia* Lithuania* Luxembourg Montenegro Netherlands North Macedonia Norway Poland* Portugal Romania* Slovak Republic Slovenia Spain Türkiye United Kingdom	150 4,400 643 15,562 892 1,683 3,399 431 3,387 43,935 39,274 4,358 1,035 20,788 246 357 216 59 8,650 106 5,865 8,556 2,562 2,324 832 411 10,608 11,783 61,378	132 4,204 633 18,689 883 1,921 3,364 463 3,401 43,496 39,833 4,520 1,132 19,576 282 471 250 57 8,673 105 6,142 10,588 2,645 2,581 987 401 11,096 11,953 59,505	nstant 2015 130 4,189 650 18,219 831 1,833 3,586 488 3,424 44,097 41,173 4,676 1,282 21,936 401 628 240 59 9,057 100 6,808 9,814 2,579 2,612 1,012 447 9,970 12,985 62,329	prices and  135 4,204 657 23,278 882 2,095 3,657 501 3,443 44,862 43,438 4,683 1,592 22,759 459 759 317 59 9,254 94 6,861 9,781 2,605 3,432 1,030 458 11,495 14,494 63,647	exchange 147 4,317 800 21,614 857 2,312 4,187 520 3,491 46,480 44,554 5,084 1,414 23,390 618 905 325 63 10,032 102 6,959 11,015 2,902 3,761 1,186 491 12,049 17,954 65,254	rates  166 4,400 1,799 21,958 919 2,546 4,307 547 3,700 47,460 48,603 4,985 1,968 22,468 610 962 366 64 11,126 130 7,564 11,332 3,057 4,001 1,696 531 11,993 18,465 65,749	163 4,750 879 22,801 892 2,651 4,469 613 3,806 48,039 52,238 5,396 2,476 27,709 996 383 70 11,368 132 7,962 12,469 2,916 4,218 1,848 511 11,814 18,886 66,585	170 5,207 901 21,545 1,174 2,932 4,508 582 3,583 49,096 51,737 7,431 1,994 29,063 648 1,002 334 71 11,662 163 7,242 13,231 3,277 4,112 1,755 645 12,846 18,163 70,421	173 6,106 982 21,187 1,136 2,892 4,872 616 4,353 49,554 54,613 8,221 2,892 30,139 672 1,284 404 68 12,867 184 6,521 14,066 3,223 4,005 1,855 692 15,347 16,203 73,357	254 6,317 1,173 23,452 1,136 3,282 7,175 802 6,400 50,448 60,019 6,657 3,243 29,107 758 1,438 488 79 14,600 197 7,921 24,832 3,471 3,805 2,124 723 16,818 19,687 73,490
Albania Belgium Bulgaria Canada Croatia Czechia* Denmark Estonia Finland France Germany Greece Hungary Italy Latvia* Lithuania* Luxembourg Montenegro Netherlands North Macedonia Norway Poland* Portugal Romania* Slovak Republic Slovenia Spain Türkiye United Kingdom United States	150 4,400 643 15,562 892 1,683 3,399 431 3,387 43,935 39,274 4,358 1,035 20,788 246 357 216 59 8,650 106 5,865 8,556 2,562 2,324 832 411 10,608 11,783 61,378 660,021	132 4,204 633 18,689 883 1,921 3,364 463 3,401 43,496 39,833 4,520 1,132 19,576 282 471 250 57 8,673 105 6,142 10,588 2,645 2,581 987 401 11,096 11,953 59,505 641,253	nstant 2015 130 4,189 650 18,219 831 1,833 3,586 488 3,424 44,097 41,173 4,676 1,282 21,936 401 628 240 59 9,057 100 6,808 9,814 2,579 2,612 1,012 447 9,970 12,985 62,329 651,246	prices and  135 4,204 657 23,278 882 2,095 3,657 501 3,443 44,862 43,438 4,683 1,592 22,759 459 759 317 59 9,254 94 6,861 9,781 2,605 3,432 1,030 458 11,495 14,494 63,647 626,409	exchange 147 4,317 800 21,614 857 2,312 4,187 520 3,491 46,480 44,554 5,084 1,414 23,390 618 905 325 63 10,032 102 6,959 11,015 2,902 3,761 1,186 491 12,049 17,954 65,254 640,087	rates  166 4,400 1,799 21,958 919 2,546 4,307 547 3,700 47,460 48,603 4,985 1,968 22,468 610 962 366 64 11,126 130 7,564 11,332 3,057 4,001 1,696 531 11,993 18,465 65,749 699,062	163 4,750 879 22,801 892 2,651 4,469 613 3,806 48,039 52,238 5,396 2,476 27,709 996 383 70 11,368 132 7,962 12,469 2,916 4,218 1,848 511 11,814 18,886 66,585 704,414	170 5,207 901 21,545 1,174 2,932 4,508 582 3,583 49,096 51,737 7,431 1,994 29,063 648 1,002 334 71 11,662 163 7,242 13,231 3,277 4,112 1,755 645 12,846 18,163 70,421 734,749	173 6,106 982 21,187 1,136 2,892 4,872 616 4,353 49,554 54,613 8,221 2,892 30,139 672 1,284 404 68 12,867 184 6,521 14,066 3,223 4,005 1,855 692 15,347 16,203 73,357 703,362	254 6,317 1,173 23,452 1,136 3,282 7,175 802 6,400 50,448 60,019 6,657 3,243 29,107 758 1,438 488 79 14,600 197 7,921 24,832 3,471 3,805 2,124 723 16,818 19,687 73,490 703,902
Albania Belgium Bulgaria Canada Croatia Czechia* Denmark Estonia Finland France Germany Greece Hungary Italy Latvia* Lithuania* Luxembourg Montenegro Netherlands North Macedonia Norway Poland* Portugal Romania* Slovak Republic Slovenia Spain Türkiye United Kingdom	150 4,400 643 15,562 892 1,683 3,399 431 3,387 43,935 39,274 4,358 1,035 20,788 246 357 216 59 8,650 106 5,865 8,556 2,562 2,324 832 411 10,608 11,783 61,378	132 4,204 633 18,689 883 1,921 3,364 463 3,401 43,496 39,833 4,520 1,132 19,576 282 471 250 57 8,673 105 6,142 10,588 2,645 2,581 987 401 11,096 11,953 59,505	nstant 2015 130 4,189 650 18,219 831 1,833 3,586 488 3,424 44,097 41,173 4,676 1,282 21,936 401 628 240 59 9,057 100 6,808 9,814 2,579 2,612 1,012 447 9,970 12,985 62,329	prices and  135 4,204 657 23,278 882 2,095 3,657 501 3,443 44,862 43,438 4,683 1,592 22,759 459 759 317 59 9,254 94 6,861 9,781 2,605 3,432 1,030 458 11,495 14,494 63,647	exchange 147 4,317 800 21,614 857 2,312 4,187 520 3,491 46,480 44,554 5,084 1,414 23,390 618 905 325 63 10,032 102 6,959 11,015 2,902 3,761 1,186 491 12,049 17,954 65,254	rates  166 4,400 1,799 21,958 919 2,546 4,307 547 3,700 47,460 48,603 4,985 1,968 22,468 610 962 366 64 11,126 130 7,564 11,332 3,057 4,001 1,696 531 11,993 18,465 65,749	163 4,750 879 22,801 892 2,651 4,469 613 3,806 48,039 52,238 5,396 2,476 27,709 629 996 383 70 11,368 132 7,962 12,469 2,916 4,218 1,848 511 11,814 18,886 66,585 704,414 313,864	170 5,207 901 21,545 1,174 2,932 4,508 582 3,583 49,096 51,737 7,431 1,994 29,063 648 1,002 334 71 11,662 163 7,242 13,231 3,277 4,112 1,755 645 12,846 18,163 70,421	173 6,106 982 21,187 1,136 2,892 4,872 616 4,353 49,554 54,613 8,221 2,892 30,139 672 1,284 404 68 12,867 184 6,521 14,066 3,223 4,005 1,855 692 15,347 16,203 73,357	254 6,317 1,173 23,452 1,136 3,282 7,175 802 6,400 50,448 60,019 6,657 3,243 29,107 758 1,438 488 79 14,600 197 7,921 24,832 3,471 3,805 2,124 723 16,818 19,687 73,490 703,902 369,898

Notes: Figures for 2023 are estimates. The NATO Europe and Canada and NATO Total aggregates from 2017 onwards include Montenegro, which became an Ally on 5 June 2017, from 2020 onwards include North Macedonia, which became an Ally on 27 March 2020, and from 2023 onwards include Finland, which became an Ally on 4 April 2023.

Please refer to note on page 157.

Table 3: Defence expenditure as a share of GDP and annual real change (based on 2015 prices)

Country	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023e
Albania	1.25	1.16		of real GD		4.00	4.20	1.04	1.01	1 70
Albania	1.35 0.97	1.16	1.10 0.89	1.11 0.88	1.16	1.28 0.89	1.30 1.01	1.24 1.04	1.21 1.18	1.72
Belgium	1.31	0.91	1.24	1.22	0.89	3.13	1.59	1.52	1.16	1.21
Bulgaria Canada	1.01	1.25 1.20	1.16	1.44	1.45 1.30	1.29	1.42	1.27	1.21	1.33
Croatia	1.82	1.75	1.59	1.64	1.55	1.60	1.70	1.97	1.79	1.75
Czechia*	0.94	1.02	0.95	1.03	1.10	1.18	1.30	1.39	1.34	1.53
Denmark	1.15	1.11	1.15	1.14	1.28	1.30	1.38	1.30	1.37	2.00
Estonia	1.93	2.03	2.07	2.01	2.01	2.04	2.30	2.03	2.16	2.89
Finland	1.45	1.45	1.42	1.38	1.39	1.45	1.53	1.40	1.67	2.46
France	1.82	1.78	1.79	1.78	1.81	1.81	2.00	1.91	1.88	1.90
Germany	1.19	1.19	1.20	1.23	1.25	1.35	1.51	1.45	1.51	1.66
Greece	2.22	2.31	2.40	2.38	2.54	2.45	2.91	3.70	3.86	3.05
Hungary	0.86	0.90	1.00	1.19	1.01	1.34	1.76	1.32	1.84	2.07
Italy	1.14	1.07	1.18	1.20	1.23	1.17	1.59	1.54	1.54	1.47
Latvia*	0.94	1.03	1.44	1.59	2.06	2.02	2.16	2.09	2.09	2.37
Lithuania*	0.88	1.14	1.48	1.71	1.97	1.99	2.07	1.96	2.45	2.75
Luxembourg	0.37	0.41	0.38	0.49	0.50	0.55	0.58	0.47	0.56	1.01
Montenegro	1.50	1.40	1.42	1.34	1.37	1.33	1.73	1.55	1.41	1.55
Netherlands	1.15	1.13	1.16	1.15	1.22	1.32	1.41	1.36	1.44	1.63
North Macedonia	1.09	1.05	0.97	0.89	0.94	1.16	1.24	1.47	1.62	1.70
Norway	1.54	1.58	1.73	1.71	1.72	1.84	1.97	1.72	1.50	1.80
Poland*	1.88	2.23	2.00	1.89	2.02	1.99	2.23	2.22	2.23	3.92
Portugal	1.31	1.33	1.27	1.24	1.34	1.37	1.43	1.52	1.40	1.48
Romania*	1.35	1.45	1.43	1.73	1.79	1.84	2.01	1.85	1.72	1.60
Slovak Republic	0.98	1.11	1.12	1.10	1.22	1.70	1.92	1.74	1.81	2.05
Slovenia	0.97	0.93	1.00	0.98	1.01	1.05	1.06	1.23	1.29	1.33
Spain	0.92	0.93	0.81	0.91	0.93	0.91	1.00	1.03	1.16	1.24
Türkiye	1.45	1.38	1.45	1.51	1.82	1.85	1.86	1.61	1.36	1.58
United Kingdom	2.14	2.03	2.09	2.08	2.10	2.08	2.35	2.29	2.29	2.28
United States	3.71	3.51	3.50	3.28	3.26	3.47	3.58	3.53	3.31	3.24
NATO Europe and Canada	1.43	1.42	1.44	1.48	1.51	1.54	1.72	1.66	1.66	1.80
NATO Total	2.58	2.48	2.48	2.39	2.40	2.52	2.69	2.63	2.51	2.54
			Annua	l real chang	10/1					
			Ailliua	i real chang	Je (%)					
Albania	-2.74	-11.76	-1.90	4.32	8.84	12.67	-2.17	4.47	2.12	46.71
Albania Belgium	-2.25	-4.44	-1.90 -0.36		8.84 2.69	1.90	7.96	9.64	17.25	3.46
	-2.25 -9.08		-1.90	4.32 0.36 0.96	8.84 2.69 21.79	1.90 124.94	7.96 -51.16	9.64 2.49	17.25 9.07	3.46 19.44
Belgium Bulgaria Canada	-2.25 -9.08 4.95	-4.44 -1.56 20.10	-1.90 -0.36 2.80 -2.52	4.32 0.36 0.96 27.76	8.84 2.69 21.79 -7.15	1.90 124.94 1.59	7.96 -51.16 3.84	9.64 2.49 -5.51	17.25 9.07 -1.66	3.46 19.44 10.69
Belgium Bulgaria Canada Croatia	-2.25 -9.08 4.95 25.91	-4.44 -1.56 20.10 -1.00	-1.90 -0.36 2.80 -2.52 -5.92	4.32 0.36 0.96 27.76 6.22	8.84 2.69 21.79 -7.15 -2.82	1.90 124.94 1.59 7.18	7.96 -51.16 3.84 -2.95	9.64 2.49 -5.51 31.62	17.25 9.07 -1.66 -3.21	3.46 19.44 10.69 -0.04
Belgium Bulgaria Canada Croatia Czechia*	-2.25 -9.08 4.95 25.91 -4.91	-4.44 -1.56 20.10 -1.00 14.14	-1.90 -0.36 2.80 -2.52 -5.92 -4.61	4.32 0.36 0.96 27.76 6.22 14.32	8.84 2.69 21.79 -7.15 -2.82 10.33	1.90 124.94 1.59 7.18 10.14	7.96 -51.16 3.84 -2.95 4.11	9.64 2.49 -5.51 31.62 10.60	17.25 9.07 -1.66 -3.21 -1.36	3.46 19.44 10.69 -0.04 13.51
Belgium Bulgaria Canada Croatia Czechia* Denmark	-2.25 -9.08 4.95 25.91 -4.91 -4.84	-4.44 -1.56 20.10 -1.00 14.14 -1.03	-1.90 -0.36 2.80 -2.52 -5.92 -4.61 6.61	4.32 0.36 0.96 27.76 6.22 14.32 1.98	8.84 2.69 21.79 -7.15 -2.82 10.33 14.47	1.90 124.94 1.59 7.18 10.14 2.89	7.96 -51.16 3.84 -2.95 4.11 3.76	9.64 2.49 -5.51 31.62 10.60 0.87	17.25 9.07 -1.66 -3.21 -1.36 8.07	3.46 19.44 10.69 -0.04 13.51 47.27
Belgium Bulgaria Canada Croatia Czechia* Denmark Estonia	-2.25 -9.08 4.95 25.91 -4.91 -4.84 3.74	-4.44 -1.56 20.10 -1.00 14.14 -1.03 7.41	-1.90 -0.36 2.80 -2.52 -5.92 -4.61 6.61 5.24	4.32 0.36 0.96 27.76 6.22 14.32 1.98 2.68	8.84 2.69 21.79 -7.15 -2.82 10.33 14.47 3.74	1.90 124.94 1.59 7.18 10.14 2.89 5.34	7.96 -51.16 3.84 -2.95 4.11 3.76 12.05	9.64 2.49 -5.51 31.62 10.60 0.87 -5.02	17.25 9.07 -1.66 -3.21 -1.36 8.07 5.75	3.46 19.44 10.69 -0.04 13.51 47.27 30.16
Belgium Bulgaria Canada Croatia Czechia* Denmark Estonia Finland	-2.25 -9.08 4.95 25.91 -4.91 -4.84 3.74 -6.03	-4.44 -1.56 20.10 -1.00 14.14 -1.03 7.41 0.42	-1.90 -0.36 2.80 -2.52 -5.92 -4.61 6.61 5.24 0.68	4.32 0.36 0.96 27.76 6.22 14.32 1.98 2.68 0.55	8.84 2.69 21.79 -7.15 -2.82 10.33 14.47 3.74 1.39	1.90 124.94 1.59 7.18 10.14 2.89 5.34 5.98	7.96 -51.16 3.84 -2.95 4.11 3.76 12.05 2.87	9.64 2.49 -5.51 31.62 10.60 0.87 -5.02 -5.86	9.07 -1.66 -3.21 -1.36 8.07 5.75 21.50	3.46 19.44 10.69 -0.04 13.51 47.27 30.16 47.03
Belgium Bulgaria Canada Croatia Czechia* Denmark Estonia Finland France	-2.25 -9.08 4.95 25.91 -4.91 -4.84 3.74 -6.03 -1.21	-4.44 -1.56 20.10 -1.00 14.14 -1.03 7.41 0.42 -1.00	-1.90 -0.36 2.80 -2.52 -5.92 -4.61 6.61 5.24 0.68 1.38	4.32 0.36 0.96 27.76 6.22 14.32 1.98 2.68 0.55	8.84 2.69 21.79 -7.15 -2.82 10.33 14.47 3.74 1.39 3.61	1.90 124.94 1.59 7.18 10.14 2.89 5.34 5.98 2.11	7.96 -51.16 3.84 -2.95 4.11 3.76 12.05 2.87 1.22	9.64 2.49 -5.51 31.62 10.60 0.87 -5.02 -5.86 2.20	17.25 9.07 -1.66 -3.21 -1.36 8.07 5.75 21.50 0.93	3.46 19.44 10.69 -0.04 13.51 47.27 30.16 47.03 1.80
Belgium Bulgaria Canada Croatia Czechia* Denmark Estonia Finland France Germany	-2.25 -9.08 4.95 25.91 -4.91 -4.84 3.74 -6.03 -1.21	-4.44 -1.56 20.10 -1.00 14.14 -1.03 7.41 0.42 -1.00 1.42	-1.90 -0.36 2.80 -2.52 -5.92 -4.61 6.61 5.24 0.68 1.38 3.36	4.32 0.36 0.96 27.76 6.22 14.32 1.98 2.68 0.55 1.73 5.50	8.84 2.69 21.79 -7.15 -2.82 10.33 14.47 3.74 1.39 3.61 2.57	1.90 124.94 1.59 7.18 10.14 2.89 5.34 5.98 2.11 9.09	7.96 -51.16 3.84 -2.95 4.11 3.76 12.05 2.87 1.22 7.48	9.64 2.49 -5.51 31.62 10.60 0.87 -5.02 -5.86 2.20 -0.96	17.25 9.07 -1.66 -3.21 -1.36 8.07 5.75 21.50 0.93 5.56	3.46 19.44 10.69 -0.04 13.51 47.27 30.16 47.03 1.80 9.90
Belgium Bulgaria Canada Croatia Czechia* Denmark Estonia Finland France Germany Greece	-2.25 -9.08 4.95 25.91 -4.91 -4.84 3.74 -6.03 -1.21 -1.39 0.44	-4.44 -1.56 20.10 -1.00 14.14 -1.03 7.41 0.42 -1.00 1.42 3.72	-1.90 -0.36 2.80 -2.52 -5.92 -4.61 6.61 5.24 0.68 1.38 3.36 3.47	4.32 0.36 0.96 27.76 6.22 14.32 1.98 2.68 0.55 1.73 5.50	8.84 2.69 21.79 -7.15 -2.82 10.33 14.47 3.74 1.39 3.61 2.57 8.55	1.90 124.94 1.59 7.18 10.14 2.89 5.34 5.98 2.11 9.09 -1.94	7.96 -51.16 3.84 -2.95 4.11 3.76 12.05 2.87 1.22 7.48 8.25	9.64 2.49 -5.51 31.62 10.60 0.87 -5.02 -5.86 2.20 -0.96 37.70	17.25 9.07 -1.66 -3.21 -1.36 8.07 5.75 21.50 0.93 5.56 10.64	3.46 19.44 10.69 -0.04 13.51 47.27 30.16 47.03 1.80 9.90 -19.03
Belgium Bulgaria Canada Croatia Czechia* Denmark Estonia Finland France Germany Greece Hungary	-2.25 -9.08 4.95 25.91 -4.91 -4.84 3.74 -6.03 -1.21 -1.39 0.44 -5.22	-4.44 -1.56 20.10 -1.00 14.14 -1.03 7.41 0.42 -1.00 1.42 3.72 9.38	-1.90 -0.36 2.80 -2.52 -5.92 -4.61 6.61 5.24 0.68 1.38 3.36 3.47 13.19	4.32 0.36 0.96 27.76 6.22 14.32 1.98 2.68 0.55 1.73 5.50 0.15 24.20	8.84 2.69 21.79 -7.15 -2.82 10.33 14.47 3.74 1.39 3.61 2.57 8.55 -11.19	1.90 124.94 1.59 7.18 10.14 2.89 5.34 5.98 2.11 9.09 -1.94 39.17	7.96 -51.16 3.84 -2.95 4.11 3.76 12.05 2.87 1.22 7.48 8.25 25.84	9.64 2.49 -5.51 31.62 10.60 0.87 -5.02 -5.86 2.20 -0.96 37.70 -19.46	17.25 9.07 -1.66 -3.21 -1.36 8.07 5.75 21.50 0.93 5.56 10.64 44.99	3.46 19.44 10.69 -0.04 13.51 47.27 30.16 47.03 1.80 9.90 -19.03 12.16
Belgium Bulgaria Canada Croatia Czechia* Denmark Estonia Finland France Germany Greece Hungary Italy	-2.25 -9.08 4.95 25.91 -4.91 -4.84 3.74 -6.03 -1.21 -1.39 0.44 -5.22 -9.81	-4.44 -1.56 20.10 -1.00 14.14 -1.03 7.41 0.42 -1.00 1.42 3.72 9.38 -5.83	-1.90 -0.36 2.80 -2.52 -5.92 -4.61 6.61 5.24 0.68 1.38 3.36 3.47 13.19 12.05	4.32 0.36 0.96 27.76 6.22 14.32 1.98 2.68 0.55 1.73 5.50 0.15 24.20 3.75	8.84 2.69 21.79 -7.15 -2.82 10.33 14.47 3.74 1.39 3.61 2.57 8.55 -11.19 2.77	1.90 124.94 1.59 7.18 10.14 2.89 5.34 5.98 2.11 9.09 -1.94 39.17 -3.94	7.96 -51.16 3.84 -2.95 4.11 3.76 12.05 2.87 1.22 7.48 8.25 25.84 23.33	9.64 2.49 -5.51 31.62 10.60 0.87 -5.02 -5.86 2.20 -0.96 37.70 -19.46 4.89	17.25 9.07 -1.66 -3.21 -1.36 8.07 5.75 21.50 0.93 5.56 10.64 44.99 3.70	3.46 19.44 10.69 -0.04 13.51 47.27 30.16 47.03 1.80 9.90 -19.03 12.16 -3.42
Belgium Bulgaria Canada Croatia Czechia* Denmark Estonia Finland France Germany Greece Hungary Italy Latvia*	-2.25 -9.08 4.95 25.91 -4.91 -4.84 3.74 -6.03 -1.21 -1.39 0.44 -5.22 -9.81 2.39	-4.44 -1.56 20.10 -1.00 14.14 -1.03 7.41 0.42 -1.00 1.42 3.72 9.38 -5.83 14.66	-1.90 -0.36 2.80 -2.52 -5.92 -4.61 6.61 5.24 0.68 1.38 3.36 3.47 13.19 12.05 42.29	4.32 0.36 0.96 27.76 6.22 14.32 1.98 2.68 0.55 1.73 5.50 0.15 24.20 3.75 14.61	8.84 2.69 21.79 -7.15 -2.82 10.33 14.47 3.74 1.39 3.61 2.57 8.55 -11.19 2.77 34.54	1.90 124.94 1.59 7.18 10.14 2.89 5.34 5.98 2.11 9.09 -1.94 39.17 -3.94 -1.25	7.96 -51.16 3.84 -2.95 4.11 3.76 12.05 2.87 1.22 7.48 8.25 25.84 23.33 3.09	9.64 2.49 -5.51 31.62 10.60 0.87 -5.02 -5.86 2.20 -0.96 37.70 -19.46 4.89 3.10	17.25 9.07 -1.66 -3.21 -1.36 8.07 5.75 21.50 0.93 5.56 10.64 44.99 3.70 3.58	3.46 19.44 10.69 -0.04 13.51 47.27 30.16 47.03 1.80 9.90 -19.03 12.16 -3.42 12.93
Belgium Bulgaria Canada Croatia Czechia* Denmark Estonia Finland France Germany Greece Hungary Italy Latvia* Lithuania*	-2.25 -9.08 4.95 25.91 -4.91 -4.84 3.74 -6.03 -1.21 -1.39 0.44 -5.22 -9.81 2.39 19.38	-4.44 -1.56 20.10 -1.00 14.14 -1.03 7.41 0.42 -1.00 1.42 3.72 9.38 -5.83 14.66 31.96	-1.90 -0.36 2.80 -2.52 -5.92 -4.61 6.61 5.24 0.68 1.38 3.36 3.47 13.19 12.05 42.29 33.13	4.32 0.36 0.96 27.76 6.22 14.32 1.98 2.68 0.55 1.73 5.50 0.15 24.20 3.75 14.61 20.84	8.84 2.69 21.79 -7.15 -2.82 10.33 14.47 3.74 1.39 3.61 2.57 8.55 -11.19 2.77 34.54 19.38	1.90 124.94 1.59 7.18 10.14 2.89 5.34 5.98 2.11 9.09 -1.94 39.17 -3.94 -1.25 6.24	7.96 -51.16 3.84 -2.95 4.11 3.76 12.05 2.87 1.22 7.48 8.25 25.84 23.33 3.09 3.51	9.64 2.49 -5.51 31.62 10.60 0.87 -5.02 -5.86 2.20 -0.96 37.70 -19.46 4.89 3.10 0.67	17.25 9.07 -1.66 -3.21 -1.36 8.07 5.75 21.50 0.93 5.56 10.64 44.99 3.70 3.58 28.10	3.46 19.44 10.69 -0.04 13.51 47.27 30.16 47.03 1.80 9.90 -19.03 12.16 -3.42 12.93 11.98
Belgium Bulgaria Canada Croatia Czechia* Denmark Estonia Finland France Germany Greece Hungary Italy Latvia*	-2.25 -9.08 4.95 25.91 -4.91 -4.84 3.74 -6.03 -1.21 -1.39 0.44 -5.22 -9.81 2.39 19.38 4.87	-4.44 -1.56 20.10 -1.00 14.14 -1.03 7.41 0.42 -1.00 1.42 3.72 9.38 -5.83 14.66 31.96 15.30	-1.90 -0.36 2.80 -2.52 -5.92 -4.61 6.61 5.24 0.68 1.38 3.36 3.47 13.19 12.05 42.29 33.13 -3.86	4.32 0.36 0.96 27.76 6.22 14.32 1.98 2.68 0.55 1.73 5.50 0.15 24.20 3.75 14.61	8.84 2.69 21.79 -7.15 -2.82 10.33 14.47 3.74 1.39 3.61 2.57 8.55 -11.19 2.77 34.54 19.38 2.68	1.90 124.94 1.59 7.18 10.14 2.89 5.34 5.98 2.11 9.09 -1.94 39.17 -3.94 -1.25 6.24 12.37	7.96 -51.16 3.84 -2.95 4.11 3.76 12.05 2.87 1.22 7.48 8.25 25.84 23.33 3.09 3.51 4.67	9.64 2.49 -5.51 31.62 10.60 0.87 -5.02 -5.86 2.20 -0.96 37.70 -19.46 4.89 3.10	17.25 9.07 -1.66 -3.21 -1.36 8.07 5.75 21.50 0.93 5.56 10.64 44.99 3.70 3.58 28.10 20.99	3.46 19.44 10.69 -0.04 13.51 47.27 30.16 47.03 1.80 9.90 -19.03 12.16 -3.42 12.93 11.98 20.61
Belgium Bulgaria Canada Croatia Czechia* Denmark Estonia Finland France Germany Greece Hungary Italy Latvia* Lithuania* Luxembourg	-2.25 -9.08 4.95 25.91 -4.91 -4.84 3.74 -6.03 -1.21 -1.39 0.44 -5.22 -9.81 2.39 19.38	-4.44 -1.56 20.10 -1.00 14.14 -1.03 7.41 0.42 -1.00 1.42 3.72 9.38 -5.83 14.66 31.96	-1.90 -0.36 2.80 -2.52 -5.92 -4.61 6.61 5.24 0.68 1.38 3.36 3.47 13.19 12.05 42.29 33.13	4.32 0.36 0.96 27.76 6.22 14.32 1.98 2.68 0.55 1.73 5.50 0.15 24.20 3.75 14.61 20.84 32.05	8.84 2.69 21.79 -7.15 -2.82 10.33 14.47 3.74 1.39 3.61 2.57 8.55 -11.19 2.77 34.54 19.38	1.90 124.94 1.59 7.18 10.14 2.89 5.34 5.98 2.11 9.09 -1.94 39.17 -3.94 -1.25 6.24	7.96 -51.16 3.84 -2.95 4.11 3.76 12.05 2.87 1.22 7.48 8.25 25.84 23.33 3.09 3.51	9.64 2.49 -5.51 31.62 10.60 0.87 -5.02 -5.86 2.20 -0.96 37.70 -19.46 4.89 3.10 0.67 -12.61	17.25 9.07 -1.66 -3.21 -1.36 8.07 5.75 21.50 0.93 5.56 10.64 44.99 3.70 3.58 28.10	3.46 19.44 10.69 -0.04 13.51 47.27 30.16 47.03 1.80 9.90 -19.03 12.16 -3.42 12.93 11.98
Belgium Bulgaria Canada Croatia Czechia* Denmark Estonia Finland France Germany Greece Hungary Italy Latvia* Lithuania* Luxembourg Montenegro	-2.25 -9.08 4.95 25.91 -4.91 -4.84 3.74 -6.03 -1.21 -1.39 0.44 -5.22 -9.81 2.39 19.38 4.87 4.49	-4.44 -1.56 20.10 -1.00 14.14 -1.03 7.41 0.42 -1.00 1.42 3.72 9.38 -5.83 14.66 31.96 15.30 -3.50	-1.90 -0.36 2.80 -2.52 -5.92 -4.61 6.61 5.24 0.68 1.38 3.36 3.47 13.19 12.05 42.29 33.13 -3.86 4.33	4.32 0.36 0.96 27.76 6.22 14.32 1.98 2.68 0.55 1.73 5.50 0.15 24.20 3.75 14.61 20.84 32.05 -1.34	8.84 2.69 21.79 -7.15 -2.82 10.33 14.47 3.74 1.39 3.61 2.57 8.55 -11.19 2.77 34.54 19.38 2.68 7.29	1.90 124.94 1.59 7.18 10.14 2.89 5.34 5.98 2.11 9.09 -1.94 39.17 -3.94 -1.25 6.24 12.37 1.36	7.96 -51.16 3.84 -2.95 4.11 3.76 12.05 2.87 1.22 7.48 8.25 25.84 23.33 3.09 3.51 4.67 10.02	9.64 2.49 -5.51 31.62 10.60 0.87 -5.02 -5.86 2.20 -0.96 37.70 -19.46 4.89 3.10 0.67 -12.61 1.48	17.25 9.07 -1.66 -3.21 -1.36 8.07 5.75 21.50 0.93 5.56 10.64 44.99 3.70 3.58 28.10 20.99 -3.91	3.46 19.44 10.69 -0.04 13.51 47.27 30.16 47.03 1.80 9.90 -19.03 12.16 -3.42 12.93 11.98 20.61 15.10
Belgium Bulgaria Canada Croatia Czechia* Denmark Estonia Finland France Germany Greece Hungary Italy Latvia* Lithuania* Luxembourg Montenegro Netherlands	-2.25 -9.08 4.95 25.91 -4.91 -4.84 3.74 -6.03 -1.21 -1.39 0.44 -5.22 -9.81 2.39 19.38 4.87 4.49 0.19	-4.44 -1.56 20.10 -1.00 14.14 -1.03 7.41 0.42 -1.00 1.42 3.72 9.38 -5.83 14.66 31.96 15.30 -3.50 0.26	-1.90 -0.36 2.80 -2.52 -5.92 -4.61 6.61 5.24 0.68 1.38 3.36 3.47 13.19 12.05 42.29 33.13 -3.86 4.33 4.43	4.32 0.36 0.96 27.76 6.22 14.32 1.98 2.68 0.55 1.73 5.50 0.15 24.20 3.75 14.61 20.84 32.05 -1.34 2.17	8.84 2.69 21.79 -7.15 -2.82 10.33 14.47 3.74 1.39 3.61 2.57 8.55 -11.19 2.77 34.54 19.38 2.68 7.29 8.41	1.90 124.94 1.59 7.18 10.14 2.89 5.34 5.98 2.11 9.09 -1.94 39.17 -3.94 -1.25 6.24 12.37 1.36 10.90	7.96 -51.16 3.84 -2.95 4.11 3.76 12.05 2.87 1.22 7.48 8.25 25.84 23.33 3.09 3.51 4.67 10.02 2.18	9.64 2.49 -5.51 31.62 10.60 0.87 -5.02 -5.86 2.20 -0.96 37.70 -19.46 4.89 3.10 0.67 -12.61 1.48 2.59	17.25 9.07 -1.66 -3.21 -1.36 8.07 5.75 21.50 0.93 5.56 10.64 44.99 3.70 3.58 28.10 20.99 -3.91 10.33	3.46 19.44 10.69 -0.04 13.51 47.27 30.16 47.03 1.80 9.90 -19.03 12.16 -3.42 12.93 11.98 20.61 15.10 13.47
Belgium Bulgaria Canada Croatia Czechia* Denmark Estonia Finland France Germany Greece Hungary Italy Latvia* Lithuania* Luxembourg Montenegro Netherlands North Macedonia	-2.25 -9.08 4.95 25.91 -4.91 -4.84 3.74 -6.03 -1.21 -1.39 0.44 -5.22 -9.81 2.39 19.38 4.87 4.49 0.19 -3.58	-4.44 -1.56 20.10 -1.00 14.14 -1.03 7.41 0.42 -1.00 1.42 3.72 9.38 -5.83 14.66 31.96 15.30 -3.50 0.26 -0.09	-1.90 -0.36 2.80 -2.52 -5.92 -4.61 6.61 5.24 0.68 1.38 3.36 3.47 13.19 12.05 42.29 33.13 -3.86 4.33 4.43 -4.71	4.32 0.36 0.96 27.76 6.22 14.32 1.98 2.68 0.55 1.73 5.50 0.15 24.20 3.75 14.61 20.84 32.05 -1.34 2.17 -6.75	8.84 2.69 21.79 -7.15 -2.82 10.33 14.47 3.74 1.39 3.61 2.57 8.55 -11.19 2.77 34.54 19.38 2.68 7.29 8.41 8.40	1.90 124.94 1.59 7.18 10.14 2.89 5.34 5.98 2.11 9.09 -1.94 39.17 -3.94 -1.25 6.24 12.37 1.36 10.90 27.73	7.96 -51.16 3.84 -2.95 4.11 3.76 12.05 2.87 1.22 7.48 8.25 25.84 23.33 3.09 3.51 4.67 10.02 2.18 2.01	9.64 2.49 -5.51 31.62 10.60 0.87 -5.02 -5.86 2.20 -0.96 37.70 -19.46 4.89 3.10 0.67 -12.61 1.48 2.59 23.31	17.25 9.07 -1.66 -3.21 -1.36 8.07 5.75 21.50 0.93 5.56 10.64 44.99 3.70 3.58 28.10 20.99 -3.91 10.33 12.63	3.46 19.44 10.69 -0.04 13.51 47.27 30.16 47.03 1.80 9.90 -19.03 12.16 -3.42 12.93 11.98 20.61 15.10 13.47 7.30
Belgium Bulgaria Canada Croatia Czechia* Denmark Estonia Finland France Germany Greece Hungary Italy Latvia* Lithuania* Luxembourg Montenegro Netherlands Norway	-2.25 -9.08 4.95 25.91 -4.84 3.74 -6.03 -1.21 -1.39 0.44 -5.22 -9.81 2.39 19.38 4.87 4.49 0.19 -3.58 5.38	-4.44 -1.56 20.10 -1.00 14.14 -1.03 7.41 0.42 -1.00 1.42 3.72 9.38 -5.83 14.66 31.96 15.30 -3.50 0.26 -0.09 4.72	-1.90 -0.36 2.80 -2.52 -5.92 -4.61 6.61 5.24 0.68 1.38 3.36 3.47 13.19 12.05 42.29 33.13 -3.86 4.33 4.43 -4.71 10.84	4.32 0.36 0.96 27.76 6.22 14.32 1.98 2.68 0.55 1.73 5.50 0.15 24.20 3.75 14.61 20.84 32.05 -1.34 2.17 -6.75 0.78	8.84 2.69 21.79 -7.15 -2.82 10.33 14.47 3.74 1.39 3.61 2.57 8.55 -11.19 2.77 34.54 19.38 2.68 7.29 8.41 8.40 1.43	1.90 124.94 1.59 7.18 10.14 2.89 5.34 5.98 2.11 9.09 -1.94 39.17 -3.94 -1.25 6.24 12.37 1.36 10.90 27.73 8.70	7.96 -51.16 3.84 -2.95 4.11 3.76 12.05 2.87 1.22 7.48 8.25 25.84 23.33 3.09 3.51 4.67 10.02 2.18 2.01 5.27	9.64 2.49 -5.51 31.62 10.60 0.87 -5.02 -5.86 2.20 -0.96 37.70 -19.46 4.89 3.10 0.67 -12.61 1.48 2.59 23.31 -9.05	17.25 9.07 -1.66 -3.21 -1.36 8.07 5.75 21.50 0.93 5.56 10.64 44.99 3.70 3.58 28.10 20.99 -3.91 10.33 12.63 -9.95	3.46 19.44 10.69 -0.04 13.51 47.27 30.16 47.03 1.80 9.90 -19.03 12.16 -3.42 12.93 11.98 20.61 15.10 13.47 7.30 21.47
Belgium Bulgaria Canada Croatia Czechia* Denmark Estonia Finland France Germany Greece Hungary Italy Latvia* Lithuania* Luxembourg Montenegro Netherlands North Macedonia Norway Poland*	-2.25 -9.08 4.95 25.91 -4.84 3.74 -6.03 -1.21 -1.39 0.44 -5.22 -9.81 2.39 19.38 4.87 4.49 0.19 -3.58 5.38 11.39	-4.44 -1.56 20.10 -1.00 14.14 -1.03 7.41 0.42 -1.00 1.42 3.72 9.38 -5.83 14.66 31.96 15.30 -3.50 0.26 -0.09 4.72 23.75	-1.90 -0.36 2.80 -2.52 -5.92 -4.61 6.61 5.24 0.68 1.38 3.36 3.47 13.19 12.05 42.29 33.13 -3.86 4.33 4.43 -4.71 10.84 -7.32	4.32 0.36 0.96 27.76 6.22 14.32 1.98 2.68 0.55 1.73 5.50 0.15 24.20 3.75 14.61 20.84 32.05 -1.34 2.17 -6.75 0.78 -0.34	8.84 2.69 21.79 -7.15 -2.82 10.33 14.47 3.74 1.39 3.61 2.57 8.55 -11.19 2.77 34.54 19.38 2.68 7.29 8.41 8.40 1.43 12.62	1.90 124.94 1.59 7.18 10.14 2.89 5.34 5.98 2.11 9.09 -1.94 39.17 -3.94 -1.25 6.24 12.37 1.36 10.90 27.73 8.70 2.88	7.96 -51.16 3.84 -2.95 4.11 3.76 12.05 2.87 1.22 7.48 8.25 25.84 23.33 3.09 3.51 4.67 10.02 2.18 2.01 5.27 10.04	9.64 2.49 -5.51 31.62 10.60 0.87 -5.02 -5.86 2.20 -0.96 37.70 -19.46 4.89 3.10 0.67 -12.61 1.48 2.59 23.31 -9.05 6.11	17.25 9.07 -1.66 -3.21 -1.36 8.07 5.75 21.50 0.93 5.56 10.64 44.99 3.70 3.58 28.10 20.99 -3.91 10.33 12.63 -9.95 6.31	3.46 19.44 10.69 -0.04 13.51 47.27 30.16 47.03 1.80 9.90 -19.03 12.16 -3.42 12.93 11.98 20.61 15.10 13.47 7.30 21.47 76.54
Belgium Bulgaria Canada Croatia Czechia* Denmark Estonia Finland France Germany Greece Hungary Italy Latvia* Lithuania* Luxembourg Montenegro Netherlands North Macedonia Norway Poland* Portugal	-2.25 -9.08 4.95 25.91 -4.84 3.74 -6.03 -1.21 -1.39 0.44 -5.22 -9.81 2.39 19.38 4.87 4.49 0.19 -3.58 5.38 11.39 -8.52	-4.44 -1.56 20.10 -1.00 14.14 -1.03 7.41 0.42 -1.00 1.42 3.72 9.38 -5.83 14.66 31.96 15.30 -3.50 0.26 -0.09 4.72 23.75 3.25	-1.90 -0.36 2.80 -2.52 -5.92 -4.61 6.61 5.24 0.68 1.38 3.36 3.47 13.19 12.05 42.29 33.13 -3.86 4.33 4.43 -4.71 10.84 -7.32 -2.51	4.32 0.36 0.96 27.76 6.22 14.32 1.98 2.68 0.55 1.73 5.50 0.15 24.20 3.75 14.61 20.84 32.05 -1.34 2.17 -6.75 0.78 -0.34 1.03	8.84 2.69 21.79 -7.15 -2.82 10.33 14.47 3.74 1.39 3.61 2.57 8.55 -11.19 2.77 34.54 19.38 2.68 7.29 8.41 8.40 1.43 12.62 11.40	1.90 124.94 1.59 7.18 10.14 2.89 5.34 5.98 2.11 9.09 -1.94 39.17 -3.94 -1.25 6.24 12.37 1.36 10.90 27.73 8.70 2.88 5.32	7.96 -51.16 3.84 -2.95 4.11 3.76 12.05 2.87 1.22 7.48 8.25 25.84 23.33 3.09 3.51 4.67 10.02 2.18 2.01 5.27 10.04 -4.60	9.64 2.49 -5.51 31.62 10.60 0.87 -5.02 -5.86 2.20 -0.96 37.70 -19.46 4.89 3.10 0.67 -12.61 1.48 2.59 23.31 -9.05 6.11 12.37	17.25 9.07 -1.66 -3.21 -1.36 8.07 5.75 21.50 0.93 5.56 10.64 44.99 3.70 3.58 28.10 20.99 -3.91 10.33 12.63 -9.95 6.31 -1.64	3.46 19.44 10.69 -0.04 13.51 47.27 30.16 47.03 1.80 9.90 -19.03 12.16 -3.42 12.93 11.98 20.61 15.10 13.47 7.30 21.47 76.54 7.69
Belgium Bulgaria Canada Croatia Czechia* Denmark Estonia Finland France Germany Greece Hungary Italy Latvia* Lithuania* Luxembourg Montenegro Netherlands North Macedonia Norway Poland* Portugal Romania*	-2.25 -9.08 4.95 25.91 -4.84 3.74 -6.03 -1.21 -1.39 0.44 -5.22 -9.81 2.39 19.38 4.87 4.49 0.19 -3.58 5.38 11.39 -8.52 8.61	-4.44 -1.56 20.10 -1.00 14.14 -1.03 7.41 0.42 -1.00 1.42 3.72 9.38 -5.83 14.66 31.96 15.30 -3.50 0.26 -0.09 4.72 23.75 3.25 11.05	-1.90 -0.36 2.80 -2.52 -5.92 -4.61 6.61 5.24 0.68 1.38 3.36 3.47 13.19 12.05 42.29 33.13 -3.86 4.33 4.43 -4.71 10.84 -7.32 -2.51 1.23	4.32 0.36 0.96 27.76 6.22 14.32 1.98 2.68 0.55 1.73 5.50 0.15 24.20 3.75 14.61 20.84 32.05 -1.34 2.17 -6.75 0.78 -0.34 1.03 31.38	8.84 2.69 21.79 -7.15 -2.82 10.33 14.47 3.74 1.39 3.61 2.57 8.55 -11.19 2.77 34.54 19.38 2.68 7.29 8.41 8.40 1.43 12.62 11.40 9.57	1.90 124.94 1.59 7.18 10.14 2.89 5.34 5.98 2.11 9.09 -1.94 39.17 -3.94 -1.25 6.24 12.37 1.36 10.90 27.73 8.70 2.88 5.32 6.40	7.96 -51.16 3.84 -2.95 4.11 3.76 12.05 2.87 1.22 7.48 8.25 25.84 23.33 3.09 3.51 4.67 10.02 2.18 2.01 5.27 10.04 -4.60 5.42	9.64 2.49 -5.51 31.62 10.60 0.87 -5.02 -5.86 2.20 -0.96 37.70 -19.46 4.89 3.10 0.67 -12.61 1.48 2.59 23.31 -9.05 6.11 12.37 -2.52	17.25 9.07 -1.66 -3.21 -1.36 8.07 5.75 21.50 0.93 5.56 10.64 44.99 3.70 3.58 28.10 20.99 -3.91 10.33 12.63 -9.95 6.31 -1.64 -2.61	3.46 19.44 10.69 -0.04 13.51 47.27 30.16 47.03 1.80 9.90 -19.03 12.16 -3.42 12.93 11.98 20.61 15.10 13.47 7.30 21.47 76.54 7.69 -4.97
Belgium Bulgaria Canada Croatia Czechia* Denmark Estonia Finland France Germany Greece Hungary Italy Latvia* Lithuania* Luxembourg Montenegro Netherlands North Macedonia Norway Poland* Portugal Romania* Slovak Republic	-2.25 -9.08 4.95 25.91 -4.84 3.74 -6.03 -1.21 -1.39 0.44 -5.22 -9.81 2.39 19.38 4.87 4.49 0.19 -3.58 5.38 11.39 -8.52 8.61 3.25	-4.44 -1.56 20.10 -1.00 14.14 -1.03 7.41 0.42 -1.00 1.42 3.72 9.38 -5.83 14.66 31.96 15.30 -3.50 0.26 -0.09 4.72 23.75 3.25 11.05 18.61	-1.90 -0.36 2.80 -2.52 -5.92 -4.61 6.61 5.24 0.68 1.38 3.36 3.47 13.19 12.05 42.29 33.13 -3.86 4.33 4.43 -4.71 10.84 -7.32 -2.51 1.23 2.51	4.32 0.36 0.96 27.76 6.22 14.32 1.98 2.68 0.55 1.73 5.50 0.15 24.20 3.75 14.61 20.84 32.05 -1.34 2.17 -6.75 0.78 -0.34 1.03 31.38 1.80	8.84 2.69 21.79 -7.15 -2.82 10.33 14.47 3.74 1.39 3.61 2.57 8.55 -11.19 2.77 34.54 19.38 2.68 7.29 8.41 8.40 1.43 12.62 11.40 9.57 15.18	1.90 124.94 1.59 7.18 10.14 2.89 5.34 5.98 2.11 9.09 -1.94 39.17 -3.94 -1.25 6.24 12.37 1.36 10.90 27.73 8.70 2.88 5.32 6.40 42.97	7.96 -51.16 3.84 -2.95 4.11 3.76 12.05 2.87 1.22 7.48 8.25 25.84 23.33 3.09 3.51 4.67 10.02 2.18 2.01 5.27 10.04 -4.60 5.42 8.97	9.64 2.49 -5.51 31.62 10.60 0.87 -5.02 -5.86 2.20 -0.96 37.70 -19.46 4.89 3.10 0.67 -12.61 1.48 2.59 23.31 -9.05 6.11 12.37 -2.52 -5.03 26.10 8.73	17.25 9.07 -1.66 -3.21 -1.36 8.07 5.75 21.50 0.93 5.56 10.64 44.99 3.70 3.58 28.10 20.99 -3.91 10.33 12.63 -9.95 6.31 -1.64 -2.61 5.69	3.46 19.44 10.69 -0.04 13.51 47.27 30.16 47.03 1.80 9.90 -19.03 12.16 -3.42 12.93 11.98 20.61 15.10 13.47 7.30 21.47 76.54 7.69 -4.97 14.51
Belgium Bulgaria Canada Croatia Czechia* Denmark Estonia Finland France Germany Greece Hungary Italy Latvia* Lithuania* Luxembourg Montenegro Netherlands North Macedonia Norway Poland* Portugal Romania* Slovak Republic Slovenia Spain Türkiye	-2.25 -9.08 4.95 25.91 -4.91 -4.84 3.74 -6.03 -1.21 -1.39 0.44 -5.22 -9.81 2.39 19.38 4.87 4.49 0.19 -3.58 5.38 11.39 -8.52 8.61 3.25 -4.42	-4.44 -1.56 20.10 -1.00 14.14 -1.03 7.41 0.42 -1.00 1.42 3.72 9.38 -5.83 14.66 31.96 15.30 -3.50 0.26 -0.09 4.72 23.75 3.25 11.05 18.61 -2.37 4.61 1.44	-1.90 -0.36 2.80 -2.52 -5.92 -4.61 6.61 5.24 0.68 1.38 3.36 3.47 13.19 12.05 42.29 33.13 -3.86 4.33 4.43 -4.71 10.84 -7.32 -2.51 1.23 2.51 11.42	4.32 0.36 0.96 27.76 6.22 14.32 1.98 2.68 0.55 1.73 5.50 0.15 24.20 3.75 14.61 20.84 32.05 -1.34 2.17 -6.75 0.78 -0.34 1.03 31.38 1.80 2.45	8.84 2.69 21.79 -7.15 -2.82 10.33 14.47 3.74 1.39 3.61 2.57 8.55 -11.19 2.77 34.54 19.38 2.68 7.29 8.41 8.40 1.43 12.62 11.40 9.57 15.18 7.31 4.81 23.87	1.90 124.94 1.59 7.18 10.14 2.89 5.34 5.98 2.11 9.09 -1.94 39.17 -3.94 -1.25 6.24 12.37 1.36 10.90 27.73 8.70 2.88 5.32 6.40 42.97 8.03 -0.47 2.85	7.96 -51.16 3.84 -2.95 4.11 3.76 12.05 2.87 1.22 7.48 8.25 25.84 23.33 3.09 3.51 4.67 10.02 2.18 2.01 5.27 10.04 -4.60 5.42 8.97 -3.67 -1.49 2.28	9.64 2.49 -5.51 31.62 10.60 0.87 -5.02 -5.86 2.20 -0.96 37.70 -19.46 4.89 3.10 0.67 -12.61 1.48 2.59 23.31 -9.05 6.11 12.37 -2.52 -5.03 26.10 8.73 -3.83	17.25 9.07 -1.66 -3.21 -1.36 8.07 5.75 21.50 0.93 5.56 10.64 44.99 3.70 3.58 28.10 20.99 -3.91 10.33 12.63 -9.95 6.31 -1.64 -2.61 5.69 7.38	3.46 19.44 10.69 -0.04 13.51 47.27 30.16 47.03 1.80 9.90 -19.03 12.16 -3.42 12.93 11.98 20.61 15.10 13.47 7.30 21.47 76.54 7.69 -4.97 14.51 4.46
Belgium Bulgaria Canada Croatia Czechia* Denmark Estonia Finland France Germany Greece Hungary Italy Latvia* Lithuania* Luxembourg Montenegro Netherlands North Macedonia Norway Poland* Portugal Romania* Slovak Republic Slovenia Spain	-2.25 -9.08 4.95 25.91 -4.91 -4.84 3.74 -6.03 -1.21 -1.39 0.44 -5.22 -9.81 2.39 19.38 4.87 4.49 0.19 -3.58 5.38 11.39 -8.52 8.61 3.25 -4.42 0.36 0.78 -1.11	-4.44 -1.56 20.10 -1.00 14.14 -1.03 7.41 0.42 -1.00 1.42 3.72 9.38 -5.83 14.66 31.96 15.30 -3.50 0.26 -0.09 4.72 23.75 3.25 11.05 18.61 -2.37 4.61 1.44 -3.05	-1.90 -0.36 2.80 -2.52 -5.92 -4.61 6.61 5.24 0.68 1.38 3.36 3.47 13.19 12.05 42.29 33.13 -3.86 4.33 4.43 -4.71 10.84 -7.32 -2.51 1.23 2.51 11.42 -10.15 8.64 4.75	4.32 0.36 0.96 27.76 6.22 14.32 1.98 2.68 0.55 1.73 5.50 0.15 24.20 3.75 14.61 20.84 32.05 -1.34 2.17 -6.75 0.78 -0.34 1.03 31.38 1.80 2.45 15.30 11.61 2.11	8.84 2.69 21.79 -7.15 -2.82 10.33 14.47 3.74 1.39 3.61 2.57 8.55 -11.19 2.77 34.54 19.38 2.68 7.29 8.41 8.40 1.43 12.62 11.40 9.57 15.18 7.31 4.81 23.87 2.52	1.90 124.94 1.59 7.18 10.14 2.89 5.34 5.98 2.11 9.09 -1.94 39.17 -3.94 -1.25 6.24 12.37 1.36 10.90 27.73 8.70 2.88 5.32 6.40 42.97 8.03 -0.47 2.85 0.76	7.96 -51.16 3.84 -2.95 4.11 3.76 12.05 2.87 1.22 7.48 8.25 25.84 23.33 3.09 3.51 4.67 10.02 2.18 2.01 5.27 10.04 -4.60 5.42 8.97 -3.67 -1.49 2.28 1.27	9.64 2.49 -5.51 31.62 10.60 0.87 -5.02 -5.86 2.20 -0.96 37.70 -19.46 4.89 3.10 0.67 -12.61 1.48 2.59 23.31 -9.05 6.11 12.37 -2.52 -5.03 26.10 8.73 -3.83 5.76	17.25 9.07 -1.66 -3.21 -1.36 8.07 5.75 21.50 0.93 5.56 10.64 44.99 3.70 3.58 28.10 20.99 -3.91 10.33 12.63 -9.95 6.31 -1.64 -2.61 5.69 7.38 19.47 -10.79 4.17	3.46 19.44 10.69 -0.04 13.51 47.27 30.16 47.03 1.80 9.90 -19.03 12.16 -3.42 12.93 11.98 20.61 15.10 13.47 7.30 21.47 76.54 7.69 -4.97 14.51 4.46 9.58 21.51 0.18
Belgium Bulgaria Canada Croatia Czechia* Denmark Estonia Finland France Germany Greece Hungary Italy Latvia* Lithuania* Luxembourg Montenegro Netherlands North Macedonia Norway Poland* Portugal Romania* Slovak Republic Slovenia Spain Türkiye United Kingdom United States	-2.25 -9.08 4.95 25.91 -4.91 -4.84 3.74 -6.03 -1.21 -1.39 0.44 -5.22 -9.81 2.39 19.38 4.87 4.49 0.19 -3.58 5.38 11.39 -8.52 8.61 3.25 -4.42 0.36 0.78 -1.11 -5.19	-4.44 -1.56 20.10 -1.00 14.14 -1.03 7.41 0.42 -1.00 1.42 3.72 9.38 -5.83 14.66 31.96 15.30 -3.50 0.26 -0.09 4.72 23.75 3.25 11.05 18.61 -2.37 4.61 1.44 -3.05 -2.84	-1.90 -0.36 2.80 -2.52 -5.92 -4.61 6.61 5.24 0.68 1.38 3.36 3.47 13.19 12.05 42.29 33.13 -3.86 4.33 4.43 -4.71 10.84 -7.32 -2.51 1.23 2.51 11.42 -10.15 8.64 4.75 1.56	4.32 0.36 0.96 27.76 6.22 14.32 1.98 2.68 0.55 1.73 5.50 0.15 24.20 3.75 14.61 20.84 32.05 -1.34 2.17 -6.75 0.78 -0.34 1.03 31.38 1.80 2.45 15.30 11.61 2.11 -3.81	8.84 2.69 21.79 -7.15 -2.82 10.33 14.47 3.74 1.39 3.61 2.57 8.55 -11.19 2.77 34.54 19.38 2.68 7.29 8.41 8.40 1.43 12.62 11.40 9.57 15.18 7.31 4.81 23.87 2.52 2.18	1.90 124.94 1.59 7.18 10.14 2.89 5.34 5.98 2.11 9.09 -1.94 39.17 -3.94 -1.25 6.24 12.37 1.36 10.90 27.73 8.70 2.88 5.32 6.40 42.97 8.03 -0.47 2.85 0.76 9.21	7.96 -51.16 3.84 -2.95 4.11 3.76 12.05 2.87 1.22 7.48 8.25 25.84 23.33 3.09 3.51 4.67 10.02 2.18 2.01 5.27 10.04 -4.60 5.42 8.97 -3.67 -1.49 2.28 1.27 0.77	9.64 2.49 -5.51 31.62 10.60 0.87 -5.02 -5.86 2.20 -0.96 37.70 -19.46 4.89 3.10 0.67 -12.61 1.48 2.59 23.31 -9.05 6.11 12.37 -2.52 -5.03 26.10 8.73 -3.83 5.76 4.31	17.25 9.07 -1.66 -3.21 -1.36 8.07 5.75 21.50 0.93 5.56 10.64 44.99 3.70 3.58 28.10 20.99 -3.91 10.33 12.63 -9.95 6.31 -1.64 -2.61 5.69 7.38 19.47 -10.79 4.17 -4.27	3.46 19.44 10.69 -0.04 13.51 47.27 30.16 47.03 1.80 9.90 -19.03 12.16 -3.42 12.93 11.98 20.61 15.10 13.47 7.30 21.47 76.54 7.69 -4.97 14.51 4.46 9.58 21.51 0.18 0.08
Belgium Bulgaria Canada Croatia Czechia* Denmark Estonia Finland France Germany Greece Hungary Italy Latvia* Lithuania* Luxembourg Montenegro Netherlands North Macedonia Norway Poland* Portugal Romania* Slovak Republic Slovenia Spain Türkiye United Kingdom United States NATO Europe and Canada	-2.25 -9.08 4.95 25.91 -4.91 -4.84 3.74 -6.03 -1.21 -1.39 0.44 -5.22 -9.81 2.39 19.38 4.87 4.49 0.19 -3.58 5.38 11.39 -8.52 8.61 3.25 -4.42 0.36 0.78 -1.11 -5.19 -0.88	-4.44 -1.56 20.10 -1.00 14.14 -1.03 7.41 0.42 -1.00 1.42 3.72 9.38 -5.83 14.66 31.96 15.30 -3.50 0.26 -0.09 4.72 23.75 3.25 11.05 18.61 -2.37 4.61 1.44 -3.05 -2.84 1.63	-1.90 -0.36 2.80 -2.52 -5.92 -4.61 6.61 5.24 0.68 1.38 3.36 3.47 13.19 12.05 42.29 33.13 -3.86 4.33 4.43 -4.71 10.84 -7.32 -2.51 1.23 2.51 11.42 -10.15 8.64 4.75 1.56 2.97	4.32 0.36 0.96 27.76 6.22 14.32 1.98 2.68 0.55 1.73 5.50 0.15 24.20 3.75 14.61 20.84 32.05 -1.34 2.17 -6.75 0.78 -0.34 1.03 31.38 1.80 2.45 15.30 11.61 2.11 -3.81 5.89	8.84 2.69 21.79 -7.15 -2.82 10.33 14.47 3.74 1.39 3.61 2.57 8.55 -11.19 2.77 34.54 19.38 2.68 7.29 8.41 8.40 1.43 12.62 11.40 9.57 15.18 7.31 4.81 23.87 2.52 2.18 4.25	1.90 124.94 1.59 7.18 10.14 2.89 5.34 5.98 2.11 9.09 -1.94 39.17 -3.94 -1.25 6.24 12.37 1.36 10.90 27.73 8.70 2.88 5.32 6.40 42.97 8.03 -0.47 2.85 0.76 9.21 3.61	7.96 -51.16 3.84 -2.95 4.11 3.76 12.05 2.87 1.22 7.48 8.25 25.84 23.33 3.09 3.51 4.67 10.02 2.18 2.01 5.27 10.04 -4.60 5.42 8.97 -3.67 -1.49 2.28 1.27 0.77 4.75	9.64 2.49 -5.51 31.62 10.60 0.87 -5.02 -5.86 2.20 -0.96 37.70 -19.46 4.89 3.10 0.67 -12.61 1.48 2.59 23.31 -9.05 6.11 12.37 -2.52 -5.03 26.10 8.73 -3.83 5.76 4.31 2.57	17.25 9.07 -1.66 -3.21 -1.36 8.07 5.75 21.50 0.93 5.56 10.64 44.99 3.70 3.58 28.10 20.99 -3.91 10.33 12.63 -9.95 6.31 -1.64 -2.61 5.69 7.38 19.47 -10.79 4.17 -4.27 3.79	3.46 19.44 10.69 -0.04 13.51 47.27 30.16 47.03 1.80 9.90 -19.03 12.16 -3.42 12.93 11.98 20.61 15.10 13.47 7.30 21.47 76.54 7.69 -4.97 14.51 4.46 9.58 21.51 0.18 0.08 10.70
Belgium Bulgaria Canada Croatia Czechia* Denmark Estonia Finland France Germany Greece Hungary Italy Latvia* Lithuania* Luxembourg Montenegro Netherlands North Macedonia Norway Poland* Portugal Romania* Slovak Republic Slovenia Spain Türkiye United Kingdom United States	-2.25 -9.08 4.95 25.91 -4.91 -4.84 3.74 -6.03 -1.21 -1.39 0.44 -5.22 -9.81 2.39 19.38 4.87 4.49 0.19 -3.58 5.38 11.39 -8.52 8.61 3.25 -4.42 0.36 0.78 -1.11 -5.19 -0.88 -4.04	-4.44 -1.56 20.10 -1.00 14.14 -1.03 7.41 0.42 -1.00 1.42 3.72 9.38 -5.83 14.66 31.96 15.30 -3.50 0.26 -0.09 4.72 23.75 3.25 11.05 18.61 -2.37 4.61 1.44 -3.05 -2.84 1.63 -1.61	-1.90 -0.36 2.80 -2.52 -5.92 -4.61 6.61 5.24 0.68 1.38 3.36 3.47 13.19 12.05 42.29 33.13 -3.86 4.33 4.43 -4.71 10.84 -7.32 -2.51 11.42 -10.15 8.64 4.75 1.56 2.97 1.96	4.32 0.36 0.96 27.76 6.22 14.32 1.98 2.68 0.55 1.73 5.50 0.15 24.20 3.75 14.61 20.84 32.05 -1.34 2.17 -6.75 0.78 -0.34 1.03 31.38 1.80 2.45 15.30 11.61 2.11 -3.81 5.89 -1.03	8.84 2.69 21.79 -7.15 -2.82 10.33 14.47 3.74 1.39 3.61 2.57 8.55 -11.19 2.77 34.54 19.38 2.68 7.29 8.41 8.40 1.43 12.62 11.40 9.57 15.18 7.31 4.81 23.87 2.52 2.18 4.25 2.82	1.90 124.94 1.59 7.18 10.14 2.89 5.34 5.98 2.11 9.09 -1.94 39.17 -3.94 -1.25 6.24 12.37 1.36 10.90 27.73 8.70 2.88 5.32 6.40 42.97 8.03 -0.47 2.85 0.76 9.21 3.61 7.47	7.96 -51.16 3.84 -2.95 4.11 3.76 12.05 2.87 1.22 7.48 8.25 25.84 23.33 3.09 3.51 4.67 10.02 2.18 2.01 5.27 10.04 -4.60 5.42 8.97 -3.67 -1.49 2.28 1.27 0.77 4.75 1.96	9.64 2.49 -5.51 31.62 10.60 0.87 -5.02 -5.86 2.20 -0.96 37.70 -19.46 4.89 3.10 0.67 -12.61 1.48 2.59 23.31 -9.05 6.11 12.37 -2.52 -5.03 26.10 8.73 -3.83 5.76 4.31 2.57 3.77	17.25 9.07 -1.66 -3.21 -1.36 8.07 5.75 21.50 0.93 5.56 10.64 44.99 3.70 3.58 28.10 20.99 -3.91 10.33 12.63 -9.95 6.31 -1.64 -2.61 5.69 7.38 19.47 -10.79 4.17 -4.27 3.79 -1.81	3.46 19.44 10.69 -0.04 13.51 47.27 30.16 47.03 1.80 9.90 -19.03 12.16 -3.42 12.93 11.98 20.61 15.10 13.47 7.30 21.47 76.54 7.69 -4.97 14.51 4.46 9.58 21.51 0.18 0.08 10.70 3.50

Notes: Figures for 2023 are estimates. The NATO Europe and Canada and NATO Total aggregates from 2017 onwards include Montenegro, which became an Ally on 5 June 2017, from 2020 onwards include North Macedonia, which became an Ally on 27 March 2020, and from 2023 onwards include Finland, which became an Ally on 4 April 2023.

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<sup>\*</sup> Please refer to note on page 157.

Table 4: Defence expenditure real change 2014-2023e

Country	2014	2023e	Real change 2014-2023e (%)	Share of real GDP 2014 (%)	Share of real GDP 2023e (%)
	Million	US dollars (2015 p	rices and exchange ra	tes)	
Albania	150	254	69.56	1.35	1.72
Belgium	4,400	6,317	43.56	0.97	1.21
Bulgaria	643	1,173	82.55	1.31	1.87
Canada	15,562	23,452	50.71	1.01	1.33
Croatia	892	1,136	27.35	1.82	1.75
Czechia	1,683	3,282	94.99	0.94	1.53
Denmark	3,399	7,175	111.09	1.15	2.00
Estonia	431	802	85.80	1.93	2.89
Finland	3,387	6,400	88.99	1.45	2.46
France	43,935	50,448	14.82	1.82	1.90
Germany	39,274	60,019	52.82	1.19	1.66
Greece	4,358	6,657	52.76	2.22	3.05
Hungary	1,035	3,243	213.26	0.86	2.07
Italy	20,788	29,107	40.02	1.14	1.47
Latvia	246	758	208.87	0.94	2.37
Lithuania	357	1,438	302.46	0.88	2.75
Luxembourg	216	488	125.42	0.37	1.01
Montenegro	59	79	33.37	1.50	1.55
Netherlands	8,650	14,600	68.78	1.15	1.63
North Macedonia	106	197	86.86	1.09	1.70
Norway	5,865	7,921	35.06	1.54	1.80
Poland	8,556	24,832	190.22	1.88	3.92
Portugal	2,562	3,471	35.49	1.31	1.48
Romania	2,324	3,805	63.75	1.35	1.60
Slovak Republic	832	2,124	155.29	0.98	2.05
Slovenia	411	723	76.04	0.97	1.33
Spain	10,608	16,818	58.55	0.92	1.24
Türkiye	11,783	19,687	67.08	1.45	1.58
United Kingdom	61,378	73,490	19.73	2.14	2.28
United States	660,021	703,902	6.65	3.71	3.24

Note: Figures for 2023 are estimates.

Table 5: GDP (million US dollars)

Country	2014	2015	2016	2017	2010	2010	2020	2021	2022	2023e
Country	2014	2015	2016 Curren	2017 t prices and o	2018 exchange rate	2019 <b>es</b>	2020	2021	2022	20236
Albania	13,246	11,389	11,862	13,053	15,156	15,399	15,192	17,984	19,048	23,356
Belgium	535,528	462,383	475,931	502,587	543,545	535,925	525,843	601,147	583,895	636,065
Bulgaria	57,080	50,766	53,926	59,288	66,398	68,889	70,311	84,100	90,422	103,594
Canada	1,805,748	1,556,511	1,527,996	1,649,271	1,725,297	1,743,730	1,647,598	2,001,487	2,137,939	2,123,007
Croatia	58,566	50,328	52,521	56,593	62,446	62,436	57,714	69,127	71,656	83,008
Czechia	209,305	188,114	196,193	218,891	249,261	252,654	246,046	281,711	290,460	334,943
Denmark	352,993	302,672	313,116	332,121	356,841	346,499	354,763	405,688	400,168	412,374
Estonia	26,625	22,881	24,056	26,880	30,592	31,258	31,290	36,835	37,922	41,504
Finland	274,934	234,558	240,705	255,558	275,833	268,545	271,668	296,969	283,115	305,419
France	2,860,038	2,440,749	2,470,992	2,596,970	2,794,051	2,732,067	2,644,219	2,958,265	2,780,442	3,050,302
Germany	3,896,203	3,355,015	3,462,962	3,694,227	3,982,019	3,896,534	3,876,612	4,270,522	4,078,694	4,472,997
Greece	235,519	195,704	193,095	199,774	212,146	205,167	188,684	216,384	219,827	245,376
Hungary	141,034	125,174	128,610	143,113	160,566	164,010	157,227	182,090	178,552	209,411
Iceland	17,868 2,164,173	17,517 1,835,521	20,793 1,877,709	24,728 1,963,794	26,261 2,092,708	24,682 2,011,295	21,566 1,894,328	25,596 2,154,473	28,065 2,052,296	31,300 2,223,006
Italy	31,395	27,266	28,076	30,473	34,445	34,229	34,363	39,469	40,964	44,497
Latvia Lithuania	48,611	41,440	43,035	47,742	53,776	54,815	56,919	66,843	71,030	79,130
Luxembourg	68,797	60,207	62,195	65,844	70,929	69,616	73,619	85,520	82,008	59,606
Montenegro	4,595	4,055	4,376	4,855	5,509	5,543	4,777	5,865	6,109	7,449
Netherlands	892,370	765,822	783,668	834,414	914,609	909,681	908,433	1,029,756	1,010,557	1,122,054
North Macedonia	11,378	10,067	10,686	11,336	12,694	12,609	12,385	13,835	13,593	15,801
Norway	501,737	388,160	370,956	401,746	439,789	408,742	367,633	490.293	579,422	488,185
Poland	538,982	475,859	469,841	524,642	588,311	595,260	598,909	681,384	687,300	819,819
Portugal	229,961	199,415	206,369	221,280	242,423	240,013	228,849	255,705	255,397	288,366
Romania	199,714	177,884	185,288	210,147	243,316	251,018	251,699	286,015	301,273	352,642
Slovak Republic	101,463	88,910	89,928	95,616	106,186	105,723	106,646	118,655	115,553	130,904
Slovenia	50,010	43,112	44,754	48,572	54,203	54,393	53,692	61,873	60,111	68,613
Spain	1,372,176	1,196,280	1,233,216	1,312,781	1,422,349	1,394,474	1,277,106	1,446,613	1,418,916	1,582,941
Türkiye	938,511	864,071	869,280	858,933	780,189	760,521	720,159	818,337	905,841	1,201,564
United Kingdom	3,066,303	2,928,557	2,699,086	2,682,385	2,875,024	2,853,072	2,699,735	3,142,261	3,100,343	3,398,270
United States	17,608,138	18,295,019	18,804,913	19,612,103	20,656,516	21,521,395	21,322,950	23,594,031	25,744,108	27,343,453
NATO Europe and Canada	20,413,957	17,871,705	17,895,455	18,820,719	20,148,345	19,827,644	19,126,316	21,847,836	21,617,804	23,955,505
NATO Total	38,022,096	36,166,724	36,700,368	38,432,821	40,804,861	41,349,039	40,449,265	45,441,866	47,361,912	51,298,957
			Constant 2	015 prices a	nd exchange	rates				
Albania	11,142	11,389	Constant 2 11,767	2 <b>015 prices a</b> 12,214	nd exchange 12,705	<b>rates</b> 12,970	12,542	13,659	14,318	14,819
Albania Belgium	11,142 453,133	11,389 462,383					12,542 469,155	13,659 501,297	14,318 516,386	14,819 523,871
			11,767	12,214	12,705	12,970				
Belgium Bulgaria Canada	453,133 49,098 1,546,318	462,383 50,766 1,556,511	11,767 468,239 52,302 1,572,098	12,214 475,822 53,738 1,619,887	12,705 484,354 55,187 1,664,872	12,970 495,209 57,413 1,696,309	469,155 55,136 1,610,232	501,297 59,361 1,690,934	516,386 61,691 1,749,068	523,871 62,895 1,769,320
Belgium Bulgaria Canada Croatia	453,133 49,098 1,546,318 49,090	462,383 50,766 1,556,511 50,328	11,767 468,239 52,302 1,572,098 52,121	12,214 475,822 53,738 1,619,887 53,893	12,705 484,354 55,187 1,664,872 55,413	12,970 495,209 57,413 1,696,309 57,297	469,155 55,136 1,610,232 52,374	501,297 59,361 1,690,934 59,594	516,386 61,691 1,749,068 63,377	523,871 62,895 1,769,320 65,005
Belgium Bulgaria Canada Croatia Czechia	453,133 49,098 1,546,318 49,090 178,374	462,383 50,766 1,556,511 50,328 188,114	11,767 468,239 52,302 1,572,098 52,121 192,724	12,214 475,822 53,738 1,619,887 53,893 203,027	12,705 484,354 55,187 1,664,872 55,413 209,536	12,970 495,209 57,413 1,696,309 57,297 215,750	469,155 55,136 1,610,232 52,374 203,845	501,297 59,361 1,690,934 59,594 210,971	516,386 61,691 1,749,068 63,377 215,931	523,871 62,895 1,769,320 65,005 215,239
Belgium Bulgaria Canada Croatia Czechia Denmark	453,133 49,098 1,546,318 49,090 178,374 295,744	462,383 50,766 1,556,511 50,328 188,114 302,672	11,767 468,239 52,302 1,572,098 52,121 192,724 312,497	12,214 475,822 53,738 1,619,887 53,893 203,027 321,315	12,705 484,354 55,187 1,664,872 55,413 209,536 327,708	12,970 495,209 57,413 1,696,309 57,297 215,750 332,602	469,155 55,136 1,610,232 52,374 203,845 324,538	501,297 59,361 1,690,934 59,594 210,971 346,751	516,386 61,691 1,749,068 63,377 215,931 356,221	523,871 62,895 1,769,320 65,005 215,239 360,845
Belgium Bulgaria Canada Croatia Czechia Denmark Estonia	453,133 49,098 1,546,318 49,090 178,374 295,744 22,369	462,383 50,766 1,556,511 50,328 188,114 302,672 22,881	11,767 468,239 52,302 1,572,098 52,121 192,724 312,497 23,586	12,214 475,822 53,738 1,619,887 53,893 203,027 321,315 24,874	12,705 484,354 55,187 1,664,872 55,413 209,536 327,708 25,832	12,970 495,209 57,413 1,696,309 57,297 215,750 332,602 26,850	469,155 55,136 1,610,232 52,374 203,845 324,538 26,666	501,297 59,361 1,690,934 59,594 210,971 346,751 28,631	516,386 61,691 1,749,068 63,377 215,931 356,221 28,496	523,871 62,895 1,769,320 65,005 215,239 360,845 27,767
Belgium Bulgaria Canada Croatia Czechia Denmark Estonia Finland	453,133 49,098 1,546,318 49,090 178,374 295,744 22,369 233,287	462,383 50,766 1,556,511 50,328 188,114 302,672 22,881 234,558	11,767 468,239 52,302 1,572,098 52,121 192,724 312,497 23,586 241,153	12,214 475,822 53,738 1,619,887 53,893 203,027 321,315 24,874 248,855	12,705 484,354 55,187 1,664,872 55,413 209,536 327,708 25,832 251,689	12,970 495,209 57,413 1,696,309 57,297 215,750 332,602 26,850 254,769	469,155 55,136 1,610,232 52,374 203,845 324,538 26,666 248,767	501,297 59,361 1,690,934 59,594 210,971 346,751 28,631 256,659	516,386 61,691 1,749,068 63,377 215,931 356,221 28,496 260,761	523,871 62,895 1,769,320 65,005 215,239 360,845 27,767 260,632
Belgium Bulgaria Canada Croatia Czechia Denmark Estonia Finland France	453,133 49,098 1,546,318 49,090 178,374 295,744 22,369 233,287 2,415,433	462,383 50,766 1,556,511 50,328 188,114 302,672 22,881 234,558 2,440,749	11,767 468,239 52,302 1,572,098 52,121 192,724 312,497 23,586 241,153 2,464,749	12,214 475,822 53,738 1,619,887 53,893 203,027 321,315 24,874 248,855 2,525,388	12,705 484,354 55,187 1,664,872 55,413 209,536 327,708 25,832 251,689 2,571,301	12,970 495,209 57,413 1,696,309 57,297 215,750 332,602 26,850 254,769 2,619,841	469,155 55,136 1,610,232 52,374 203,845 324,538 26,666 248,767 2,418,657	501,297 59,361 1,690,934 59,594 210,971 346,751 28,631 256,659 2,572,581	516,386 61,691 1,749,068 63,377 215,931 356,221 28,496 260,761 2,637,600	523,871 62,895 1,769,320 65,005 215,239 360,845 27,767 260,632 2,661,616
Belgium Bulgaria Canada Croatia Czechia Denmark Estonia Finland France Germany	453,133 49,098 1,546,318 49,090 178,374 295,744 22,369 233,287 2,415,433 3,313,881	462,383 50,766 1,556,511 50,328 188,114 302,672 22,881 234,558 2,440,749 3,355,015	11,767 468,239 52,302 1,572,098 52,121 192,724 312,497 23,586 241,153 2,464,749 3,426,873	12,214 475,822 53,738 1,619,887 53,893 203,027 321,315 24,874 248,855 2,525,388 3,529,121	12,705 484,354 55,187 1,664,872 55,413 209,536 327,708 25,832 251,689 2,571,301 3,564,546	12,970 495,209 57,413 1,696,309 57,297 215,750 332,602 26,850 254,769 2,619,841 3,603,917	469,155 55,136 1,610,232 52,374 203,845 324,538 26,666 248,767 2,418,657 3,452,645	501,297 59,361 1,690,934 59,594 210,971 346,751 28,631 256,659 2,572,581 3,560,517	516,386 61,691 1,749,068 63,377 215,931 356,221 28,496 260,761 2,637,600 3,627,506	523,871 62,895 1,769,320 65,005 215,239 360,845 27,767 260,632 2,661,616 3,623,717
Belgium Bulgaria Canada Croatia Czechia Denmark Estonia Finland France Germany Greece	453,133 49,098 1,546,318 49,090 178,374 295,744 22,369 233,287 2,415,433 3,313,881 196,088	462,383 50,766 1,556,511 50,328 188,114 302,672 22,881 234,558 2,440,749 3,355,015 195,704	11,767 468,239 52,302 1,572,098 52,121 192,724 312,497 23,586 241,153 2,464,749 3,426,873 194,750	12,214 475,822 53,738 1,619,887 53,893 203,027 321,315 24,874 248,855 2,525,388 3,529,121 196,877	12,705 484,354 55,187 1,664,872 55,413 209,536 327,708 25,832 251,689 2,571,301 3,564,546 200,162	12,970 495,209 57,413 1,696,309 57,297 215,750 332,602 26,850 254,769 2,619,841 3,603,917 203,772	469,155 55,136 1,610,232 52,374 203,845 324,538 26,666 248,767 2,418,657 3,452,645 185,394	501,297 59,361 1,690,934 59,594 210,971 346,751 28,631 256,659 2,572,581 3,560,517 200,848	516,386 61,691 1,749,068 63,377 215,931 356,221 28,496 260,761 2,637,600 3,627,506 212,928	523,871 62,895 1,769,320 65,005 215,239 360,845 27,767 260,632 2,661,616 3,623,717 217,945
Belgium Bulgaria Canada Croatia Czechia Denmark Estonia Finland France Germany Greece Hungary	453,133 49,098 1,546,318 49,090 178,374 295,744 22,369 233,287 2,415,433 3,313,881 196,088 120,699	462,383 50,766 1,556,511 50,328 188,114 302,672 22,881 234,558 2,440,749 3,355,015 195,704 125,174	11,767 468,239 52,302 1,572,098 52,121 192,724 312,497 23,586 241,153 2,464,749 3,426,873 194,750 127,929	12,214 475,822 53,738 1,619,887 53,893 203,027 321,315 24,874 248,855 2,525,388 3,529,121 196,877 133,394	12,705 484,354 55,187 1,664,872 55,413 209,536 327,708 25,832 251,689 2,571,301 3,564,546 200,162 140,547	12,970 495,209 57,413 1,696,309 57,297 215,750 332,602 26,850 254,769 2,619,841 3,603,917 203,772 147,384	469,155 55,136 1,610,232 52,374 203,845 324,538 26,666 248,767 2,418,657 3,452,645 185,394 140,699	501,297 59,361 1,690,934 59,594 210,971 346,751 28,631 256,659 2,572,581 3,560,517 200,848 150,669	516,386 61,691 1,749,068 63,377 215,931 356,221 28,496 260,761 2,637,600 3,627,506 212,928 157,531	523,871 62,895 1,769,320 65,005 215,239 360,845 27,767 260,632 2,661,616 3,623,717 217,945 156,575
Belgium Bulgaria Canada Croatia Czechia Denmark Estonia Finland France Germany Greece Hungary Iceland	453,133 49,098 1,546,318 49,090 178,374 295,744 22,369 233,287 2,415,433 3,313,881 196,088 120,699 16,773	462,383 50,766 1,556,511 50,328 188,114 302,672 22,881 234,558 2,440,749 3,355,015 195,704 125,174 17,517	11,767 468,239 52,302 1,572,098 52,121 192,724 312,497 23,586 241,153 2,464,749 3,426,873 194,750 127,929 18,621	12,214 475,822 53,738 1,619,887 53,893 203,027 321,315 24,874 248,855 2,525,388 3,529,121 196,877 133,394 19,402	12,705 484,354 55,187 1,664,872 55,413 209,536 327,708 25,832 251,689 2,571,301 3,564,546 200,162 140,547 20,351	12,970 495,209 57,413 1,696,309 57,297 215,750 332,602 26,850 254,769 2,619,841 3,603,917 203,772 147,384 20,730	469,155 55,136 1,610,232 52,374 203,845 324,538 26,666 248,767 2,418,657 3,452,645 185,394 140,699 19,234	501,297 59,361 1,690,934 59,594 210,971 346,751 28,631 256,659 2,572,581 3,560,517 200,848 150,669 20,101	516,386 61,691 1,749,068 63,377 215,931 356,221 28,496 260,761 2,637,600 3,627,506 212,928 157,531 21,556	523,871 62,895 1,769,320 65,005 215,239 360,845 27,767 260,632 2,661,616 3,623,717 217,945 156,575 22,620
Belgium Bulgaria Canada Croatia Czechia Denmark Estonia Finland France Germany Greece Hungary	453,133 49,098 1,546,318 49,090 178,374 295,744 22,369 233,287 2,415,433 3,313,881 196,088 120,699	462,383 50,766 1,556,511 50,328 188,114 302,672 22,881 234,558 2,440,749 3,355,015 195,704 125,174 17,517 1,835,521	11,767 468,239 52,302 1,572,098 52,121 192,724 312,497 23,586 241,153 2,464,749 3,426,873 194,750 127,929 18,621 1,861,730	12,214 475,822 53,738 1,619,887 53,893 203,027 321,315 24,874 248,855 2,525,388 3,529,121 196,877 133,394 19,402 1,894,253	12,705 484,354 55,187 1,664,872 55,413 209,536 327,708 25,832 251,689 2,571,301 3,564,546 200,162 140,547 20,351 1,909,010	12,970 495,209 57,413 1,696,309 57,297 215,750 332,602 26,850 254,769 2,619,841 3,603,917 203,772 147,384 20,730 1,918,176	469,155 55,136 1,610,232 52,374 203,845 324,538 26,666 248,767 2,418,657 3,452,645 185,394 140,699 19,234 1,744,769	501,297 59,361 1,690,934 59,594 210,971 346,751 28,631 256,659 2,572,581 3,560,517 200,848 150,669 20,101 1,889,426	516,386 61,691 1,749,068 63,377 215,931 356,221 28,496 260,761 2,637,600 3,627,506 212,928 157,531 21,556 1,962,844	523,871 62,895 1,769,320 65,005 215,239 360,845 27,767 260,632 2,661,616 3,623,717 217,945 156,575 22,620 1,975,703
Belgium Bulgaria Canada Croatia Czechia Denmark Estonia Finland France Germany Greece Hungary Iceland Italy Latvia	453,133 49,098 1,546,318 49,090 178,374 295,744 22,369 233,287 2,415,433 3,313,881 196,088 120,699 16,773 1,823,987 26,246	462,383 50,766 1,556,511 50,328 188,114 302,672 22,881 234,558 2,440,749 3,355,015 195,704 125,174 17,517 1,835,521 27,266	11,767 468,239 52,302 1,572,098 52,121 192,724 312,497 23,586 241,153 2,464,749 3,426,873 194,750 127,929 18,621 1,861,730 27,912	12,214 475,822 53,738 1,619,887 53,893 203,027 321,315 24,874 248,855 2,525,388 3,529,121 196,877 133,394 19,402 1,894,253 28,836	12,705 484,354 55,187 1,664,872 55,413 209,536 327,708 25,832 251,689 2,571,301 3,564,546 200,162 140,547 20,351 1,909,010 29,987	12,970 495,209 57,413 1,696,309 57,297 215,750 332,602 26,850 254,769 2,619,841 3,603,917 203,772 147,384 20,730 1,918,176 30,163	469,155 55,136 1,610,232 52,374 203,845 324,538 26,666 248,767 2,418,657 3,452,645 185,394 140,699 19,234 1,744,769 29,103	501,297 59,361 1,690,934 59,594 210,971 346,751 28,631 256,659 2,572,581 3,560,517 200,848 150,669 20,101 1,889,426 31,062	516,386 61,691 1,749,068 63,377 215,931 356,221 28,496 260,761 2,637,600 3,627,506 212,928 157,531 21,556 1,962,844 32,106	523,871 62,895 1,769,320 65,005 215,239 360,845 27,767 260,632 2,661,616 3,623,717 217,945 156,575 22,620 1,975,703 32,068
Belgium Bulgaria Canada Croatia Czechia Denmark Estonia Finland France Germany Greece Hungary Iceland Italy Latvia Lithuania	453,133 49,098 1,546,318 49,090 178,374 295,744 22,369 233,287 2,415,433 3,313,881 196,088 120,699 16,773 1,823,987 26,246 40,617	462,383 50,766 1,556,511 50,328 188,114 302,672 22,881 234,558 2,440,749 3,355,015 195,704 125,174 17,517 1,835,521 27,266 41,440	11,767 468,239 52,302 1,572,098 52,121 192,724 312,497 23,586 241,153 2,464,749 3,426,873 194,750 127,929 18,621 1,861,730 27,912 42,484	12,214 475,822 53,738 1,619,887 53,893 203,027 321,315 24,874 248,855 2,525,388 3,529,121 196,877 133,394 19,402 1,894,253 28,836 44,303	12,705 484,354 55,187 1,664,872 55,413 209,536 327,708 25,832 251,689 2,571,301 3,564,546 200,162 140,547 20,351 1,909,010 29,987 46,072	12,970 495,209 57,413 1,696,309 57,297 215,750 332,602 26,850 254,769 2,619,841 3,603,917 203,772 147,384 20,730 1,918,176 30,163 48,222	469,155 55,136 1,610,232 52,374 203,845 324,538 26,666 248,767 2,418,657 3,452,645 185,394 140,699 19,234 1,744,769 29,103 48,210	501,297 59,361 1,690,934 59,594 210,971 346,751 28,631 256,659 2,572,581 3,560,517 200,848 150,669 20,101 1,889,426 31,062 51,240	516,386 61,691 1,749,068 63,377 215,931 356,221 28,496 260,761 2,637,600 3,627,506 212,928 157,531 21,556 1,962,844 32,106 52,490	523,871 62,895 1,769,320 65,005 215,239 360,845 27,767 260,632 2,661,616 3,623,717 217,945 156,575 22,620 1,975,703 32,068 52,264
Belgium Bulgaria Canada Croatia Czechia Denmark Estonia Finland France Germany Greece Hungary Iceland Italy Latvia Lithuania Luxembourg	453,133 49,098 1,546,318 49,090 178,374 295,744 22,369 233,287 2,415,433 3,313,881 196,088 120,699 16,773 1,823,987 26,246 40,617 58,865	462,383 50,766 1,556,511 50,328 188,114 302,672 22,881 234,558 2,440,749 3,355,015 195,704 125,174 17,517 1,835,521 27,266 41,440 60,207	11,767 468,239 52,302 1,572,098 52,121 192,724 312,497 23,586 241,153 2,464,749 3,426,873 194,750 127,929 18,621 1,861,730 27,912 42,484 63,211	12,214 475,822 53,738 1,619,887 53,893 203,027 321,315 24,874 248,855 2,525,388 3,529,121 196,877 133,394 19,402 1,894,253 28,836 44,303 64,048	12,705 484,354 55,187 1,664,872 55,413 209,536 327,708 25,832 251,689 2,571,301 3,564,546 200,162 140,547 20,351 1,909,010 29,987 46,072 64,847	12,970 495,209 57,413 1,696,309 57,297 215,750 332,602 26,850 254,769 2,619,841 3,603,917 203,772 147,384 20,730 1,918,176 30,163 48,222 66,741	469,155 55,136 1,610,232 52,374 203,845 324,538 26,666 248,767 2,418,657 3,452,645 185,394 140,699 19,234 1,744,769 29,103	501,297 59,361 1,690,934 59,594 210,971 346,751 28,631 256,659 2,572,581 3,560,517 200,848 150,669 20,101 1,889,426 31,062 51,240 70,883	516,386 61,691 1,749,068 63,377 215,931 356,221 28,496 260,761 2,637,600 3,627,506 212,928 157,531 21,556 1,962,844 32,106 52,490 71,883	523,871 62,895 1,769,320 65,005 215,239 360,845 27,767 260,632 2,661,616 3,623,717 217,945 156,575 22,620 1,975,703 32,068 52,264 48,191
Belgium Bulgaria Canada Croatia Czechia Denmark Estonia Finland France Germany Greece Hungary Iceland Italy Latvia Lithuania	453,133 49,098 1,546,318 49,090 178,374 295,744 22,369 233,287 2,415,433 3,313,881 196,088 120,699 16,773 1,823,987 26,246 40,617	462,383 50,766 1,556,511 50,328 188,114 302,672 22,881 234,558 2,440,749 3,355,015 195,704 125,174 17,517 1,835,521 27,266 41,440	11,767 468,239 52,302 1,572,098 52,121 192,724 312,497 23,586 241,153 2,464,749 3,426,873 194,750 127,929 18,621 1,861,730 27,912 42,484	12,214 475,822 53,738 1,619,887 53,893 203,027 321,315 24,874 248,855 2,525,388 3,529,121 196,877 133,394 19,402 1,894,253 28,836 44,303	12,705 484,354 55,187 1,664,872 55,413 209,536 327,708 25,832 251,689 2,571,301 3,564,546 200,162 140,547 20,351 1,909,010 29,987 46,072	12,970 495,209 57,413 1,696,309 57,297 215,750 332,602 26,850 254,769 2,619,841 3,603,917 203,772 147,384 20,730 1,918,176 30,163 48,222	469,155 55,136 1,610,232 52,374 203,845 324,538 26,666 248,767 2,418,657 3,452,645 185,394 140,699 19,234 1,744,769 29,103 48,210 66,152	501,297 59,361 1,690,934 59,594 210,971 346,751 28,631 256,659 2,572,581 3,560,517 200,848 150,669 20,101 1,889,426 31,062 51,240	516,386 61,691 1,749,068 63,377 215,931 356,221 28,496 260,761 2,637,600 3,627,506 212,928 157,531 21,556 1,962,844 32,106 52,490	523,871 62,895 1,769,320 65,005 215,239 360,845 27,767 260,632 2,661,616 3,623,717 217,945 156,575 22,620 1,975,703 32,068 52,264
Belgium Bulgaria Canada Croatia Czechia Denmark Estonia Finland France Germany Greece Hungary Iceland Italy Latvia Lithuania Luxembourg Montenegro	453,133 49,098 1,546,318 49,090 178,374 295,744 22,369 233,287 2,415,433 3,313,881 196,088 120,699 16,773 1,823,987 26,246 40,617 58,865 3,922	462,383 50,766 1,556,511 50,328 188,114 302,672 22,881 234,558 2,440,749 3,355,015 195,704 125,174 17,517 1,835,521 27,266 41,440 60,207 4,055	11,767 468,239 52,302 1,572,098 52,121 192,724 312,497 23,586 241,153 2,464,749 3,426,873 194,750 127,929 18,621 1,861,730 27,912 42,484 63,211 4,175	12,214 475,822 53,738 1,619,887 53,893 203,027 321,315 24,874 248,855 2,525,388 3,529,121 196,877 133,394 19,402 1,894,253 28,836 44,303 64,048 4,372	12,705 484,354 55,187 1,664,872 55,413 209,536 327,708 25,832 251,689 2,571,301 3,564,546 200,162 140,547 20,351 1,909,010 29,987 46,072 64,847 4,594	12,970 495,209 57,413 1,696,309 57,297 215,750 332,602 26,850 254,769 2,619,841 3,603,917 203,772 147,384 20,730 1,918,176 30,163 48,222 66,741 4,780	469,155 55,136 1,610,232 52,374 203,845 324,538 26,666 248,767 2,418,657 3,452,645 185,394 140,699 19,234 1,744,769 29,103 48,210 66,152 4,049	501,297 59,361 1,690,934 59,594 210,971 346,751 28,631 256,659 2,572,581 3,560,517 200,848 150,669 20,101 1,889,426 31,062 51,240 70,883 4,577	516,386 61,691 1,749,068 63,377 215,931 356,221 28,496 260,761 2,637,600 3,627,506 212,928 157,531 21,556 1,962,844 32,106 52,490 71,883 4,856	523,871 62,895 1,769,320 65,005 215,239 360,845 27,767 260,632 2,661,616 3,623,717 217,945 156,575 22,620 1,975,703 32,068 52,264 48,191 5,093
Belgium Bulgaria Canada Croatia Czechia Denmark Estonia Finland France Germany Greece Hungary Iceland Italy Latvia Lithuania Luxembourg Montenegro Netherlands	453,133 49,098 1,546,318 49,090 178,374 295,744 22,369 233,287 2,415,433 3,313,881 196,088 120,699 16,773 1,823,987 26,246 40,617 58,865 3,922 751,121	462,383 50,766 1,556,511 50,328 188,114 302,672 22,881 234,558 2,440,749 3,355,015 195,704 125,174 17,517 1,835,521 27,266 41,440 60,207 4,055 765,822	11,767 468,239 52,302 1,572,098 52,121 192,724 312,497 23,586 241,153 2,464,749 3,426,873 194,750 127,929 18,621 1,861,730 27,912 42,484 63,211 4,175 782,225	12,214 475,822 53,738 1,619,887 53,893 203,027 321,315 24,874 248,855 2,525,388 3,529,121 196,877 133,394 19,402 1,894,253 28,836 44,303 64,048 4,372 805,701	12,705 484,354 55,187 1,664,872 55,413 209,536 327,708 25,832 251,689 2,571,301 3,564,546 200,162 140,547 20,351 1,909,010 29,987 46,072 64,847 4,594 824,375	12,970 495,209 57,413 1,696,309 57,297 215,750 332,602 26,850 254,769 2,619,841 3,603,917 203,772 147,384 20,730 1,918,176 30,163 48,222 66,741 4,780 840,033	469,155 55,136 1,610,232 52,374 203,845 324,538 26,666 248,767 2,418,657 3,452,645 185,394 140,699 19,234 1,744,769 29,103 48,210 66,152 4,049 807,405	501,297 59,361 1,690,934 59,594 210,971 346,751 28,631 256,659 2,572,581 3,560,517 200,848 150,669 20,101 1,889,426 31,062 51,240 70,883 4,577 857,367	516,386 61,691 1,749,068 63,377 215,931 356,221 28,496 260,761 2,637,600 3,627,506 212,928 157,531 21,556 1,962,844 32,106 52,490 71,883 4,856 894,980	523,871 62,895 1,769,320 65,005 215,239 360,845 27,767 260,632 2,661,616 3,623,717 217,945 156,575 22,620 1,975,703 32,068 52,264 48,191 5,093 896,512
Belgium Bulgaria Canada Croatia Czechia Denmark Estonia Finland France Germany Greece Hungary Iceland Italy Latvia Lithuania Luxembourg Montenegro Netherlands North Macedonia	453,133 49,098 1,546,318 49,090 178,374 295,744 22,369 233,287 2,415,433 3,313,881 196,088 120,699 16,773 1,823,987 26,246 40,617 58,865 3,922 751,121 9,693	462,383 50,766 1,556,511 50,328 188,114 302,672 22,881 234,558 2,440,749 3,355,015 195,704 17,517 1,835,521 27,266 41,440 60,207 4,055 765,822 10,067	11,767 468,239 52,302 1,572,098 52,121 192,724 312,497 23,586 241,153 2,464,749 3,426,873 194,750 127,929 18,621 1,861,730 27,912 42,484 63,211 4,175 782,225 10,354	12,214 475,822 53,738 1,619,887 53,893 203,027 321,315 24,874 248,855 2,525,388 3,529,121 196,877 133,394 19,402 1,894,253 28,836 44,303 64,048 4,372 805,701 10,466	12,705 484,354 55,187 1,664,872 55,413 209,536 327,708 25,832 251,689 2,571,301 3,564,546 200,162 140,547 20,351 1,909,010 29,987 46,072 64,847 4,594 824,375 10,767	12,970 495,209 57,413 1,696,309 57,297 215,750 332,602 26,850 254,769 2,619,841 3,603,917 203,772 147,384 20,730 1,918,176 30,163 48,222 66,741 4,780 840,033 11,188	469,155 55,136 1,610,232 52,374 203,845 324,538 26,666 248,767 2,418,657 3,452,645 185,394 140,699 19,234 1,744,769 29,103 48,210 66,152 4,049 807,405 10,664	501,297 59,361 1,690,934 210,971 346,751 28,631 256,659 2,572,581 3,560,517 200,848 150,669 20,101 1,889,426 31,062 51,240 70,883 4,577 857,367 11,083	516,386 61,691 1,749,068 63,377 215,931 356,221 28,496 260,761 2,637,600 3,627,506 212,928 157,531 21,556 1,962,844 32,106 52,490 71,883 4,856 894,980 11,321	523,871 62,895 1,769,320 65,005 215,239 360,845 27,767 260,632 2,661,616 3,623,717 217,945 156,575 22,620 1,975,703 32,068 52,264 48,191 5,093 896,512 11,604
Belgium Bulgaria Canada Croatia Czechia Denmark Estonia Finland France Germany Greece Hungary Iceland Italy Latvia Lithuania Luxembourg Montenegro Netherlands Norway	453,133 49,098 1,546,318 49,090 178,374 295,744 22,369 233,287 2,415,433 3,313,881 196,088 120,699 16,773 1,823,987 26,246 40,617 58,865 3,922 751,121 9,693 381,082	462,383 50,766 1,556,511 50,328 188,114 302,672 22,881 234,558 2,440,749 3,355,015 195,704 125,174 17,517 1,835,521 27,266 41,440 60,207 4,055 765,822 10,067 388,160	11,767 468,239 52,302 1,572,098 52,121 192,724 312,497 23,586 241,153 2,464,749 3,426,873 194,750 127,929 18,621 1,861,730 27,912 42,484 63,211 4,175 782,225 10,354 392,681	12,214 475,822 53,738 1,619,887 53,893 203,027 321,315 24,874 248,855 2,525,388 3,529,121 196,877 133,394 19,402 1,894,253 28,836 44,303 64,048 4,372 805,701 10,466 402,355	12,705 484,354 55,187 1,664,872 55,413 209,536 327,708 25,832 251,689 2,571,301 3,564,546 200,162 140,547 20,351 1,909,010 29,987 46,072 64,847 4,594 824,375 10,767 405,691	12,970 495,209 57,413 1,696,309 57,297 215,750 332,602 26,850 254,769 2,619,841 3,603,917 203,772 147,384 20,730 1,918,176 30,163 48,222 66,741 4,780 840,033 11,188 410,250	469,155 55,136 1,610,232 52,374 203,845 324,538 26,666 248,767 2,418,657 3,452,645 185,394 140,699 19,234 1,744,769 29,103 48,210 66,152 4,049 807,405 10,664 405,006	501,297 59,361 1,690,934 210,971 346,751 28,631 256,659 2,572,581 3,560,517 200,848 150,669 20,101 1,889,426 31,062 51,240 70,883 4,577 857,367 11,083 420,795	516,386 61,691 1,749,068 63,377 215,931 356,221 28,496 260,761 2,637,600 3,627,506 212,928 157,531 21,556 1,962,844 32,106 52,490 71,883 4,856 894,980 11,321 434,586	523,871 62,895 1,769,320 65,005 215,239 360,845 27,767 260,632 2,661,616 3,623,717 217,945 156,575 22,620 1,975,703 32,068 52,264 48,191 5,093 896,512 11,604 440,020
Belgium Bulgaria Canada Croatia Czechia Denmark Estonia Finland France Germany Greece Hungary Iceland Italy Latvia Lithuania Luxembourg Montenegro Netherlands Norway Poland	453,133 49,098 1,546,318 49,090 178,374 295,744 22,369 233,287 2,415,433 3,313,881 196,088 120,699 16,773 1,823,987 26,246 40,617 58,865 3,922 751,121 9,693 381,082 456,286	462,383 50,766 1,556,511 50,328 188,114 302,672 22,881 234,558 2,440,749 3,355,015 195,704 125,174 17,517 1,835,521 27,266 41,440 60,207 4,055 765,822 10,067 388,160 475,859	11,767 468,239 52,302 1,572,098 52,121 192,724 312,497 23,586 241,153 2,464,749 3,426,873 194,750 127,929 18,621 1,861,730 27,912 42,484 63,211 4,175 782,225 10,354 392,681 490,653	12,214 475,822 53,738 1,619,887 53,893 203,027 321,315 24,874 248,855 2,525,388 3,529,121 196,877 133,394 19,402 1,894,253 28,836 44,303 64,048 4,372 805,701 10,466 402,355 516,213	12,705 484,354 55,187 1,664,872 55,413 209,536 327,708 25,832 251,689 2,571,301 3,564,546 200,162 140,547 20,351 1,909,010 29,987 46,072 64,847 4,594 824,375 10,767 405,691 546,502	12,970 495,209 57,413 1,696,309 57,297 215,750 332,602 26,850 254,769 2,619,841 3,603,917 203,772 147,384 20,730 1,918,176 30,163 48,222 66,741 4,780 840,033 11,188 410,250 570,463	469,155 55,136 1,610,232 52,374 203,845 324,538 26,666 248,767 2,418,657 3,452,645 185,394 140,699 19,234 1,744,769 29,103 48,210 66,152 4,049 807,405 10,664 405,006 558,873	501,297 59,361 1,690,934 59,594 210,971 346,751 28,631 256,659 2,572,581 3,560,517 200,848 150,669 20,101 1,889,426 31,062 51,240 70,883 4,577 857,367 11,083 420,795 597,091	516,386 61,691 1,749,068 63,377 215,931 356,221 28,496 260,761 2,637,600 3,627,506 212,928 157,531 21,556 1,962,844 32,106 52,490 71,883 4,856 894,980 11,321 434,586 630,300	523,871 62,895 1,769,320 65,005 215,239 360,845 27,767 260,632 2,661,616 3,623,717 217,945 156,575 22,620 1,975,703 32,068 52,264 48,191 5,093 896,512 11,604 440,020 632,915
Belgium Bulgaria Canada Croatia Czechia Denmark Estonia Finland France Germany Greece Hungary Iceland Italy Latvia Lithuania Luxembourg Montenegro Netherlands Norway Poland Portugal	453,133 49,098 1,546,318 49,090 178,374 295,744 22,369 233,287 2,415,433 3,313,881 196,088 120,699 16,773 1,823,987 26,246 40,617 58,865 3,922 751,121 9,693 381,082 456,286 195,904	462,383 50,766 1,556,511 50,328 188,114 302,672 22,881 234,558 2,440,749 3,355,015 195,704 17,517 1,835,521 27,266 41,440 60,207 4,055 765,822 10,067 388,160 475,859 199,415	11,767 468,239 52,302 1,572,098 52,121 192,724 312,497 23,586 241,153 2,464,749 3,426,873 194,750 127,929 18,621 1,861,730 27,912 42,484 63,211 4,175 782,225 10,354 392,681 490,653 203,442	12,214 475,822 53,738 1,619,887 53,893 203,027 321,315 24,874 248,855 2,525,388 3,529,121 196,877 133,394 19,402 1,894,253 28,836 44,303 64,048 4,372 805,701 10,466 402,355 516,213 210,575	12,705 484,354 55,187 1,664,872 55,413 209,536 327,708 25,832 251,689 2,571,301 3,564,546 200,162 140,547 20,351 1,909,010 29,987 46,072 64,847 4,594 824,375 10,767 405,691 546,502 216,575	12,970 495,209 57,413 1,696,309 57,297 215,750 332,602 26,850 254,769 2,619,841 3,603,917 203,772 147,384 20,730 1,918,176 30,163 48,222 66,741 4,780 840,033 11,188 410,250 570,463 222,385	469,155 55,136 1,610,232 52,374 203,845 324,538 26,666 248,767 2,418,657 3,452,645 185,394 140,699 19,234 1,744,769 29,103 48,210 66,152 4,049 807,405 10,664 405,006 558,873 203,926	501,297 59,361 1,690,934 59,594 210,971 346,751 28,631 256,659 2,572,581 3,560,517 200,848 150,669 20,101 1,889,426 31,062 51,240 70,883 4,577 857,367 11,083 420,795 597,091 215,626	516,386 61,691 1,749,068 63,377 215,931 356,221 28,496 260,761 2,637,600 3,627,506 212,928 157,531 21,556 1,962,844 32,106 52,490 71,883 4,856 894,980 11,321 434,586 630,300 230,348	523,871 62,895 1,769,320 65,005 215,239 360,845 27,767 260,632 2,661,616 3,623,717 217,945 156,575 22,620 1,975,703 32,068 52,264 48,191 5,093 896,512 11,604 440,020 632,915 235,301
Belgium Bulgaria Canada Croatia Czechia Denmark Estonia Finland France Germany Greece Hungary Iceland Italy Latvia Lithuania Luxembourg Montenegro Netherlands North Macedonia Norway Poland Portugal Romania	453,133 49,098 1,546,318 49,090 178,374 295,744 22,369 233,287 2,415,433 3,313,881 196,088 120,699 16,773 1,823,987 26,246 40,617 58,865 3,922 751,121 9,693 381,082 456,286 195,904 172,434	462,383 50,766 1,556,511 50,328 188,114 302,672 22,881 234,558 2,440,749 3,355,015 195,704 125,174 17,517 1,835,521 27,266 41,440 60,207 4,055 765,822 10,067 388,160 475,859 199,415 177,884	11,767 468,239 52,302 1,572,098 52,121 192,724 312,497 23,586 241,153 2,464,749 3,426,873 194,750 127,929 18,621 1,861,730 27,912 42,484 63,211 4,175 782,225 10,354 392,681 490,653 203,442 182,967	12,214 475,822 53,738 1,619,887 53,893 203,027 321,315 24,874 248,855 2,525,388 3,529,121 196,877 133,394 19,402 1,894,253 28,836 44,303 64,048 4,372 805,701 10,466 402,355 516,213 210,575 197,964	12,705 484,354 55,187 1,664,872 55,413 209,536 327,708 25,832 251,689 2,571,301 3,564,546 200,162 140,547 20,351 1,909,010 29,987 46,072 64,847 4,594 824,375 10,767 405,691 546,502 216,575 209,899	12,970 495,209 57,413 1,696,309 57,297 215,750 332,602 26,850 254,769 2,619,841 3,603,917 203,772 147,384 20,730 1,918,176 30,163 48,222 66,741 4,780 840,033 11,188 410,250 570,463 222,385 217,987	469,155 55,136 1,610,232 52,374 203,845 324,538 26,666 248,767 2,418,657 3,452,645 185,394 140,699 19,234 1,744,769 29,103 48,210 66,152 4,049 807,405 10,664 405,006 558,873 203,926 209,971	501,297 59,361 1,690,934 59,594 210,971 346,751 28,631 256,659 2,572,581 3,560,517 200,848 150,669 20,101 1,889,426 31,062 51,240 70,883 4,577 857,367 11,083 420,795 597,091 215,626 221,958	516,386 61,691 1,749,068 63,377 215,931 356,221 28,496 260,761 2,637,600 3,627,506 212,928 157,531 21,556 1,962,844 32,106 52,490 71,883 4,856 894,980 11,321 434,586 630,300 230,348 232,157	523,871 62,895 1,769,320 65,005 215,239 360,845 27,767 260,632 2,661,616 3,623,717 217,945 156,575 22,620 1,975,703 32,068 52,264 48,191 5,093 896,512 11,604 440,020 632,915 235,301 237,288
Belgium Bulgaria Canada Croatia Czechia Denmark Estonia Finland France Germany Greece Hungary Iceland Italy Latvia Lithuania Luxembourg Montenegro Netherlands North Macedonia Norway Poland Portugal Romania Slovak Republic	453,133 49,098 1,546,318 49,090 178,374 295,744 22,369 233,287 2,415,433 3,313,881 196,088 120,699 16,773 1,823,987 26,246 40,617 58,865 3,922 751,121 9,693 381,082 456,286 195,904 172,434 84,542	462,383 50,766 1,556,511 50,328 188,114 302,672 22,881 234,558 2,440,749 3,355,015 195,704 125,174 17,517 1,835,521 27,266 41,440 60,207 4,055 765,822 10,067 388,160 475,859 199,415 177,884 88,910	11,767 468,239 52,302 1,572,098 52,121 192,724 312,497 23,586 241,153 2,464,749 3,426,873 194,750 127,929 18,621 1,861,730 27,912 42,484 63,211 4,175 782,225 10,354 392,681 490,653 203,442 182,967 90,638	12,214 475,822 53,738 1,619,887 53,893 203,027 321,315 24,874 248,855 2,525,388 3,529,121 196,877 133,394 19,402 1,894,253 28,836 44,303 64,048 4,372 805,701 10,466 402,355 516,213 210,575 197,964 93,301	12,705 484,354 55,187 1,664,872 55,413 209,536 327,708 25,832 251,689 2,571,301 3,564,546 200,162 140,547 20,351 1,909,010 29,987 46,072 64,847 4,594 824,375 10,767 405,691 546,502 216,575 209,899 97,062	12,970 495,209 57,413 1,696,309 57,297 215,750 332,602 26,850 254,769 2,619,841 3,603,917 203,772 147,384 20,730 1,918,176 30,163 48,222 66,741 4,780 840,033 11,188 410,250 570,463 222,385 217,987 99,499	469,155 55,136 1,610,232 52,374 203,845 324,538 26,666 248,767 2,418,657 3,452,645 185,394 140,699 19,234 1,744,769 29,103 48,210 66,152 4,049 807,405 10,664 405,006 558,873 203,926 209,971 96,180	501,297 59,361 1,690,934 210,971 346,751 28,631 256,659 2,572,581 3,560,517 200,848 150,669 20,101 1,889,426 31,062 51,240 70,883 4,577 857,367 11,083 420,795 597,091 215,626 221,958 100,787	516,386 61,691 1,749,068 63,377 215,931 356,221 28,496 260,761 2,637,600 3,627,506 212,928 157,531 21,556 1,962,844 32,106 52,490 71,883 4,856 894,980 11,321 434,586 630,300 230,348 232,157 102,551	523,871 62,895 1,769,320 65,005 215,239 360,845 27,767 260,632 2,661,616 3,623,717 217,945 156,575 22,620 1,975,703 32,068 52,264 48,191 5,093 896,512 11,604 440,020 632,915 235,301 237,288 103,675
Belgium Bulgaria Canada Croatia Czechia Denmark Estonia Finland France Germany Greece Hungary Iceland Italy Latvia Lithuania Luxembourg Montenegro Netherlands North Macedonia Norway Poland Portugal Romania Slovak Republic Slovenia	453,133 49,098 1,546,318 49,090 178,374 295,744 22,369 233,287 2,415,433 3,313,881 196,088 120,699 16,773 1,823,987 26,246 40,617 58,865 3,922 751,121 9,693 381,082 456,286 195,904 172,434 84,542 42,180	462,383 50,766 1,556,511 50,328 188,114 302,672 22,881 234,558 2,440,749 3,355,015 195,704 125,174 17,517 1,835,521 27,266 41,440 60,207 4,055 765,822 10,067 388,160 475,859 199,415 177,884 88,910 43,112 1,196,280 864,071	11,767 468,239 52,302 1,572,098 52,121 192,724 312,497 23,586 241,153 2,464,749 3,426,873 194,750 127,929 18,621 1,861,730 27,912 42,484 63,211 4,175 782,225 10,354 392,681 490,653 203,442 182,967 90,638 44,488 1,232,620 892,785	12,214 475,822 53,738 1,619,887 53,893 203,027 321,315 24,874 248,855 2,525,388 3,529,121 196,877 133,394 19,402 1,894,253 28,836 44,303 64,048 4,372 805,701 10,466 402,355 516,213 210,575 197,964 93,301 46,630	12,705 484,354 55,187 1,664,872 55,413 209,536 327,708 25,832 251,689 2,571,301 3,564,546 200,162 140,547 20,351 1,909,010 29,987 46,072 64,847 4,594 824,375 10,767 405,691 546,502 216,575 209,899 97,062 48,707	12,970 495,209 57,413 1,696,309 57,297 215,750 332,602 26,850 254,769 2,619,841 3,603,917 203,772 147,384 20,730 1,918,176 30,163 48,222 66,741 4,780 840,033 11,188 410,250 570,463 222,385 217,987 99,499 50,423	469,155 55,136 1,610,232 52,374 203,845 324,538 26,666 248,767 2,418,657 3,452,645 185,394 140,699 19,234 1,744,769 29,103 48,210 66,152 4,049 807,405 10,664 405,006 558,873 203,926 209,971 96,180 48,285	501,297 59,361 1,690,934 59,594 210,971 346,751 28,631 256,659 2,572,581 3,560,517 200,848 150,669 20,101 1,889,426 31,062 51,240 70,883 4,577 857,367 11,083 420,795 597,091 215,626 221,958 100,787 52,258	516,386 61,691 1,749,068 63,377 215,931 356,221 28,496 260,761 2,637,600 3,627,506 212,928 157,531 21,556 1,962,844 32,106 52,490 71,883 4,856 894,980 11,321 434,586 630,300 230,348 232,157 102,551 53,544	523,871 62,895 1,769,320 65,005 215,239 360,845 27,767 260,632 2,661,616 3,623,717 217,945 156,575 22,620 1,975,703 32,068 52,264 48,191 5,093 896,512 11,604 440,020 632,915 235,301 237,288 103,675 54,268
Belgium Bulgaria Canada Croatia Czechia Denmark Estonia Finland France Germany Greece Hungary Iceland Italy Latvia Lithuania Luxembourg Montenegro Netherlands North Macedonia Norway Poland Portugal Romania Slovak Republic Slovenia Spain	453,133 49,098 1,546,318 49,090 178,374 295,744 22,369 233,287 2,415,433 3,313,881 196,088 120,699 16,773 1,823,987 26,246 40,617 58,865 3,922 751,121 9,693 381,082 456,286 195,904 172,434 84,542 42,180 1,152,057	462,383 50,766 1,556,511 50,328 188,114 302,672 22,881 234,558 2,440,749 3,355,015 195,704 125,174 17,517 1,835,521 27,266 41,440 60,207 4,055 765,822 10,067 388,160 475,859 199,415 177,884 88,910 43,112 1,196,280	11,767 468,239 52,302 1,572,098 52,121 192,724 312,497 23,586 241,153 2,464,749 3,426,873 194,750 127,929 18,621 1,861,730 27,912 42,484 63,211 4,175 782,225 10,354 392,681 490,653 203,442 182,967 90,638 44,488 1,232,620	12,214 475,822 53,738 1,619,887 53,893 203,027 321,315 24,874 248,855 2,525,388 3,529,121 196,877 133,394 19,402 1,894,253 28,836 44,303 64,048 4,372 805,701 10,466 402,355 516,213 210,575 197,964 93,301 46,630 1,269,299	12,705 484,354 55,187 1,664,872 55,413 209,536 327,708 25,832 251,689 2,571,301 3,564,546 200,162 140,547 20,351 1,909,010 29,987 46,072 64,847 4,594 824,375 10,767 405,691 546,502 216,575 209,899 97,062 48,707 1,298,296	12,970 495,209 57,413 1,696,309 57,297 215,750 332,602 26,850 254,769 2,619,841 3,603,917 203,772 147,384 20,730 1,918,176 30,163 48,222 66,741 4,780 840,033 11,188 410,250 570,463 222,385 217,987 99,499 50,423 1,324,054	469,155 55,136 1,610,232 52,374 203,845 324,538 26,666 248,767 2,418,657 3,452,645 185,394 140,699 19,234 1,744,769 29,103 48,210 66,152 4,049 807,405 10,664 405,006 558,873 203,926 209,971 96,180 48,285 1,176,192	501,297 59,361 1,690,934 59,594 210,971 346,751 28,631 256,659 2,572,581 3,560,517 200,848 150,669 20,101 1,889,426 31,062 51,240 70,883 4,577 857,367 11,083 420,795 597,091 215,626 221,958 100,787 52,258 1,251,506	516,386 61,691 1,749,068 63,377 215,931 356,221 28,496 260,761 2,637,600 3,627,506 212,928 157,531 21,556 1,962,844 32,106 52,490 71,883 4,856 894,980 11,321 434,586 630,300 230,348 232,157 102,551 53,544 1,323,728	523,871 62,895 1,769,320 65,005 215,239 360,845 27,767 260,632 2,661,616 3,623,717 217,945 156,575 22,620 1,975,703 32,068 52,264 48,191 5,093 896,512 11,604 440,020 632,915 235,301 237,288 103,675 54,268 1,355,605
Belgium Bulgaria Canada Croatia Czechia Denmark Estonia Finland France Germany Greece Hungary Iceland Italy Latvia Lithuania Luxembourg Montenegro Netherlands North Macedonia Norway Poland Portugal Romania Slovak Republic Slovenia Spain Türkiye	453,133 49,098 1,546,318 49,090 178,374 295,744 22,369 233,287 2,415,433 3,313,881 196,088 120,699 16,773 1,823,987 26,246 40,617 58,865 3,922 751,121 9,693 381,082 456,286 195,904 172,434 84,542 42,180 1,152,057 814,513	462,383 50,766 1,556,511 50,328 188,114 302,672 22,881 234,558 2,440,749 3,355,015 195,704 125,174 17,517 1,835,521 27,266 41,440 60,207 4,055 765,822 10,067 388,160 475,859 199,415 177,884 88,910 43,112 1,196,280 864,071	11,767 468,239 52,302 1,572,098 52,121 192,724 312,497 23,586 241,153 2,464,749 3,426,873 194,750 127,929 18,621 1,861,730 27,912 42,484 63,211 4,175 782,225 10,354 392,681 490,653 203,442 182,967 90,638 44,488 1,232,620 892,785	12,214 475,822 53,738 1,619,887 53,893 203,027 321,315 24,874 248,855 2,525,388 3,529,121 196,877 133,394 19,402 1,894,253 28,836 44,303 64,048 4,372 805,701 10,466 402,355 516,213 210,575 197,964 93,301 46,630 1,269,299 959,762	12,705 484,354 55,187 1,664,872 55,413 209,536 327,708 25,832 251,689 2,571,301 3,564,546 200,162 140,547 20,351 1,909,010 29,987 46,072 64,847 4,594 824,375 10,767 405,691 546,502 216,575 209,899 97,062 48,707 1,298,296 988,681	12,970 495,209 57,413 1,696,309 57,297 215,750 332,602 26,850 254,769 2,619,841 3,603,917 203,772 147,384 20,730 1,918,176 30,163 48,222 66,741 4,780 840,033 11,188 410,250 570,463 222,385 217,987 99,499 50,423 1,324,054 996,774	469,155 55,136 1,610,232 52,374 203,845 324,538 26,666 248,767 2,418,657 3,452,645 185,394 140,699 19,234 1,744,769 29,103 48,210 66,152 4,049 807,405 10,664 405,006 558,873 203,926 209,971 96,180 48,285 1,176,192 1,015,313	501,297 59,361 1,690,934 59,594 210,971 346,751 28,631 256,659 2,572,581 3,560,517 200,848 150,669 20,101 1,889,426 31,062 51,240 70,883 4,577 857,367 11,083 420,795 597,091 215,626 221,958 100,787 52,258 1,251,506 1,131,458	516,386 61,691 1,749,068 63,377 215,931 356,221 28,496 260,761 2,637,600 3,627,506 212,928 157,531 21,556 1,962,844 32,106 52,490 71,883 4,856 894,980 11,321 434,586 630,300 230,348 232,157 102,551 53,544 1,323,728 1,194,067	523,871 62,895 1,769,320 65,005 215,239 360,845 27,767 260,632 2,661,616 3,623,717 217,945 156,575 22,620 1,975,703 32,068 52,264 48,191 5,093 896,512 11,604 440,020 632,915 235,301 237,288 103,675 54,268 1,355,605 1,247,348
Belgium Bulgaria Canada Croatia Czechia Denmark Estonia Finland France Germany Greece Hungary Iceland Italy Latvia Lithuania Luxembourg Montenegro Netherlands North Macedonia Norway Poland Portugal Romania Slovak Republic Slovenia Spain Türkiye United Kingdom United States NATO Europe and Canada	453,133 49,098 1,546,318 49,090 178,374 295,744 22,369 233,287 2,415,433 3,313,881 196,088 120,699 16,773 1,823,987 26,246 40,617 58,865 3,922 751,121 9,693 381,082 456,286 195,904 172,434 84,542 42,180 1,152,057 814,513 2,864,948 17,771,549 17,532,922	462,383 50,766 1,556,511 50,328 188,114 302,672 22,881 234,558 2,440,749 3,355,015 195,704 125,174 17,517 1,835,521 27,266 41,440 60,207 4,055 765,822 10,067 388,160 475,859 199,415 177,884 88,910 43,112 1,196,280 864,071 2,928,557 18,295,019 17,871,705	11,767 468,239 52,302 1,572,098 52,121 192,724 312,497 23,586 241,153 2,464,749 3,426,873 194,750 127,929 18,621 1,861,730 27,912 42,484 63,211 4,175 782,225 10,354 392,681 490,653 203,442 182,967 90,638 44,488 1,232,620 892,785 2,984,816 18,627,888 18,210,909	12,214 475,822 53,738 1,619,887 53,893 203,027 321,315 24,874 248,855 2,525,388 3,529,121 196,877 133,394 19,402 1,894,253 28,836 44,303 64,048 4,372 805,701 10,466 402,355 516,213 210,575 197,964 93,301 46,630 1,269,299 959,762 3,064,065 19,085,692 18,770,632	12,705 484,354 55,187 1,664,872 55,413 209,536 327,708 25,832 251,689 2,571,301 3,564,546 200,162 140,547 20,351 1,909,010 29,987 46,072 64,847 4,594 824,375 10,767 405,691 546,502 216,575 209,899 97,062 48,707 1,298,296 988,681 3,107,078 19,651,868 19,129,891	12,970 495,209 57,413 1,696,309 57,297 215,750 332,602 26,850 254,769 2,619,841 3,603,917 203,772 147,384 20,730 1,918,176 30,163 48,222 66,741 4,780 840,033 11,188 410,250 570,463 222,385 217,987 99,499 50,423 1,324,054 996,774 3,158,084 20,136,688 19,448,079	469,155 55,136 1,610,232 52,374 203,845 324,538 26,666 248,767 2,418,657 3,452,645 185,394 140,699 19,234 1,744,769 29,103 48,210 66,152 4,049 807,405 10,664 405,006 558,873 203,926 209,971 96,180 48,285 1,176,192 1,015,313 2,830,910 19,690,969 18,226,123	501,297 59,361 1,690,934 59,594 210,971 346,751 28,631 256,659 2,572,581 3,560,517 200,848 150,669 20,101 1,889,426 31,062 51,240 70,883 4,577 857,367 11,083 420,795 597,091 215,626 221,958 100,787 52,258 1,251,506 1,131,458 3,076,489 20,833,086 19,399,518	516,386 61,691 1,749,068 63,377 215,931 356,221 28,496 260,761 2,637,600 3,627,506 212,928 157,531 21,556 1,962,844 32,106 52,490 71,883 4,856 894,980 11,321 434,586 630,300 230,348 232,157 102,551 53,544 1,323,728 1,194,067 3,210,210 21,236,308 20,104,578	523,871 62,895 1,769,320 65,005 215,239 360,845 27,767 260,632 2,661,616 3,623,717 217,945 156,575 22,620 1,975,703 32,068 52,264 48,191 5,093 896,512 11,604 440,020 632,915 237,288 103,675 54,268 1,355,605 1,247,348 3,227,282 21,737,531 20,537,999
Belgium Bulgaria Canada Croatia Czechia Denmark Estonia Finland France Germany Greece Hungary Iceland Italy Latvia Lithuania Luxembourg Montenegro Netherlands North Macedonia Norway Poland Portugal Romania Slovak Republic Slovenia Spain Türkiye United Kingdom United States	453,133 49,098 1,546,318 49,090 178,374 295,744 22,369 233,287 2,415,433 3,313,881 196,088 120,699 16,773 1,823,987 26,246 40,617 58,865 3,922 751,121 9,693 381,082 456,286 195,904 172,434 84,542 42,180 1,152,057 814,513 2,864,948 17,771,549	462,383 50,766 1,556,511 50,328 188,114 302,672 22,881 234,558 2,440,749 3,355,015 195,704 125,174 17,517 1,835,521 27,266 41,440 60,207 4,055 765,822 10,067 388,160 475,859 199,415 177,884 88,910 43,112 1,196,280 864,071 2,928,557 18,295,019	11,767 468,239 52,302 1,572,098 52,121 192,724 312,497 23,586 241,153 2,464,749 3,426,873 194,750 127,929 18,621 1,861,730 27,912 42,484 63,211 4,175 782,225 10,354 392,681 490,653 203,442 182,967 90,638 44,488 1,232,620 892,785 2,984,816 18,627,888	12,214 475,822 53,738 1,619,887 53,893 203,027 321,315 24,874 248,855 2,525,388 3,529,121 196,877 133,394 19,402 1,894,253 28,836 44,303 64,048 4,372 805,701 10,466 402,355 516,213 210,575 197,964 93,301 46,630 1,269,299 959,762 3,064,065 19,085,692	12,705 484,354 55,187 1,664,872 55,413 209,536 327,708 25,832 251,689 2,571,301 3,564,546 200,162 140,547 20,351 1,909,010 29,987 46,072 64,847 4,594 824,375 10,767 405,691 546,502 216,575 209,899 97,062 48,707 1,298,296 988,681 3,107,078 19,651,868	12,970 495,209 57,413 1,696,309 57,297 215,750 332,602 26,850 254,769 2,619,841 3,603,917 203,772 147,384 20,730 1,918,176 30,163 48,222 66,741 4,780 840,033 11,188 410,250 570,463 222,385 217,987 99,499 50,423 1,324,054 996,774 3,158,084 20,136,688	469,155 55,136 1,610,232 52,374 203,845 324,538 26,666 248,767 2,418,657 3,452,645 185,394 140,699 19,234 1,744,769 29,103 48,210 66,152 4,049 807,405 10,664 405,006 558,873 203,926 209,971 96,180 48,285 1,176,192 1,015,313 2,830,910 19,690,969	501,297 59,361 1,690,934 59,594 210,971 346,751 28,631 256,659 2,572,581 3,560,517 200,848 150,669 20,101 1,889,426 31,062 51,240 70,883 4,577 857,367 11,083 420,795 597,091 215,626 221,958 100,787 52,258 1,251,506 1,131,458 3,076,489 20,833,086	516,386 61,691 1,749,068 63,377 215,931 356,221 28,496 260,761 2,637,600 3,627,506 212,928 157,531 21,556 1,962,844 32,106 52,490 71,883 4,856 894,980 11,321 434,586 630,300 230,348 232,157 102,551 53,544 1,323,728 1,194,067 3,210,210 21,236,308	523,871 62,895 1,769,320 65,005 215,239 360,845 27,767 260,632 2,661,616 3,623,717 217,945 156,575 22,620 1,975,703 32,068 52,264 48,191 5,093 896,512 11,604 440,020 632,915 235,301 237,288 103,675 54,268 1,355,605 1,247,348 3,227,282 21,737,531

Notes: Figures for 2023 are estimates. The NATO Europe and Canada and NATO Total aggregates from 2017 onwards include Montenegro, which became an Ally on 5 June 2017, from 2020 onwards include North Macedonia, which became an Ally on 27 March 2020, and from 2023 onwards include Finland, which became an Ally on 4 April 2023.

Table 6: GDP per capita and defence expenditure per capita (2015 prices and exchange rates)

Country	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023e
•				ta (thousand						
Albania	3.9	4.0	4.1	4.3	4.4	4.5	4.4	4.9	5.2	5.4
Belgium	40.4	41.0	41.3	41.8	42.4	43.1	40.6	43.2	44.2	44.5
Bulgaria	6.8	7.1	7.3	7.6	7.9	8.2	8.0	8.6	9.5	9.7
Canada	43.6	43.6	43.5	44.3	44.9	45.1	42.4	44.2	44.9	44.6
Croatia	11.6	12.0	12.5	13.0	13.5	14.1	12.9	15.1	16.2	16.7
Czechia	16.9	17.8	18.2	19.2	19.7	20.2	19.1	19.7	20.2	20.0
Denmark	52.4	53.3	54.5	55.7	56.6	57.2	55.7	59.2	60.3	60.7
Estonia	17.0	17.4	17.9	18.9	19.6	20.3	20.1	21.5	21.4	20.3
Finland	42.7	42.8	43.9	45.2	45.6	46.1	45.0	46.3	46.9	46.7
France	36.4	36.7	36.9	37.6	38.1	38.7	35.6	37.7	38.5	38.7
Germany	40.9	41.1	41.6	42.7	43.0	43.4	41.5	42.8	43.3	43.0
Greece	18.0	18.1	18.1	18.3	18.6	19.0	17.3	18.9	20.1	20.7
Hungary	12.2	12.7	13.0	13.6	14.4	15.1	14.4	15.5	16.3	16.2
Iceland	51.2	53.0	55.5	56.5	57.7	57.5	52.5	54.0	56.7	58.3
Italy	30.2	30.5	31.0	31.6	31.9	32.1	29.4	32.0	33.3	33.5
Latvia	13.2	13.8	14.2	14.9	15.6	15.8	15.3	16.5	17.0	17.1
Lithuania	13.9	14.3	14.8	15.7	16.4	17.3	17.2	18.2	18.5	18.5
Luxembourg	105.4	105.7	108.2	107.3	106.5	107.4	104.8	110.6	109.7	72.1
Montenegro	6.3	6.5	6.7	7.0	7.4	7.7	6.5	7.4	7.9	8.3
Netherlands	44.5	45.2	45.9	47.0	47.8	48.4	46.3	48.9	50.6	50.2
North Macedonia	4.7	4.9	5.0	5.0	5.2	5.4	5.1	5.7	5.9	5.6
Norway	74.2	74.8	75.0	76.2	76.4	76.7	75.3	77.8	79.6	80.3
Poland	11.9	12.4	12.8	13.4	14.2	14.9	14.6	15.6	16.7	16.7
Portugal	18.8	19.3	19.7	20.4	21.1	21.6	19.8	20.9	22.4	22.8
Romania	8.7	9.0	9.3	10.1	10.8	11.2	10.9	11.6	12.2	12.5
Slovak Republic	15.6	16.4	16.7	17.2	17.8	18.2	17.6	18.5	18.7	18.9
Slovenia	20.5	20.9	21.5	22.6	23.5	24.1	23.0	24.8	25.4	25.7
Spain	24.8	25.8	26.5	27.3	27.8	28.1	24.8	26.4	27.8	28.2
Türkiye	10.6	11.0	11.3	12.0	12.1	12.1	12.2	13.4	14.0	14.4
United Kingdom	44.4	45.0	45.5	46.4	46.8	47.3	42.2	45.9	47.4	47.3
United States	55.6	56.8	57.4	58.4	59.8	60.9	59.4	62.7	63.7	64.9
NATO Europe and Canada	29.3	29.7	30.1	30.9	31.4	31.7	29.5	31.4	32.4	32.6
NATO T 4 1										
NATO Total	38.4	39.1	39.7	40.5	41.3	42.0	40.0	42.4	43.4	43.8
NATO Total	38.4			40.5 ture per cap			40.0	42.4	43.4	43.8
NATO Total  Albania	<b>38.4</b> 52						<b>40.0</b> 57	<b>42.4</b> 60	<b>43.4</b> 62	<b>43.8</b> 93
		Defen	ce expendi	ture per cap	oita (US dol	lars)				
Albania	52	Defen 46	<b>ce expendi</b> 45	ture per cap	oita (US dol	<b>lars)</b> 58	57	60	62	93
Albania Belgium Bulgaria Canada	52 393 89 439	Defen 46 373 88 523	<b>ce expendi</b> 45 370 91 505	47 370 93 637	51 378 114 583	58 383 258 584	57 411 127 600	60 449 131 564	62 522 152 544	93 537 181 591
Albania Belgium Bulgaria	52 393 89	<b>Defen</b> 46 373 88	<b>ce expendi</b> 45 370 91	47 370 93	51 378 114	58 383 258	57 411 127	60 449 131	62 522 152	93 537 181
Albania Belgium Bulgaria Canada Croatia Czechia	52 393 89 439 210 160	Defen 46 373 88 523 210 182	ce expendii 45 370 91 505 199 173	47 370 93 637 214	51 378 114 583 210 218	58 383 258 584 226 239	57 411 127 600 220 248	60 449 131 564 297 274	62 522 152 544 291 271	93 537 181 591 291 305
Albania Belgium Bulgaria Canada Croatia Czechia Denmark	52 393 89 439 210 160 602	Defen 46 373 88 523 210 182 592	ce expendi 45 370 91 505 199 173 626	47 370 93 637 214 198 634	51 378 114 583 210 218 723	58 383 258 584 226 239 740	57 411 127 600 220 248 767	60 449 131 564 297 274 770	62 522 152 544 291 271 825	93 537 181 591 291 305 1,208
Albania Belgium Bulgaria Canada Croatia Czechia Denmark Estonia	52 393 89 439 210 160 602 328	Defen 46 373 88 523 210 182 592 353	ce expendit 45 370 91 505 199 173 626 371	47 370 93 637 214 198 634 381	51 378 114 583 210 218 723 394	58 383 258 584 226 239 740 413	57 411 127 600 220 248 767 461	60 449 131 564 297 274 770 438	62 522 152 544 291 271 825 462	93 537 181 591 291 305 1,208 587
Albania Belgium Bulgaria Canada Croatia Czechia Denmark Estonia Finland	52 393 89 439 210 160 602 328 620	Defen 46 373 88 523 210 182 592 353 621	ce expendit 45 370 91 505 199 173 626 371 623	47 370 93 637 214 198 634 381 625	51 378 114 583 210 218 723 394 633	58 383 258 584 226 239 740 413 670	57 411 127 600 220 248 767 461 688	60 449 131 564 297 274 770 438 647	62 522 152 544 291 271 825 462 783	93 537 181 591 291 305 1,208 587 1,146
Albania Belgium Bulgaria Canada Croatia Czechia Denmark Estonia Finland France	52 393 89 439 210 160 602 328 620 663	Defen 46 373 88 523 210 182 592 353 621 653	ce expendit 45 370 91 505 199 173 626 371 623 660	47 370 93 637 214 198 634 381 625 668	51 378 114 583 210 218 723 394 633 689	58 383 258 584 226 239 740 413 670 700	57 411 127 600 220 248 767 461 688 706	60 449 131 564 297 274 770 438 647 720	62 522 152 544 291 271 825 462 783 724	93 537 181 591 291 305 1,208 587 1,146 734
Albania Belgium Bulgaria Canada Croatia Czechia Denmark Estonia Finland France Germany	52 393 89 439 210 160 602 328 620 663 485	Defen 46 373 88 523 210 182 592 353 621 653 488	ce expendit 45 370 91 505 199 173 626 371 623 660 500	ture per cap 47 370 93 637 214 198 634 381 625 668 526	51 378 114 583 210 218 723 394 633 689 537	58 383 258 584 226 239 740 413 670 700 585	57 411 127 600 220 248 767 461 688 706 628	60 449 131 564 297 274 770 438 647 720 622	62 522 152 544 291 271 825 462 783 724 652	93 537 181 591 291 305 1,208 587 1,146 734 712
Albania Belgium Bulgaria Canada Croatia Czechia Denmark Estonia Finland France Germany Greece	52 393 89 439 210 160 602 328 620 663 485 400	Defen 46 373 88 523 210 182 592 353 621 653 488 418	ce expendit 45 370 91 505 199 173 626 371 623 660 500 434	ture per cap 47 370 93 637 214 198 634 381 625 668 526 435	51 378 114 583 210 218 723 394 633 689 537 474	58 383 258 584 226 239 740 413 670 700 585 465	57 411 127 600 220 248 767 461 688 706 628 504	60 449 131 564 297 274 770 438 647 720 622 698	62 522 152 544 291 271 825 462 783 724 652 777	93 537 181 591 291 305 1,208 587 1,146 734 712 632
Albania Belgium Bulgaria Canada Croatia Czechia Denmark Estonia Finland France Germany Greece Hungary	52 393 89 439 210 160 602 328 620 663 485 400	Defen 46 373 88 523 210 182 592 353 621 653 488 418 115	ce expendit 45 370 91 505 199 173 626 371 623 660 500 434 131	47 370 93 637 214 198 634 381 625 668 526 435 163	51 378 114 583 210 218 723 394 633 689 537 474 145	58 383 258 584 226 239 740 413 670 700 585 465 201	57 411 127 600 220 248 767 461 688 706 628 504	60 449 131 564 297 274 770 438 647 720 622 698 205	62 522 152 544 291 271 825 462 783 724 652 777 299	93 537 181 591 291 305 1,208 587 1,146 734 712 632 336
Albania Belgium Bulgaria Canada Croatia Czechia Denmark Estonia Finland France Germany Greece Hungary Italy	52 393 89 439 210 160 602 328 620 663 485 400 105 345	Defen 46 373 88 523 210 182 592 353 621 653 488 418 115 325	ce expendit 45 370 91 505 199 173 626 371 623 660 500 434 131 365	ture per cap 47 370 93 637 214 198 634 381 625 668 526 435 163 379	51 378 114 583 210 218 723 394 633 689 537 474 145 391	58 383 258 584 226 239 740 413 670 700 585 465 201 376	57 411 127 600 220 248 767 461 688 706 628 504 254	60 449 131 564 297 274 770 438 647 720 622 698 205 491	62 522 152 544 291 271 825 462 783 724 652 777 299 511	93 537 181 591 291 305 1,208 587 1,146 734 712 632 336 494
Albania Belgium Bulgaria Canada Croatia Czechia Denmark Estonia Finland France Germany Greece Hungary Italy Latvia	52 393 89 439 210 160 602 328 620 663 485 400 105 345 123	Defen 46 373 88 523 210 182 592 353 621 653 488 418 115 325 142	ce expendit 45 370 91 505 199 173 626 371 623 660 500 434 131 365 204	ture per cap 47 370 93 637 214 198 634 381 625 668 526 435 163 379 237	51 378 114 583 210 218 723 394 633 689 537 474 145 391 321	58 383 258 584 226 239 740 413 670 700 585 465 201 376 319	57 411 127 600 220 248 767 461 688 706 628 504 254 466 331	60 449 131 564 297 274 770 438 647 720 622 698 205 491 344	62 522 152 544 291 271 825 462 783 724 652 777 299 511 356	93 537 181 591 291 305 1,208 587 1,146 734 712 632 336 494 404
Albania Belgium Bulgaria Canada Croatia Czechia Denmark Estonia Finland France Germany Greece Hungary Italy Latvia Lithuania	52 393 89 439 210 160 602 328 620 663 485 400 105 345 123	Defen 46 373 88 523 210 182 592 353 621 653 488 418 115 325 142 162	ce expendit 45 370 91 505 199 173 626 371 623 660 500 434 131 365 204 219	ture per cap 47 370 93 637 214 198 634 381 625 668 526 435 163 379 237 268	51 378 114 583 210 218 723 394 633 689 537 474 145 391 321 323	58 383 258 584 226 239 740 413 670 700 585 465 201 376 319 344	57 411 127 600 220 248 767 461 688 706 628 504 254 466 331 356	60 449 131 564 297 274 770 438 647 720 622 698 205 491 344 357	62 522 152 544 291 271 825 462 783 724 652 777 299 511 356 453	93 537 181 591 291 305 1,208 587 1,146 734 712 632 336 494 404 508
Albania Belgium Bulgaria Canada Croatia Czechia Denmark Estonia Finland France Germany Greece Hungary Italy Latvia Lithuania Luxembourg	52 393 89 439 210 160 602 328 620 663 485 400 105 345 123 122 388	Defen 46 373 88 523 210 182 592 353 621 653 488 418 115 325 142 162 438	ce expendit 45 370 91 505 199 173 626 371 623 660 500 434 131 365 204 219 411	ture per cap 47 370 93 637 214 198 634 381 625 668 526 435 163 379 237 268 531	51 378 114 583 210 218 723 394 633 689 537 474 145 391 321 323 534	58 383 258 584 226 239 740 413 670 700 585 465 201 376 319 344 588	57 411 127 600 220 248 767 461 688 706 628 504 254 466 331 356 606	60 449 131 564 297 274 770 438 647 720 622 698 205 491 344 357 522	62 522 152 544 291 271 825 462 783 724 652 777 299 511 356 453 617	93 537 181 591 291 305 1,208 587 1,146 734 712 632 336 494 404 508 730
Albania Belgium Bulgaria Canada Croatia Czechia Denmark Estonia Finland France Germany Greece Hungary Italy Latvia Lithuania Luxembourg Montenegro	52 393 89 439 210 160 602 328 620 663 485 400 105 345 123 122 388 95	Defen 46 373 88 523 210 182 592 353 621 653 488 418 115 325 142 162 438 92	ce expendit 45 370 91 505 199 173 626 371 623 660 500 434 131 365 204 219 411 95	ture per cap 47 370 93 637 214 198 634 381 625 668 526 435 163 379 237 268 531 94	51 378 114 583 210 218 723 394 633 689 537 474 145 391 321 323 534 101	58 383 258 584 226 239 740 413 670 700 585 465 201 376 319 344 588 102	57 411 127 600 220 248 767 461 688 706 628 504 254 466 331 356 606 113	60 449 131 564 297 274 770 438 647 720 622 698 205 491 344 357 522 115	62 522 152 544 291 271 825 462 783 724 652 777 299 511 356 453 617	93 537 181 591 291 305 1,208 587 1,146 734 712 632 336 494 404 508 730 128
Albania Belgium Bulgaria Canada Croatia Czechia Denmark Estonia Finland France Germany Greece Hungary Italy Latvia Lithuania Luxembourg Montenegro Netherlands	52 393 89 439 210 160 602 328 620 663 485 400 105 345 123 122 388 95 513	Defen 46 373 88 523 210 182 592 353 621 653 488 418 115 325 142 162 438 92 512	ce expendit 45 370 91 505 199 173 626 371 623 660 500 434 131 365 204 219 411 95 532	ture per cap 47 370 93 637 214 198 634 381 625 668 526 435 163 379 237 268 531 94 540	51 378 114 583 210 218 723 394 633 689 537 474 145 391 321 323 534 101 582	58 383 258 584 226 239 740 413 670 700 585 465 201 376 319 344 588 102 641	57 411 127 600 220 248 767 461 688 706 628 504 254 466 331 356 606 113 652	60 449 131 564 297 274 770 438 647 720 622 698 205 491 344 357 522 115 665	62 522 152 544 291 271 825 462 783 724 652 777 299 511 356 453 617 111 727	93 537 181 591 291 305 1,208 587 1,146 734 712 632 336 494 404 508 730 128 818
Albania Belgium Bulgaria Canada Croatia Czechia Denmark Estonia Finland France Germany Greece Hungary Italy Latvia Lithuania Luxembourg Montenegro Netherlands North Macedonia	52 393 89 439 210 160 602 328 620 663 485 400 105 345 123 122 388 95 513 51	Defen 46 373 88 523 210 182 592 353 621 653 488 418 115 325 142 162 438 92 512 51	ce expendit 45 370 91 505 199 173 626 371 623 660 500 434 131 365 204 219 411 95 532 48	ture per cap 47 370 93 637 214 198 634 381 625 668 526 435 163 379 237 268 531 94 540 45	51 378 114 583 210 218 723 394 633 689 537 474 145 391 321 323 534 101 582 49	58 383 258 584 226 239 740 413 670 700 585 465 201 376 319 344 588 102 641 62	57 411 127 600 220 248 767 461 688 706 628 504 254 466 331 356 606 113 652 64	60 449 131 564 297 274 770 438 647 720 622 698 205 491 344 357 522 115 665 84	62 522 152 544 291 271 825 462 783 724 652 777 299 511 356 453 617 111 727 95	93 537 181 591 291 305 1,208 587 1,146 734 712 632 336 494 404 508 730 128 818 96
Albania Belgium Bulgaria Canada Croatia Czechia Denmark Estonia Finland France Germany Greece Hungary Italy Latvia Lithuania Luxembourg Montenegro Netherlands Norway	52 393 89 439 210 160 602 328 620 663 485 400 105 345 123 122 388 95 513 51 1,142	Defen  46  373  88  523  210  182  592  353  621  653  488  418  115  325  142  162  438  92  512  51  1,183	ce expendit 45 370 91 505 199 173 626 371 623 660 500 434 131 365 204 219 411 95 532 48 1,300	ture per cap 47 370 93 637 214 198 634 381 625 668 526 435 163 379 237 268 531 94 540 45 1,300	51 378 114 583 210 218 723 394 633 689 537 474 145 391 321 323 534 101 582 49 1,310	58 383 258 584 226 239 740 413 670 700 585 465 201 376 319 344 588 102 641 62 1,414	57 411 127 600 220 248 767 461 688 706 628 504 254 466 331 356 606 113 652 64	60 449 131 564 297 274 770 438 647 720 622 698 205 491 344 357 522 115 665 84 1,339	62 522 152 544 291 271 825 462 783 724 652 777 299 511 356 453 617 111 727 95 1,195	93 537 181 591 291 305 1,208 587 1,146 734 712 632 336 494 404 508 730 128 818 96 1,445
Albania Belgium Bulgaria Canada Croatia Czechia Denmark Estonia Finland France Germany Greece Hungary Italy Latvia Lithuania Luxembourg Montenegro Netherlands North Macedonia Norway Poland	52 393 89 439 210 160 602 328 620 663 485 400 105 345 123 122 388 95 513 51 1,142 222	Defen 46 373 88 523 210 182 592 353 621 653 488 418 115 325 142 162 438 92 512 51 1,183 275	ce expendit 45 370 91 505 199 173 626 371 623 660 500 434 131 365 204 219 411 95 532 48 1,300 255	ture per cap 47 370 93 637 214 198 634 381 625 668 526 435 163 379 237 268 531 94 540 45 1,300 255	51 378 114 583 210 218 723 394 633 689 537 474 145 391 321 323 534 101 582 49 1,310 287	58 383 258 584 226 239 740 413 670 700 585 465 201 376 319 344 588 102 641 62 1,414 295	57 411 127 600 220 248 767 461 688 706 628 504 254 466 331 356 606 113 652 64 1,480 325	60 449 131 564 297 274 770 438 647 720 622 698 205 491 344 357 522 115 665 84 1,339 347	62 522 152 544 291 271 825 462 783 724 652 777 299 511 356 453 617 111 727 95 1,195 372	93 537 181 591 291 305 1,208 587 1,146 734 712 632 336 494 404 508 730 128 818 96 1,445 655
Albania Belgium Bulgaria Canada Croatia Czechia Denmark Estonia Finland France Germany Greece Hungary Italy Latvia Lithuania Luxembourg Montenegro Netherlands North Macedonia Norway Poland Portugal	52 393 89 439 210 160 602 328 620 663 485 400 105 345 123 122 388 95 513 51 1,142 222 246	Defen  46  373  88  523  210  182  592  353  621  653  488  418  115  325  142  162  438  92  512  51  1,183  275  255	ce expendit 45 370 91 505 199 173 626 371 623 660 500 434 131 365 204 219 411 95 532 48 1,300 255 250	ture per cap 47 370 93 637 214 198 634 381 625 668 526 435 163 379 237 268 531 94 540 45 1,300 255 253	51 378 114 583 210 218 723 394 633 689 537 474 145 391 321 323 534 101 582 49 1,310 287 282	58 383 258 584 226 239 740 413 670 700 585 465 201 376 319 344 588 102 641 62 1,414 295 297	57 411 127 600 220 248 767 461 688 706 628 504 254 466 331 356 606 113 652 64 1,480 325 283	60 449 131 564 297 274 770 438 647 720 622 698 205 491 344 357 522 115 665 84 1,339 347 318	62 522 152 544 291 271 825 462 783 724 652 777 299 511 356 453 617 111 727 95 1,195 372 313	93 537 181 591 291 305 1,208 587 1,146 734 712 632 336 494 404 508 730 128 818 96 1,445 655 337
Albania Belgium Bulgaria Canada Croatia Czechia Denmark Estonia Finland France Germany Greece Hungary Italy Latvia Lithuania Luxembourg Montenegro Netherlands North Macedonia Norway Poland Portugal Romania	52 393 89 439 210 160 602 328 620 663 485 400 105 345 123 122 388 95 513 51 1,142 222 246 117	Defen  46  373  88  523  210  182  592  353  621  653  488  418  115  325  142  162  438  92  512  51  1,183  275  255  130	ce expendit 45 370 91 505 199 173 626 371 623 660 500 434 131 365 204 219 411 95 532 48 1,300 255 250 133	ture per cap 47 370 93 637 214 198 634 381 625 668 526 435 163 379 237 268 531 94 540 45 1,300 255 253 175	51 378 114 583 210 218 723 394 633 689 537 474 145 391 321 323 534 101 582 49 1,310 287 282 193	58 383 258 584 226 239 740 413 670 700 585 465 201 376 319 344 588 102 641 62 1,414 295 297 206	57 411 127 600 220 248 767 461 688 706 628 504 254 466 331 356 606 113 652 64 1,480 325 283 219	60 449 131 564 297 274 770 438 647 720 622 698 205 491 344 357 522 115 665 84 1,339 347 318 215	62 522 152 544 291 271 825 462 783 724 652 777 299 511 356 453 617 111 727 95 1,195 372 313 210	93 537 181 591 291 305 1,208 587 1,146 734 712 632 336 494 404 508 730 128 818 96 1,445 655 337 200
Albania Belgium Bulgaria Canada Croatia Czechia Denmark Estonia Finland France Germany Greece Hungary Italy Latvia Lithuania Luxembourg Montenegro Netherlands North Macedonia Norway Poland Portugal Romania Slovak Republic	52 393 89 439 210 160 602 328 620 663 485 400 105 345 123 122 388 95 513 51 1,142 222 246 117 154	Defen 46 373 88 523 210 182 592 353 621 653 488 418 115 325 142 162 438 92 512 51 1,183 275 255 130 182	ce expendit 45 370 91 505 199 173 626 371 623 660 500 434 131 365 204 219 411 95 532 48 1,300 255 250 133 186	ture per cap 47 370 93 637 214 198 634 381 625 668 526 435 163 379 237 268 531 94 540 45 1,300 255 253 175 189	51 378 114 583 210 218 723 394 633 689 537 474 145 391 321 323 534 101 582 49 1,310 287 282 193 218	58 383 258 584 226 239 740 413 670 700 585 465 201 376 319 344 588 102 641 62 1,414 295 297 206 311	57 411 127 600 220 248 767 461 688 706 628 504 254 466 331 356 606 113 652 64 1,480 325 283 219 338	60 449 131 564 297 274 770 438 647 720 622 698 205 491 344 357 522 115 665 84 1,339 347 318 215 323	62 522 152 544 291 271 825 462 783 724 652 777 299 511 356 453 617 111 727 95 1,195 372 313 210 338	93 537 181 591 291 305 1,208 587 1,146 734 712 632 336 494 404 508 730 128 818 96 1,445 655 337 200 387
Albania Belgium Bulgaria Canada Croatia Czechia Denmark Estonia Finland France Germany Greece Hungary Italy Latvia Lithuania Luxembourg Montenegro Netherlands North Macedonia Norway Poland Portugal Romania Slovak Republic Slovenia	52 393 89 439 210 160 602 328 620 663 485 400 105 345 123 122 388 95 513 51 1,142 222 246 117 154 199	Defen  46  373  88  523  210  182  592  353  621  653  488  418  115  325  142  162  438  92  512  51  1,183  275  255  130  182  194	ce expendii 45 370 91 505 199 173 626 371 623 660 500 434 131 365 204 219 411 95 532 48 1,300 255 250 133 186 216	ture per cap 47 370 93 637 214 198 634 381 625 668 526 435 163 379 237 268 531 94 540 45 1,300 255 253 175 189 222	51 378 114 583 210 218 723 394 633 689 537 474 145 391 321 323 534 101 582 49 1,310 287 282 193 218 237	58 383 258 584 226 239 740 413 670 700 585 465 201 376 319 344 588 102 641 62 1,414 295 297 206 311 254	57 411 127 600 220 248 767 461 688 706 628 504 254 466 331 356 606 113 652 64 1,480 325 283 219 338 243	60 449 131 564 297 274 770 438 647 720 622 698 205 491 344 357 522 115 665 84 1,339 347 318 215 323 306	62 522 152 544 291 271 825 462 783 724 652 777 299 511 356 453 617 111 727 95 1,195 372 313 210 338 328	93 537 181 591 291 305 1,208 587 1,146 734 712 632 336 494 404 508 730 128 818 96 1,445 655 337 200 387 342
Albania Belgium Bulgaria Canada Croatia Czechia Denmark Estonia Finland France Germany Greece Hungary Italy Latvia Lithuania Luxembourg Montenegro Netherlands North Macedonia Norway Poland Portugal Romania Slovak Republic Slovenia Spain	52 393 89 439 210 160 602 328 620 663 485 400 105 345 123 122 388 95 513 51 1,142 222 246 117 154 199 228	Defen  46  373  88  523  210  182  592  353  621  653  488  418  115  325  142  162  438  92  512  51  1,183  275  255  130  182  194  239	ce expendii 45 370 91 505 199 173 626 371 623 660 500 434 131 365 204 219 411 95 532 48 1,300 255 250 133 186 216 215	ture per cap 47 370 93 637 214 198 634 381 625 668 526 435 163 379 237 268 531 94 540 45 1,300 255 253 175 189 222 247	51 378 114 583 210 218 723 394 633 689 537 474 145 391 321 323 534 101 582 49 1,310 287 282 193 218 237 258	58 383 258 584 226 239 740 413 670 700 585 465 201 376 319 344 588 102 641 62 1,414 295 297 206 311 254 255	57 411 127 600 220 248 767 461 688 706 628 504 254 466 331 356 606 113 652 64 1,480 325 283 219 338 243 249	60 449 131 564 297 274 770 438 647 720 622 698 205 491 344 357 522 115 665 84 1,339 347 318 215 323 306 271	62 522 152 544 291 271 825 462 783 724 652 777 299 511 356 453 617 111 727 95 1,195 372 313 210 338 328 322	93 537 181 591 291 305 1,208 587 1,146 734 712 632 336 494 404 508 730 128 818 96 1,445 655 337 200 387 342 350
Albania Belgium Bulgaria Canada Croatia Czechia Denmark Estonia Finland France Germany Greece Hungary Italy Latvia Lithuania Luxembourg Montenegro Netherlands North Macedonia Norway Poland Portugal Romania Slovak Republic Slovenia Spain Türkiye	52 393 89 439 210 160 602 328 620 663 485 400 105 345 123 122 388 95 513 51 1,142 222 246 117 154 199 228 153	Defen 46 373 88 523 210 182 592 353 621 653 488 418 115 325 142 162 438 92 512 51 1,183 275 255 130 182 194 239 153	ce expendii  45  370  91  505  199  173  626  371  623  660  500  434  131  365  204  219  411  95  532  48  1,300  255  250  133  186  216  215  164	ture per cap 47 370 93 637 214 198 634 381 625 668 526 435 163 379 237 268 531 94 540 45 1,300 255 253 175 189 222 247 180	51 378 114 583 210 218 723 394 633 689 537 474 145 391 321 323 534 101 582 49 1,310 287 282 193 218 237 258 221	58 383 258 584 226 239 740 413 670 700 585 465 201 376 319 344 588 102 641 62 1,414 295 297 206 311 254 255 224	57 411 127 600 220 248 767 461 688 706 628 504 254 466 331 356 606 113 652 64 1,480 325 283 219 338 243 249 226	60 449 131 564 297 274 770 438 647 720 622 698 205 491 344 357 522 115 665 84 1,339 347 318 215 323 306 271 216	62 522 152 544 291 271 825 462 783 724 652 777 299 511 356 453 617 111 727 95 1,195 372 313 210 338 328 322 190	93 537 181 591 291 305 1,208 587 1,146 734 712 632 336 494 404 508 730 128 818 96 1,445 655 337 200 387 342 350 228
Albania Belgium Bulgaria Canada Croatia Czechia Denmark Estonia Finland France Germany Greece Hungary Italy Latvia Lithuania Luxembourg Montenegro Netherlands North Macedonia Norway Poland Portugal Romania Slovak Republic Slovenia Spain Türkiye United Kingdom	52 393 89 439 210 160 602 328 620 663 485 400 105 345 123 122 388 95 513 51 1,142 222 246 117 154 199 228 153 950	Defen 46 373 88 523 210 182 592 353 621 653 488 418 115 325 142 162 438 92 512 51 1,183 275 255 130 182 194 239 153 914	ce expendit  45  370  91  505  199  173  626  371  623  660  500  434  131  365  204  219  411  95  532  48  1,300  255  250  133  186  216  215  164  949	ture per cap 47 370 93 637 214 198 634 381 625 668 526 435 163 379 237 268 531 94 540 45 1,300 255 253 175 189 222 247 180 964	51 378 114 583 210 218 723 394 633 689 537 474 145 391 321 323 534 101 582 49 1,310 287 282 193 218 237 258 221 982	58 383 258 584 226 239 740 413 670 700 585 465 201 376 319 344 588 102 641 62 1,414 295 297 206 311 254 255 224 984	57 411 127 600 220 248 767 461 688 706 628 504 254 466 331 356 606 113 652 64 1,480 325 283 219 338 243 249 226 993	60 449 131 564 297 274 770 438 647 720 622 698 205 491 344 357 522 115 665 84 1,339 347 318 215 323 306 271 216 1,051	62 522 152 544 291 271 825 462 783 724 652 777 299 511 356 453 617 111 727 95 1,195 372 313 210 338 328 322 190 1,082	93 537 181 591 291 305 1,208 587 1,146 734 712 632 336 494 404 508 730 128 818 96 1,445 655 337 200 387 342 350 228 1,077
Albania Belgium Bulgaria Canada Croatia Czechia Denmark Estonia Finland France Germany Greece Hungary Italy Latvia Lithuania Luxembourg Montenegro Netherlands North Macedonia Norway Poland Portugal Romania Slovak Republic Slovenia Spain Türkiye United Kingdom United States	52 393 89 439 210 160 602 328 620 663 485 400 105 345 123 122 388 95 513 51 1,142 222 246 117 154 199 228 153 950 2,065	Defen  46  373  88  523  210  182  592  353  621  653  488  418  115  325  142  162  438  92  512  51  1,183  275  255  130  182  194  239  153  914  1,991	ce expendit  45  370  91  505  199  173  626  371  623  660  500  434  131  365  204  219  411  95  532  48  1,300  255  250  133  186  216  215  164  949  2,006	ture per cap  47  370  93  637  214  198  634  381  625  668  526  435  163  379  237  268  531  94  540  45  1,300  255  253  175  189  222  247  180  964  1,916	51 378 114 583 210 218 723 394 633 689 537 474 145 391 321 323 534 101 582 49 1,310 287 282 193 218 237 258 221 982 1,947	58 383 258 584 226 239 740 413 670 700 585 465 201 376 319 344 588 102 641 62 1,414 295 297 206 311 254 255 224 984 2,115	57 411 127 600 220 248 767 461 688 706 628 504 254 466 331 356 606 113 652 64 1,480 325 283 219 338 243 249 226 993 2,123	60 449 131 564 297 274 770 438 647 720 622 698 205 491 344 357 522 115 665 84 1,339 347 318 215 323 306 271 216 1,051 2,212	62 522 152 544 291 271 825 462 783 724 652 777 299 511 356 453 617 111 727 95 1,195 372 313 210 338 328 322 190 1,082 2,109	93 537 181 591 291 305 1,208 587 1,146 734 712 632 336 494 404 508 730 128 818 96 1,445 655 337 200 387 342 350 228 1,077 2,101
Albania Belgium Bulgaria Canada Croatia Czechia Denmark Estonia Finland France Germany Greece Hungary Italy Latvia Lithuania Luxembourg Montenegro Netherlands North Macedonia Norway Poland Portugal Romania Slovak Republic Slovenia Spain Türkiye United Kingdom	52 393 89 439 210 160 602 328 620 663 485 400 105 345 123 122 388 95 513 51 1,142 222 246 117 154 199 228 153 950	Defen 46 373 88 523 210 182 592 353 621 653 488 418 115 325 142 162 438 92 512 51 1,183 275 255 130 182 194 239 153 914	ce expendit  45  370  91  505  199  173  626  371  623  660  500  434  131  365  204  219  411  95  532  48  1,300  255  250  133  186  216  215  164  949	ture per cap 47 370 93 637 214 198 634 381 625 668 526 435 163 379 237 268 531 94 540 45 1,300 255 253 175 189 222 247 180 964	51 378 114 583 210 218 723 394 633 689 537 474 145 391 321 323 534 101 582 49 1,310 287 282 193 218 237 258 221 982	58 383 258 584 226 239 740 413 670 700 585 465 201 376 319 344 588 102 641 62 1,414 295 297 206 311 254 255 224 984	57 411 127 600 220 248 767 461 688 706 628 504 254 466 331 356 606 113 652 64 1,480 325 283 219 338 243 249 226 993	60 449 131 564 297 274 770 438 647 720 622 698 205 491 344 357 522 115 665 84 1,339 347 318 215 323 306 271 216 1,051	62 522 152 544 291 271 825 462 783 724 652 777 299 511 356 453 617 111 727 95 1,195 372 313 210 338 328 322 190 1,082	93 537 181 591 291 305 1,208 587 1,146 734 712 632 336 494 404 508 730 128 818 96 1,445 655 337 200 387 342 350 228 1,077

Table 7: Military personnel (Thousands)

Country	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023e
Albania	6.7	6.2	5.8	6.8	6.8	6.8	6.7	6.6	6.6	6.6
Belgium	30.5	29.7	28.8	27.8	26.5	23.3	22.8	22.1	21.4	21.4
Bulgaria	27.5	24.9	24.7	24.3	24.4	24.6	25.0	25.7	25.6	26.6
Canada	65.9	70.3	70.5	68.2	70.3	71.8	70.3	68.2	67.4	66.8
Croatia	15.4	15.1	14.8	14.8	15.0	14.8	14.7	14.9	14.4	14.0
Czechia	20.2	21.5	22.7	23.8	24.7	25.3	26.1	26.4	26.6	27.7
Denmark	16.9	17.2	17.3	16.7	17.2	16.3	16.9	16.9	16.7	16.7
Estonia	6.3	6.0	6.1	6.0	6.2	6.3	6.7	6.6	6.3	7.3
Finland	32.5	31.0	31.3	31.0	31.8	31.1	31.3	31.1	30.5	31.0
France	207.0	204.8	208.1	208.2	208.2	207.8	207.6	207.6	207.1	207.3
Germany	178.8	177.2	177.9	179.8	181.5	183.8	183.9	183.9	183.2	181.7
Greece	107.3	104.4	106.0	106.9	109.2	102.5	106.6	108.1	107.3	111.0
Hungary	17.5	17.4	17.9	18.7	19.9	18.9	19.8	20.0	19.7	20.1
Italy	183.5	178.4	176.3	174.6	174.1	176.4	173.4	170.3	170.0	170.7
Latvia	4.6	4.8	5.2	5.5	5.9	6.0	6.4	6.5	6.4	6.7
Lithuania	8.6	11.8	11.8	13.5	14.3	14.9	15.1	15.2	15.7	17.9
Luxembourg	0.8	0.8	0.8	0.8	0.9	0.9	0.8	0.9	0.9	0.9
Montenegro	1.9	1.7	1.5	1.5	1.5	1.5	1.9	1.6	1.6	1.7
Netherlands	41.2	40.6	40.0	39.5	39.3	39.7	40.4	40.9	40.6	40.8
North Macedonia	6.5	6.8	6.6	6.3	6.5	6.4	6.4	6.1	5.9	5.7
Norway	21.0	20.9	20.5	20.2	20.2	19.2	20.6	23.1	23.5	24.0
Poland	99.0	98.9	101.6	105.3	109.5	113.1	116.2	166.8	176.0	202.3
Portugal	30.7	28.3	29.8	27.8	26.9	23.8	23.7	25.3	22.5	22.4
Romania	65.1	64.5	63.4	64.0	64.0	64.5	66.4	68.6	66.7	64.0
Slovak Republic	12.4	12.4	12.2	12.2	12.2	12.7	13.1	13.7	13.9	13.8
Slovenia	6.8	6.6	6.5	6.3	6.2	6.0	6.0	6.0	5.8	5.7
Spain	121.8	121.6	121.0	117.7	117.4	117.0	118.7	118.7	117.3	110.6
Türkiye	426.6	384.8	359.3	416.7	444.3	441.8	433.0	450.0	455.9	463.7
United Kingdom	168.7	141.4	139.5	149.4	146.6	144.0	147.3	148.2	143.6	139.5
United States	1,338.2	1,314.1	1,301.4	1,305.9	1,317.4	1,329.2	1,346.7	1,349.0	1,317.0	1,317.0
NATO Europe and Canada	1,891	1,811	1,788	1,857	1,893	1,884	1,897	1,969	1,969	2,029
NATO Total	3,229	3,125	3,090	3,163	3,210	3,213	3,243	3,318	3,286	3,346

Notes: Figures for 2023 are estimates. The NATO Europe and Canada and NATO Total aggregates from 2017 onwards include Montenegro, which became an Ally on 5 June 2017, from 2020 onwards include North Macedonia, which became an Ally on 27 March 2020, and from 2023 onwards include Finland, which became an Ally on 4 April 2023.

Table 8a: Distribution of defence expenditure by main category (percentage of total defence expenditure)

Country	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023e
Country	2017	2013	2010	Equipm		2019	2020	2021	2022	20236
Albania	16.65	8.92	8.01	6.96	9.42	14.61	15.00	15.12	17.05	25.19
Belgium	3.52	3.44	4.72	6.52	10.15	11.06	13.88	19.47	20.36	20.22
Bulgaria	1.03	3.47	9.15	8.10	9.65	59.74	8.44	11.05	15.70	29.32
Canada	13.03	10.47	10.61	10.70	11.94	13.84	14.67	12.07	11.33	14.37
Croatia	5.56	8.01	7.51	5.69	3.37	6.55	9.06	30.01	31.19	23.91
Czechia	6.53	11.75	6.70	11.55	11.16	16.44	17.31	20.47	24.69	25.83
Denmark	10.99	11.50	13.68	10.39	11.66	16.21	17.65	17.19	18.72	13.35
Estonia	22.15	12.82	17.86	19.22	16.51	15.50	23.00	23.18	20.07	29.31
Finland	13.68	14.15	14.04	13.35	13.56	21.14	21.63	19.88	33.54	50.80
France	24.64	25.04	24.44	24.17	23.66	24.53	26.62	27.85	28.64	28.19
Germany	12.94	11.93	12.21	11.77	12.36	14.69	17.45	16.69	17.23	23.89
Greece	8.17	10.40	13.45	11.28	11.03	11.55	10.70	37.24	42.29	35.57
Hungary	7.76	9.75	13.37	18.54	12.63	36.46	45.57	36.40	47.58	39.22
Italy	10.92	9.72	19.09	20.68	19.13	17.00	18.56	23.23	22.77	20.46
Latvia	7.55	13.60	19.05	15.01	31.85	21.65	20.53	22.07	24.65	26.33
Lithuania	14.06	21.55	30.06	31.61	36.98	37.57	33.71	22.32	36.62	23.06
Luxembourg	22.61	33.33	30.07	42.06	45.18	49.71	50.15	39.58	45.10	41.44
Montenegro	7.46	5.43	4.46	4.97	11.14	14.96	20.96	20.54	22.85	24.00
Netherlands North Macedonia	10.68 5.92	11.16	14.14 8.37	14.75 6.47	16.39	20.34	22.13 11.53	23.85	14.78	25.50 34.19
	20.42	11.13 21.83	23.37	24.63	11.09 25.60	13.82 28.76	28.41	21.77 29.19	24.13 28.39	28.26
Norway Poland	18.84	33.20	21.62	22.04	27.51	23.36	29.31	33.89	32.42	53.57
Portugal	8.43	8.70	9.95	11.42	15.48	16.61	17.36	16.54	18.00	22.06
Romania	15.77	19.65	20.43	33.34	33.47	25.59	23.12	21.57	25.51	21.94
Slovak Republic	11.12	18.28	15.32	17.74	22.27	40.07	31.84	32.34	36.54	24.26
Slovenia	0.66	1.85	1.02	4.04	5.98	7.11	5.69	14.56	22.38	24.05
Spain	13.49	14.82	6.65	20.39	21.83	21.02	19.43	22.47	20.89	28.10
Türkiye	25.08	25.13	25.55	30.30	37.64	34.32	30.73	29.31	28.43	28.75
United Kingdom	22.82	21.75	21.24	22.29	22.25	22.85	23.83	29.50	31.42	33.37
United States	25.97	25.41	25.05	25.73	27.06	29.06	29.69	28.70	27.85	28.75
				Person						
Albania	68.05	78.15	68.05	68.20	70.70	62.89	64.41	63.57	60.05	39.53
Belgium	77.84	78.23	76.80	68.20 75.20	70.70 70.69	68.38	63.58	56.79	49.89	49.92
Belgium Bulgaria	77.84 72.84	78.23 73.66	76.80 65.64	68.20 75.20 68.33	70.70 70.69 62.99	68.38 29.42	63.58 63.79	56.79 65.59	49.89 57.80	49.92 52.65
Belgium Bulgaria Canada	77.84 72.84 50.90	78.23 73.66 53.76	76.80 65.64 53.11	68.20 75.20 68.33 57.37	70.70 70.69 62.99 51.02	68.38 29.42 49.54	63.58 63.79 49.23	56.79 65.59 49.92	49.89 57.80 48.44	49.92 52.65 46.75
Belgium Bulgaria Canada Croatia	77.84 72.84 50.90 76.55	78.23 73.66 53.76 72.28	76.80 65.64 53.11 75.40	68.20 75.20 68.33 57.37 71.72	70.70 70.69 62.99 51.02 76.96	68.38 29.42 49.54 73.71	63.58 63.79 49.23 76.15	56.79 65.59 49.92 56.71	49.89 57.80 48.44 55.38	49.92 52.65 46.75 56.83
Belgium Bulgaria Canada Croatia Czechia	77.84 72.84 50.90 76.55 61.40	78.23 73.66 53.76 72.28 55.25	76.80 65.64 53.11 75.40 61.95	68.20 75.20 68.33 57.37 71.72 56.11	70.70 70.69 62.99 51.02 76.96 54.57	68.38 29.42 49.54 73.71 51.82	63.58 63.79 49.23 76.15 49.72	56.79 65.59 49.92 56.71 44.70	49.89 57.80 48.44 55.38 42.84	49.92 52.65 46.75 56.83 39.16
Belgium Bulgaria Canada Croatia Czechia Denmark	77.84 72.84 50.90 76.55 61.40 51.27	78.23 73.66 53.76 72.28 55.25 52.01	76.80 65.64 53.11 75.40 61.95 49.51	68.20 75.20 68.33 57.37 71.72 56.11 47.01	70.70 70.69 62.99 51.02 76.96 54.57 49.88	68.38 29.42 49.54 73.71 51.82 48.25	63.58 63.79 49.23 76.15 49.72 46.07	56.79 65.59 49.92 56.71 44.70 48.31	49.89 57.80 48.44 55.38 42.84 40.88	49.92 52.65 46.75 56.83 39.16 29.85
Belgium Bulgaria Canada Croatia Czechia Denmark Estonia	77.84 72.84 50.90 76.55 61.40 51.27 38.62	78.23 73.66 53.76 72.28 55.25 52.01 39.56	76.80 65.64 53.11 75.40 61.95 49.51 38.70	68.20 75.20 68.33 57.37 71.72 56.11 47.01 34.89	70.70 70.69 62.99 51.02 76.96 54.57 49.88 33.83	68.38 29.42 49.54 73.71 51.82 48.25 34.18	63.58 63.79 49.23 76.15 49.72 46.07 32.67	56.79 65.59 49.92 56.71 44.70 48.31 33.61	49.89 57.80 48.44 55.38 42.84 40.88 29.47	49.92 52.65 46.75 56.83 39.16 29.85 22.93
Belgium Bulgaria Canada Croatia Czechia Denmark Estonia Finland	77.84 72.84 50.90 76.55 61.40 51.27 38.62 40.24	78.23 73.66 53.76 72.28 55.25 52.01 39.56 37.88	76.80 65.64 53.11 75.40 61.95 49.51 38.70 38.86	68.20 75.20 68.33 57.37 71.72 56.11 47.01 34.89 40.52	70.70 70.69 62.99 51.02 76.96 54.57 49.88 33.83 38.95	68.38 29.42 49.54 73.71 51.82 48.25 34.18 34.47	63.58 63.79 49.23 76.15 49.72 46.07 32.67 33.84	56.79 65.59 49.92 56.71 44.70 48.31 33.61 35.36	49.89 57.80 48.44 55.38 42.84 40.88 29.47 28.64	49.92 52.65 46.75 56.83 39.16 29.85 22.93 19.48
Belgium Bulgaria Canada Croatia Czechia Denmark Estonia Finland France	77.84 72.84 50.90 76.55 61.40 51.27 38.62 40.24 48.59	78.23 73.66 53.76 72.28 55.25 52.01 39.56 37.88 47.79	76.80 65.64 53.11 75.40 61.95 49.51 38.70 38.86 47.94	68.20 75.20 68.33 57.37 71.72 56.11 47.01 34.89 40.52 47.98	70.70 70.69 62.99 51.02 76.96 54.57 49.88 33.83 38.95 46.90	68.38 29.42 49.54 73.71 51.82 48.25 34.18 34.47 45.59	63.58 63.79 49.23 76.15 49.72 46.07 32.67 33.84 44.01	56.79 65.59 49.92 56.71 44.70 48.31 33.61 35.36 42.99	49.89 57.80 48.44 55.38 42.84 40.88 29.47 28.64 42.33	49.92 52.65 46.75 56.83 39.16 29.85 22.93 19.48 41.74
Belgium Bulgaria Canada Croatia Czechia Denmark Estonia Finland France Germany	77.84 72.84 50.90 76.55 61.40 51.27 38.62 40.24 48.59 50.67	78.23 73.66 53.76 72.28 55.25 52.01 39.56 37.88 47.79 49.86	76.80 65.64 53.11 75.40 61.95 49.51 38.70 38.86 47.94 48.35	68.20 75.20 68.33 57.37 71.72 56.11 47.01 34.89 40.52 47.98 48.96	70.70 70.69 62.99 51.02 76.96 54.57 49.88 33.83 38.95 46.90 47.99	68.38 29.42 49.54 73.71 51.82 48.25 34.18 34.47 45.59 45.26	63.58 63.79 49.23 76.15 49.72 46.07 32.67 33.84 44.01 42.22	56.79 65.59 49.92 56.71 44.70 48.31 33.61 35.36 42.99 42.28	49.89 57.80 48.44 55.38 42.84 40.88 29.47 28.64 42.33 39.26	49.92 52.65 46.75 56.83 39.16 29.85 22.93 19.48 41.74 36.74
Belgium Bulgaria Canada Croatia Czechia Denmark Estonia Finland France	77.84 72.84 50.90 76.55 61.40 51.27 38.62 40.24 48.59	78.23 73.66 53.76 72.28 55.25 52.01 39.56 37.88 47.79	76.80 65.64 53.11 75.40 61.95 49.51 38.70 38.86 47.94	68.20 75.20 68.33 57.37 71.72 56.11 47.01 34.89 40.52 47.98 48.96 76.56	70.70 70.69 62.99 51.02 76.96 54.57 49.88 33.83 38.95 46.90	68.38 29.42 49.54 73.71 51.82 48.25 34.18 34.47 45.59	63.58 63.79 49.23 76.15 49.72 46.07 32.67 33.84 44.01 42.22 74.58	56.79 65.59 49.92 56.71 44.70 48.31 33.61 35.36 42.99	49.89 57.80 48.44 55.38 42.84 40.88 29.47 28.64 42.33	49.92 52.65 46.75 56.83 39.16 29.85 22.93 19.48 41.74
Belgium Bulgaria Canada Croatia Czechia Denmark Estonia Finland France Germany Greece	77.84 72.84 50.90 76.55 61.40 51.27 38.62 40.24 48.59 50.67 77.18	78.23 73.66 53.76 72.28 55.25 52.01 39.56 37.88 47.79 49.86 72.05	76.80 65.64 53.11 75.40 61.95 49.51 38.70 38.86 47.94 48.35 73.13	68.20 75.20 68.33 57.37 71.72 56.11 47.01 34.89 40.52 47.98 48.96	70.70 70.69 62.99 51.02 76.96 54.57 49.88 33.83 38.95 46.90 47.99 78.76	68.38 29.42 49.54 73.71 51.82 48.25 34.18 34.47 45.59 45.26 77.08	63.58 63.79 49.23 76.15 49.72 46.07 32.67 33.84 44.01 42.22	56.79 65.59 49.92 56.71 44.70 48.31 33.61 35.36 42.99 42.28 53.78	49.89 57.80 48.44 55.38 42.84 40.88 29.47 28.64 42.33 39.26 45.92	49.92 52.65 46.75 56.83 39.16 29.85 22.93 19.48 41.74 36.74 54.94
Belgium Bulgaria Canada Croatia Czechia Denmark Estonia Finland France Germany Greece Hungary	77.84 72.84 50.90 76.55 61.40 51.27 38.62 40.24 48.59 50.67 77.18 49.77	78.23 73.66 53.76 72.28 55.25 52.01 39.56 37.88 47.79 49.86 72.05 48.21	76.80 65.64 53.11 75.40 61.95 49.51 38.70 38.86 47.94 48.35 73.13 49.66	68.20 75.20 68.33 57.37 71.72 56.11 47.01 34.89 40.52 47.98 48.96 76.56 37.13	70.70 70.69 62.99 51.02 76.96 54.57 49.88 33.83 38.95 46.90 47.99 78.76 42.33	68.38 29.42 49.54 73.71 51.82 48.25 34.18 34.47 45.59 45.26 77.08 35.37	63.58 63.79 49.23 76.15 49.72 46.07 32.67 33.84 44.01 42.22 74.58 27.18	56.79 65.59 49.92 56.71 44.70 48.31 33.61 35.36 42.99 42.28 53.78 38.74	49.89 57.80 48.44 55.38 42.84 40.88 29.47 28.64 42.33 39.26 45.92 31.42	49.92 52.65 46.75 56.83 39.16 29.85 22.93 19.48 41.74 36.74 54.94 25.00
Belgium Bulgaria Canada Croatia Czechia Denmark Estonia Finland France Germany Greece Hungary Italy	77.84 72.84 50.90 76.55 61.40 51.27 38.62 40.24 48.59 50.67 77.18 49.77 76.41	78.23 73.66 53.76 72.28 55.25 52.01 39.56 37.88 47.79 49.86 72.05 48.21 77.55	76.80 65.64 53.11 75.40 61.95 49.51 38.70 38.86 47.94 48.35 73.13 49.66 70.79	68.20 75.20 68.33 57.37 71.72 56.11 47.01 34.89 40.52 47.98 48.96 76.56 37.13 67.58	70.70 70.69 62.99 51.02 76.96 54.57 49.88 33.83 38.95 46.90 47.99 78.76 42.33 68.16	68.38 29.42 49.54 73.71 51.82 48.25 34.18 34.47 45.59 45.26 77.08 35.37 70.21	63.58 63.79 49.23 76.15 49.72 46.07 32.67 33.84 44.01 42.22 74.58 27.18 67.52	56.79 65.59 49.92 56.71 44.70 48.31 33.61 35.36 42.99 42.28 53.78 38.74 63.73	49.89 57.80 48.44 55.38 42.84 40.88 29.47 28.64 42.33 39.26 45.92 31.42 63.67	49.92 52.65 46.75 56.83 39.16 29.85 22.93 19.48 41.74 36.74 54.94 25.00 62.04
Belgium Bulgaria Canada Croatia Czechia Denmark Estonia Finland France Germany Greece Hungary Italy Latvia	77.84 72.84 50.90 76.55 61.40 51.27 38.62 40.24 48.59 50.67 77.18 49.77 76.41 52.97	78.23 73.66 53.76 72.28 55.25 52.01 39.56 37.88 47.79 49.86 72.05 48.21 77.55 50.06	76.80 65.64 53.11 75.40 61.95 49.51 38.70 38.86 47.94 48.35 73.13 49.66 70.79 43.87	68.20 75.20 68.33 57.37 71.72 56.11 47.01 34.89 40.52 47.98 48.96 76.56 37.13 67.58 38.59	70.70 70.69 62.99 51.02 76.96 54.57 49.88 33.83 38.95 46.90 47.99 78.76 42.33 68.16 34.32	68.38 29.42 49.54 73.71 51.82 48.25 34.18 34.47 45.59 45.26 77.08 35.37 70.21 33.53	63.58 63.79 49.23 76.15 49.72 46.07 32.67 33.84 44.01 42.22 74.58 27.18 67.52 37.15	56.79 65.59 49.92 56.71 44.70 48.31 33.61 35.36 42.99 42.28 53.78 38.74 63.73 37.24	49.89 57.80 48.44 55.38 42.84 40.88 29.47 28.64 42.33 39.26 45.92 31.42 63.67 36.53	49.92 52.65 46.75 56.83 39.16 29.85 22.93 19.48 41.74 36.74 54.94 25.00 62.04 37.04
Belgium Bulgaria Canada Croatia Czechia Denmark Estonia Finland France Germany Greece Hungary Italy Latvia Lithuania	77.84 72.84 50.90 76.55 61.40 51.27 38.62 40.24 48.59 50.67 77.18 49.77 76.41 52.97 57.53	78.23 73.66 53.76 72.28 55.25 52.01 39.56 37.88 47.79 49.86 72.05 48.21 77.55 50.06 48.49	76.80 65.64 53.11 75.40 61.95 49.51 38.70 38.86 47.94 48.35 73.13 49.66 70.79 43.87 45.50	68.20 75.20 68.33 57.37 71.72 56.11 47.01 34.89 40.52 47.98 48.96 76.56 37.13 67.58 38.59 40.79	70.70 70.69 62.99 51.02 76.96 54.57 49.88 33.83 38.95 46.90 47.99 78.76 42.33 68.16 34.32 37.47	68.38 29.42 49.54 73.71 51.82 48.25 34.18 34.47 45.59 45.26 77.08 35.37 70.21 33.53 40.02	63.58 63.79 49.23 76.15 49.72 46.07 32.67 33.84 44.01 42.22 74.58 27.18 67.52 37.15 41.33	56.79 65.59 49.92 56.71 44.70 48.31 33.61 35.36 42.99 42.28 53.78 38.74 63.73 37.24 42.58	49.89 57.80 48.44 55.38 42.84 40.88 29.47 28.64 42.33 39.26 45.92 31.42 63.67 36.53 33.21	49.92 52.65 46.75 56.83 39.16 29.85 22.93 19.48 41.74 36.74 54.94 25.00 62.04 37.04 33.43
Belgium Bulgaria Canada Croatia Czechia Denmark Estonia Finland France Germany Greece Hungary Italy Latvia Lithuania Luxembourg	77.84 72.84 50.90 76.55 61.40 51.27 38.62 40.24 48.59 50.67 77.18 49.77 76.41 52.97 57.53 49.31	78.23 73.66 53.76 72.28 55.25 52.01 39.56 37.88 47.79 49.86 72.05 48.21 77.55 50.06 48.49 42.77	76.80 65.64 53.11 75.40 61.95 49.51 38.70 38.86 47.94 48.35 73.13 49.66 70.79 43.87 45.50 45.56	68.20 75.20 68.33 57.37 71.72 56.11 47.01 34.89 40.52 47.98 48.96 76.56 37.13 67.58 38.59 40.79 34.40	70.70 70.69 62.99 51.02 76.96 54.57 49.88 33.83 38.95 46.90 47.99 78.76 42.33 68.16 34.32 37.47 33.42	68.38 29.42 49.54 73.71 51.82 48.25 34.18 34.47 45.59 45.26 77.08 35.37 70.21 33.53 40.02 30.76	63.58 63.79 49.23 76.15 49.72 46.07 32.67 33.84 44.01 42.22 74.58 27.18 67.52 37.15 41.33 30.13	56.79 65.59 49.92 56.71 44.70 48.31 33.61 35.36 42.99 42.28 53.78 38.74 63.73 37.24 42.58 34.58	49.89 57.80 48.44 55.38 42.84 40.88 29.47 28.64 42.33 39.26 45.92 31.42 63.67 36.53 33.21 28.78	49.92 52.65 46.75 56.83 39.16 29.85 22.93 19.48 41.74 36.74 54.94 25.00 62.04 37.04 33.43 21.89
Belgium Bulgaria Canada Croatia Czechia Denmark Estonia Finland France Germany Greece Hungary Italy Latvia Lithuania Luxembourg Montenegro	77.84 72.84 50.90 76.55 61.40 51.27 38.62 40.24 48.59 50.67 77.18 49.77 76.41 52.97 57.53 49.31 78.53	78.23 73.66 53.76 72.28 55.25 52.01 39.56 37.88 47.79 49.86 72.05 48.21 77.55 50.06 48.49 42.77 78.03	76.80 65.64 53.11 75.40 61.95 49.51 38.70 38.86 47.94 48.35 73.13 49.66 70.79 43.87 45.50 45.56 75.32	68.20 75.20 68.33 57.37 71.72 56.11 47.01 34.89 40.52 47.98 48.96 76.56 37.13 67.58 38.59 40.79 34.40 80.87	70.70 70.69 62.99 51.02 76.96 54.57 49.88 33.83 38.95 46.90 47.99 78.76 42.33 68.16 34.32 37.47 33.42 73.50	68.38 29.42 49.54 73.71 51.82 48.25 34.18 34.47 45.59 45.26 77.08 35.37 70.21 33.53 40.02 30.76 71.39	63.58 63.79 49.23 76.15 49.72 46.07 32.67 33.84 44.01 42.22 74.58 27.18 67.52 37.15 41.33 30.13 64.66	56.79 65.59 49.92 56.71 44.70 48.31 33.61 35.36 42.99 42.28 53.78 38.74 63.73 37.24 42.58 34.58 59.90	49.89 57.80 48.44 55.38 42.84 40.88 29.47 28.64 42.33 39.26 45.92 31.42 63.67 36.53 33.21 28.78 61.12	49.92 52.65 46.75 56.83 39.16 29.85 22.93 19.48 41.74 36.74 54.94 25.00 62.04 37.04 33.43 21.89 58.40
Belgium Bulgaria Canada Croatia Czechia Denmark Estonia Finland France Germany Greece Hungary Italy Latvia Lithuania Luxembourg Montenegro Netherlands	77.84 72.84 50.90 76.55 61.40 51.27 38.62 40.24 48.59 50.67 77.18 49.77 76.41 52.97 57.53 49.31 78.53 56.50	78.23 73.66 53.76 72.28 55.25 52.01 39.56 37.88 47.79 49.86 72.05 48.21 77.55 50.06 48.49 42.77 78.03 55.51	76.80 65.64 53.11 75.40 61.95 49.51 38.70 38.86 47.94 48.35 73.13 49.66 70.79 43.87 45.50 45.56 75.32 51.77	68.20 75.20 68.33 57.37 71.72 56.11 47.01 34.89 40.52 47.98 48.96 76.56 37.13 67.58 38.59 40.79 34.40 80.87 52.19 75.25 37.08	70.70 70.69 62.99 51.02 76.96 54.57 49.88 33.83 38.95 46.90 47.99 78.76 42.33 68.16 34.32 37.47 33.42 73.50 51.16	68.38 29.42 49.54 73.71 51.82 48.25 34.18 34.47 45.59 45.26 77.08 35.37 70.21 33.53 40.02 30.76 71.39 49.27	63.58 63.79 49.23 76.15 49.72 46.07 32.67 33.84 44.01 42.22 74.58 27.18 67.52 37.15 41.33 30.13 64.66 48.49	56.79 65.59 49.92 56.71 44.70 48.31 33.61 35.36 42.99 42.28 53.78 38.74 63.73 37.24 42.58 34.58 59.90 47.86	49.89 57.80 48.44 55.38 42.84 40.88 29.47 28.64 42.33 39.26 45.92 31.42 63.67 36.53 33.21 28.78 61.12 47.04 42.80 34.22	49.92 52.65 46.75 56.83 39.16 29.85 22.93 19.48 41.74 36.74 54.94 25.00 62.04 37.04 33.43 21.89 58.40 42.64
Belgium Bulgaria Canada Croatia Czechia Denmark Estonia Finland France Germany Greece Hungary Italy Latvia Lithuania Luxembourg Montenegro Netherlands North Macedonia	77.84 72.84 50.90 76.55 61.40 51.27 38.62 40.24 48.59 50.67 77.18 49.77 76.41 52.97 57.53 49.31 78.53 56.50 72.49 40.64 51.45	78.23 73.66 53.76 72.28 55.25 52.01 39.56 37.88 47.79 49.86 72.05 48.21 77.55 50.06 48.49 42.77 78.03 55.51 70.95	76.80 65.64 53.11 75.40 61.95 49.51 38.70 38.86 47.94 48.35 73.13 49.66 70.79 43.87 45.50 45.56 75.32 51.77 71.26	68.20 75.20 68.33 57.37 71.72 56.11 47.01 34.89 40.52 47.98 48.96 76.56 37.13 67.58 38.59 40.79 34.40 80.87 52.19 75.25 37.08 50.04	70.70 70.69 62.99 51.02 76.96 54.57 49.88 33.83 38.95 46.90 47.99 78.76 42.33 68.16 34.32 37.47 33.42 73.50 51.16 71.53	68.38 29.42 49.54 73.71 51.82 48.25 34.18 34.47 45.59 45.26 77.08 35.37 70.21 33.53 40.02 30.76 71.39 49.27 61.93	63.58 63.79 49.23 76.15 49.72 46.07 32.67 33.84 44.01 42.22 74.58 27.18 67.52 37.15 41.33 30.13 64.66 48.49 63.33	56.79 65.59 49.92 56.71 44.70 48.31 33.61 35.36 42.99 42.28 53.78 38.74 63.73 37.24 42.58 34.58 59.90 47.86 51.03	49.89 57.80 48.44 55.38 42.84 40.88 29.47 28.64 42.33 39.26 45.92 31.42 63.67 36.53 33.21 28.78 61.12 47.04 42.80	49.92 52.65 46.75 56.83 39.16 29.85 22.93 19.48 41.74 36.74 54.94 25.00 62.04 37.04 33.43 21.89 58.40 42.64 47.72
Belgium Bulgaria Canada Croatia Czechia Denmark Estonia Finland France Germany Greece Hungary Italy Latvia Lithuania Luxembourg Montenegro Netherlands North Macedonia Norway Poland Portugal	77.84 72.84 50.90 76.55 61.40 51.27 38.62 40.24 48.59 50.67 77.18 49.77 76.41 52.97 57.53 49.31 78.53 56.50 72.49 40.64 51.45 81.27	78.23 73.66 53.76 72.28 55.25 52.01 39.56 37.88 47.79 49.86 72.05 48.21 77.55 50.06 48.49 42.77 78.03 55.51 70.95 39.96 41.96 81.90	76.80 65.64 53.11 75.40 61.95 49.51 38.70 38.86 47.94 48.35 73.13 49.66 70.79 43.87 45.50 45.56 75.32 51.77 71.26 38.60 47.15 81.38	68.20 75.20 68.33 57.37 71.72 56.11 47.01 34.89 40.52 47.98 48.96 76.56 37.13 67.58 38.59 40.79 34.40 80.87 52.19 75.25 37.08 50.04 80.19	70.70 70.69 62.99 51.02 76.96 54.57 49.88 33.83 38.95 46.90 47.99 78.76 42.33 68.16 34.32 37.47 33.42 73.50 51.16 71.53 36.43 46.14 74.75	68.38 29.42 49.54 73.71 51.82 48.25 34.18 34.47 45.59 45.26 77.08 35.37 70.21 33.53 40.02 30.76 71.39 49.27 61.93 34.78 46.91 70.51	63.58 63.79 49.23 76.15 49.72 46.07 32.67 33.84 44.01 42.22 74.58 27.18 67.52 37.15 41.33 30.13 64.66 48.49 63.33 34.51 44.71 71.15	56.79 65.59 49.92 56.71 44.70 48.31 33.61 35.36 42.99 42.28 53.78 38.74 63.73 37.24 42.58 34.58 59.90 47.86 51.03 34.15 43.55 63.31	49.89 57.80 48.44 55.38 42.84 40.88 29.47 28.64 42.33 39.26 45.92 31.42 63.67 36.53 33.21 28.78 61.12 47.04 42.80 34.22 42.72 62.14	49.92 52.65 46.75 56.83 39.16 29.85 22.93 19.48 41.74 54.94 25.00 62.04 37.04 33.43 21.89 58.40 42.64 47.72 34.22 27.46 57.70
Belgium Bulgaria Canada Croatia Czechia Denmark Estonia Finland France Germany Greece Hungary Italy Latvia Lithuania Luxembourg Montenegro Netherlands Norway Poland Portugal Romania	77.84 72.84 50.90 76.55 61.40 51.27 38.62 40.24 48.59 50.67 77.18 49.77 76.41 52.97 57.53 49.31 78.53 56.50 72.49 40.64 51.45 81.27 71.15	78.23 73.66 53.76 72.28 55.25 52.01 39.56 37.88 47.79 49.86 72.05 48.21 77.55 50.06 48.49 42.77 78.03 55.51 70.95 39.96 41.96 81.90 63.30	76.80 65.64 53.11 75.40 61.95 49.51 38.70 38.86 47.94 48.35 73.13 49.66 70.79 43.87 45.50 45.56 75.32 51.77 71.26 38.60 47.15 81.38 65.01	68.20 75.20 68.33 57.37 71.72 56.11 47.01 34.89 40.52 47.98 48.96 76.56 37.13 67.58 38.59 40.79 34.40 80.87 52.19 75.25 37.08 50.04 80.19 54.67	70.70 70.69 62.99 51.02 76.96 54.57 49.88 33.83 38.95 46.90 47.99 78.76 42.33 68.16 34.32 37.47 33.42 73.50 51.16 71.53 36.43 46.14 74.75 54.48	68.38 29.42 49.54 73.71 51.82 48.25 34.18 34.47 45.59 45.26 77.08 35.37 70.21 33.53 40.02 30.76 71.39 49.27 61.93 34.78 46.91 70.51 57.90	63.58 63.79 49.23 76.15 49.72 46.07 32.67 33.84 44.01 42.22 74.58 27.18 67.52 37.15 41.33 30.13 64.66 48.49 63.33 34.51 44.71 71.15 59.20	56.79 65.59 49.92 56.71 44.70 48.31 33.61 35.36 42.99 42.28 53.78 38.74 63.73 37.24 42.58 34.58 59.90 47.86 51.03 34.15 43.55 63.31 57.79	49.89 57.80 48.44 55.38 42.84 40.88 29.47 28.64 42.33 39.26 45.92 31.42 63.67 36.53 33.21 28.78 61.12 47.04 42.80 34.22 42.72 62.14 55.03	49.92 52.65 46.75 56.83 39.16 29.85 22.93 19.48 41.74 54.94 25.00 62.04 37.04 33.43 21.89 58.40 42.64 47.72 34.22 27.46 57.70 59.68
Belgium Bulgaria Canada Croatia Czechia Denmark Estonia Finland France Germany Greece Hungary Italy Latvia Lithuania Luxembourg Montenegro Netherlands North Macedonia Norway Poland Portugal Romania Slovak Republic	77.84 72.84 50.90 76.55 61.40 51.27 38.62 40.24 48.59 50.67 77.18 49.77 76.41 52.97 57.53 49.31 78.53 56.50 72.49 40.64 51.45 81.27 71.15 69.14	78.23 73.66 53.76 72.28 55.25 52.01 39.56 37.88 47.79 49.86 72.05 48.21 77.55 50.06 48.49 42.77 78.03 55.51 70.95 39.96 41.96 81.90 63.30 56.24	76.80 65.64 53.11 75.40 61.95 49.51 38.70 38.86 47.94 48.35 73.13 49.66 70.79 43.87 45.50 45.56 75.32 51.77 71.26 38.60 47.15 81.38 65.01 58.72	68.20 75.20 68.33 57.37 71.72 56.11 47.01 34.89 40.52 47.98 48.96 76.56 37.13 67.58 38.59 40.79 34.40 80.87 52.19 75.25 37.08 50.04 80.19 54.67 58.21	70.70 70.69 62.99 51.02 76.96 54.57 49.88 33.83 38.95 46.90 47.99 78.76 42.33 68.16 34.32 37.47 33.42 73.50 51.16 71.53 36.43 46.14 74.75 54.48 54.74	68.38 29.42 49.54 73.71 51.82 48.25 34.18 34.47 45.59 45.26 77.08 35.37 70.21 33.53 40.02 30.76 71.39 49.27 61.93 34.78 46.91 70.51 57.90 40.81	63.58 63.79 49.23 76.15 49.72 46.07 32.67 33.84 44.01 42.22 74.58 27.18 67.52 37.15 41.33 30.13 64.66 48.49 63.33 34.51 44.71 71.15 59.20 42.34	56.79 65.59 49.92 56.71 44.70 48.31 33.61 35.36 42.99 42.28 53.78 38.74 63.73 37.24 42.58 34.58 59.90 47.86 51.03 34.15 43.55 63.31 57.79 46.61	49.89 57.80 48.44 55.38 42.84 40.88 29.47 28.64 42.33 39.26 45.92 31.42 63.67 36.53 33.21 28.78 61.12 47.04 42.80 34.22 42.72 62.14 55.03 42.77	49.92 52.65 46.75 56.83 39.16 29.85 22.93 19.48 41.74 36.74 54.94 25.00 62.04 37.04 33.43 21.89 58.40 42.64 47.72 34.22 27.46 57.70 59.68 37.48
Belgium Bulgaria Canada Croatia Czechia Denmark Estonia Finland France Germany Greece Hungary Italy Latvia Lithuania Luxembourg Montenegro Netherlands North Macedonia Norway Poland Portugal Romania Slovak Republic Slovenia	77.84 72.84 50.90 76.55 61.40 51.27 38.62 40.24 48.59 50.67 77.18 49.77 76.41 52.97 57.53 49.31 78.53 56.50 72.49 40.64 51.45 81.27 71.15 69.14 82.31	78.23 73.66 53.76 72.28 55.25 52.01 39.56 37.88 47.79 49.86 72.05 48.21 77.55 50.06 48.49 42.77 78.03 55.51 70.95 39.96 41.96 81.90 63.30 56.24 82.23	76.80 65.64 53.11 75.40 61.95 49.51 38.70 38.86 47.94 48.35 73.13 49.66 70.79 43.87 45.50 45.56 75.32 51.77 71.26 38.60 47.15 81.38 65.01 58.72 76.03	68.20 75.20 68.33 57.37 71.72 56.11 47.01 34.89 40.52 47.98 48.96 76.56 37.13 67.58 38.59 40.79 34.40 80.87 52.19 75.25 37.08 50.04 80.19 54.67 58.21 75.04	70.70 70.69 62.99 51.02 76.96 54.57 49.88 33.83 38.95 46.90 47.99 78.76 42.33 68.16 34.32 37.47 33.42 73.50 51.16 71.53 36.43 46.14 74.75 54.48 54.74 72.38	68.38 29.42 49.54 73.71 51.82 48.25 34.18 34.47 45.59 45.26 77.08 35.37 70.21 33.53 40.02 30.76 71.39 49.27 61.93 34.78 46.91 70.51 57.90 40.81 69.07	63.58 63.79 49.23 76.15 49.72 46.07 32.67 33.84 44.01 42.22 74.58 27.18 67.52 37.15 41.33 30.13 64.66 48.49 63.33 34.51 44.71 71.15 59.20 42.34 72.75	56.79 65.59 49.92 56.71 44.70 48.31 33.61 35.36 42.99 42.28 53.78 38.74 63.73 37.24 42.58 34.58 59.90 47.86 51.03 34.15 43.55 63.31 57.79 46.61 61.99	49.89 57.80 48.44 55.38 42.84 40.88 29.47 28.64 42.33 39.26 45.92 31.42 63.67 36.53 33.21 28.78 61.12 47.04 42.80 34.22 42.72 62.14 55.03 42.77 53.77	49.92 52.65 46.75 56.83 39.16 29.85 22.93 19.48 41.74 36.74 54.94 25.00 62.04 37.04 33.43 21.89 58.40 42.64 47.72 34.22 27.46 57.70 59.68 37.48 48.96
Belgium Bulgaria Canada Croatia Czechia Denmark Estonia Finland France Germany Greece Hungary Italy Latvia Lithuania Luxembourg Montenegro Netherlands North Macedonia Norway Poland Portugal Romania Slovak Republic Slovenia Spain	77.84 72.84 50.90 76.55 61.40 51.27 38.62 40.24 48.59 50.67 77.18 49.77 76.41 52.97 57.53 49.31 78.53 56.50 72.49 40.64 51.45 81.27 71.15 69.14 82.31 67.34	78.23 73.66 53.76 72.28 55.25 52.01 39.56 37.88 47.79 49.86 72.05 48.21 77.55 50.06 48.49 42.77 78.03 55.51 70.95 39.96 41.96 81.90 63.30 56.24 82.23 65.18	76.80 65.64 53.11 75.40 61.95 49.51 38.70 38.86 47.94 48.35 73.13 49.66 70.79 43.87 45.50 45.56 75.32 51.77 71.26 38.60 47.15 81.38 65.01 58.72 76.03 72.61	68.20 75.20 68.33 57.37 71.72 56.11 47.01 34.89 40.52 47.98 48.96 76.56 37.13 67.58 38.59 40.79 34.40 80.87 52.19 75.25 37.08 50.04 80.19 54.67 58.21 75.04 61.64	70.70 70.69 62.99 51.02 76.96 54.57 49.88 33.83 38.95 46.90 47.99 78.76 42.33 68.16 34.32 37.47 33.42 73.50 51.16 71.53 36.43 46.14 74.75 54.48 54.74 72.38 59.64	68.38 29.42 49.54 73.71 51.82 48.25 34.18 34.47 45.59 45.26 77.08 35.37 70.21 33.53 40.02 30.76 71.39 49.27 61.93 34.78 46.91 70.51 57.90 40.81 69.07 61.86	63.58 63.79 49.23 76.15 49.72 46.07 32.67 33.84 44.01 42.22 74.58 27.18 67.52 37.15 41.33 30.13 64.66 48.49 63.33 34.51 44.71 71.15 59.20 42.34 72.75 62.54	56.79 65.59 49.92 56.71 44.70 48.31 33.61 35.36 42.99 42.28 53.78 38.74 63.73 37.24 42.58 34.58 59.90 47.86 51.03 34.15 43.55 63.31 57.79 46.61 61.99 58.70	49.89 57.80 48.44 55.38 42.84 40.88 29.47 28.64 42.33 39.26 45.92 31.42 63.67 36.53 33.21 28.78 61.12 47.04 42.80 34.22 42.72 62.14 55.03 42.77 53.77 52.70	49.92 52.65 46.75 56.83 39.16 29.85 22.93 19.48 41.74 54.94 25.00 62.04 37.04 33.43 21.89 58.40 42.64 47.72 34.22 27.46 57.70 59.68 37.48 48.96 48.06
Belgium Bulgaria Canada Croatia Czechia Denmark Estonia Finland France Germany Greece Hungary Italy Latvia Lithuania Luxembourg Montenegro Netherlands North Macedonia Norway Poland Portugal Romania Slovak Republic Slovenia Spain Türkiye	77.84 72.84 50.90 76.55 61.40 51.27 38.62 40.24 48.59 50.67 77.18 49.77 76.41 52.97 57.53 49.31 78.53 56.50 72.49 40.64 51.45 81.27 71.15 69.14 82.31 67.34 56.88	78.23 73.66 53.76 72.28 55.25 52.01 39.56 37.88 47.79 49.86 72.05 48.21 77.55 50.06 48.49 42.77 78.03 55.51 70.95 39.96 41.96 81.90 63.30 56.24 82.23 65.18 56.82	76.80 65.64 53.11 75.40 61.95 49.51 38.70 38.86 47.94 48.35 73.13 49.66 70.79 43.87 45.50 45.56 75.32 51.77 71.26 38.60 47.15 81.38 65.01 58.72 76.03 72.61 57.60	68.20 75.20 68.33 57.37 71.72 56.11 47.01 34.89 40.52 47.98 48.96 76.56 37.13 67.58 38.59 40.79 34.40 80.87 52.19 75.25 37.08 50.04 80.19 54.67 58.21 75.04 61.64 51.02	70.70 70.69 62.99 51.02 76.96 54.57 49.88 33.83 38.95 46.90 47.99 78.76 42.33 68.16 34.32 37.47 33.42 73.50 51.16 71.53 36.43 46.14 74.75 54.48 54.74 72.38 59.64 45.18	68.38 29.42 49.54 73.71 51.82 48.25 34.18 34.47 45.59 45.26 77.08 35.37 70.21 33.53 40.02 30.76 71.39 49.27 61.93 34.78 46.91 70.51 57.90 40.81 69.07 61.86 48.38	63.58 63.79 49.23 76.15 49.72 46.07 32.67 33.84 44.01 42.22 74.58 27.18 67.52 37.15 41.33 30.13 64.66 48.49 63.33 34.51 44.71 71.15 59.20 42.34 72.75 62.54 50.64	56.79 65.59 49.92 56.71 44.70 48.31 33.61 35.36 42.99 42.28 53.78 38.74 63.73 37.24 42.58 34.58 59.90 47.86 51.03 34.15 43.55 63.31 57.79 46.61 61.99 58.70 47.88	49.89 57.80 48.44 55.38 42.84 40.88 29.47 28.64 42.33 39.26 45.92 31.42 63.67 36.53 33.21 28.78 61.12 47.04 42.80 34.22 42.72 62.14 55.03 42.77 53.77 52.70 45.27	49.92 52.65 46.75 56.83 39.16 29.85 22.93 19.48 41.74 54.94 25.00 62.04 37.04 33.43 21.89 58.40 42.64 47.72 34.22 27.46 57.70 59.68 37.48 48.96 48.06 38.18
Belgium Bulgaria Canada Croatia Czechia Denmark Estonia Finland France Germany Greece Hungary Italy Latvia Lithuania Luxembourg Montenegro Netherlands North Macedonia Norway Poland Portugal Romania Slovak Republic Slovenia Spain	77.84 72.84 50.90 76.55 61.40 51.27 38.62 40.24 48.59 50.67 77.18 49.77 76.41 52.97 57.53 49.31 78.53 56.50 72.49 40.64 51.45 81.27 71.15 69.14 82.31 67.34	78.23 73.66 53.76 72.28 55.25 52.01 39.56 37.88 47.79 49.86 72.05 48.21 77.55 50.06 48.49 42.77 78.03 55.51 70.95 39.96 41.96 81.90 63.30 56.24 82.23 65.18	76.80 65.64 53.11 75.40 61.95 49.51 38.70 38.86 47.94 48.35 73.13 49.66 70.79 43.87 45.50 45.56 75.32 51.77 71.26 38.60 47.15 81.38 65.01 58.72 76.03 72.61	68.20 75.20 68.33 57.37 71.72 56.11 47.01 34.89 40.52 47.98 48.96 76.56 37.13 67.58 38.59 40.79 34.40 80.87 52.19 75.25 37.08 50.04 80.19 54.67 58.21 75.04 61.64	70.70 70.69 62.99 51.02 76.96 54.57 49.88 33.83 38.95 46.90 47.99 78.76 42.33 68.16 34.32 37.47 33.42 73.50 51.16 71.53 36.43 46.14 74.75 54.48 54.74 72.38 59.64	68.38 29.42 49.54 73.71 51.82 48.25 34.18 34.47 45.59 45.26 77.08 35.37 70.21 33.53 40.02 30.76 71.39 49.27 61.93 34.78 46.91 70.51 57.90 40.81 69.07 61.86	63.58 63.79 49.23 76.15 49.72 46.07 32.67 33.84 44.01 42.22 74.58 27.18 67.52 37.15 41.33 30.13 64.66 48.49 63.33 34.51 44.71 71.15 59.20 42.34 72.75 62.54	56.79 65.59 49.92 56.71 44.70 48.31 33.61 35.36 42.99 42.28 53.78 38.74 63.73 37.24 42.58 34.58 59.90 47.86 51.03 34.15 43.55 63.31 57.79 46.61 61.99 58.70	49.89 57.80 48.44 55.38 42.84 40.88 29.47 28.64 42.33 39.26 45.92 31.42 63.67 36.53 33.21 28.78 61.12 47.04 42.80 34.22 42.72 62.14 55.03 42.77 53.77 52.70	49.92 52.65 46.75 56.83 39.16 29.85 22.93 19.48 41.74 54.94 25.00 62.04 37.04 33.43 21.89 58.40 42.64 47.72 34.22 27.46 57.70 59.68 37.48 48.96 48.06

Notes: Figures for 2023 are estimates.

(a) Equipment expenditure includes major equipment expenditure and R&D devoted to major equipment.

(b) Personnel expenditure includes military and civilian expenditure and pensions.

Table 8b: Distribution of defence expenditure by main category (percentage of total defence expenditure)

Country	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023e
,				Infrastru						
Albania	0.86	1.40	1.37	0.92	1.09	1.64	1.39	3.61	5.12	19.24
Belgium	1.81	0.93	0.96	1.05	1.43	1.19	1.00	0.82	2.67	3.58
Bulgaria	0.63	1.27	0.63	0.83	2.62	1.09	7.71	4.93	6.96	1.36
Canada	3.81	3.63	3.03	2.98	3.58	2.72	3.07	3.22	2.64	4.63
Croatia	1.24	1.98	1.26	3.59	1.00	1.41	1.53	0.55	0.71	4.19
Czechia	2.34	3.32	3.91	3.99	5.31	5.27	7.41	6.24	4.32	9.14
Denmark	0.97	1.09	2.16	1.95	1.49	1.85	1.84	4.08	3.07	2.44
Estonia	8.20	8.45	12.15	11.27	8.52	6.13	6.65	5.55	8.02	7.01
Finland	0.00	0.00	0.00	0.00	0.00	0.29	0.37	0.63	0.52	0.42
France	2.33	2.80	2.70	2.88	3.51	3.13	2.88	3.04	3.01	3.60
Germany	3.75	3.60	3.39	4.06	4.15	3.99	3.78	3.74	3.54	3.46
Greece	1.10	0.65	0.58	0.79	0.62	0.20	0.18	0.26	0.26	0.50
Hungary	1.07	1.21	1.13	1.31	1.68	2.64	1.41	9.16	2.23	4.19
Italy	1.40	1.30	0.70	0.94	1.29	0.67	0.97	1.48	1.95	3.10
Latvia	8.89	6.64	12.83	15.02	6.45	10.30	11.85	5.28	4.31	6.92
Lithuania	2.17	2.16	3.59	3.92	2.24	2.40	1.25	2.47	4.54	13.40
Luxembourg	10.26	7.79	6.64	4.64	5.05	3.16	3.42	7.28	4.96	13.88
Montenegro	0.96	2.47	2.41	0.88	1.86	1.48	1.33	5.26	0.49	5.16
Netherlands	4.77	3.19	3.90	3.02	3.46	3.26	3.14	2.99	3.32	4.56
North Macedonia	1.24	1.67	1.28	1.01	0.95	3.89	2.78	3.09	3.09	1.64
Norway	5.71	5.30	6.56	6.93	6.67	5.87	6.55	6.45	5.64	5.78
Poland	5.47	4.74	4.62	4.21	3.45	4.78	4.31	3.71	4.12	4.01
Portugal	0.11	0.25	0.06	0.03	0.05	0.11	0.08	0.11	0.07	0.05
Romania	1.09	1.27	2.77	2.09	1.54	3.53	4.29	7.06	4.19	4.49
Slovak Republic	0.57	1.99	3.75	2.97	2.00	1.17	5.21	1.46	2.60	2.91
Slovenia	0.65	0.61	1.14	0.45	1.40	0.57	1.10	1.31	1.92	7.35
Spain	0.66	0.97	0.97	0.68	0.64	0.98	1.07	1.08	0.76	1.67
Türkiye	2.77	2.56	2.42	2.95	2.53	2.26	2.22	7.49	7.63	22.52
United Kingdom	1.95	1.63	1.87	2.25	2.99	2.11	1.72	1.72	2.88	2.56
United States	1.71	1.45	1.22	1.23	1.17	1.38	1.33	1.27	1.32	1.49
				Othe	r (d)					
Albania	14.44	11.53	22.57	23.92	18.79	20.86	19.20	17.70	17.78	16.03
Belgium	16.83	17.40	17.52	17.23	17.72	19.36	21.54	22.92	27.08	26.27
Bulgaria	25.51	21.60	24.57	22.74	24.74	9.74	20.05	18.43	19.54	16.67
Canada	32.26	32.14	33.25	28.95	33.46	33.90	33.04	34.79	37.60	34.26
Croatia	16.65	17.73	15.83	18.99	18.67	18.33	13.27	12.73	12.72	15.06
Czechia	29.73	29.67	27.45	28.35	28.95	26.47	25.56	28.58	28.15	25.87
Denmark	36.78	35.40	34.65	40.66	36.97	33.69	34.44	30.42	37.33	54.35
Estonia	31.03	39.18	31.30	34.62	41.14	44.20	37.68	37.65	42.44	40.74
Finland	46.08	47.96	47.10	46.13	47.49	44.10	44.16	44.12	37.30	29.30
France	24.43	24.37	24.92	24.97	25.92	26.74	26.49	26.12	26.02	26.47
Germany	32.63	34.61	36.05	35.20	35.49	36.06	36.55	37.29	39.96	35.91
Greece	13.55	16.90	12.84	11.37	9.60	11.17	14.55	8.72	11.53	8.98
Hungary	41.40	40.83	35.84	43.01	43.36	25.53	25.84	15.70	18.76	31.59
Italy	11.27	11.42	9.42	10.80	11.43	12.11	12.95	11.56	11.61	14.40
Latvia	30.59	29.69	24.25	31.38	27.38	34.51	30.46	35.42	34.51	29.72
Lithuania	26.24	27.79	20.85	23.67	23.30	20.01	23.71	32.63	25.63	30.11
Luxembourg	17.82	16.11	17.73	18.90	16.35	16.37	16.30	18.57	21.15	22.80
Montenegro	13.06	14.07	17.73	13.27	13.50	12.16	13.06	14.30	15.53	12.44
The state of the s										
Netherlands	28.05	30.14 16.25	30.20 19.09	30.04 17.26	28.99 16.43	27.13 20.36	26.24 22.37	25.29 24.10	34.85 29.98	27.29 16.45
North Massadonia	20.24		19.09							
North Macedonia	20.34		24.40		31.30	30.59	30.53	30.21	31.75	31.74
Norway	33.24	32.90	31.46	31.36						44.00
Norway Poland	33.24 24.24	32.90 20.11	26.61	23.71	22.89	24.95	21.67	18.85	20.74	
Norway Poland Portugal	33.24 24.24 10.19	32.90 20.11 9.15	26.61 8.61	23.71 8.35	22.89 9.72	24.95 12.77	21.67 11.41	18.85 20.04	20.74 19.79	20.18
Norway Poland Portugal Romania	33.24 24.24 10.19 11.98	32.90 20.11 9.15 15.78	26.61 8.61 11.79	23.71 8.35 9.90	22.89 9.72 10.51	24.95 12.77 12.99	21.67 11.41 13.38	18.85 20.04 13.58	20.74 19.79 15.26	20.18 13.89
Norway Poland Portugal Romania Slovak Republic	33.24 24.24 10.19 11.98 19.16	32.90 20.11 9.15 15.78 23.49	26.61 8.61 11.79 22.22	23.71 8.35 9.90 21.08	22.89 9.72 10.51 20.99	24.95 12.77 12.99 17.95	21.67 11.41 13.38 20.60	18.85 20.04 13.58 19.59	20.74 19.79 15.26 18.09	20.18 13.89 35.35
Norway Poland Portugal Romania Slovak Republic Slovenia	33.24 24.24 10.19 11.98 19.16 16.38	32.90 20.11 9.15 15.78 23.49 15.31	26.61 8.61 11.79 22.22 21.80	23.71 8.35 9.90 21.08 20.47	22.89 9.72 10.51 20.99 20.24	24.95 12.77 12.99 17.95 23.25	21.67 11.41 13.38 20.60 20.46	18.85 20.04 13.58 19.59 22.14	20.74 19.79 15.26 18.09 21.94	20.18 13.89 35.35 19.64
Norway Poland Portugal Romania Slovak Republic	33.24 24.24 10.19 11.98 19.16 16.38 18.50	32.90 20.11 9.15 15.78 23.49	26.61 8.61 11.79 22.22	23.71 8.35 9.90 21.08 20.47 17.28	22.89 9.72 10.51 20.99 20.24 17.89	24.95 12.77 12.99 17.95 23.25 16.14	21.67 11.41 13.38 20.60	18.85 20.04 13.58 19.59 22.14 17.76	20.74 19.79 15.26 18.09	20.18 13.89 35.35 19.64
Norway Poland Portugal Romania Slovak Republic Slovenia Spain Türkiye	33.24 24.24 10.19 11.98 19.16 16.38 18.50 15.27	32.90 20.11 9.15 15.78 23.49 15.31 19.03 15.49	26.61 8.61 11.79 22.22 21.80 19.78 14.43	23.71 8.35 9.90 21.08 20.47 17.28 15.73	22.89 9.72 10.51 20.99 20.24 17.89 14.65	24.95 12.77 12.99 17.95 23.25 16.14 15.04	21.67 11.41 13.38 20.60 20.46 16.96 16.41	18.85 20.04 13.58 19.59 22.14 17.76 15.32	20.74 19.79 15.26 18.09 21.94 25.65 18.67	20.18 13.89 35.35 19.64 22.17 10.55
Norway Poland Portugal Romania Slovak Republic Slovenia Spain	33.24 24.24 10.19 11.98 19.16 16.38 18.50	32.90 20.11 9.15 15.78 23.49 15.31 19.03	26.61 8.61 11.79 22.22 21.80 19.78	23.71 8.35 9.90 21.08 20.47 17.28	22.89 9.72 10.51 20.99 20.24 17.89	24.95 12.77 12.99 17.95 23.25 16.14	21.67 11.41 13.38 20.60 20.46 16.96	18.85 20.04 13.58 19.59 22.14 17.76	20.74 19.79 15.26 18.09 21.94 25.65	14.96 20.18 13.89 35.35 19.64 22.17 10.55 33.63 42.81

Notes: Figures for 2023 are estimates.

(c) Infrastructure expenditure includes NATO common infrastructure and national military construction.

(d) Other expenditure includes operations and maintenance expenditure, other R&D expenditure and expenditure not allocated among above-mentioned categories.

## NATO defence expenditure

NATO defines defence expenditure as payments made by a national government specifically to meet the needs of its armed forces, those of Allies or of the Alliance. A major component of defence expenditure is payments for Armed Forces financed from within the Ministry of Defence (MoD) budget. Armed Forces include Land, Maritime and Air forces as well as Joint formations such as Administration and Command, Special Operations Forces, Medical Service, Logistic Command, Space Command, Cyber Command, etc. They might also include "Other Forces" like Ministry of Interior troops, national police forces, gendarmerie, carabinieri, coast guards etc. In such cases, expenditure is included only in proportion to the forces that are trained in military tactics, are equipped as a military force, can operate under direct military authority in deployed operations, and can, realistically, be deployed outside national territory in support of a military force. Also, expenditure on Other Forces financed through the budgets of ministries other than MoD is included in defence expenditure.

Pension payments made directly by the government to retired military and civilian employees of military departments is included regardless of whether these payments are made from the budget of the MoD or other ministries.

Expenditure for peacekeeping and humanitarian operations (paid by MoD or other ministries), the destruction of weapons, equipment and ammunition, contributions to eligible NATO-managed trust funds, and the costs associated with inspection and control of equipment destruction are included in defence expenditure.

Research and development (R&D) costs are included in defence expenditure. R&D costs also include expenditure for those projects that do not successfully lead to production of equipment.

Expenditure for the military component of mixed civilian-military activities is included, but only when the military component can be specifically accounted for or estimated.

Expenditure on NATO common infrastructure is included in the total defence expenditure of each Ally only to the extent of that nation's net contribution.

War damage payments and spending on civil defence are both excluded from the NATO definition of defence expenditure.

NATO uses United States dollars (USD) as the common currency denominator. The exchange rate applied to each Ally is the average annual rate published by the International Monetary Fund (IMF).

Iceland has no armed forces. For nations of the Euro zone and Montenegro, monetary values in national currency are expressed in Euros for all years. Latvia adopted the Euro from 2014, Lithuania from 2015, and Croatia from 2023. Montenegro joined the Alliance in 2017, North Macedonia in 2020, and Finland in 2023.

To avoid any ambiguity, the fiscal year has been designated by the year which includes the highest number of months: e.g. 2023 represents the fiscal year 2023/2024 for Canada and the United Kingdom, and the fiscal year 2022/2023 for the United States. Because of rounding, the total figures may differ from the sum of their components.

## **Conventional signs:**

- e estimated
- nil
- .. not available
- break in continuity of series
- . decimal point

## Nomenclature of NATO defence expenditure:

- 1 Operating costs
- 1.1 Military personnel
- 1.1.1 Pay and allowances
- 1.1.2 Employer's contributions to retirement funds
- 1.1.3 Other
- 1.2 Civilian personnel
- 1.2.1 Pay and allowances
- 1.2.2 Employer's contributions to retirement funds
- 1.3 Pensions
- 1.3.1 Paid to military retirees
- 1.3.2 Paid to civilian retirees
- 1.4 Operations and maintenance
- 1.4.1 Ammunition and explosives (excluding nuclear)
- 1.4.2 Petroleum products
- 1.4.3 Spare parts
- 1.4.4 Other equipment and supplies
- 1.4.5 Rents
- 1.4.6 Other operations and maintenance
- 2 Procurement and construction
- 2.1 Major equipment
- 2.1.1 Missile systems
- 2.1.2 Missiles (conventional weapons)
- 2.1.3 Nuclear weapons
- 2.1.4 Aircraft
- 2.1.5 Artillery
- 2.1.6 Combat vehicles
- 2.1.7 Engineering equipment
- 2.1.8 Weapons and small arms
- 2.1.9 Transport vehicles
- 2.1.10 Ships and harbour craft
- 2.1.11 Electronic and communications equipment
- 2.2 National military construction
- 2.3 NATO common infrastructure
- 2.3.1 Expenditure as host country
- 2.3.2 Payments to other countries
- 2.3.3 Receipts from other countries
- 2.3.4 Land and utilities

- 3 Research and development
- 3.1 Devoted to major equipment
- 3.2 Other
- 4 Other expenditure
- 5 Total
- 6 Statistical discrepancy
- 7 Adjusted total

## Main categories of defence expenditure:

- Equipment (Table 8a) lines 2.1 + 3.1
- Personnel (Table 8a) lines 1.1 + 1.2 + 1.3
- Infrastructure (Table 8b) lines 2.2 + 2.3
- Other (Table 8b) lines 1.4 + 3.2 + 4



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