



The Secretary General's
Annual Report

2017

The Secretary General's

Annual Report

2017

TABLE OF CONTENTS

FOREWORD	4
FOR ALL WHO SERVE	8
DETERRENCE, DEFENCE AND DIALOGUE	10
A Year of Progress	12
Strengthening Collective Defence: An Alliance-wide Response	13
Safeguarding NATO's Skies	18
Building Resilience	19
Investing in Cyber Defence	20
Countering Hybrid Threats	22
Transparency and Risk Reduction	23
Conventional Arms Control in Europe	24
Relations with Russia	25
Arms Control, Disarmament, Non-proliferation, and Chemical, Biological, Radiological and Nuclear Defence	26
Weapons of Mass Destruction and Chemical, Biological, Radiological and Nuclear Threats	26
Small Arms, Light Weapons, Mine Action	28
INVESTING IN SECURITY	30
MODERNISING NATO	36
A Year of Adaptation	38
Improving Capabilities	39
Investing in Innovation and Technology	40
Pursuing an Integrated Approach to Aviation	42
NATO Integrated Air and Missile Defence System	42
Airborne Warning and Control System	44
Alliance Ground Surveillance	45
Joint Intelligence, Surveillance and Reconnaissance	46
Anti-Submarine Warfare	47
Working with Industry	47
Exercising the Alliance	48
Crisis Management Exercise 2017	49
Enhancing Intelligence Coordination	52

PROJECTING STABILITY: COUNTERING TERRORISM, WORKING WITH PARTNERS	54
Fighting Terrorism	56
Supporting Afghanistan	58
Assisting Iraq	59
Enhancing Resilience in the Middle East and North Africa	60
Maritime Security and Regional Stability	62
Continuing to Stabilise Kosovo with the NATO-led Kosovo Force	63
Protecting Civilians	64
Stability and the Value of Partnerships	65
NATO's Open Door	66
Promoting Interoperability	67
Building Capacity	68
Enhancing Training	72
Advancing Science for Peace and Security	73
Trust Funds	75
Euro-Atlantic Disaster Response Coordination Centre	76
Working with International Organisations	78
PROMOTING EQUALITY: WOMEN, PEACE AND SECURITY	82
ORGANISATION	88
NATO Headquarters and Structures	90
International Staff	91
North Atlantic Council	91
NATO Military Authorities	92
Agencies and Organisations	94
NATO Funding	96
Improving Transparency	98
Public Communications	99
ANNEXES	100
Resolute Support Mission	102
Kosovo Force	103
Defence Expenditure of NATO Countries	104



FOREWORD



In front of the new NATO Headquarters building in Brussels stand two memorials: a section of the Berlin Wall, and a twisted girder from the wreckage of the Twin Towers in New York.

Those memorials are a powerful symbol of NATO's unshakeable commitment to our collective defence, of our solidarity and resolve in the fight against terrorism, and of the unbreakable bond that ties Europe and North America.

The men and women of our armed forces represent that bond. The skill and bravery they display on NATO missions and operations keep our nations safe. We rely on their professionalism every day, and owe them and their families a huge debt of gratitude.

That is particularly true as NATO continues to respond to the most complex security environment in a generation. The Alliance's mission remains to deter and defend against any military attack. But we must also be vigilant against a whole generation of new threats, which are just as likely to come in the form of computer code, disinformation or foreign fighters.

That is why NATO is adapting.

Part of being a truly 21st century Alliance is about speed: speed of awareness, speed of decision-making, speed of action, speed of reinforcement and speed of adaptation – what is sometimes called the 'speed of relevance'. And a more agile, more responsive, more innovative NATO is a stronger and more effective NATO.

2017 was a defining year in that continuing evolution. At our meeting of NATO leaders in Brussels in May, we took important decisions on how to implement fairer burden-sharing and stepping up the fight against terrorism – decisions which are making the Alliance stronger.

Last year, we also deployed four multinational battlegroups to the east of the Alliance and strengthened our Forward Presence in the Black Sea region. We welcomed Montenegro as the 29th member of the Alliance. We joined the Global Coalition to Defeat ISIS, with our AWACS planes, and training of Iraqi forces. We increased our support to Jordan and Tunisia. And we worked hand-in-hand with the European Union to keep our seas safe, fight terrorism, and defend against cyber attacks.

A more uncertain security environment requires that we invest more in defence, develop the right military capabilities, and make the necessary contributions to our military operations and missions. In 2014, Allies pledged to stop cuts to their defence budgets, increase defence spending, and move towards investing at least 2% of their GDP in defence within a decade.

Since then we have seen three consecutive years of growth in defence expenditure across Europe and Canada, adding a total of 46 billion dollars to defence. All Allies have pledged to continue to increase defence spending in real terms. In 2017 alone, European Allies and Canada increased their defence expenditure by almost 5%. This year, we expect eight allies to meet the 2% guideline. And the majority of Allies already have plans on how to meet the 2% guideline by 2024.

So the picture is clear: the Alliance is doing more to respond and adapt to an uncertain security environment. All Allies are stepping up: doing more, in more places, in more ways, to strengthen our shared security.

NATO poses no threat to any country. We continue to strive for a constructive relationship with Russia and we remain committed to dialogue in order to clearly communicate our positions, reduce risk and increase transparency. We also remain firmly committed to arms control and to landmark agreements such as the Intermediate-Range Nuclear Forces Treaty. In 2017 the NATO-Russia Council – a forum for frank discussion – met three times. This dialogue is not easy. But when tensions are high it is even more important to talk to each other. Our policy towards Russia is consistent: strong deterrence and defence combined with meaningful dialogue.

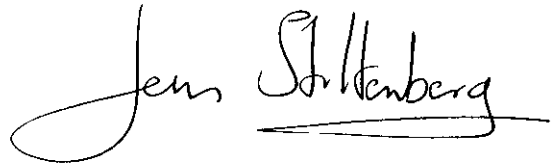
Looking forward, NATO will continue working to preserve peace and security – boosting our ability to reinforce across Alliance territory, updating the NATO Command Structure, integrating cyber defence into our planning and operations, stepping up our support for the Afghan security forces, launching a new mission in Iraq to expand our training efforts and enhancing our ability to respond to future crises in the Middle East and North Africa.

But we know we cannot be complacent. The world does not stand still – and neither can NATO.


This coming July, a Summit of NATO leaders will be held at the new Headquarters. The Summit will be an important opportunity to chart the Alliance's path for the years ahead: to further strengthen our deterrence and defence; boost our efforts to project stability in our neighbourhood and fight terrorism; enhance the strategic partnership with the European Union; modernise our Alliance; and ensure fairer burden-sharing. The new NATO Headquarters will itself be a symbol of our transformation – a cutting-edge, sustainable, adaptable building which makes a fitting home for the Alliance in the 21st century.

NATO doesn't have the luxury of choosing the security threats we face. We must be ready and able to operate decisively across all operational domains – land, sea, air and cyberspace.

And we are. Because the result of all our efforts over these last 12 months – illustrated in this report – is an Alliance that is becoming faster and fairer. An Alliance which has the tools – and the determination – to keep our almost one billion citizens safe. And an Alliance which remains uncompromising in its commitment to preserving peace and security.

A handwritten signature in black ink, reading 'Jens Stoltenberg'. The signature is fluid and cursive, with a long horizontal stroke at the end.

Jens Stoltenberg
NATO Secretary General

A photograph of NATO soldiers in camouflage uniforms and berets, holding various national flags on poles. The flags include the German flag (black, red, and gold horizontal stripes), the Danish flag (red field with a white Scandinavian cross), the Norwegian flag (red, white, and blue horizontal stripes), the Polish flag (white top half and red bottom half), and the Italian flag (green, white, and red vertical stripes). The soldiers are standing in a line, looking forward, against a clear blue sky.

For All Who Serve

NATO's ability to preserve peace and security relies, above all, on the skill and determination of the men and women of Allied and partner countries' armed forces.

In 2017, tens of thousands of Allied and partner personnel were deployed on NATO missions and operations – on land, at sea and in the air. Their willingness to serve – and the professionalism they display each day – is the single most important contribution to the safety of the citizens the Alliance exists to protect.

NATO recognises the debt of gratitude it owes them for the risks they take, and the sacrifices they and their families make. They are the embodiment of the Alliance's values and of our commitment to coming to each other's aid.





DETERRENCE, DEFENCE AND DIALOGUE



NATO's chief responsibility is to protect its citizens and nations, a task it has successfully carried out for nearly 70 years. To prevent conflict and preserve peace, the Alliance must deter and defend against any security threat, no matter its complexity or origin. In the last twelve months, NATO has continued to adapt in order to do exactly that.

A Year of Progress

In 2017, NATO continued to modernise to meet the challenges of a complex, rapidly changing and uncertain security environment.

The Alliance remained committed to **strengthening its deterrence and defence**. In 2017, NATO bolstered its defensive presence in the eastern part of the Alliance. In just a year, the Alliance implemented the Warsaw Summit decision to establish a rotational Forward Presence – deploying four multinational battlegroups to Estonia, Latvia, Lithuania and Poland, and strengthening its presence in the Black Sea region.

NATO maintained an all-round approach to collective defence, including by deepening its focus on threats from the Alliance's southern flank. For example, NATO established a Regional Hub for the South in September 2017. The Hub aims to improve situational awareness and to enhance engagement with partners.

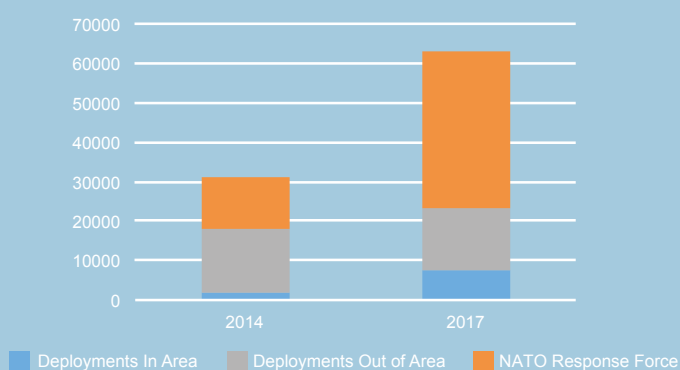
The Alliance continues to ensure it can perform its three core tasks: collective defence, crisis management, and cooperative security. In recent years, this has required NATO to recalibrate its missions, operations and activities to better meet

changing security needs. NATO has wound down some activities, such as its counter-piracy mission off the Horn of Africa, and transformed others, including by transitioning from a combat to a training mission in Afghanistan. At the same time, to keep its nations safe in the face of new security challenges, the Alliance has invested in reinforcing and developing a number of activities, including on Allied territory.

As part of this adaptation process, NATO has strengthened its collective defence, tripling the size of the NATO Response Force from roughly 13,000 to 40,000 troops and establishing a 5,000-strong Very High Readiness Joint Task Force. The Alliance has boosted its Forward Presence in the northeast and southeast of the Alliance and strengthened assurance and support measures inside Alliance territory, including by enhancing air policing. NATO has also adapted its maritime security posture in the Mediterranean and invested in supporting the security and stability of partners by training local institutions and forces to fight terrorism.

Following the 2016 Warsaw Summit decision to make cyberspace an operational domain, the Alliance continued to strengthen its cyber defences

Personnel in Allied Deployments and NATO Response Force*



* **Allied Personnel includes:** 1- **Deployments in area:** Allied operations, missions and activities conducted within the territory of NATO member countries; 2- **Deployments out of area:** Allied operations, missions and activities carried out outside member states' territory; 3- **NATO Response Force:** Allied forces earmarked as NATO's high readiness response forces, including the Very High Readiness Joint Task Force.

In 2017, NATO's principal in area engagements included its **Forward Presence** (approximately 4,500 Allied personnel); whereas NATO's main out of area deployments included the **Kosovo Force** (approximately 4,500 Allied personnel) and the non-combat **Resolute Support Mission** in Afghanistan (approximately 13,000 Allied personnel).

The numbers displayed in the chart are rounded off.



Canadian and Romanian air force personnel at Mihail Kogalniceanu Air Base, Romania, 2017.

and to fully integrate cyber defence into operational planning. At the same time, NATO is undertaking the largest modernisation of its information technology and networks in decades.

NATO also established a new intelligence division at its Headquarters in Brussels, improving Allies' ability to obtain and share information on potential security threats.

2017 saw the Allies launch a process to adapt the NATO Command Structure – which is responsible

for providing command and control for the Alliance's joint operations – to make sure it is fit for purpose and able to effectively tackle any potential security threat.

As it adapts, NATO's posture remains defensive, proportionate, and consistent with its international obligations. The Alliance also demonstrates an enduring respect for the rules-based international order. NATO does not seek confrontation but it will defend all Allies against any threat.

Strengthening Collective Defence: An Alliance-wide Response

Since the Wales Summit in 2014, NATO has implemented the largest reinforcement of its collective defence in a generation. As part of this extensive effort, NATO has increased its presence in the northeast and southeast of the Alliance.

In 2017, NATO deployed four multinational battlegroups in Estonia, Latvia, Lithuania and Poland. Led by the United Kingdom, Canada,

Germany and the United States respectively, this **Forward Presence** became fully operational in the summer. Around 4,500 troops are deployed and embedded in the home defence forces of the host nations, training and exercising with those forces on a daily basis.

Over the past year, more than 20 Allies contributed forces and capabilities to this initiative, a clear

4 Multinational Battlegroups

ESTONIA:

United Kingdom
Denmark
France
Iceland

LITHUANIA:

Germany
Belgium
Croatia
Luxembourg
The Netherlands
Norway

LATVIA:

Canada
Albania
Italy
Poland
Slovakia
Slovenia
Spain

POLAND:

United States
Croatia
Romania
United Kingdom

 Framework Nation
 Contributing Nation
December 2017





Operation Sea Guardian, Mediterranean Sea, May 2017.

demonstration of Allied solidarity and commitment. The battlegroups represent a proportionate and defensive force, in line with NATO's determination to provide effective deterrence and to ensure collective defence. They send a message that an attack against any Ally would be an attack against the whole Alliance, and met with a collective response.

In the face of evolving security challenges in the Black Sea region, NATO also took steps to strengthen its presence in the southeast of the Alliance. This element of NATO's Forward Presence comprises the deployment of a multinational brigade for training, and an expanded air and maritime presence in the Black Sea region. Together, these are distinct and important contributions to the Alliance's strengthened deterrence and defence posture, and to its situational awareness.

The multinational framework brigade, led by Romania, was established in April 2017 and is expected to become fully operational by the end of 2018. The brigade is being developed with affiliated forces from Bulgaria, Italy, Poland, Portugal and the United States, with contributions from Canada, Germany, Hungary, Luxembourg, the Netherlands, Slovakia and Spain.

These measures are part of NATO's broader military

adaptation in response to a changed security environment, a process shaped by the Alliance's need to remain flexible and ready to deter and defend against any threat.

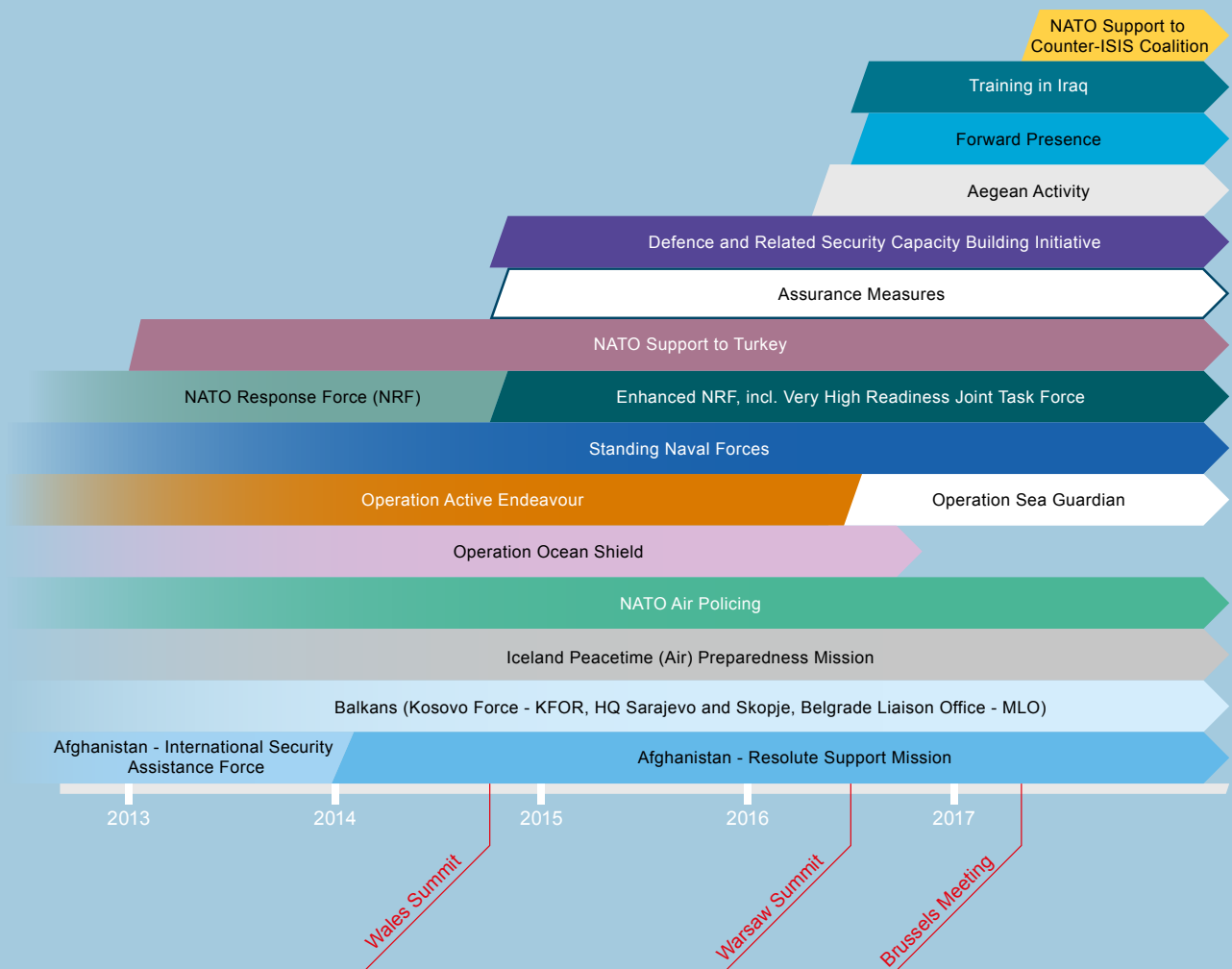
NATO's strengthened Forward Presence does not exist in isolation. The Alliance's **rapid-reinforcement strategy** ensures that in a collective defence scenario the multinational battlegroups – alongside national home defence forces – would be reinforced by the brigade-sized Very High Readiness Joint Task Force, ready to be deployed in days, followed by the remainder of the approximately 40,000 troops of the enhanced NATO Response Force.

NATO's ability to rapidly deploy the necessary forces across Allied territory is essential in any emerging crisis. In 2017, work continued on training Allied forces for high-intensity conflict, exercising in larger formations, and ensuring effective command and control.

NATO has also invested in reinforcing its ability to **understand and respond to security challenges along its southern borders**.

The Alliance continues to provide support to Turkey, including by augmenting Turkish air defence capabilities through the deployment of missile batteries, air policing and port visits. NATO actively

Evolution of NATO's Tasks, Activities, Missions and Operations



contributes to security in its southern neighbourhood by being an active member of the Global Coalition to Defeat ISIS and by supporting its partners' efforts to fight terrorism. NATO continues to be present in the Aegean and Mediterranean Seas, working to support maritime situational awareness, counter terrorism, combat illegal trafficking and enhance capacity-building.

In 2017, NATO boosted its awareness of the threats and challenges from the south, including by establishing a Regional Hub at the Allied Joint Force

Command Naples. The Alliance has also committed to improving its ability to conduct expeditionary operations, for example by carrying out more high-level exercises that reflect challenges emanating from its southern neighbourhood.

NATO's Activities, Missions and Operations:
An All-round Approach

■ Allies
■ NATO partners

Iceland Peacetime (Air) Preparedness Mission

Enhanced NATO Response Force (eNRF) /
Very High Readiness Joint Task Force (VJTF)

NATO Europe-wide Air Policing

Standing Naval Forces

Baltic Air Policing

Joint Intelligence, Surveillance
and Reconnaissance

Forward Presence

Ballistic Missile Defence

KFOR
approximately
4,500 troops

Operation Sea Guardian

Aegean Sea

Tunisia

Includes interoperability; counter-terrorism training; counter-improvised explosive device (IED); defence education; chemical, biological, radiological and nuclear (CBRN) defence

Morocco

Includes interoperability; counter-terrorism training; cyber defence training; CBRN defence.

Mauritania

Includes establishment of National Crisis Management Centre; and support for the destruction of Man-Portable Air-Defence Systems (MANPADS)

Algeria

Includes counter-terrorism training; crisis management; cyber defence training

Israel

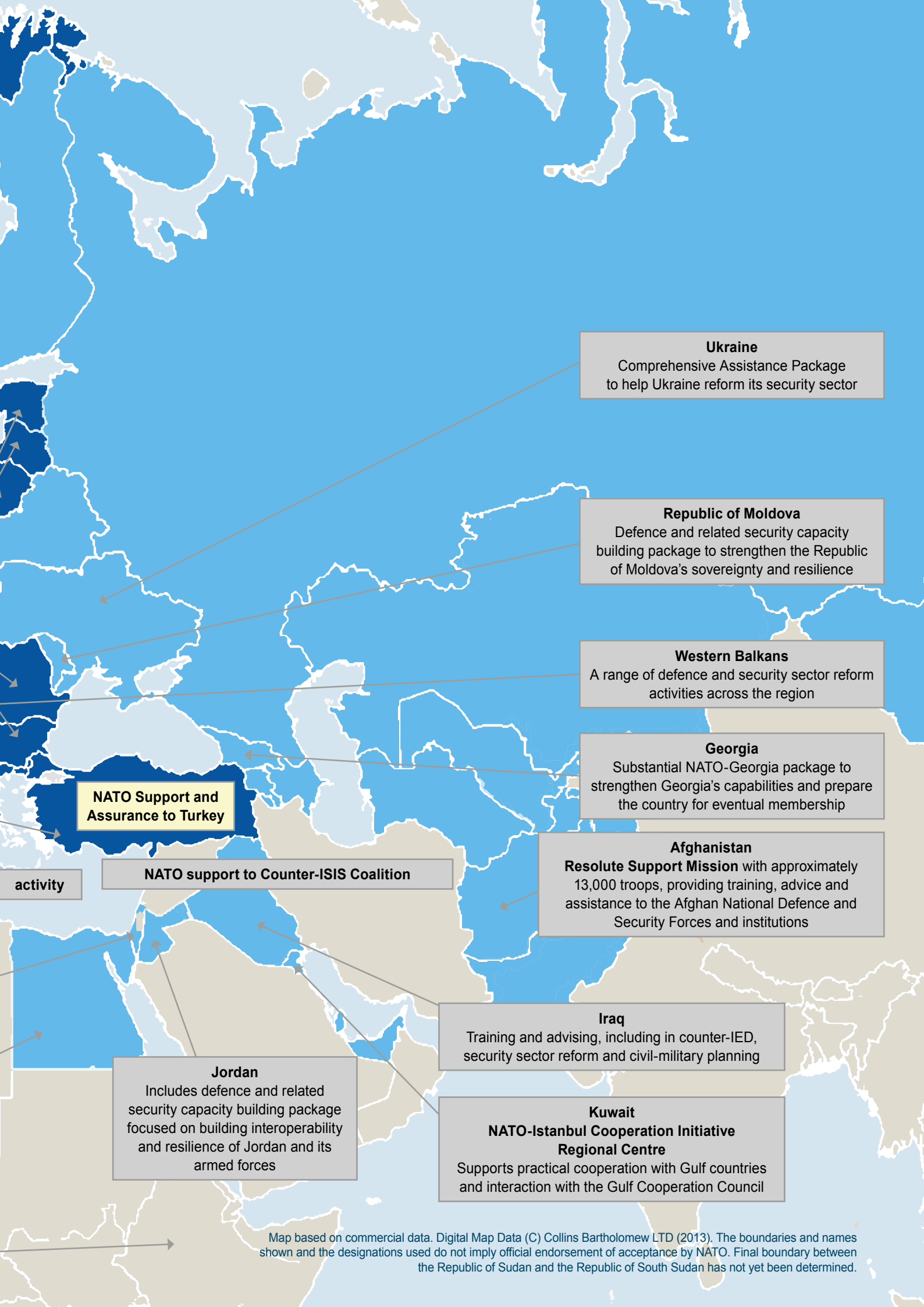
Includes interoperability; counter-terrorism training; cyber defence

Egypt

Includes land-mine detection and clearance; counter-terrorism training

NATO Support to the African Union (AU)

Airlift support to AU peace-keeping contingents; planning support



Ukraine

Comprehensive Assistance Package to help Ukraine reform its security sector

Republic of Moldova

Defence and related security capacity building package to strengthen the Republic of Moldova's sovereignty and resilience

Western Balkans

A range of defence and security sector reform activities across the region

Georgia

Substantial NATO-Georgia package to strengthen Georgia's capabilities and prepare the country for eventual membership

Afghanistan

Resolute Support Mission with approximately 13,000 troops, providing training, advice and assistance to the Afghan National Defence and Security Forces and institutions

Iraq

Training and advising, including in counter-IED, security sector reform and civil-military planning

Kuwait

NATO-Istanbul Cooperation Initiative Regional Centre

Supports practical cooperation with Gulf countries and interaction with the Gulf Cooperation Council

Jordan

Includes defence and related security capacity building package focused on building interoperability and resilience of Jordan and its armed forces

NATO Support and Assurance to Turkey

NATO support to Counter-ISIS Coalition

activity



USAF F-15C conducting NATO Air Surveillance in Iceland, August, 2017.

Safeguarding NATO's Skies

NATO air policing continues to make an important contribution to the security and collective defence of the Alliance. Air policing is a peacetime task carried out by Quick Reaction Alert interceptor aircraft owned and operated by NATO members, and is designed to safeguard the integrity of Allies' airspace. The interceptor planes respond to unidentified aircraft and those operating in an unusual or unsafe manner.

All NATO members contribute in one way or another to NATO air policing. Examples include the use of national air surveillance systems, air traffic management, and providing interceptor aircraft and other air defence measures.

Existing military and civilian agreements ensure coordinated air policing operations across NATO airspace. Allied nations that do not have the necessary air policing assets themselves are supported by those of others, ensuring a single standard of security across the Alliance.

In 2017, Allies continued to provide NATO air policing support to the Baltic States through the rotational deployment of interceptor aircraft.

By the end of 2017, 65 contingents from 17 countries¹ had contributed to the standing and reinforced Baltic Air Policing mission since it began in 2004. Hungarian and Italian interceptor aircraft also remained involved in providing NATO air policing to Slovenia, while Greece and Italy continued to offer similar support to Albania as well as, since 2017, to Montenegro. NATO also continues to provide airborne surveillance and interception capabilities to meet Iceland's peacetime preparedness needs.

¹ Belgium, Canada, the Czech Republic, Denmark, France, Germany, Hungary, Italy, Netherlands, Norway, Poland, Portugal, Romania, Spain, Turkey, the United Kingdom, and the United States.

Building Resilience

Resilience means the ability of a nation to resist and recover from a major shock, such as a natural disaster or an armed attack. Robust resilience and civil preparedness in Allied nations are essential to NATO's collective security and defence.

Civil Preparedness and Deterrence and Defence: a Strong Link

The resilience of a country's civilian infrastructure is just as important as that of its military infrastructure, particularly at a time of increased hybrid threats. In fact, today's armed forces are more reliant than ever on civilian infrastructure and capabilities. NATO forces depend on civilian resources, including the supply of food and water, communications and transport. Around 90% of military transport for large operations involves civilian infrastructure, such as railways and aircraft. Some 75% of host-nation support for NATO operations – including fuel, food and water – comes from commercial infrastructure and services. Cyber attacks on civilian networks and infrastructure can paralyse nations and seriously impede NATO forces. For all these reasons, robust civil preparedness among Allied nations is essential to NATO's deterrence and defence.

At the Warsaw Summit, NATO leaders agreed to enhance Allied resilience to the full spectrum of threats. This commitment included the need to make sure that Allies work towards meeting the **NATO baseline requirements for national resilience**. These focus on ensuring continuity of government and essential services to the public, guaranteeing protection of critical infrastructure and supporting military operations with civilian means.

The **NATO baseline requirements** for national resilience are:

- Assured continuity of government and critical government services
- Ability to deal effectively with uncontrolled movement of people
- Ability to deal with mass casualties
- Resilient energy supplies
- Resilient food and water resources
- Resilient civil communications systems
- Resilient transportation systems

In 2017, steps were taken to implement this commitment. In February, a set of evaluation criteria was made available to nations to assist them in conducting national resilience self-assessments. In July, an Alliance-wide assessment of national resilience began with the aim of generating an overview of the state of civil preparedness. This will identify areas where further efforts are required to enhance resilience and deal with a wide range of threats, including terrorism. This initiative has increased awareness of the need for Allied countries to focus on building resilience through civil preparedness.

Enhancing resilience and civil preparedness is also part of NATO's support to partners and a way to project stability in the Alliance's neighbourhood. Examples of practical cooperation include the deployment of teams of civil preparedness experts in support of Georgia and Iraq, and the establishment of a three-year defence capacity building project to assist Jordan in improving its crisis management and continuity of government capabilities.



10th Cyber Coalition Exercise, Estonia, November 2017.

Investing in Cyber Defence

In today's world, cyber threats are becoming more widespread, sophisticated and damaging than ever before. In a worst-case scenario, a cyber attack could compromise a country's critical infrastructure, paralyse its government, undermine its democratic system or affect the operational effectiveness of its armed forces.

NATO has been enhancing the protection of the Alliance's own communications networks and information systems, assisting individual Allies with their national cyber defences, and providing tailored advice to partners.

2017 saw an increasingly sophisticated range of techniques being employed to disrupt services, conduct espionage or cause reputational damage to the Alliance, including attempts to disrupt NATO websites. At no time was NATO's ability to do its job compromised.

To prevent and respond to threats in cyberspace, NATO maintains round-the-clock protection of networks, an activity performed by the NATO Communications and Information Agency. In addition, NATO maintains a rapid reaction cyber

defence team on stand-by, ready for short-notice deployments to protect NATO's infrastructure and to assist Allies.

Having a robust cyber defence also requires the Alliance to keep up with the rapid pace of technological change. NATO consults, cooperates and shares real-time information about cyber threats with Allies, partners, and with other international organisations such as the European Union (EU), as well as with industry. For example, during the high profile WannaCry and NotPetya cyber attacks in 2017, NATO's cyber defence experts rapidly coordinated with Allies, their counterparts in the EU, and partners in industry to get the most up-to-date picture of what were complex and rapidly evolving incidents.

In November 2017, the Alliance held its 10th edition of the **Cyber Coalition exercise**, one of the biggest cyber defence exercises in the world. Seven hundred participants from 25 Allied countries, as well as from partner countries, the EU, industry and academia took part. The annual exercise tests and trains cyber experts from across the Alliance to defend NATO and national networks.

In 2017, the NATO Military Authorities continued to update their planning and training in order to better protect missions and operations from cyber threats. This work is guided by the decision taken at the Warsaw Summit to recognise cyberspace as an operational domain in which NATO needs to be able to defend itself, just as it does in the air, on land, and at sea.

Cyber defence also plays a part in the ongoing discussion on adapting the NATO Command Structure to best integrate Allies' national cyber capabilities into NATO operations. In this context, Allies included the creation of a new cyber operations centre as part of their considerations of the NATO Command Structure adaptation. As in all other operational domains, NATO's actions in cyberspace are designed to be defensive, proportionate and fully in line with international law.

NATO also increased dialogue and information-sharing with industry. For example, NATO stepped up its engagement with industry and academia on cyber threats and challenges through the NATO Industry Cyber Partnership. Sixteen industry partners from across seven Allied countries participated in the NATO Industry Cyber Partnership Malware Information Sharing Platform, which facilitates the exchange of technical information on cyber threats between NATO and industry.

Engagement with the European Union and Partners

NATO and the European Union continued to expand their cooperation on cyber defence, including through regular expert talks and dialogue between staff from the two organisations.

The two organisations have also started to take part in each other's flagship cyber defence exercises. In 2017, the NATO Secretary General participated for the first time in the high-level scenario-based exercise EU CYBRID, alongside EU Defence Ministers, while the EU was included for the first time as a full participant in NATO's Cyber Coalition exercise.

Cooperation with partners also deepened through mutual consultations in the framework of the NATO Cyber Defence Committee. In February 2017, NATO signed a Political Framework Arrangement with Finland covering cyber defence. In July, NATO successfully completed the first phase of the NATO-Ukraine Cyber Defence Trust Fund which aims to strengthen Ukraine's resilience by providing equipment to better protect and defend Ukrainian networks against cyber attacks.

2 October 2017
HELSINKI FINLAND

#EUNATOHybrid

Secretary General Jens Stoltenberg and European Union High Representative/Vice-President of the European Commission Federica Mogherini, Finland, October 2017.

Countering Hybrid Threats

Hybrid warfare involves a combination of military and non-military, covert and overt tactics, from disinformation and propaganda to the deployment of irregular armed groups, to the use of regular forces. It is deliberately designed to blur the lines between war and peace. Modern hybrid threats can include sophisticated cyber attacks, economic and political pressure and exploitation of an adversary's vulnerabilities. While not new, the speed, scale and intensity of hybrid threats have increased in recent years. Being prepared to prevent, counter and respond to hybrid attacks, whether by state or non-state actors, is a top priority for NATO.

The Alliance has developed a strategy to counter hybrid threats, and over the past year has made progress in three key areas: **recognising and attributing hybrid actions; supporting rapid assessment and effective decision-making; and building resilience.**

The new Joint Intelligence and Security Division at NATO Headquarters is helping to improve the Alliance's understanding and analysis of hybrid threats. The Division has also established a Hybrid Analysis Branch to provide decision-makers with

improved intelligence and early warning on possible hybrid threats.

Cooperation and coordination with partners and other international organisations also continues to be an important part of NATO's initiatives to counter hybrid warfare. For example, NATO-EU cooperation on responding to hybrid threats will be strengthened through the work of the new **European Centre of Excellence for Countering Hybrid Threats** in Finland, inaugurated in October 2017 by Secretary General Jens Stoltenberg and European Union High Representative/Vice-President of the European Commission Federica Mogherini. The Centre will serve as a hub of expertise, assisting participating countries in improving their civil-military capabilities, resilience and preparedness to counter hybrid threats.

In October 2017, NATO tested its readiness to respond to hybrid threats through its major annual crisis management exercise CMX17, which provided a valuable opportunity to verify NATO's crisis management procedures in a demanding collective defence scenario within a hybrid context.

Transparency and Risk Reduction

NATO has a firm and longstanding commitment to transparency, predictability and risk reduction in the Euro-Atlantic area. In that spirit, the Alliance seeks ways to avoid misunderstanding, miscalculation or accidents that could lead to unintentional conflict. NATO firmly believes that reciprocal military transparency and risk reduction can contribute to improved stability and security in the Euro-Atlantic area.

In 2017, NATO redoubled its efforts on risk reduction and transparency. These efforts followed a call by the NATO Secretary General at the end of 2015 for Allies and Russia to work together to improve European security – including by modernising the Vienna Document.

Modernising the Vienna Document

The Vienna Document outlines commitments by the participating states of the Organization for Security and Co-operation in Europe (OSCE) regarding military transparency and cooperation. It is considered one of the foundations of the Euro-Atlantic security system. Its purpose is to increase military transparency and predictability, improve mutual trust, and help to avoid unintentional conflict. In 2017, the Alliance continued its efforts to update the Vienna Document. Given the significant changes in the security environment, Allies have put forward more than a dozen proposals. They include:

- Lowering the thresholds for notification and observation of large-scale military deployments exercises
- Closing loopholes that allow countries to avoid notification and observation of exercises, including no-notice or 'snap' exercises
- Strengthening verification by improving inspections and evaluations and by providing additional opportunities to visit military deployments and facilities in Europe
- Improving the risk reduction chapter of the Vienna Document to address concerns about military activities that appear unusual or threatening to other nations
- Enhancing military-to-military lines of communication

Under the Vienna Document, OSCE participating nations must notify each other of any exercise that includes more than 9,000 troops, and allow observation of any exercise that includes more than 13,000 troops (with even lower thresholds for amphibious or airborne exercises).

NATO Allies have consistently stood by the letter and the spirit of the Vienna Document. In 2017, Allies continued to notify the OSCE of military exercises well in advance, even when well below the notification thresholds. They have also consistently made provisions to facilitate international observation of large-scale manoeuvres.

Allies expressed concerns regarding the joint Belarusian-Russian strategic exercise ZAPAD 2017. The exercise was larger in size and broader in scope than reported through different channels, including the NATO-Russia Council. Russia missed an excellent opportunity to offer full transparency under the Vienna Document. In contrast, Allies have facilitated Vienna Document observations of six exercises in the past three years – and, in 2017, escorted Russian military inspectors during visits to 16 Allied military exercises.

In line with decisions taken at the Warsaw Summit in 2016, NATO remains open to discussions with Russia on transparency and risk reduction, including in the framework of the NATO-Russia Council. Allies also believe that military lines of communication are an important part of the transparency and risk reduction toolkit.



Exercise Spring Storm, Estonia, May 2017.

Conventional Arms Control in Europe

Conventional arms control agreements remain a cornerstone of the European security architecture. Verifiable arms control adds to Allies' security by limiting military forces in the Euro-Atlantic area, as well as by providing transparency and predictability of military deployments, manoeuvres, and exercises. In this way, conventional arms control agreements help to keep the continent at peace – that is if all parties implement them fully and in good faith.

At the Warsaw Summit, Allies reaffirmed their strong support for arms control and their commitment to preserving, strengthening and modernising conventional arms control in Europe. They agreed to do this based on key principles including reciprocity, transparency and host-nation consent.

Allies' concerns about Russia's commitment to conventional arms control agreements persisted during 2017. This was due to Russia's selective implementation of the Vienna Document and the Open Skies Treaty, its suspension of the Treaty on Conventional Armed Forces in Europe, and its disregard of the Budapest Memorandum and the Helsinki Final Act – which lays out the principles for relations among states in the Euro-Atlantic area and forms the basis for the OSCE. The Structured Dialogue on current and future challenges and risks launched in 2017 within the OSCE is an opportunity for Russia to engage in the modernisation of the Vienna Document, as well as to meet its obligations and return to compliance on arms control.

Relations with Russia

NATO's policy towards Russia remains consistent: **defence and dialogue**.

After the Cold War, NATO and Russia were striving towards a strategic partnership. However, after Russia's illegal annexation of Crimea in 2014, all practical cooperation was suspended.

At the same time, however, NATO maintains political dialogue and military-to-military lines of communications with Russia. Efforts to reduce risk and increase transparency are also ongoing.

At the Warsaw Summit, NATO leaders reaffirmed that the nature of the Alliance's relations with Russia will be contingent on a clear, constructive change in Russia's actions – one that demonstrates compliance with international law and its international obligations and responsibilities.

The Alliance maintains a firm position, based on a **dual-track approach of strong deterrence and defence complemented by a periodic, focused and meaningful dialogue**. That dialogue is carried out on the basis of reciprocity in the NATO-Russia Council. This is important to avoid misunderstanding, miscalculation and unintended escalation, as well as to increase transparency and predictability.

In 2017, the NATO-Russia Council met three times – in March, July and October. At each meeting, the Council discussed the conflict in and around Ukraine, including the need for the full implementation of the Minsk Agreements, issues relating to military activities, transparency and risk reduction, as well as the security situation in Afghanistan and the regional terrorist threat.

NATO continued to maintain a dialogue with Russia on air safety in the Baltic Sea region. In light of the increased air activity in the Baltic Sea region in recent years, it has become increasingly important to boost predictability and transparency in order to prevent incidents and accidents, and avoid unintended escalation. In 2016, the International Civil Aviation Organization's Baltic Sea Project Team briefed the NATO-Russia Council on this important topic. Subsequently, a Finnish-led Expert Group on Baltic Sea Air Safety was established to build on the work of the Baltic Sea Project Team. The group – with the participation of Allied and partner countries from the region, Russia and NATO, inter alia – developed recommendations and guidance on the handling and resolution of air encounters between all aircraft, both civilian and military, in peacetime. Supported by the Allies, these recommendations were published by the International Civil Aviation Organization in December 2017.

In 2017, the NATO-Russia Council began to exchange advanced reciprocal briefings on upcoming exercises. This mutual exchange has the potential to contribute towards greater predictability and risk reduction in the Euro-Atlantic area. However, these voluntary briefings cannot replace mandatory transparency under the Vienna Document.

The Secretary General met with the Russian Foreign Minister in February, May and September. The Deputy Secretary General maintained regular contact with the Russian Ambassador to NATO throughout the year, as well as with other Russian officials. NATO's military leaders have also continued to communicate directly with their Russian counterparts.



German soldiers demonstrate safety measures taken to avoid chemical, biological, radiological, and nuclear (CBRN) contamination. Exercise Summer Shield, Latvia, April 2017.

Arms Control, Disarmament, Non-proliferation, and Chemical, Biological, Radiological and Nuclear Defence

NATO has a longstanding **commitment to arms control, disarmament and non-proliferation** as important tools for enhancing security and stability globally. The Alliance is an essential consultative and decision-making forum for its members to discuss and set this agenda.

In 2017, NATO advanced discussions between Allies on arms control policy and implementation and on how to best to defend NATO's population, territory and forces from chemical, biological, radiological and nuclear (CBRN) weapons and from weapons of mass destruction (WMD).

Weapons of Mass Destruction and Chemical, Biological, Radiological and Nuclear Threats

NATO works with Allies, partners and other international organisations to combat the proliferation of weapons of mass destruction and defend against chemical, biological, radiological and nuclear threats.

NATO has a Combined Joint CBRN Defence Task Force designed to perform a full range of CBRN defence missions. The task force is led by an individual Ally on a 12-month rotational basis. In 2017, the Czech Republic took over as lead nation, while also hosting the NATO Centre of Excellence for CBRN Defence in Vyškov.

Key activities in 2017 included:

- NATO continued to be engaged in helping to build capacity for members and partners in the area of CBRN defence. For instance, the NATO School in Oberammergau, Germany, held 16 different training courses on CBRN defence and non-proliferation during the year
- In May, the WMD Disablement Functional Concept was approved by the North Atlantic Council. This document provides a framework for a credible and coherent WMD disablement capability, describes the capabilities required to perform WMD disablement, and identifies potential approaches as an operational task
- Also in May, NATO held its annual conference on WMD and CBRN in Helsinki, Finland, gathering over 100 participants from 46 countries, as well as high-level representatives from the United Nations, the European Union, the Organisation for the Prohibition of Chemical Weapons and the Comprehensive Nuclear-Test-Ban Organization
- NATO continued to develop policy recommendations on preventing the proliferation of WMD, defending against CBRN threats and making Allied populations safer from a broad range of state and non-state threats

Nuclear Deterrence

Nuclear deterrence has made a major contribution to peace and stability in Europe and beyond for more than 70 years, and has been at the heart of NATO's posture. At the Warsaw Summit in 2016, Allies recognised the importance of nuclear deterrence as a key element of the Allied deterrence posture, for the specific purpose of preserving peace, preventing coercion, and deterring aggression. As long as nuclear weapons exist, NATO will remain a nuclear alliance.

At the same time, the Alliance is committed to seeking the conditions necessary for a world without nuclear weapons, in accordance with the Nuclear Non-Proliferation Treaty and in a step-by-step and verifiable manner.

NATO is also concerned about the threat of nuclear proliferation and it has taken a firm stand in condemning the Democratic People's Republic of Korea for carrying out nuclear and missile tests. North Korea's destabilising behaviour poses a threat to international peace and security and the Alliance has called on North Korea to abandon nuclear weapons and nuclear and ballistic missile programmes in a complete, verifiable, and irreversible manner. NATO also urges the country to comply with its international obligations and recommit to the Nuclear Non-Proliferation Treaty.

Allied commitment to the Nuclear Non-Proliferation Treaty remains unwavering. The Treaty is the cornerstone of the global nuclear non-proliferation and safeguards regime and the basis for global disarmament efforts.

The Alliance also recognises the importance of the Intermediate-Range Nuclear Forces Treaty to Euro-Atlantic security. The Treaty has contributed to strategic stability and reduced the risk of miscalculation leading to conflict. The Alliance is committed to the preservation of the Intermediate-Range Nuclear Forces Treaty and strongly believes full compliance with this landmark arms control treaty is needed. In December 2017, NATO recognised the United States' compliance with its obligations under the Intermediate-Range Nuclear Forces Treaty and its commitment to implementing the Treaty. The Alliance also welcomed the continued efforts by the United States to engage Russia to resolve concerns about Russia's compliance with the Treaty.



A Norwegian Air Force explosive ordnance disposal technician digs around a suspected improvised explosive device. Exercise Northern Challenge 2017, Iceland, November 2017.

Small Arms, Light Weapons, Mine Action

Illicit flows and proliferation of small arms and light weapons have dire consequences for human security: prolonging conflicts, contributing to transnational crime and killing innocent civilians. The effects of these weapons outlast the end of hostilities. Proliferation of small arms and light weapons can derail a post-conflict transition and take a serious toll on a society's ability to recover from hostilities. For example, anti-personnel landmines, improvised explosive devices and other explosive remnants of war kill and maim people long after the end of hostilities, and prevent access to arable land and safe transportation. The proliferation of small weapons can also continue to have long-term destabilising effects on social and economic development, representing a threat to national and regional security.

NATO has been highly involved in international efforts to tackle these issues. Since 2000, the Alliance's work has stretched from Europe, to Central Asia, to the Middle East and North Africa – **making NATO one of the world's largest demilitarization organisations.**



Over the years, NATO has also trained thousands of munitions experts. In 2017 alone, NATO conducted approximately 20 training courses on small arms, arms control, CBRN defence and non-proliferation at the NATO School in Oberammergau, Germany. NATO experts also contributed to numerous other courses at NATO Centres of Excellence and affiliated training centres in Allied and partner countries.

In 2017, NATO led a number of projects focused on small arms and light weapons. These included conducting small arms and ammunition safety training in southeastern Europe and North Africa, and developing guidelines to incorporate United Nations Security Council Resolution 1325 on Women, Peace and Security into small arms, light weapons and mine action efforts as well as into arms control. Information on all related NATO projects is publicly accessible², helping to improve coordination.

Through all these activities, the Alliance contributes to a more stable security environment, enhances cooperation with its partner countries, and strengthens national, regional and global security.

2 <https://salw.hq.nato.int/>



INVESTING IN SECURITY



The ability of the Alliance to fulfil all its tasks depends on it having the right tools and capabilities. That, in turn, means appropriate investment in defence, with all 29 Allies contributing their fair share.

NATO Allies need to invest in developing, acquiring and maintaining the right capabilities for the Alliance to be able to fulfil its core purpose of defending nearly one billion citizens in Europe and North America. The Alliance attaches great importance to its ongoing efforts to ensure a better balance and fairer burden-sharing across three specified elements: defence expenditure; investments in capabilities; and contributions to NATO's operations, missions and activities.

At the 2014 Summit in Wales, NATO Heads of State and Government signed up to a Defence Investment Pledge. The pledge called for all Allies that do not already meet the **NATO-agreed guideline of spending 2% of Gross Domestic Product (GDP) on defence** to stop cuts to defence budgets, gradually increase spending, and aim to move towards spending 2% of GDP on defence within a decade. They also agreed to move towards **spending at least 20% of annual defence expenditure on major new equipment**, including related research and development, in the same timeframe.

Since then, Allies have made significant progress in meeting these goals. After years of defence cuts, the trend over the last three years has been one of increased defence spending.³

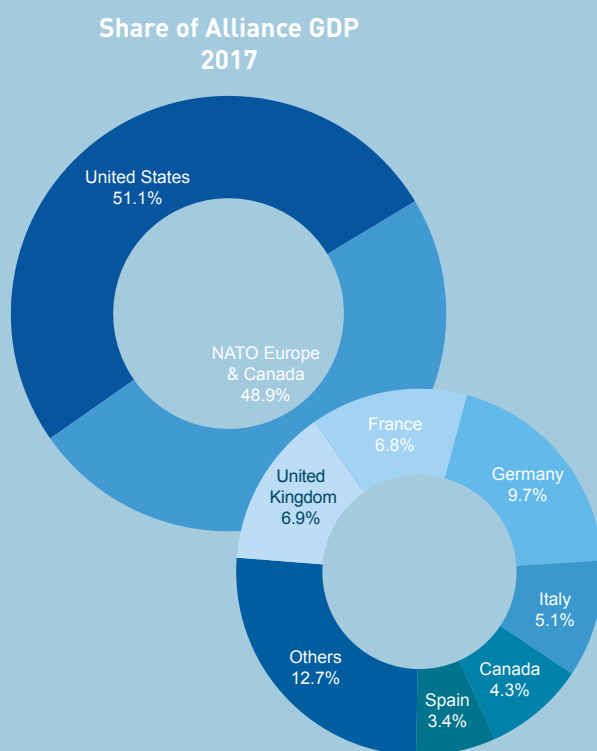
In 2017, the trend continued, with European Allies and Canada increasing their defence expenditure by almost 5%. Many Allies have put in place national plans to reach 2% by 2024 and are making progress towards that goal. In real terms, defence spending among European Allies and Canada increased by 4.87% from 2016 to 2017, with an additional cumulative spending increase of USD 46 billion for the period from 2015 to 2017, above the 2014 level.

In 2017, the United States accounted for 51.1% of the Allies' combined GDP and 71.7% of combined defence expenditure. At the same time, European Allies and Canada increased their spending, helping to redress the balance.

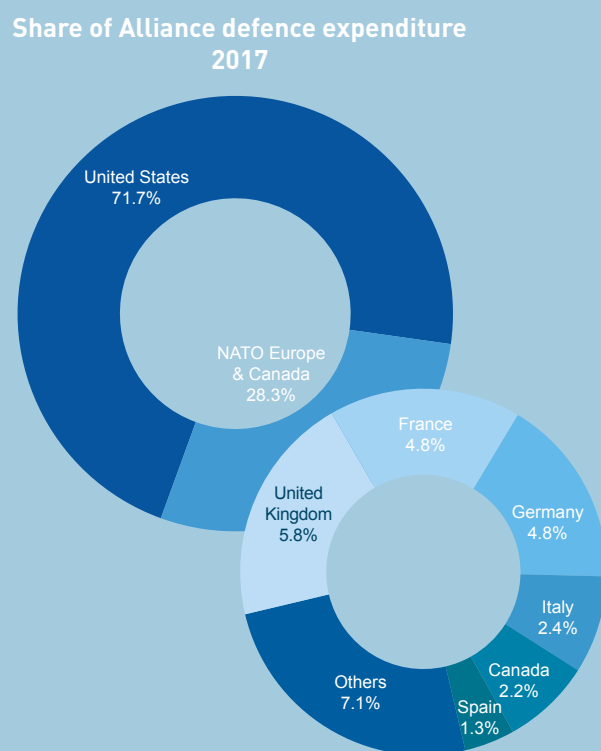
Progress was also made on the commitment to invest 20% or more of defence expenditure in major new capabilities. In 2017, **26 Allies spent more in real terms** on major equipment than they did in 2016. The number of Allies meeting the NATO-agreed 20% guideline rose to **12 in 2017**.

³ For all the graphs in this chapter of the report, it should be noted that Iceland has no armed forces.

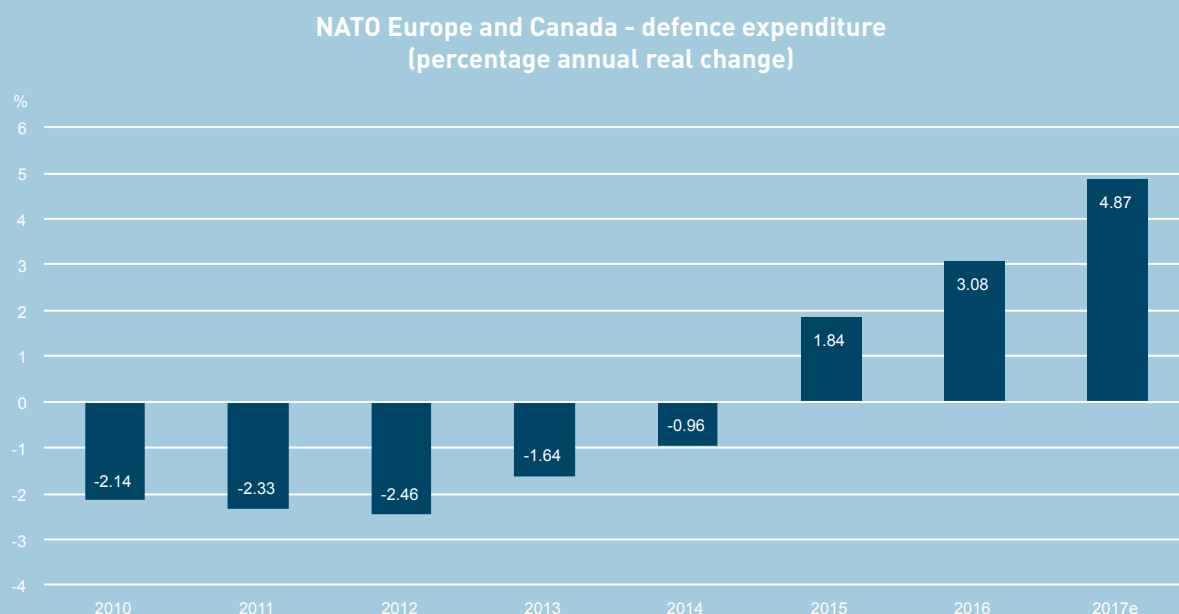
Note: The figures presented at aggregate level may differ from the sum of their component due to rounding.



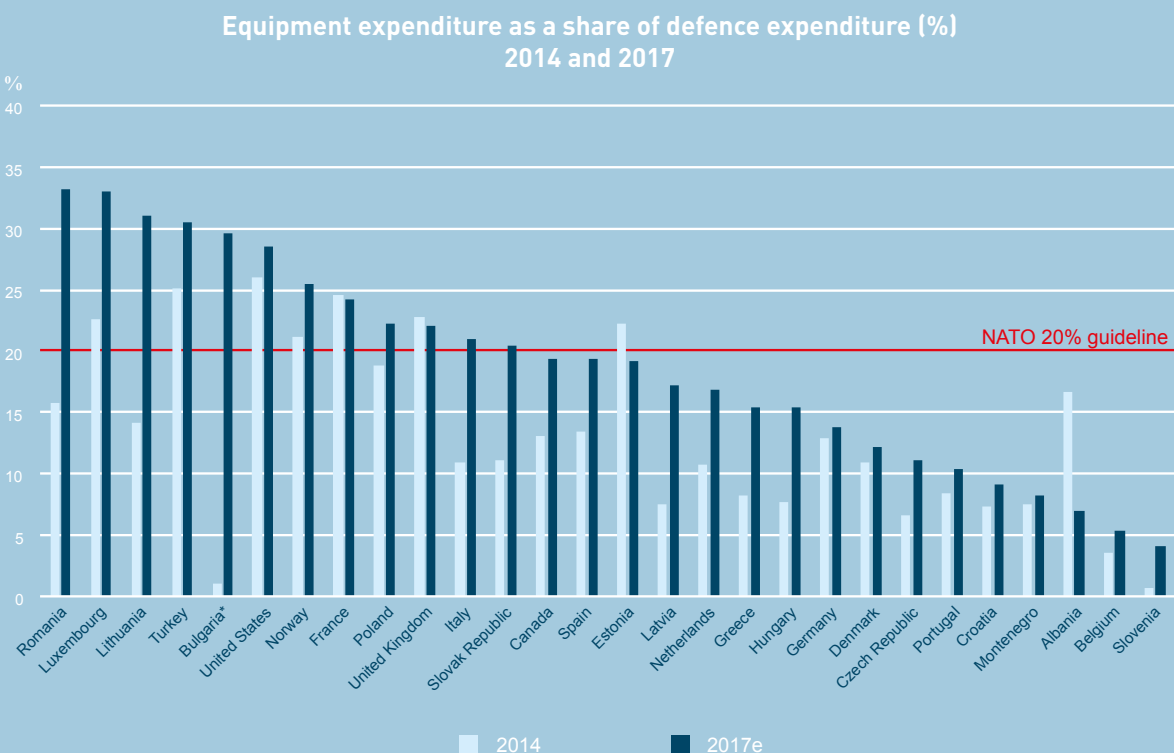
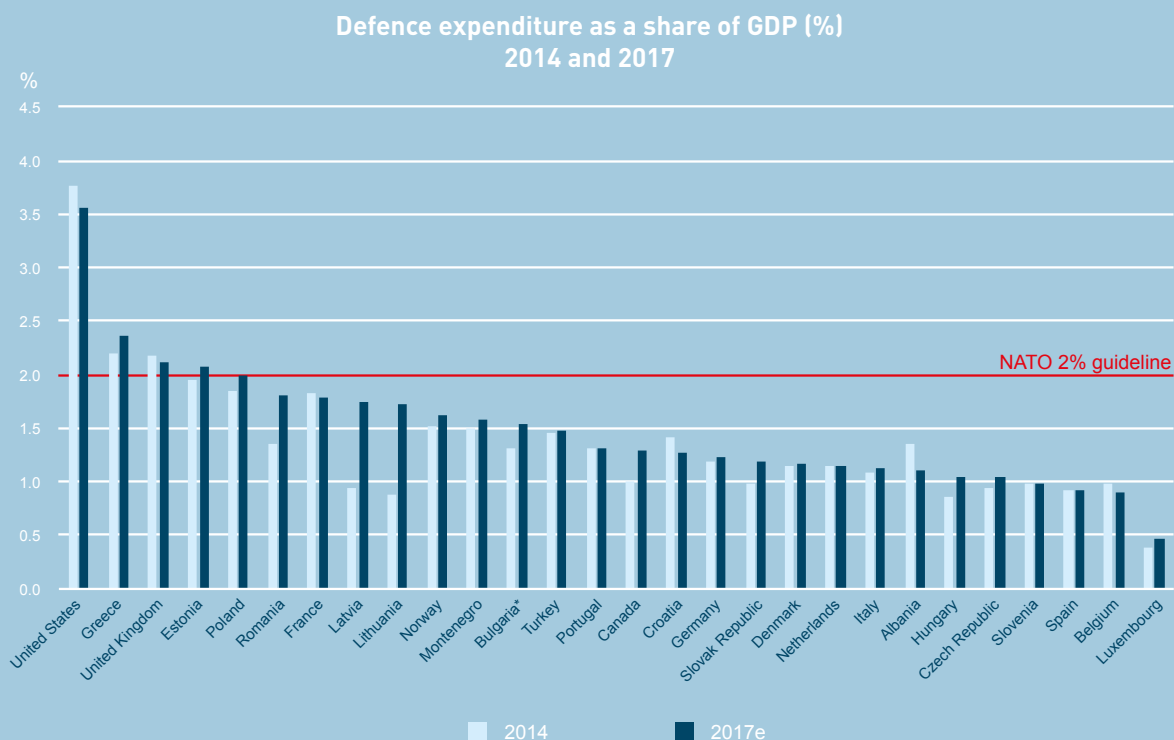
Based on current prices and exchange rates.
Figures for 2017 are estimates.



Based on current prices and exchange rates.
Figures for 2017 are estimates.



Cumulative spending increase for the period from 2015 to 2017, above 2014 level: +46.0 Bn USD
Based on constant 2010 prices and exchange rates. Figures for 2017 are estimates.



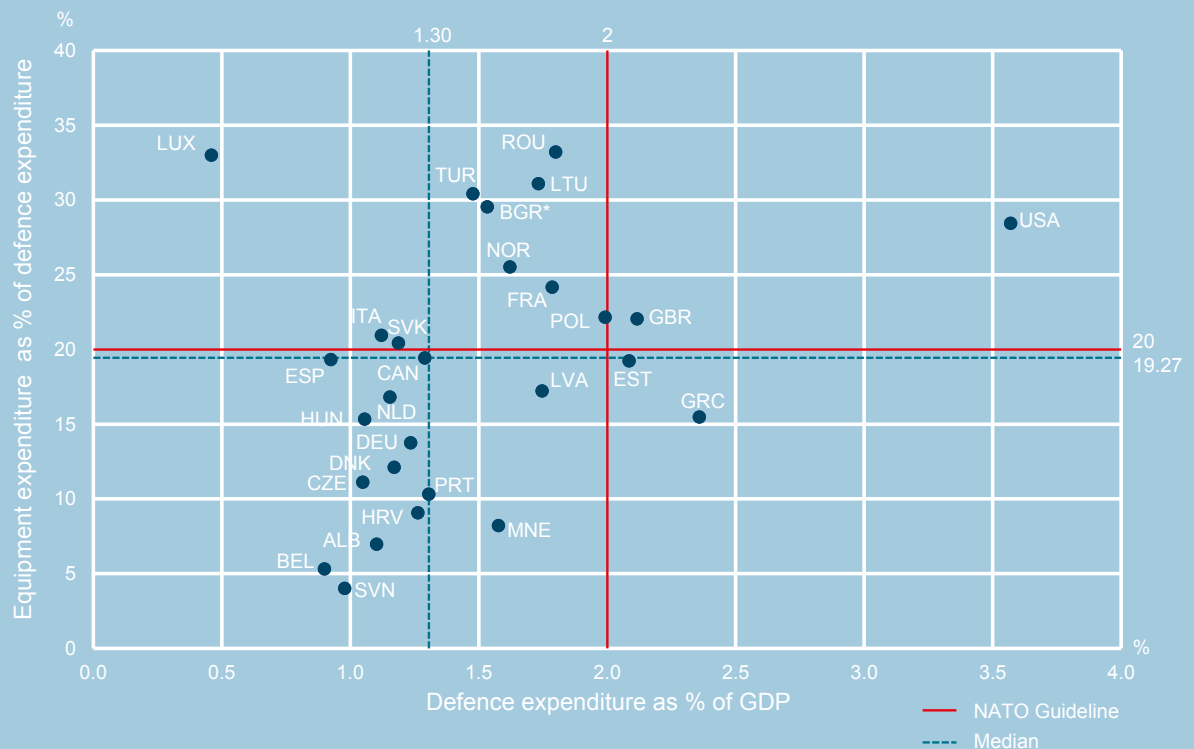
Based on constant 2010 prices and exchange rates. Figures for 2017 are estimates.
* Defence expenditure does not include pensions.

In June 2017, Allied Defence Ministers also adopted a **package of capability targets** as part of the NATO Defence Planning Process. These set out areas where NATO aims to improve its capabilities, including for heavier and more high-end equipment, and forces able to move at even shorter notice. The targets aim to ensure that NATO has the necessary capabilities and forces to fulfil its purpose of safeguarding the security and freedom of all its members.

Over 98% of the required forces and capabilities – more than 9,000 individual elements such as units, ships and aircraft – will be provided or developed over the coming years by the individual Allied countries.

The Alliance faces numerous and complex security challenges, and continued investment in defence will be essential. The progress achieved in recent years means the Alliance is well-positioned to respond to today's security environment. But progress must continue in the years to come.

Defence expenditure as a share of GDP versus equipment expenditure as a share of defence expenditure 2017



Note: Figures for 2017 are estimates.

* Defence expenditure does not include pensions.



MODERNISING NATO



One of NATO's greatest strengths is its ability to adapt to the changing security environment – something it has done again and again since its creation in 1949. In 2017, the Alliance continued to modernise and innovate to meet the challenges of a more complex security environment.

A Year of Adaptation

NATO has been adapting to a new and challenging security environment by increasing its readiness and ability to respond to any threat. At the Warsaw Summit in 2016, the Secretary General outlined a vision of a more cohesive, flexible and efficient NATO. And, in 2017, NATO continued to make progress in adapting at the political, military and institutional levels, helping to keep the Alliance fit for purpose.

Since 2014, and particularly in the aftermath of Russia's illegal annexation of Crimea, the Alliance has once again focused its attention on collective defence, with significant implications for the NATO Command Structure.

The **Command Structure** is responsible for command and control of the Alliance's joint operations, and is the backbone of the Alliance. Throughout NATO's history, it has evolved to keep up with a changing security environment.

Today, NATO's commitment to simultaneously strengthening its deterrence and defence and to projecting stability and fighting terrorism demands that the military Command Structure once again adapts. In this context, and in light of the decisions taken by Allied leaders at the Warsaw Summit in 2016, the NATO Command Structure is being adapted and modernised. In November 2017, Allied Defence Ministers agreed in principle to an outline design to adapt the NATO Command Structure. According to this proposed blueprint, NATO will establish a Command for the Atlantic – to ensure

the security of the lines of communication between North America and Europe – and a new Command responsible for the movement and sustainment of forces across Europe. The adapted Command Structure will also focus more on areas such as cyber and logistics.

The Alliance has also continued to modernise its structures and working methods in order to be more effective and efficient. At the Warsaw Summit, NATO agreed to improve the governance of military capabilities funded collectively by member countries. In 2017, NATO made significant progress towards that goal, including by initiating steps to more quickly fulfil military commanders' needs for these capabilities owned and operated by the Alliance. NATO is also modernising its working practices and undergoing the largest upgrade of its communication and information technology in its history.

In parallel, in 2017 NATO launched an important effort to review the overall alignment of its deterrence and defence posture – including capabilities, exercises and plans across all domains – with the objective of better coordinating all NATO efforts.



NATO Deputy Secretary General Rose Gottemoeller and Defence Ministers from France, Germany, Greece, Italy, Spain, and Turkey at the signing of the Maritime Multi-Mission Aircraft Letter of Intent, Brussels, July 2017.

Improving Capabilities

Meeting the 2014 Defence Investment Pledge is essential if NATO is to fulfil all its responsibilities and achieve fair burden-sharing across the Alliance. But it is equally important for Allies to invest in the right capabilities. To carry out its missions and tasks, **the Alliance needs interoperable, cutting-edge and cost-effective equipment.** To that end, NATO plays an important role in helping nations decide how and where to invest in their defence. NATO also supports Allies in identifying and developing multinational cooperative projects to deliver the defence capabilities that Allies need.

In 2017, Allied and partner nation Defence Ministers initiated three key projects that will contribute to the development of required capabilities. First, the formation of a multinational regional Special Operations Component Command will create a multinational structure to effectively command the operations of Special Forces. Second, the

acquisition of Land Battle Decisive Munitions will allow participants to buy munitions at a lower cost, harmonise their inventories, and potentially create common warehousing solutions for storing them. Third, the provision of Maritime Multi-Mission Aircraft will provide a multinational framework for replacing aging Maritime Patrol Aircraft fleets.

In addition to these new projects, the number of nations participating in two other important multinational efforts grew. The project to provide Air-to-Ground Precision-Guided Munitions expanded from 9 to 12 participants, welcoming Finland as the first NATO partner nation. Membership in the initiative to establish a Multi-Role Tanker Transport Fleet doubled from two Allies to four. These national commitments to pursue multinational solutions in key capability areas are clear evidence of Allied solidarity.

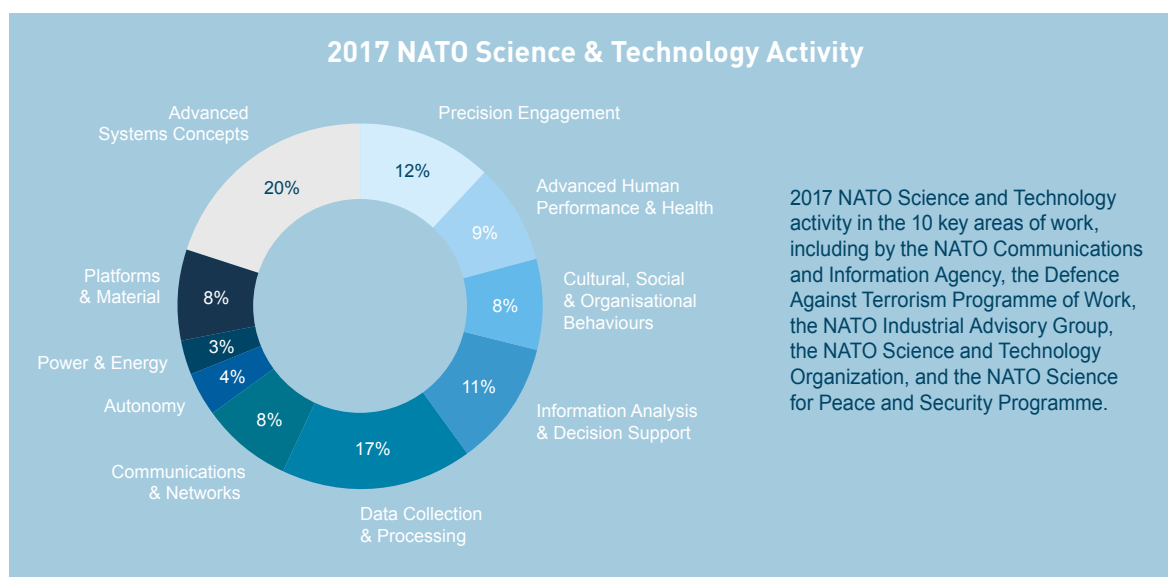
Investing in Innovation and Technology

In today's world, modern technologies are readily available both to the Alliance and to its potential adversaries – including state and non-state actors. By investing in science and technology, NATO is able to improve and develop its knowledge and capabilities in support of Alliance objectives.

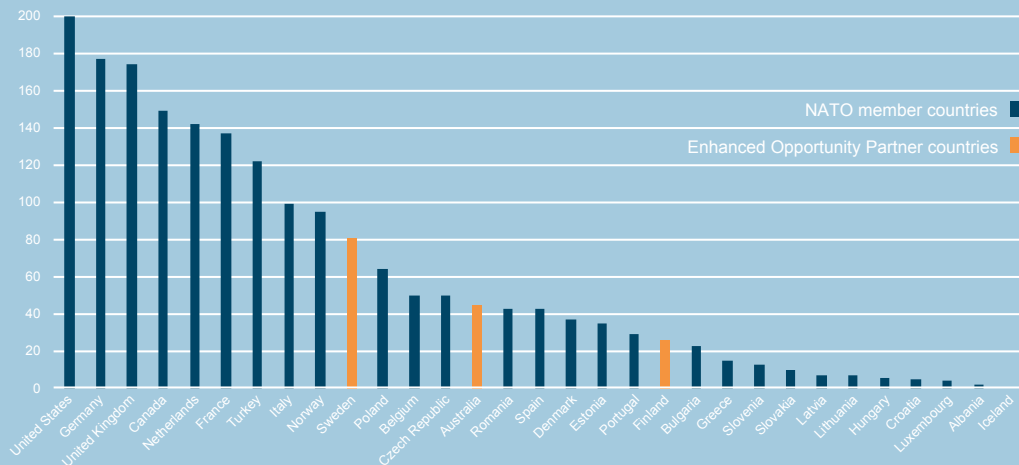
At the Wales Summit in 2014, Allies affirmed the critical role that investment in innovation and technology plays in addressing current and future security challenges, and in ensuring the Alliance maintains its military and technological edge. In that context, NATO is paying more attention to modern defence technologies such as nanotechnology, autonomous systems, artificial intelligence and quantum computing.

To advance NATO's innovation agenda, the NATO Science and Technology Board identified 10 key areas of interest for the Alliance, including advanced human performance and health, and communications and networks. In 2017, the Alliance conducted work in all these areas.

To promote innovation in the fields of science and technology, the NATO Science and Technology Organization also runs the Collaborative Programme of Work. In 2017, it comprised more than 250 collaborative research projects, each planned and executed by a group of at least four countries voluntarily committing their own resources to advance a topic of shared interest.



NATO Science and Technology Organization Collaborative Programme of Work Number of Projects per Nation 2017 Snapshot



Key Innovation Initiatives in 2017:

Manned-Unmanned Systems Teaming, to identify capabilities for operations of manned systems in conjunction with autonomous and remotely operated systems

Maritime Unmanned Systems, to demonstrate cutting-edge technologies suitable for anti-submarine warfare and other maritime applications in deep waters

Non-Lethal Effectors against Low-Small-Slow Air Threats, to explore non-lethal solutions to counter small unmanned aircraft threats

Navigation in Global Navigation Satellite System Denied Environments, to investigate solutions for robust and precise positioning and navigation even in adverse conditions

Big Data Analytics, to research solutions to process overwhelming volumes of data in order to improve military performance

Quantum Technologies, to analyse threats and opportunities arising from applications of quantum technologies in communications and networks, computing and simulation, sensing, and imaging

Artificial Intelligence and Big Data, to investigate the most promising applications in support of military decision-making

Integration of Exoskeleton in the Battlefield, to explore the best solutions and practices to reduce soldiers' physical burden and to improve their effectiveness

Modelling and Simulation Enhancement to NATO's Chemical, Biological, Radiological and Nuclear Reachback Capability, to develop an explosion damage model to analyse the effects of chemically enhanced improvised explosive devices

Electronic Countermeasures Compatibility, to optimise the use of the electromagnetic spectrum to counter radio-controlled improvised explosive devices



Spanish F-18 fighter aircraft take over NATO's Baltic Air Policing mission from German Eurofighter jets at Ämari Air Base, Estonia, May 2017.

Pursuing an Integrated Approach to Aviation

NATO takes a holistic approach to aviation focusing on all the technical, organisational, procedural and human factors that contribute to the effectiveness of Allied air missions, whether conducted by manned or remotely piloted aircraft.

In 2017, NATO developed further cooperation on aviation issues with the European Union, in the framework of the Joint Declaration on NATO-EU

cooperation signed the previous year. For instance, in February 2017, in the context of the Single European Sky, NATO and EU Defence Ministers agreed on a new military aviation strategy that reflects the shared view on military aviation as an integral part of European air traffic, and helps to capture and safeguard military needs in the shared airspace.

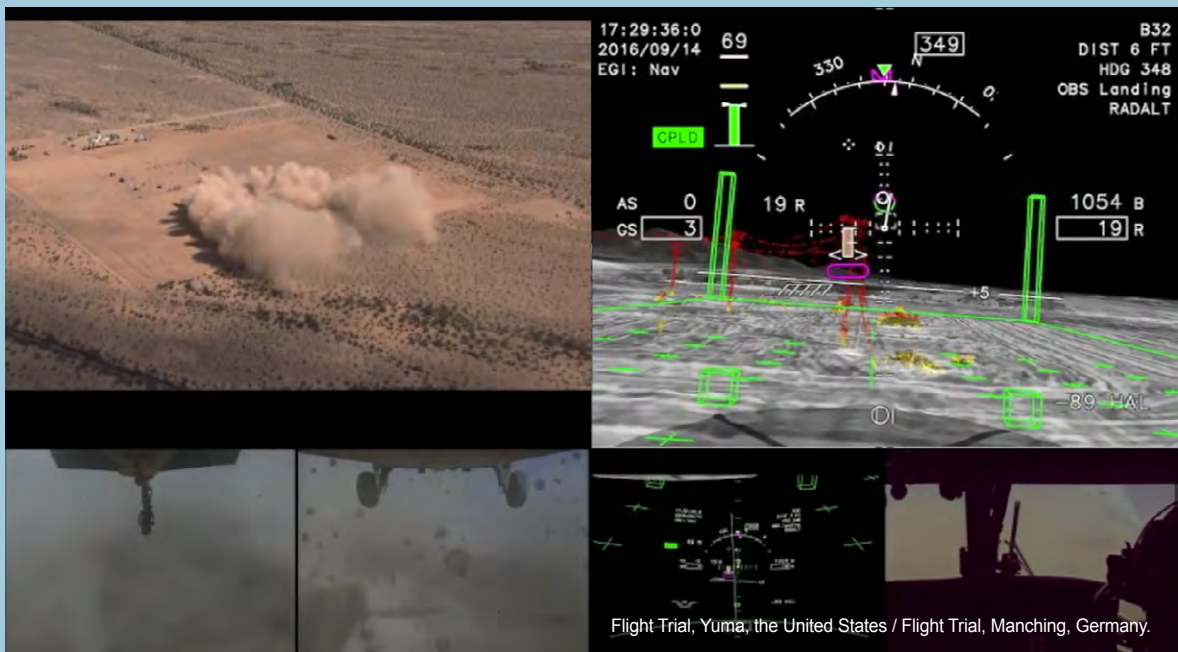
NATO Integrated Air and Missile Defence System

The NATO Integrated Air and Missile Defence System is an essential capability to protect Alliance territory, populations and forces against any air or missile threat. It also makes an important contribution to NATO's deterrence and defence.

This capability provides the means for two NATO missions conducted in peacetime: **Air Policing** and **Ballistic Missile Defence**. Through the former, NATO safeguards the integrity of Allies' airspace. The latter defends the Alliance in Europe against the increasing threat posed by the proliferation of ballistic missiles from outside the Euro-Atlantic area. The missile defence programme represents a long-term investment against a long-term threat, and is purely defensive. NATO's Ballistic Missile Defence architecture relies on the United States Ballistic Missile Defence elements deployed in Europe, as well as on additional voluntary national

contributions offered by European Allies, including Poland, Romania, Spain and Turkey. It also relies on the common-funded Command and Control system.

Work on **NATO's Air Command and Control System** continues, with the goal of providing the Alliance with a single, integrated system to manage NATO air operations in and out of the Euro-Atlantic area. In 2017, one nation and a NATO Combined Air Operations Centre began validating the system's software. After this phase of the project is completed, the final version of the operational software will be installed in a further 11 countries. The NATO Command Structure is now on course to declare Initial Operational Capability for the Air Command and Control System in 2019, with a small number of command and control centres already using the system for operations.



The Next Generation Rotorcraft

Helicopters play a vital role in NATO operations and missions. Over the next 10-15 years, however, the helicopter fleets of many Allies will reach the end of their service lives. NATO has therefore launched the Next Generation Rotorcraft Capabilities initiative to replace the current fleets.

The NATO Army Armaments Group is already establishing the requirements for **the Next Generation Rotorcraft**, working with industry to ensure that it is able to deliver the requested specifications. The future platforms will incorporate cutting-edge technologies to fly in so-called 'degraded visual environments' and control unmanned systems through Manned-Unmanned Teaming.

Poor visibility may be caused by dust, snow, rain, smoke or bad light. It is directly or indirectly responsible for more than half of all helicopter incidents. The new technologies will greatly reduce these risks, allowing Allies' helicopters to operate in otherwise inaccessible conditions.

In this context, **the 'Degraded Visual Environment' project** led by Germany, Switzerland and the United States aims to develop tools for helicopter pilots to navigate safely in difficult conditions. The project focuses on new arrays of sensors, human-machine interface and autonomy. Flight trials were held in Yuma, the United States in 2016 to test dust-obscured environments or 'brown-out', and in Manching, Germany and Alpnach, Switzerland in 2017 to test snow-obscured environments or 'white-out'. The tested prototypes successfully met the requirements and proved that this capability could be introduced within three to five years.



NATO AWACS aircraft operating in support of the Global Coalition to Defeat ISIS, August 2017.

Airborne Warning and Control System

The **NATO Airborne Warning and Control System** (AWACS) fleet is a key asset, delivering airborne command and control, air and maritime surveillance and battlespace management. As 'NATO's eyes in the sky,' AWACS relies on long-range radar and passive sensors to detect air and surface contacts over large distances, offering a full picture of the sky.

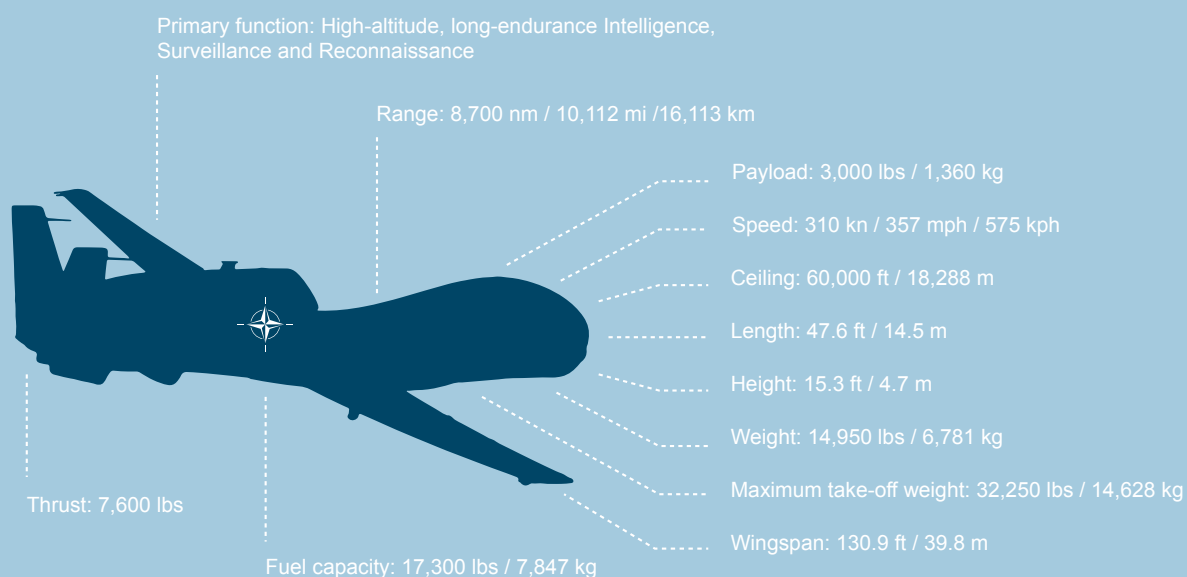
AWACS has long been one of NATO's 'first responders' to crises around the world and remains important for the Alliance's presence and engagement. In 2017, it celebrated 35 years of service, during which it conducted missions ranging from air policing and crisis response to counter-terrorism and evacuation operations. For example, AWACS was deployed to the United States after the 9/11 terror attacks, supported NATO operations in Libya and Afghanistan, and provided tailored assurance measures for Turkey. Throughout 2017, NATO AWACS maintained a high operational tempo, contributing to the Global Coalition to Defeat

ISIS, as well as conducting surveillance flights in central and eastern Europe to reassure populations and deter potential aggression.

Though AWACS has served for 35 years, numerous upgrade programmes have ensured that it remains at the leading edge of technological advances, evolving requirements, and new regulations. NATO is currently conducting a major upgrade programme, enhancing the ability of AWACS to identify and share information. Analogue cockpits are being replaced with modern digital technology known as 'glass cockpits', ensuring compliance with future air traffic control and navigation conditions and providing AWACS with broader access to airspace around the world. Internet Protocol systems are also being developed and fielded to facilitate communications with other command and control assets. NATO received its fifth upgraded AWACS aircraft in October 2017, and the remainder of the fleet will be ready by December 2018.

Global Hawk Remotely Piloted Aircraft

General Characteristics

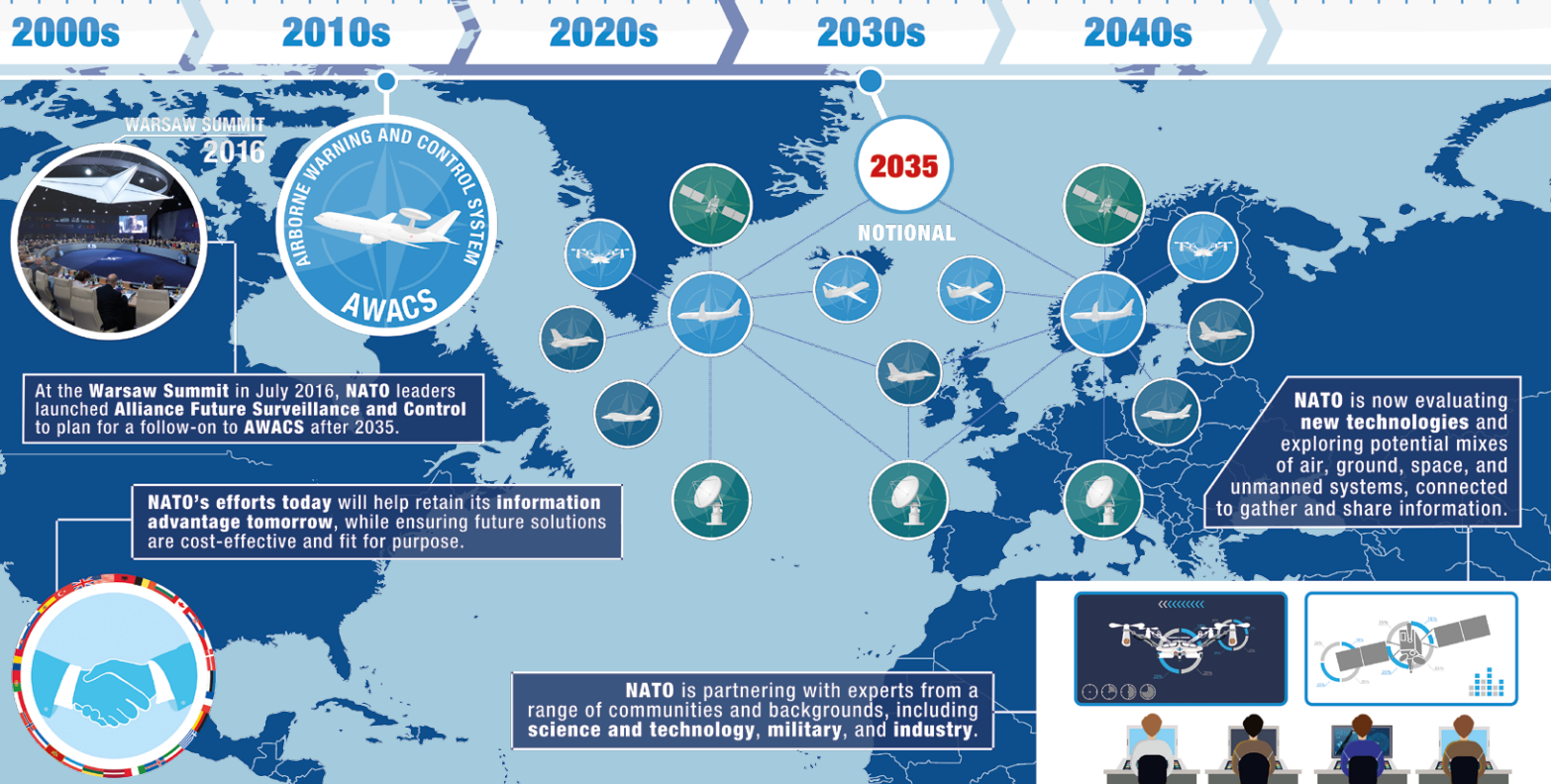


Alliance Ground Surveillance

Alliance Ground Surveillance will be the first NATO-owned and -operated Intelligence, Surveillance and Reconnaissance system. By being able to monitor and observe what is happening on the earth's surface, it will provide NATO and its member countries with a comprehensive ground situational awareness capability. Alliance Ground Surveillance will offer surveillance over wide areas from remotely piloted aircraft operating at considerable stand-off distances and in any weather or light conditions. Using advanced radar sensors, the system will be able to detect and track moving objects and provide radar imagery of areas of interest on the ground and at sea, complementing NATO AWACS capability. Alliance Ground Surveillance will be based on five 'Global Hawk' remotely piloted aircraft. The system is able to operate 24 hours a day.

In 2017, NATO made further progress in developing its Alliance Ground Surveillance capability, including ground installations, ground and support segments and aircraft production. The first NATO Global Hawk took off for its maiden flight in Palmdale, California in December 2015, followed by several test flights in 2016 and 2017. It is expected to fly from the United States to its new home in Sigonella, Italy in 2019.

This programme showcases the importance of transatlantic cooperation, with 15 Allies involved in the project: Bulgaria, the Czech Republic, Denmark, Estonia, Germany, Italy, Latvia, Lithuania, Luxembourg, Norway, Poland, Romania, Slovakia, Slovenia and the United States.



Alliance Future Surveillance and Control

At the Warsaw Summit in July 2016, NATO launched the **Alliance Future Surveillance and Control initiative** to ensure that the Alliance can maintain its information advantage and exercise command over its forces after AWACS retires around 2035. This initiative will fundamentally redefine how NATO conducts surveillance and commands its forces in the future.

In 2017, the Alliance Future Surveillance and Control initiative entered a new phase. Following an agreement by Defence Ministers in February 2017, NATO launched the concept stage – whereby all 29 Allies cooperate in planning for the future after AWACS retires from service. In 2017, the Alliance Future Surveillance and Control Solutions Working Group, led by the NATO Science and Technology Organization, worked on developing such plans by integrating input from science and technology experts, NATO military authorities and industry.

This initiative shows how, by looking far into the future and by working together in developing high-end capabilities, the Alliance can be far more than the sum of its parts.

Joint Intelligence, Surveillance and Reconnaissance

Joint Intelligence, Surveillance and Reconnaissance serves a strategically essential role for the Alliance, ensuring it has the right information and intelligence to make the right decisions and carry out its operations and missions successfully. It combines surveillance and reconnaissance tools to collect data with intelligence processes to analyse it, offering a full picture to military and civilian decision-makers.

To overcome limitations NATO faced in building and sharing a common picture based on data collected by a wide variety of Joint Intelligence, Surveillance and Reconnaissance assets, the Alliance has invested in a capability development initiative. After reaching initial operational capability in February 2016, the Joint Intelligence, Surveillance and Reconnaissance initiative further advanced in 2017.

NATO has been sustaining the development of Joint Intelligence, Surveillance and Reconnaissance capabilities by defining military requirements, developing implementation plans, delivering new tools and assets, and putting those capabilities into the field through exercises. One example is the ongoing provision of data servers to support the automated sharing of information in a coalition environment. This capability will be fully owned and operated by NATO, thanks to a 2017 contribution from Luxembourg.

Near-term Joint Intelligence, Surveillance and Reconnaissance efforts are focused on better connecting capabilities and sharing of information, taking full advantage of Alliance Ground Surveillance, of NATO's internal capabilities, and working to improve Joint Intelligence, Surveillance



Exercise Dynamic Monarch, Mediterranean Sea, September 2017.

and Reconnaissance across NATO, including within Allies. In parallel the Alliance is planning Unified Vision 2018, the latest in a series of technical and procedural Intelligence, Surveillance and Reconnaissance interoperability trials.

Anti-Submarine Warfare

Anti-submarine warfare is a key capability for NATO. In response to a changed security environment, NATO and NATO member countries have been investing in upgrading their anti-submarine capabilities, both in terms of quality and number.

NATO has placed even more emphasis on anti-submarine warfare training and large-scale exercises. For example, in 2017, NATO conducted anti-submarine warfare exercises, including Dynamic Mongoose in the Atlantic and Dynamic Manta in the Mediterranean. Training scenarios for these exercises have been made more demanding in recent years.

The Alliance is also improving how it develops related technologies and capabilities. These initiatives include collaborative work on a future Maritime Multi-Mission Aircraft, with several Allies teaming up to find solutions to their airborne anti-submarine warfare and maritime surveillance requirements; a multinational initiative on maritime unmanned systems; and improved networking of new-generation underwater sensors through digital communication.

Working with Industry

NATO relies on industry to produce capabilities that are innovative, interoperable and affordable.

This is why enhancing transatlantic cooperation in the defence industry remains essential for the Alliance.

The 2016 Joint Declaration on NATO-EU cooperation highlighted the '*urgent need to ... facilitate a stronger defence industry and greater defence research and industrial cooperation within Europe and across the Atlantic*'. As part of the implementation plan, NATO has increased its dialogue with the European Defence Agency and the European Commission, with staff working together to identify how to build a stronger defence industry in Europe, while advancing transatlantic cooperation.

NATO is also developing relationships with non-traditional defence companies, in particular in the areas of logistics and resilience, networking, Joint Intelligence, Surveillance and Reconnaissance, artificial intelligence and cognitive computing, including through a series of high-level events such as the NATO-Industry Forum.

The **NATO Industrial Advisory Group** within the structure of the Conference of National Armaments Directors is a unique vehicle for industry to provide advice to NATO. The group gives NATO access to nearly 5,000 companies, of which 80% are small- and medium-sized enterprises. In 2017, the Group brought together almost 500 people from industry to work cooperatively on key defence planning priorities such as integrated air and missile defence, ground-based air defence, maritime multi-mission aircraft, and the impact of big data on NATO operations.



Exercise Iron Wolf, Lithuania, June 2017.

Exercising the Alliance

By conducting regular military exercises, the Alliance ensures it is ready and able to respond to any threat. **Exercises are essential to test the Alliance's decision-making processes, systems and tactics**, and to make sure that NATO and its partners can work well together in an interoperable way. Exercises also play an important role in NATO's overall deterrence posture: they help the Alliance to develop new capabilities and demonstrate its credibility to any potential adversary.

NATO is fully committed to transparency and predictability, in accordance with its international obligations. To that end, exercise schedules are published months in advance on NATO's website⁴. NATO member countries strictly abide by their commitments on arms control as well as confidence- and security-building measures. In fact, they regularly go further, for example, by offering international organisations and non-member countries opportunities to observe their military exercises. In the same spirit, Allies also often announce in advance small-scale exercises that fall below the notification threshold set by the Vienna Document on military transparency.

In 2017, **NATO conducted 108 exercises** varying in scope, duration and form. They ranged from live-fire exercises involving thousands of troops and heavy equipment, to command post exercises — testing communications within and between participating headquarters — to map exercises. In 2017, more than 50% of NATO exercises were open to partners, with international organisations, including the European Union, also invited to observe or actively take part. In addition, NATO was also associated with 181 national exercises, an effective way to ensure NATO's forces are linked and able to practice working together.

⁴ <https://shape.nato.int/nato-exercises>



Exercise Northern Challenge, Iceland, October 2017.

Crisis Management Exercise 2017

NATO's major annual **Crisis Management Exercise** helps to ensure that the Alliance is ready to respond to the security threats it faces. In 2017, the Crisis Management Exercise, CMX17, tested the Organization's ability to respond quickly to a fictitious but realistic crisis scenario on collective defence that included challenges posed by hybrid warfare tactics. It tested the effectiveness and flexibility of NATO's internal processes as well as its consultation and decision-making procedures. The exercise involved staffs in national capitals, NATO Headquarters (including delegations and military missions, the North Atlantic Council and subordinate committees) and NATO's Strategic Commands. Partner countries Finland and Sweden also participated in the exercise alongside Allies. As in previous years, no forces were deployed during the Crisis Management Exercise.

In addition, for the first time, CMX17 implemented the concept of parallel and coordinated exercises between NATO and the European Union, as agreed in the Joint Declaration on NATO-EU cooperation issued in Warsaw in 2016. Through the conduct of two parallel but separate exercises, NATO and EU staff tested their respective procedures for communicating and sharing information during an unfolding fictitious crisis scenario set in a hybrid environment.

Key NATO and Allied Multinational Exercises in 2017

DESCRIPTION	DATE	LOCATION
SEA SHIELD A Romanian-led multinational exercise to promote interoperability in the maritime domain. Around 2,800 troops from Bulgaria, Canada, Greece, Romania, Spain, Turkey, the United States and Ukraine participated.	1-10 Feb	Black Sea
DYNAMIC GUARD Multinational air defence exercise focused on electronic warfare and anti-ship missile defence. It was conducted in the North Atlantic and the Mediterranean by the Standing NATO Maritime Groups.	6-12 Feb 4-10 Sep	Norway Mediterranean
DYNAMIC MANTA NATO's annual maritime exercise testing anti-submarine warfare capabilities. More than 5,000 sailors from France, Germany, Greece, Italy, Spain, Turkey, the United Kingdom and the United States participated.	13-25 Mar	Ionian Sea
TRIDENT JAGUAR A computer-assisted command post exercise involving the German/ Netherlands Corps as well as the Czech Republic and Lithuania. It tested the planning and conducting of a land-heavy, small joint operation using a fictitious scenario.	28 Mar-6 Apr	Norway
SABER STRIKE 17 A longstanding US Army Europe-led training exercise that helps facilitate cooperation between Estonia, Latvia, Lithuania, Poland, the United States, and other Allied and partner nations. Some 11,000 US and NATO military personnel from 20 countries participated in the exercise: Belgium, Canada, Croatia, Denmark, Estonia, France, Germany, Italy, Latvia, Lithuania, Luxembourg, the Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, the United Kingdom and the United States, as well as partner country Finland.	28 May-24 Jun	Estonia, Latvia, Lithuania and Poland
BALTOPS 17 A US-led multinational exercise to improve interoperability with regional partner nations in the maritime, air and land domains. Around 4,000 troops participated from Belgium, Denmark, Estonia, France, Germany, Latvia, Lithuania, the Netherlands, Norway, Poland, the United Kingdom and the United States, as well as partners Finland and Sweden.	1-16 Jun	Baltic Sea
IRON WOLF A Lithuanian-led multinational land-training exercise involving France, Germany, Lithuania, Luxembourg, Poland and the United States. Around 5,000 troops participated.	11-25 Jun	Lithuania
DYNAMIC MONGOOSE An annual NATO-led anti-submarine warfare exercise. It involved naval and air forces from Canada, France, Germany, Poland, Spain, Turkey, the United Kingdom and the United States, as well as host nation Norway. Nine surface ships, four submarines and four maritime patrol aircraft participated.	26 Jun-8 Jul	North Sea
NOBLE JUMP II 17 The JUMP exercise series tests the Very High Readiness Joint Task Force element of the NATO Response Force as well as the core elements of NATO's Readiness Action Plan. Bulgaria, Greece and Romania hosted exercise Noble Jump 2017. Albania, the Netherlands, Norway, Poland, Spain, the United Kingdom and the United States participated with troops and equipment. The exercise involved more than 5,000 troops.	29 May-22 Jun	Romania
SEA BREEZE A US-led multinational exercise to enhance interoperability and flexibility in the air, land and maritime domains between participating nations. More than 1,000 troops participated from Belgium, Bulgaria, Canada, France, Germany, Georgia, Greece, Italy, Lithuania, Norway, Poland, Romania, Sweden, Turkey, Ukraine, the United Kingdom and the United States.	10-22 Jul	Black Sea

TRIDENT JOUST A multinational exercise, sponsored by the Allied Command Transformation and providing continuation training for the NATO Response Force. Around 2,500 troops, including multinational staff from the Headquarters Joint Force Command Naples and from partner nations participated.	11-20 Sep	Poland
BRILLIANT ARROW An exercise to test the NATO Response Force air operations. NATO member countries' participation included Germany, Greece, the Netherlands, Poland and Turkey. Around 1,000 troops participated in the exercise.	11-22 Sep	Germany, the Netherlands.
BRILLIANT LEDGER An exercise designed to prepare and validate the NATO Rapid Deployable Corps Italy as designated NATO Response Force 2018 Land Headquarters and Forces. Around 2,500 troops participated in the exercise.	28 Sep-12 Oct	Italy
BRILLIANT MARINER A non-Article 5 Crisis Response Operation exercise designed to train the NATO Response Force 2018 Maritime Headquarters and Forces. Ships from the navies of Canada, Denmark, France, Greece, Germany, Italy, the Netherlands, Norway, Portugal, Spain, Turkey and the United Kingdom participated in the exercise and around 2,500 personnel were involved.	29 Sep-13 Oct	Mediterranean Sea
JOINT WARRIOR A UK-led multinational exercise involving warships, aircraft, marines and other troops.	30 Sep-12 Oct	Scotland
TRIDENT JAVELIN 17 A command post/computer-assisted exercise focused on testing NATO's command and control and interoperability to conduct a large-scale joint warfare operation in a complex and multinational environment. The exercise was based on a fictitious collective defence scenario.	6-18 Nov	Belgium, Germany, Norway, the Netherlands, the United Kingdom, and Turkey.
ALLIED SPIRIT A US-led multinational exercise aimed at integrating different forces into one multinational brigade, which led the exercise. Participating nations worked to improve effective and efficient communications and interoperability of digital fires, that is, the planning and coordination of artillery. Approximately 4,000 troops from 13 nations participated in the exercise. These nations included Bulgaria, the Czech Republic, Denmark, France, Germany, Italy, Lithuania, Poland, Portugal, Slovenia, Spain, the United Kingdom and the United States.	30 Oct-22 Nov	Germany

Enhancing Intelligence Coordination

In 2017, a new **Joint Intelligence and Security Division** was established at NATO Headquarters in Brussels. The goal of the new division is to provide decision-makers with accurate and real-time intelligence assessments to facilitate rapid decision-making.

The new division brings together civilian and military analysts on the intelligence side to make their combined output both more effective and efficient, and to allow NATO to be better informed and prepared for the complex and rapidly changing security environment it faces.

Since the division's establishment, intelligence production at NATO has increased by more than 40%, and — through the division's Hybrid Analysis Branch and Terrorism Intelligence Cell — the Alliance has enhanced the way it monitors and analyses both hybrid threats and terrorism.

Energy Security: an Energy-wise NATO

NATO is committed to raising awareness of the links between energy and security, and to assisting the military in meeting more demanding energy efficiency goals and environmental protection standards. The Organization also works to **improve energy efficiency** of forces and increase the use of renewable energy.

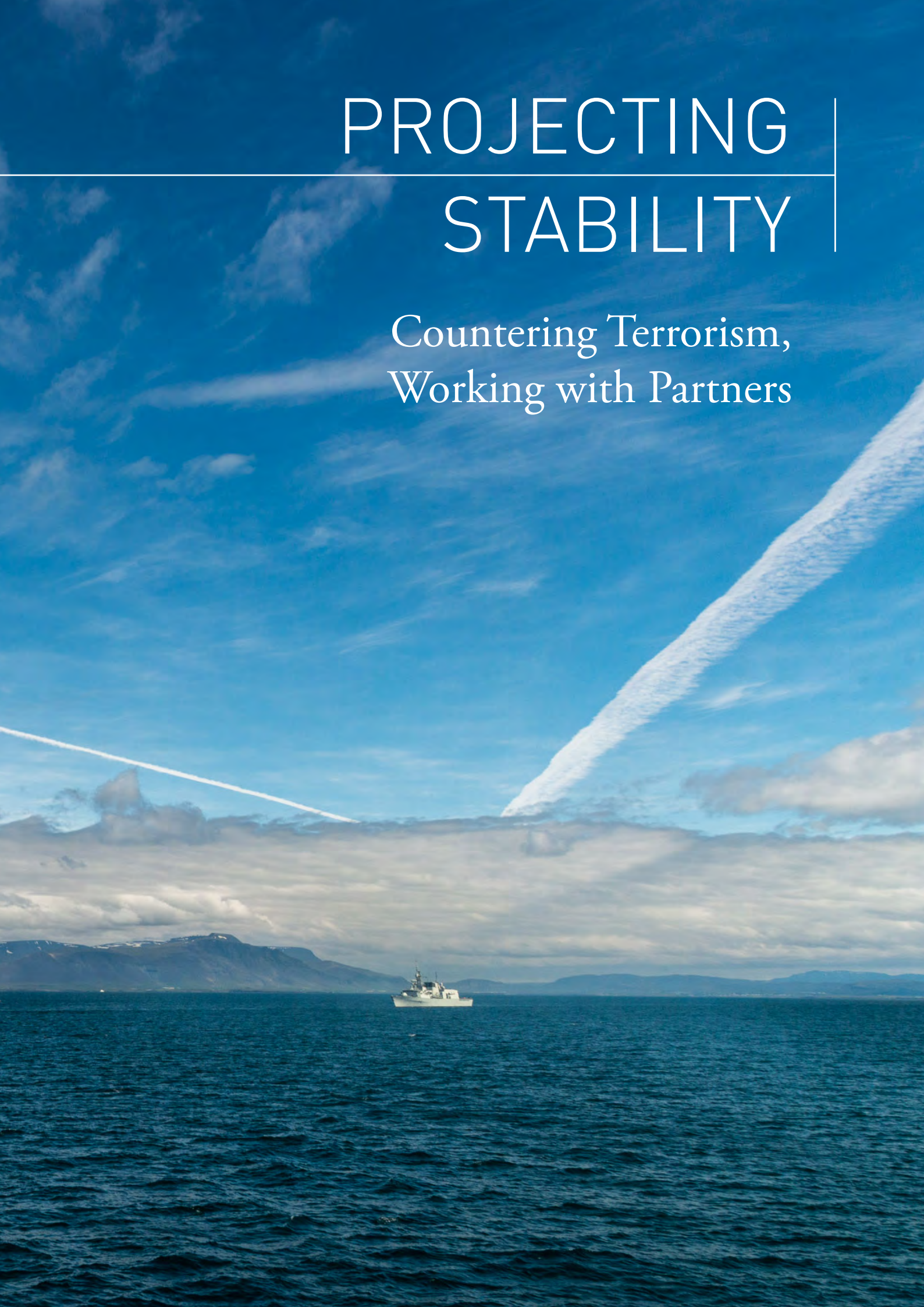
In 2017, work in this regard has been conducted both within the Alliance and by strengthening ties with other international organisations, such as the European Union and the International Energy Agency. NATO's investment in energy security also included an increased offer of modern energy-related training courses for the military. For example, in 2017, the Alliance conducted its third Energy Security Strategic Awareness Course at the NATO School in Oberammergau, Germany, with participants from over 20 Allied and partner countries.

Energy security is also part of NATO's work with its partners. In 2017, NATO co-organised a workshop with the Algerian government on the protection of critical energy infrastructure. Similarly, NATO cooperated with the NATO Energy Security Centre of Excellence in Vilnius, Lithuania, to organise a major table-top exercise in Ukraine on how best to protect the electrical grid against cyber attacks and other threats.



PROJECTING STABILITY

Countering Terrorism,
Working with Partners





Meeting of the Ministers of the Global Coalition to Defeat ISIS, Washington D.C., United States, December 2017.

NATO's chief responsibility is the security of its 29 nations. To fulfil this mission, the Alliance needs to maintain a strong defence and deterrence at home and to fight terrorism and project stability abroad. In 2017, NATO continued to work with its partners to ensure the security of the Alliance and to help promote peace and stability beyond its borders.

Terrorism affects every NATO member country. It represents a long-term threat to Allies' values and way of life. Countering terrorism is a complex challenge requiring a comprehensive and coordinated international response. NATO's own contribution to the fight against terrorism began in Afghanistan following the attacks against the United States on September 11, 2001. This remains the Alliance's largest operation. But NATO's efforts to counter terrorism extend wider.

Projecting stability means supporting NATO partners in their efforts to make their countries

more stable, secure and peaceful. It also means recognising that contemporary security threats often transcend national boundaries and need to be addressed by working with partner countries and other organisations.

NATO projects stability in many different ways in different parts of the world – from training partner nations' armed forces to secure their borders and defuse roadside bombs, to working with the United Nations to protect civilians caught up in conflict.

Fighting Terrorism

Terrorism remains a grave threat to international peace and security and therefore to the security of NATO member nations. In 2017, terrorism indiscriminately killed and injured thousands of civilians worldwide, fuelled local conflicts and increased global instability. Countering this threat is essential and requires a concerted international response.

NATO has been at the forefront of the fight against terrorism for years, not least in Afghanistan.

The Alliance has a broad counter-terrorism strategy focused on maintaining a strong awareness of the threat, strengthening the Alliance's capabilities to deal with the challenge posed by terrorism, and engaging with partners and international organisations. In 2017, the Alliance took a number of steps to enhance its role in, and contribution to, the broader international fight against terrorism.

At their meeting in May 2017, Allied leaders decided that NATO should become a full member of the **Global Coalition to Defeat ISIS** and support its efforts in Iraq. The Alliance has been providing airspace awareness and early warning via the NATO Airborne Warning and Control System aircraft (AWACS), making the skies safer and the Coalition's air operations more efficient.

Also in 2017, Allied leaders endorsed a **Comprehensive Action Plan** to expand NATO's efforts to counter terrorism and build resilience. This covers the areas of awareness and assessment, preparedness and responsiveness, capability development, cooperation and capacity-building with partners, and support to operations, including force protection.

Work on implementing this plan has progressed. In 2017, a dedicated Terrorism Intelligence Cell was established in the Joint Intelligence and Security Division at NATO Headquarters. This Cell facilitates the timely exchange of information on terrorist threats.

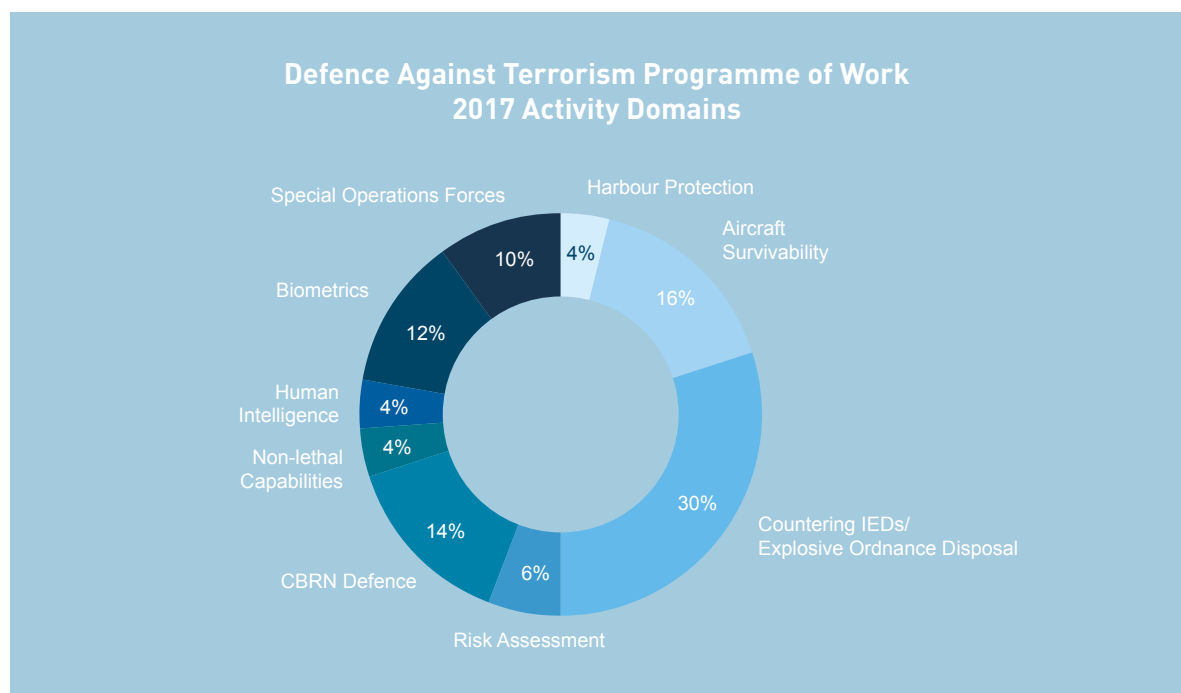
Force protection has been another key area of work for the Alliance and its partners. Given the ease of manufacturing improvised explosive devices (IEDs), countering them is a priority. In this context, the NATO Science and Technology Organization has tested new IED-detection techniques and equipment designed to make travel routes safer.

The Alliance also continued to contribute to the international community's fight against terrorism by cooperating with its local partners to increase their ability to deal with terrorism within their own countries and regions.

NATO's support to Allies is underpinned by a longstanding programme to facilitate cooperation to prevent, protect against, and respond to terrorist threats. Since its establishment in 2004, the **Defence Against Terrorism Programme of Work** has helped to raise awareness about the threat of terrorism, the importance of force protection during operations, and the need to equip forces adequately.

In 2017, the programme supported 19 cooperative initiatives. These addressed issues as diverse as protecting harbours against seaborne threats, defending against the use of chemical, biological, radiological and nuclear (CBRN) agents, improving the survivability of aircraft against portable air defence systems, and investing in explosive ordnance disposal.

The programme also engages with partner countries, other international organisations and industry, and with several NATO Centres of Excellence including those involved in countering IEDs (Spain), explosive ordnance disposal (Slovakia), CBRN defence (the Czech Republic) and human intelligence (Romania).





Resolute Support advisors arrive for a train, advise, assist mission with Afghan partners, Uruzgan province, Afghanistan, March 2017.

Supporting Afghanistan

Since the attacks of September 11, 2001, NATO has been determined to ensure Afghanistan never again becomes a safe haven for international terrorism.

NATO's longstanding support to Afghanistan has three key pillars: the Alliance's Resolute Support Mission to train, advise, and assist the Afghan security forces and institutions; financial support for the Afghan security forces; and the NATO-Afghanistan Enduring Partnership.

Resolute Support is a non-combat mission launched in January 2015 following the conclusion of the International Security Assistance Force (ISAF) combat mission and the assumption of full responsibility for the country's security by the Afghan National Defence and Security Forces. The Mission's purpose is to help Afghan security forces and institutions develop and sustain the capacity to defend their country and protect its citizens. Resolute Support Mission engages directly with Afghan security forces and ministerial officials in order to provide them with training, advice and assistance. That assistance is focused primarily on operational planning, budgetary development, force generation, personnel management, logistics and civilian oversight of the military.

NATO's assistance to Afghan security forces and institutions grew in 2017, following the adoption of Afghan President Ashraf Ghani's multi-

year security plan to improve the effectiveness of Afghan forces and foster conditions for a future political settlement to the conflict. To support the implementation of this plan, NATO Allies and partners decided to increase the Resolute Support Mission force level from approximately 13,000 personnel in 2017 to roughly 16,000 personnel in 2018. Thirty-nine NATO Allies and partners contribute to the mission with troops on the ground.

In 2017, assistance from Resolute Support Mission helped Afghan forces increase military pressure on the Taliban and other groups, denying insurgents their strategic objective of capturing a provincial capital. At the same time, Afghan military forces are becoming more sophisticated and effective. Afghan Special Forces, for example, are growing in size and are now assessed to be among the best in the region. Other notable improvements are the increasingly effective use of Afghan airpower in support of Afghan ground forces and the continuing transition from Soviet-era helicopters to new Black Hawk helicopters.

The Alliance also supports Afghanistan by **contributing to the financial sustainment of the Afghan forces**. Although Afghan financial support for its own forces has been growing steadily, international assistance remains necessary. That support is delivered through three main trust funds: NATO's Afghanistan National Army Trust Fund; the US Afghanistan Security Forces Fund; and the United Nations Development Programme's



Celebrating the opening of new facilities for female soldiers, Afghanistan, April 2017.

Law and Order Trust Fund for Afghanistan. At the 2016 Warsaw Summit, Allies and partners agreed to continue to financially support Afghan security forces at least until 2020. In 2017, non-US NATO Allies and partners contributed almost USD 1 billion in funding to the Afghan forces.

Since 2010, the **NATO-Afghanistan Enduring Partnership** has provided a framework for long-term political consultations and practical cooperation between NATO and Afghanistan. The Enduring Partnership includes a series of mutually agreed programmes, many of which support capacity-building and military education of Afghan security forces. The partnership recognises the strategic importance of NATO's engagement in Afghanistan and is intended as a bridge towards a more traditional partnership based on political dialogue and practical cooperation between NATO and Afghanistan in the longer term.

NATO Allies and partners also continue to support an Afghan-owned, Afghan-led peace and reconciliation process. This process is spearheaded by the Kabul peace process, which met in June 2017 with all key regional stakeholders.

Assisting Iraq

NATO's training and capacity-building in Iraq is an important part of the Alliance's effort to fight terrorism and project stability. **The Alliance is working to strengthen the Iraqi Armed Forces' ability to conduct operations as well as the country's resilience against terrorism.**

Following a request in 2016 by Iraqi Prime Minister Haider al-Abadi, NATO leaders agreed to initiate training and capacity-building activities in Iraq. In January 2017, NATO established a core mobile training team of civilian and military personnel in Baghdad to coordinate the deployment of trainers into the country and to work with the Iraqi security ministries to facilitate training.

By the end of 2017, training had been conducted in a number of key priority areas: countering improvised explosive devices; explosive ordnance disposal and demining; civil-military planning support to operations; reform of the Iraqi security institutions; technical training on Soviet-era equipment maintenance; and military medicine. **NATO training activities rely upon a 'train-the-trainer' approach:** the Alliance identifies and trains Iraqi personnel capable of becoming skilled instructors. By December 2017, nearly 500 Iraqi instructors had been trained by NATO.

NATO also conducted seminars and workshops on security sector reform. These have focused on helping Iraq to develop a sustainable force structure



NATO and Mediterranean Dialogue partners, Mauritania, October 2017.

which meets the requirements of its national security strategy. NATO coordinates closely on these efforts with the Global Coalition to Defeat ISIS, the European Union, the United Nations and individual nations providing support to Iraq.

Enhancing Resilience in the Middle East and North Africa

NATO has worked with partners in the Middle East and North Africa for more than 20 years – developing and enhancing practical cooperation, building local capacity, increasing the resilience of countries in the region and supporting their efforts to fight terrorism.

One of NATO's key programmes in the region is the **Mediterranean Dialogue**. Initiated in 1994, the programme now involves seven countries: Algeria, Egypt, Israel, Jordan, Mauritania, Morocco and Tunisia. The purpose of the Dialogue is to contribute to regional security and stability, improve mutual understanding, and dispel misconceptions about NATO.

In 2017, NATO increased both political dialogue and practical cooperation with its partners in the region. NATO stepped up training and capacity-building

efforts in the region, including through its Mobile Training Teams, which conducted training on subjects as diverse as counter-terrorism, logistics, crisis management, civil emergency planning, air defence, and maritime security. NATO's Science for Peace and Security Programme also supported training efforts on issues such as non-proliferation, energy security, border security, environmental security, counter-IED, radiation protection procedures, cyber defence and mine detection.

Mediterranean Dialogue partners' participation in education, training and NATO exercises has helped them to modernise their armed forces, increase interoperability with NATO, and become more effective security providers. For example, in 2017, Jordan hosted the first NATO-supported regional exercise in the Middle East and North Africa region. It involved 15 countries, four of whom are Mediterranean Dialogue partners.

NATO Trust Fund projects have also helped partners in the region to build secure ammunition depots, destroy obsolete ammunition, facilitate the transition of military personnel into civilian life, and expand and develop the role of women in the armed forces.



North Atlantic Council visit to Kuwait, January 2017.

The second main NATO programme in the region is the **Istanbul Cooperation Initiative**. Launched in 2004, it aims to contribute to long-term regional security by offering countries of the broader Middle East practical bilateral security cooperation with NATO. The Initiative currently involves four countries: Bahrain, Kuwait, Qatar, and the United Arab Emirates.

In 2017, progress was made on enhancing political dialogue and consultations with partner countries participating in the Initiative. This was also facilitated by the opening of diplomatic missions to NATO, and through visits and official meetings between high-level NATO and partner nation officials. Also in 2017, Qatar and the United Arab Emirates expressed interest in contributing to NATO's Resolute Support Mission in Afghanistan. Subsequently, consultations began with both countries to assist their efforts to join the Mission as partners.

The NATO-Istanbul Cooperation Initiative Regional Centre

NATO and its Gulf partners established the NATO-Istanbul Cooperation Initiative Regional Centre in Kuwait. The Centre is the first such NATO presence in the region and was inaugurated in January 2017 during a visit by the Secretary General and the North Atlantic Council.

The purpose of the new 8,000m² Centre is to enhance cooperation between NATO and its Gulf partners including Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates.

Over the past year, the Centre's multinational civilian and military team has delivered educational training courses in a number of fields such as exercise planning, civil-military cooperation and civil emergency planning.



Mediterranean Sea, October 2017

Maritime Security and Regional Stability

NATO's operations at sea are a crucial element of the Alliance's ability to deter and defend against any potential adversary, and its ability to project stability in areas of strategic importance.

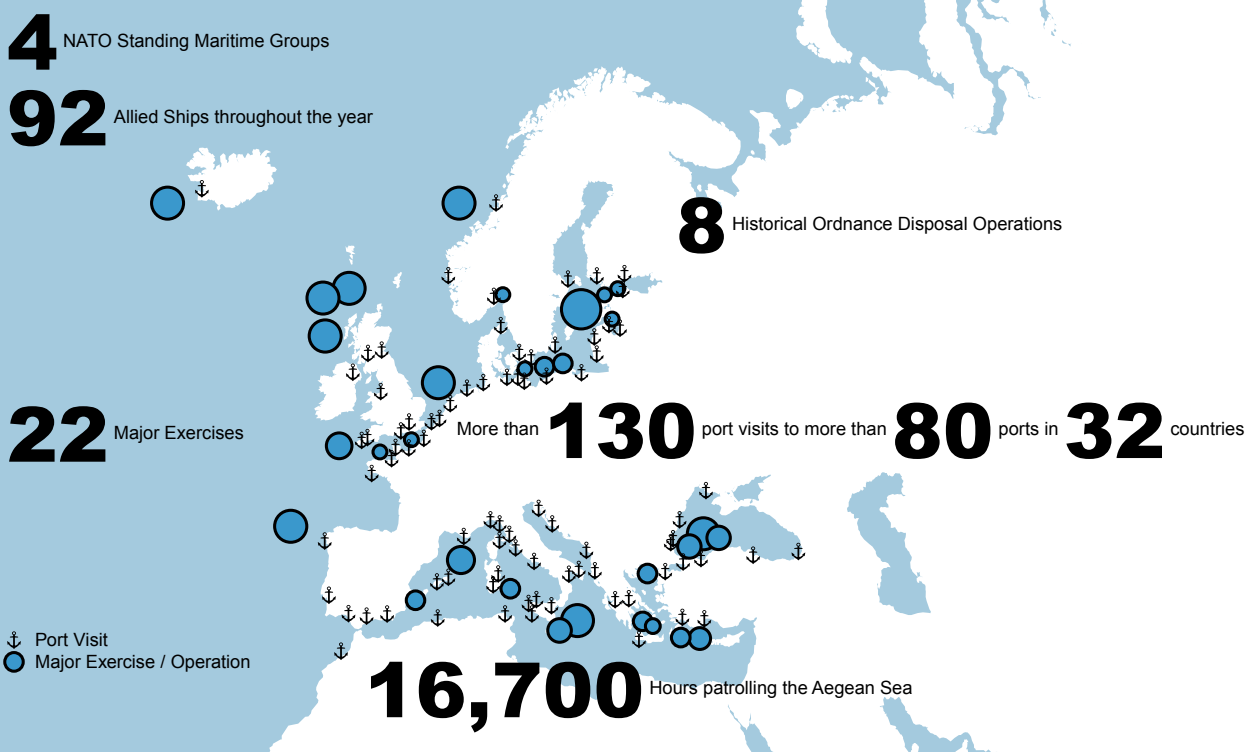
Operation Sea Guardian, launched in November 2016, aims to boost maritime situational awareness, counter-terrorism efforts, and capacity-building in and around the Mediterranean Sea. Sea Guardian has also been providing the EU's Operation Sophia with information and logistics support in the Mediterranean. Sea Guardian stands ready, if so requested by the EU, to accompany vessels diverted by Operation Sophia ships to the port of Marseille under United Nations Security Council Resolution 2357. NATO and the EU have also

agreed to increase informal exchanges on maritime issues between the staff of the two organisations.

NATO's activity in the Aegean Sea also continued in 2017, with NATO ships regularly providing information on illegal trafficking and migration activities to the Greek and Turkish coastguards and the EU's border agency, Frontex.

While NATO no longer has a direct operational role in fighting counter-piracy off the Horn of Africa, the Alliance maintains situational awareness and close links with other counter-piracy actors. The NATO Shipping Centre at the **NATO Maritime Command** in Northwood, the United Kingdom, also continues to provide advice to the maritime industry on the threat from piracy.

NATO Standing Maritime Forces in 2017





Exercise Silver Sabre, Kosovo, November 2017

Continuing to Stabilise Kosovo with the NATO-led Kosovo Force

The Western Balkans is of strategic importance to NATO. The Alliance remains committed to helping to bring stability and security to the region.

The NATO-led Kosovo Force is NATO's longest-running operation. It was first deployed in 1999 under the provisions of United Nations Security Council Resolution 1244.

Today, the NATO-led Kosovo Force, or KFOR, continues to support wider international efforts to maintain peace and stability in Kosovo and in the broader region. KFOR's mission is to maintain a safe and secure environment and freedom of movement for all communities in Kosovo. In 2017, KFOR force levels remained largely unchanged, with 4,500 troops provided by NATO Allies and partner countries. Due to improved circumstances, at no point in 2017 was KFOR asked to intervene to provide security – including during general and municipal elections.

KFOR's work supports the development of professional, democratic and multi-ethnic security structures in Kosovo. In 2017, NATO continued to provide capacity-building support to the Kosovo Security Force and related civilian structures through the NATO Advisory and Liaison Team. Located in Pristina, it comprises approximately 40 civilian and military personnel and provides advice and assistance in areas such as logistics, procurement and finance, force development and planning, and leadership development.

In addition, in 2017, the Enhanced Interaction Programme between NATO and Kosovo became operational, offering additional capacity-building as well as increased bilateral dialogue. In 2017, both the Secretary General and the North Atlantic Council visited KFOR.



Deputy Secretary General Rose Gottemoeller during North Atlantic Council visit to KFOR, Kosovo, October 2017.



Valcea, Romania, July 2017.

Protecting Civilians

NATO's work to project stability and support partner countries' efforts to become more resilient goes hand-in-hand with efforts to limit the negative impact of conflict on civilians. NATO continues to help partners to protect and defend their civilian populations.

NATO is strongly committed to **minimising the impact of its own operations on civilians**. The Alliance also works to protect civilians from conflict-related violence and the threat of violence.

In February 2017, NATO Defence Ministers approved a Protection of Civilians Action Plan, building on the NATO Policy for the Protection of Civilians endorsed by Allied leaders at the Warsaw Summit. The Policy and the Action Plan identify areas where the protection of civilians should be included – such as training, exercises, operations and NATO military doctrine. In developing the Policy, the Alliance consulted extensively with international organisations, including the United Nations and the International Committee of the Red Cross.

NATO's efforts to protect civilians also focus on children in armed conflict. Protecting children from the effects of armed conflict is essential to breaking cycles of violence in warzones. At the Warsaw Summit, NATO Heads of State and Government reaffirmed the importance of protecting children during NATO-led operations and missions, pledging

to expand training, exercises and education in cooperation with the UN.

In 2017, progress was made in further implementing United Nations Security Council Resolution 1612 on Children and Armed Conflict and related resolutions. For example, NATO's pre-deployment training for Afghanistan revised and expanded its focus on Children and Armed Conflict. In addition, with the support of the United Nations Assistance Mission in Afghanistan, more than 100 senior leaders in the Afghan Ministries of Defence and Interior have been trained on this issue. In partnership with the UN, NATO has helped the Afghan Ministry of Defence to develop a child protection policy in line with international standards. Child protection Focal Points have been established in NATO Commands across Afghanistan. Focal Points support the application policies related to protecting children, monitor and report on violations and provide briefings and training.

NATO also recognises conflict-related sexual and gender-based violence as a tactic of war and the Alliance has developed policies to better prevent and respond to this tactic. For example, NATO has established Military Guidelines on the prevention of, and response to, conflict-related sexual and gender-based violence and established appropriate training modules.



Meeting of NATO Secretary General Jens Stoltenberg and NATO Ambassadors with the Speaker of the Ukrainian Parliament and Heads of the Parliamentary Factions, Ukraine, July 2017.



NATO Secretary General Jens Stoltenberg and the Minister of Foreign Affairs of the Republic of Korea, Ms Kang Kyung-wha, after signing the Individual Partnership and Cooperation Programme, Republic of Korea, November 2017

Stability and the Value of Partnerships

NATO develops relationships with its partners in many different ways – including through political dialogue, but also by working together on military operations, building defence capacity, and training and education.

Political dialogue is essential to partnership. Dialogue takes place in many different formats, including at the NATO Headquarters in Brussels, where 15 partner nations maintain permanent Missions. In 2017, Kuwait became the most recent partner to open a permanent Mission at the NATO Headquarters. In Brussels, 19 partners have established a Mission to NATO, including Afghanistan, Egypt, Iraq, Mauritania and Morocco since 2017.

In 2017, NATO opened a liaison office in the Republic of Moldova following a request from the Moldovan government. The office – a small, civilian-diplomatic representation – focuses on facilitating the delivery of NATO's advice and assistance in support of ongoing reforms in the Republic of Moldova. The office also enhances NATO's engagement with Moldovan civil society, helping to build better mutual understanding. The office joins NATO's existing network of liaison and information offices in partner nations and international organisations, with offices in Belgrade, Serbia; Kyiv, Ukraine; Kuwait City,

Kuwait; Moscow, Russia; Sarajevo, Bosnia and Herzegovina; Skopje, the former Yugoslav Republic of Macedonia⁵; Tbilisi, Georgia (for the Southern Caucasus); and New York, United States (to the United Nations).

In 2017, the North Atlantic Council met with partners 31 times, with six meetings at ministerial level. The Council also visited Kosovo, Kuwait and Ukraine; the Military Committee visited Bosnia and Herzegovina and Georgia.

The Secretary General, the Deputy Secretary General, the Chairman of the Military Committee, the Supreme Allied Commander Europe and the Supreme Allied Commander Transformation all met regularly with partner Heads of State and Government, Foreign Ministers, Defence Ministers and other high-level officials.

⁵ Turkey recognises the Republic of Macedonia with its constitutional name.



NATO Heads of State and Government in the new NATO Headquarters in Brussels, May 2017.

NATO's Open Door

On 5 June 2017, Montenegro became NATO's 29th member country. Its membership enhances the security of the whole Western Balkans region, a region of key importance to the Alliance. Montenegro's accession demonstrates that NATO's door remains open to those countries that wish to join the Alliance and whose membership would contribute to its security.

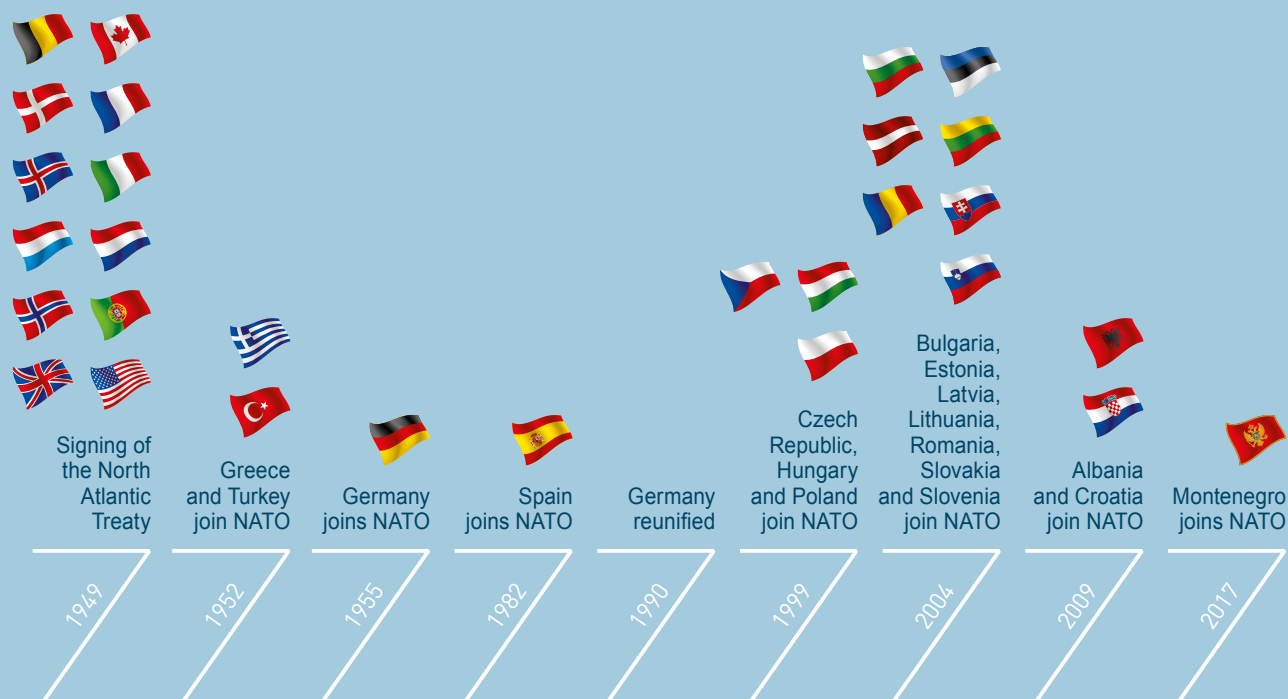
In 2017, work continued with the other aspirant countries, Bosnia and Herzegovina, Georgia and the former Yugoslav Republic of Macedonia⁶, to help them prepare for membership in the Alliance. NATO has a strong programme of cooperation with each

of these countries and is committed to supporting them as they carry out the reforms required for membership.

NATO's 'Open Door' is a founding principle of the Washington Treaty and one of the Alliance's success stories. Since its creation in 1949, NATO has grown from 12 members to 29.

According to the Treaty, NATO's door is open to all European democracies that share the values of the Alliance, are willing and able to assume the responsibilities and obligations of membership, are in a position to further the principles of the Treaty, and whose inclusion can contribute to the security of the North Atlantic area.

⁶ Turkey recognises the Republic of Macedonia with its constitutional name.



Promoting Interoperability

At the Wales Summit in 2014, NATO Heads of State and Government endorsed an initiative designed to make it easier for partner countries to work with the Alliance in NATO-led crisis management operations and missions.

The **Partnership Interoperability Initiative** introduced a number of innovations, such as the possibility of granting specific partners 'enhanced opportunities' for deeper cooperation. In 2014, the North Atlantic Council granted five partners – Australia, Finland, Georgia, Jordan and Sweden – enhanced cooperation, and in November 2017, the Council decided to renew this cooperation for an additional three years. The Partnership Interoperability Initiative also established the Interoperability Platform, a standing forum for Allies and partners to discuss concrete projects and issues that affect interoperability. To date, more than 20 partners – that have either contributed to NATO operations in the past or have taken concrete steps to enhance their ability to participate in NATO-led operations and missions – participate in this platform.

At the Warsaw Summit in 2016, Allied and Interoperability Platform Ministers of Defence agreed on a Roadmap on Crisis Management and Interoperability, setting out objectives for deepening NATO-partner interoperability, including in areas such as education and training, exercises, lessons learned, logistics, armaments, as well as consultation, command and control. Throughout 2017, work to implement these recommendations continued.

Another key tool for promoting interoperability is the **NATO Planning and Review Process**, through which NATO can assist partners in boosting interoperability, developing capabilities and effective, affordable and sustainable armed forces, as well as promoting wider defence and security reforms. Currently, 19 partner nations take part in the NATO Planning and Review Process.⁷ In this framework, Allies negotiate with individual partners to set planning targets for that country known as Partnership Goals. In 2017, NATO Planning and Review Process assessments were agreed for 17 partners, analysing each partner's plans, policies and progress in implementing Partnership Goals.

⁷ Armenia, Austria, Azerbaijan, Belarus, Bosnia and Herzegovina, Finland, Georgia, Ireland, Jordan, Kazakhstan, the Kyrgyz Republic, the Republic of Moldova, Serbia, Sweden, Switzerland, the former Yugoslav Republic of Macedonia*, Tunisia, Ukraine and Uzbekistan.

* Turkey recognises the Republic of Macedonia with its constitutional name.



Swedish Navy officers conduct navigation manoeuvres with Standing NATO Mine Countermeasures Group One Flagship ENS Wambola during a Passing Exercise, Baltic Sea, May 2017.

Promoting Common Standards

Establishing common standards is essential for enhancing interoperability among Allies, and between Allies and partners. More than 1,100 NATO standards are currently available to partners in the NATO Standardization Document Database.

In order to maintain interoperability, partners work to implement NATO standards. In 2017, partners shared more than 80 reports outlining their adoption and implementation of these standards.

The Operational Capabilities Concept also aims to improve the ability of partner forces to contribute to NATO-led crisis response operations by evaluating partner forces, supporting their transformation, and helping them to implement NATO standards in national doctrine development, procurement and training. Based on evaluation and feedback, NATO maintains a database enabling partners to declare forces and capabilities potentially available for NATO-led operations. This database is an important building block for future operations.

In 2017, the database of declared partner forces grew to 108 units, up from 90 in 2016. This included naval, land and air units, ranging from platoon- to battalion-sized units, surface ships, submarines, medical units and air fighter units, from a total of 18 partners.

Building Capacity

The **Defence and Related Security Capacity Building Initiative**, launched at the Wales Summit in 2014, is an important tool for projecting stability beyond NATO's borders. It helps NATO's partners to enhance their resilience and security.

The Initiative builds on NATO's extensive expertise in providing advice, assistance, support, training, education and mentoring activities. In 2017, substantial progress was made on assisting Georgia, Iraq, Jordan and the Republic of Moldova. Work also began to take forward requests for support from Libya and Tunisia.

Georgia

Defence and related security capacity building for Georgia is provided through the **Substantial NATO-Georgia Package**, which was agreed at the NATO Summit in Wales in 2014. The package was further strengthened at the Warsaw Summit in 2016 and contains 15 areas of support. These initiatives – including air defence, aviation, cyber defence and defence institution building – strengthen Georgia's defence capabilities and interoperability with the Alliance. Work in Georgia is supported by approximately 40 resident and non-resident experts from all Allies and partner nations Finland and Sweden.

Implementation of the Substantial NATO-Georgia Package made further progress in 2017. For example, the Defence Institution Building School, established through the Package, conducted 73 training activities for 1,683 participants from Georgian defence and security sector agencies and institutions. The school focuses on promoting good governance in the security sector, understanding of defence and security policies, interagency cooperation, as well as regional and international cooperation. The Joint Training and Evaluation Centre also provided training activities and exercises for Georgian units, including pre-deployment for Georgian units involved in NATO and United Nations peace-support operations.

Iraq

For a break-down of activities in Iraq, please refer to the 'Assisting Iraq' section on page 59.

Jordan

Defence capacity building in Jordan covers nine areas: information protection, cyber defence, military exercises, countering improvised explosive devices, support to the national strategic defence review, personnel management, logistics systems, civil preparedness and crisis management, and border security.



U.S. Army Europe-led exercise Noble Partner 2017, Georgia, July-August 2017



NATO and the Jordanian Armed Forces inaugurate the Computer Emergency Response Team, Amman, Jordan, July 2017.

In 2017, NATO provided expert advice to Jordan in the areas of civil preparedness and on the conduct of a strategic defence review. In the framework of the Science for Peace and Security Programme, the United States and the Jordanian Armed Forces organised a **Border Defence Symposium** in Amman in March. The event aimed to improve the understanding of Jordan's overall border security strategy, current capabilities, and further requirements in this area. Jordanian personnel also participated in various courses and training activities on countering improvised explosive devices.

Jordan also received substantial support in the area of cyber defence, including for the implementation and further development of **Jordan's cyber defence strategy**. In 2017, 84 officers were trained to establish a Jordanian Armed Forces Computer Emergency Response Team in Amman. The team began working in July 2017, and serves both the military and the government.

With NATO support, Jordan organised and hosted NATO's Regional Exercise REGEX 17 in September with participants from 15 countries including the United Arab Emirates and four Mediterranean Dialogue countries.

Republic of Moldova

In 2017, NATO provided support to the Moldovan authorities in the development of their national defence and military strategies and a new force structure. The NATO Defence Education Enhancement Programme supported the creation of a doctorate programme at the Military Academy of Moldova. Throughout the year, Moldovan defence and security sector

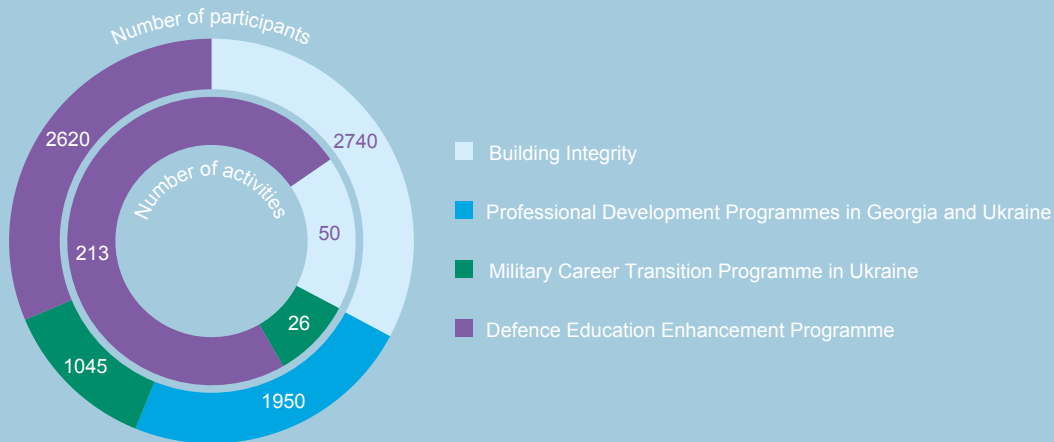
representatives participated in capacity-building activities in the framework of the NATO Building Integrity Programme.

The NATO Science for Peace and Security Programme established a state-of-the-art **cyber defence laboratory at the Technical University of Moldova** and provided tailor-made training in cyber incident management for government experts. NATO also provided support to the Moldovan government and civil society actors in order to create a multi-agency national strategy to implement United Nations Security Council Resolution 1325 on Women, Peace and Security.

Support to Ukraine

NATO's partnership with Ukraine began in 1991 and was strengthened in 1997 with the signing of the Charter on Distinctive Partnership and the establishment of the NATO-Ukraine Commission. In July 2017, the North Atlantic Council visited Ukraine and met with Ukrainian President Petro Poroshenko. During that visit, the Alliance reiterated its unwavering political and practical support for ongoing reforms in Ukraine. Allies and Ukraine also reviewed the implementation of the Comprehensive Assistance Package adopted at the 2016 Warsaw Summit. The Package supports Ukraine so that it can better provide for its own security as well as effectively implement its reform.

Defence Institution Building Programmes in 2017



Defence Institution Building

Defence institution building is at the heart of the Alliance's efforts to project stability. Capacity-building activities typically involve tailor-made bilateral programmes based on objectives set by partners themselves in consultation with NATO. These activities provide access to new tools and methodologies, peer-to-peer contacts, and education and training conducted in partner countries and NATO nations. They are designed for civilian and military personnel engaged in the defence and security sector – including ministries of defence and national defence academies and institutes. More than 8,000 civil and military personnel from partner defence institutions were involved in 2017, including in Afghanistan and Iraq.

Building Integrity

Poor governance and corruption can severely complicate any security environment. Left unchecked, they can lead to less effective state and security institutions, erode public trust and confidence, and increase the risk of destabilisation.

NATO's Building Integrity Programme is designed to address the issues of integrity and good governance in defence and security, and to identify concrete steps for improving both. It aims to develop effective, transparent and accountable

defence institutions which are responsive to unpredictable security challenges. The goal is to embed transparency, accountability and integrity throughout the defence and security sector of any participating country. In 2017, the Programme worked with 38 countries, including both Allies and partners.

Activities include professional development in areas such as human resource management, procurement and auditing. The Programme also provides training through Mobile Training Teams on Building Integrity in Peace Support Operations and advises on ways to strengthen good governance in the defence and related security sector. 2017 saw the implementation of the NATO Building Integrity Policy and Action Plan, the relaunch of the Programme in Afghanistan and the launch of activities in Iraq and Kosovo. The Programme also contributed to the defence capacity building packages for Georgia and Moldova.

Professional Development Programmes in Georgia and Ukraine

NATO Professional Development Programmes in Georgia and Ukraine support the implementation of long-term reforms, parliamentary oversight over the defence and security sector, managing security challenges, and establishing critical masses of reformists in the defence and security sectors.

In 2017, these Programmes in Georgia and Ukraine were reviewed to better align them to the policy objectives of NATO-Georgia and NATO-Ukraine relations. Following these reviews, the Programmes adopted new, four-year policies to assist Georgia and Ukraine in implementing reforms and ensuring national security. In 2017, the two Programmes together provided training to almost 2,000 representatives from both Georgia's and Ukraine's public sectors.

Helping Military Personnel to Transition to Civilian Life in Ukraine

The **Military Career Transition Programme** continued to assist Ukraine in managing the social consequences of the ongoing conflict by helping former military personnel reintegrate into civilian life. In 2017, the Programme provided counselling and therapeutic assistance to more than 1,000 members of the Ukrainian Armed Forces and National Guard.

Defence Education Enhancement Programme

The **Defence Education Enhancement Programme** aims to help professionalise armed forces and associated security institutions through education.

The Programme helps partners to build, develop and reform their professional military education institutions. This process takes place through peer-to-peer discussion about institutional adaptation, and faculty and curriculum development. The Programme draws on experts from defence academies and educational institutions in Allied and partner countries. In 2017, 670 such experts were involved.



NATO Secretary General Jens Stoltenberg presents certificates to the Ukrainian team participating in the Invictus Games, Ukraine, July 2017.

Invictus Games 2017

The NATO Trust Fund project on Medical Rehabilitation supports medical, sport and vocational rehabilitation services to Ukrainian service men and women and civilian personnel from the defence and security sector. The focus is both physical and mental rehabilitation. In 2017, the Trust Fund sponsored the participation of the first Ukrainian team in the international Invictus Games. Held in September 2017 in Toronto, Canada, the Games provide a venue for disabled veterans and service men and women to compete in sporting events. NATO also supported the Afghan team's participation.



The Afghan team at the Invictus Games in Toronto, Canada, September 2017.



A team of NATO experts visits the National Staff College in Nouakchott, Mauritania, February 2017.

In 2017, more than 200 educational events were held in the framework of the Defence Education Enhancement Programme, involving almost 2,000 participants from partner countries and more than 650 from Allied nations.

At the end of 2017, there were 13 individual country programmes: Afghanistan, Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, Mauritania, the Republic of Moldova, Mongolia, Serbia, the former Yugoslav Republic of Macedonia*, Tunisia and Ukraine.

2017 saw the conclusion of a multi-year programme in Mongolia with the development of a Mongolian Staff Officer Course and implementation of contemporary teaching methods in the National Defence University's curriculum.

In Ukraine, 780 Non-Commissioned Officers were trained as instructors. New programmes have been initiated with Kyrgyzstan and the former Yugoslav Republic of Macedonia*.

Together with the Partnership for Peace Consortium, NATO developed and published two new curricula: cyber security and counter-insurgency.

* Turkey recognises the Republic of Macedonia with its constitutional name.

Enhancing Training

Education and training is central to NATO's relationships with partner countries. Every year, partners can choose from a wide range of training events, seminars and courses that match their training needs. They do this using the Partnership Cooperation Menu, a rolling programme of cooperation.

In 2017, the **Partnership Cooperation Menu's** procedures were updated to allow for more long-term planning and more effective decision-making. In 2017, the Menu contained more than 1,000 separate events, including almost 560 courses, in which around 1,500 participants from partner nations took part.

Allied and partner nations can also set up **Partnership Training and Education Centres**, which are open to Allies and partners alike. Together, these Centres facilitate a wide range of education and training which, in turn, support NATO partnerships and help to project stability.

With 31 institutions in 25 NATO and partner countries, the Centres lead innovation and capacity-building in many fields of education and training. In 2017, these institutions conducted almost 150 different courses for NATO Allies and partners and trained more than 3,000 Allied and partner officers. The Centres offer courses to both military and civilian audiences in a variety of areas, including language training, crisis management, the law of armed conflict, democratic control of the armed forces and defence structures, and gender security. In addition, the Centres provide platforms for operational training such as preparation for deployment to NATO led-operations.

Exercising and training together with partners is crucial to ensuring that partners are able to contribute in future crises where NATO may have a role. In 2017, partners participated in 17 different NATO exercises.



NATO Science for Peace and Security Programme-funded Serbian researchers develop biofuel from algae at the Belgrade Institute for Multidisciplinary Research in cooperation with Manchester University in the United Kingdom and Baylor University in the United States, 2017.

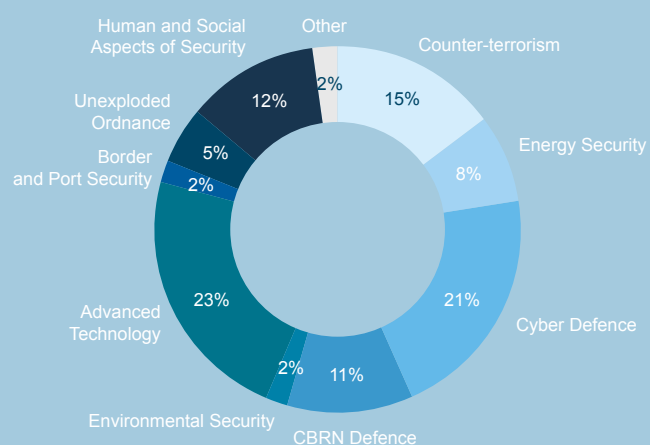
Advancing Science for Peace and Security

The **NATO Science for Peace and Security Programme** is a framework to facilitate practical cooperation between experts and scientists from Allied and partner countries. Activities supported by the Science for Peace and Security Programme leverage science, technology and innovation in addressing emerging security challenges such as cyber defence, counter-terrorism, energy security, and defence against chemical, biological, radiological and nuclear threats. The Programme also assists NATO-led missions and operations,

helps develop advanced technologies with tangible security applications, and contributes to the human and social aspects of security, for example in the area of Women, Peace and Security.

Science for Peace and Security activities support NATO's efforts to strengthen international and regional security by projecting stability and helping partner countries build capacity. In 2017, NATO member countries approved 65 new Science for Peace and Security activities.

Science for Peace and Security Programme - Key Priorities





NATO Counter-IED training for the Iraqi Armed Forces, Iraq, 2017.

Science for Peace and Security Programme: 2017 Highlights

In the context of **NATO's efforts to counter terrorism**, the Science for Peace and Security Programme developed a new flagship initiative focused on the detection of explosives. The initiative invests in improving stand-off detection technologies, developing data fusion algorithms and technologies, and providing response actions in the event of an alarm in real-time and in mass-transit environments.

Science for Peace and Security activities also supported the **Defence and Related Security Capacity Building Initiative**. Assistance to Iraq included delivering expert training and specialist equipment to counter improvised explosive devices (IED). In Jordan, Science for Peace and Security activities focused on cyber defence, counter-IED and border security. Meanwhile, in the Republic of Moldova, the Programme supported both cyber defence and the development of a National Action Plan for the implementation of United Nations Security Council Resolution 1325 on Women, Peace and Security.

In 2017, the Science for Peace and Security Programme stepped up its already strong cooperation with **NATO's partners in the Middle East and North Africa**. Some key initiatives included:

- Providing equipment and conducting counter-improvised explosive device training courses for Egyptian experts at the Counter IED Centre of Excellence in Spain
- Advancing a project to set up a national crisis management coordination centre in Mauritania, serving as a model for the wider Sahel region. In this framework, in 2017, civil emergency protection experts from Mauritania received three final training sessions in France
- Conducting the first activity with Algeria in the field of terahertz technology with the aim of contributing to the fight against terrorism
- Continuing cooperation with Israel, an active partner in the Science for Peace and Security Programme
- Approving a package of five training courses to be held at the NATO-Istanbul Cooperation Initiative Regional Centre in Kuwait in the fields of cyber defence, energy security and chemical, biological, radiological and nuclear defence

2017 saw further expansion of the Programme's work with **NATO partners in the Balkans and across the globe**:

- A multi-year project in Western Balkan countries to improve their crisis management and emergency response capabilities through a Next Generation Incident Command System
- A table-top exercise on chemical, biological, radiological and nuclear defence took place in Japan
- Experts from New Zealand contributing to projects on perceptions of NATO in the Asia-Pacific region and the role of small states in international security
- A cyber defence capacity building project with Mongolia



Signing of agreement to launch Trust Fund IV for Jordan, November 2017.



Team Ukraine at the Invictus Games in Toronto, Canada, September 2017.

Trust Funds

Trust Funds are one of the Alliance's most effective tools for projecting stability. Allies create Trust Funds to provide resources to help partner countries implement practical projects in the broad areas of demilitarization, defence transformation and capacity-building.

Over the years, NATO Trust Funds have assisted partners in key areas. These include the safe destruction of surplus and obsolete anti-personnel landmines, weapons and munitions; capacity-building in areas such as demining and munition stockpile management; and support to wider defence transformation initiatives, such as the resettlement of former military personnel, promoting transparency and gender mainstreaming.

The **Defence and Related Security Capacity Building Trust Fund** was established in 2015 to provide additional support and resources to implement the Defence and Related Security Capacity Building Initiative. It allows Allies and partners to contribute to specific projects developed for Defence and Related Security Capacity Building recipient countries, as well as to contribute to a financial pool that will be used to support future projects.

Since the Trust Fund was established, 16 Allies (Croatia, Canada, the Czech Republic, Denmark, Germany, Iceland, Italy, Lithuania, Luxembourg, Montenegro, the Netherlands, Norway, Portugal, Slovakia, Turkey and the United Kingdom) and two partner nations (Finland and Ireland) have made financial contributions totalling some EUR 12.5 million. Additionally, three Allies

(Luxembourg, Norway and Turkey) have promised further financial contributions to the Trust Fund. These pledges, as at December 2017, totalled over EUR 4 million.

In 2017, **Trust Fund Georgia IV** was successfully concluded. This Trust Fund helped to clear unexploded ordnance from a partially exploded military ammunition depot in central Georgia. The EUR 1.15 million project, with the Czech Republic and Lithuania as lead nations, cleared more than 78,000m³ of earth and debris, and removed remaining live munitions so that the site could be returned to use by the local population.

Significant progress has also been made in assisting Ukraine in the wake of the Russia-Ukraine crisis. As part of the response to the crisis, NATO member states established Trust Funds to assist Ukraine. The key areas were: command, control, communications and computers; logistics and standardization, cyber defence; military career transition; medical rehabilitation; explosive ordnance disposal and countering improvised explosive devices. The implementation of these Trust Funds is ongoing. 2017 also saw the successful completion of a Trust Fund project on the disposal of radioactive waste in Vakulenchuk and the launch of a similar Trust Fund in Tsybuleve.



Exercise BOSNA I HERCEGOVINA 2017, Bosnia and Herzegovina, September 2017.

Euro-Atlantic Disaster Response Coordination Centre

The **Euro-Atlantic Disaster Response Coordination Centre** is NATO's principal mechanism for responding to civil emergencies in the Euro-Atlantic area. It is active all year round, operational on a 24/7 basis and involves all 29 NATO Allies and many partner countries.

The Centre functions as a clearing house for coordinating requests and offers of assistance, usually in response to natural and man-made disasters. All of the Centre's tasks are performed in close cooperation with the United Nations Office for the Coordination of Humanitarian Affairs, which retains the primary coordinating role in international disaster relief operations. The Centre is designed as a regional coordination mechanism, supporting and complementing UN efforts. In the case of a disaster requiring international assistance, it is up to individual NATO Allies and partners to decide whether to provide assistance, based on information they receive from the Centre.

The Euro-Atlantic Disaster Response Coordination Centre also works closely with the EU Emergency Response Coordination Centre both in exercises and in real-life emergencies.

Euro-Atlantic Disaster Response Coordination Centre 2017 activities

In March 2017, Ukraine requested international assistance from the Centre following a fire at an ammunition depot in the Kharkiv region. The detonation of missiles and ammunition triggered a large civilian evacuation operation and the suspension of air traffic in the region. Three nations – Poland, Romania and Slovakia – provided urgently requested protective equipment and detection devices. Additionally, the NATO Science for Peace and Security Programme helped to equip the demining teams of the Ukrainian State Emergency Service.

In July 2017, a forest fire hit Montenegro, endangering the lives of hundreds of people in the villages on the Luštica peninsula. Five Allies and partners – Bulgaria, Croatia, Israel, Switzerland and Ukraine – responded to a request by the Montenegrin government, offering firefighting aircraft and helicopters.

In August and September 2017, Georgia made three requests for assistance to the Centre following a series of forest fires. The mountainous terrain and strong winds made it extremely difficult to bring the fires under control. Seven NATO Allies and partners – Armenia, Azerbaijan, Belarus, Israel, Turkey, Ukraine and the United States – provided firefighter teams, aircraft, helicopters and logistics support.



Exercise BOSNA I HERCEGOVINA 2017, Bosnia and Herzegovina, September 2017.

Exercise BOSNA I HERCEGOVINA 2017

In addition to its day-to-day activities, the Euro-Atlantic Disaster Response Coordination Centre conducts annual large-scale field exercises to improve interoperability between civilian and military actors in NATO and partner countries.

In September 2017, the Centre and the Ministry of Security of Bosnia and Herzegovina co-organised the 17th consequence management field exercise in Tuzla. The country was hit by devastating floods and landslides in 2014. The lessons identified after this disaster included the need to organise more multinational exercises to strengthen interoperability.

Around 1,200 people were involved in the exercise. They came from Bosnia and Herzegovina, 34 Allied and partner nations, and 12 international organisations and bodies, including the Joint CBRN Defence Centre of Excellence and the EU Emergency Response Coordination Centre.

The exercise included innovations such as virtual reality technology and a simulated social media platform. A multinational telemedicine system was also used to allow medical personnel in the field to reach back and get critical advice from medical experts across the world, using man-portable telemedicine kits. An incident command system, supporting partner nations in the Western Balkans and developed under the NATO Science for Peace and Security Programme, was also tested during the exercise and helped to better coordinate emergency response through the provision of real-time information about the unfolding fictitious disaster. Also, training on the protection of civilians in a complex emergency was offered to participants.

Working with International Organisations

NATO is a strong advocate of closer consultation and cooperation among international organisations to prevent and manage crises. In 2017, the Alliance expanded its contacts with a range of organisations, including the World Bank and the African Union, as well as several non-governmental organisations.

NATO enhanced its ties with the EU, the UN, and the Organization for Security and Co-operation in Europe (OSCE). At the same time, in March 2017, Jens Stoltenberg became the first NATO Secretary General to visit the Headquarters of the International Committee of the Red Cross in Geneva.

European Union

In 2017, **NATO and the EU continued to develop and expand their partnership**. This follows the Joint Declaration signed in July 2016 in Warsaw by NATO Secretary General Jens Stoltenberg, European Council President Donald Tusk, and European Commission President Jean-Claude Juncker. The Joint Declaration called for a 'new impetus and new substance to the NATO-EU Strategic Partnership'. It recognised that both organisations face new and complex security challenges that can be more effectively addressed by working together.

NATO and the EU continue to implement measures to improve cooperation on more than 70 different issues – ranging from cyber defence to counter-terrorism to maritime security. At sea, for instance, NATO's maritime Operation Sea Guardian provides

critical support to the EU's Operation Sophia. On cyber, NATO and EU cyber teams can now exchange warnings about cyber attacks and malware in real time. And in October 2017, the NATO Secretary General and EU High Representative/Vice-President of the European Commission Federica Mogherini opened the Centre of Excellence for Countering Hybrid Threats in Helsinki, Finland.

Last year, NATO and the EU also worked more closely to improve situational awareness and to enhance training, exercises and strategic communications to counter hybrid and cyber threats. The two organisations also began to cooperate more closely when supporting efforts by partner nations to develop their defence capacity and resilience.



NATO Secretary General Jens Stoltenberg meets President of the European Council Donald Tusk and President of the European Commission Jean-Claude Juncker, Brussels, May 2017.



NATO Secretary General Jens Stoltenberg at the United Nations General Assembly, New York, September 2017.

United Nations

NATO Secretary General Stoltenberg's 2015 pledge to enhance the Alliance's support to UN peace operations continues to drive **closer NATO-UN cooperation**. In response to operational challenges, NATO has worked more closely with the UN to counter the threat posed by improvised explosive devices through training initiatives and joint work on developing common standards. Cooperation and dialogue has also continued on military medicine and capacity-building, including with the exchange of best practices and the UN's participation in NATO's bi-annual Building Integrity Conference.

NATO-UN cooperation has also intensified on the human security agenda. Throughout 2017, the UN remained strongly engaged with NATO as the Alliance implemented its Policy for the Protection of Civilians. The two organisations have continued to work together on the issue of Children and Armed Conflict with a focus on training, as well as on the implementation of UN Security Council Resolution 1325 on Women, Peace and Security.

Organization for Security and Co-operation in Europe

In the face of a complex security environment in Europe, the **partnership between NATO and the Organization for Security and Co-operation in Europe remains key**. The Alliance follows developments at the OSCE very closely, especially in relation to arms control and confidence- and security-building measures, as well as the OSCE's Structured Dialogue on current and future challenges and risks. Other areas of common interest are the Western Balkans and Ukraine, where the OSCE plays a key role.

In 2017, NATO engaged with the OSCE in a number of ways. The Secretaries General of the two organisations met in the margins of the UN General Assembly in September, and the NATO Deputy Secretary General took part in the OSCE Ministerial Council in Vienna in December. NATO also gave several briefings to the OSCE's Forum for Security Co-operation, including on small arms and light weapons, and cyber security. The latest round of the annual NATO-OSCE staff talks was held at NATO Headquarters in November 2017. Following the appointment of a Representative of the NATO Secretary General to the OSCE in 2016, the planned opening of a NATO Liaison Office in Vienna in 2018 should facilitate closer interaction between the two organisations.

African Union

In 2017, NATO continued to **provide practical assistance to the African Union**. Common security threats and challenges such as stability in Africa and the fight against terrorism demonstrate the strategic importance of NATO-African Union cooperation. NATO's support to the Union, which began in 2005, is designed to complement assistance provided by other international organisations.

NATO maintains a senior military liaison office in Addis Ababa. In addition, subject matter experts are seconded to the African Union Peace and Security Secretariat, responsible for peace-support operations and missions. At the request of the African Union, NATO provides various forms of assistance including planning and support for current operations and African Union peacekeeping capabilities. In 2017, NATO supported the Union with two Mobile Education and Training Team courses in Addis Ababa, focused on operational and exercise planning.

International Committee of the Red Cross

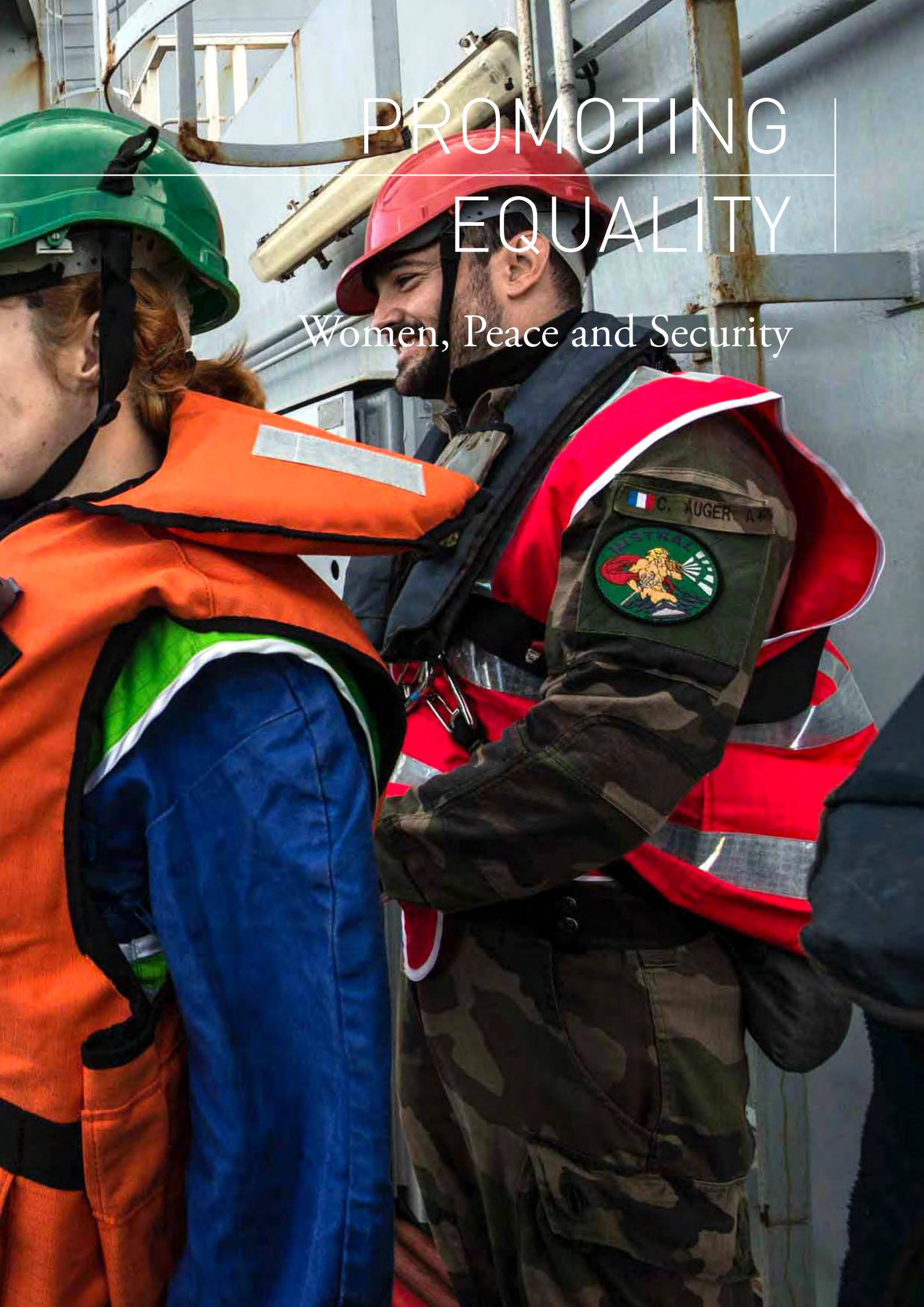
As a regional multilateral organisation, NATO has always been a strong advocate of close cooperation with other organisations that have both regional and global missions, including the International Committee of the Red Cross.

The cooperation between NATO and the International Committee of the Red Cross continued in 2017 with a focus on issues relating to **international humanitarian law and the protection of civilians in conflict**. During his visit to Switzerland in March 2017, the NATO Secretary General met the President of the International Committee of the Red Cross. Their discussion concentrated on humanitarian issues and the cooperation between the two organisations. It marked the first visit by a NATO Secretary General to the International Committee of the Red Cross Headquarters in Geneva.



PROMOTING EQUALITY

Women, Peace and Security





Avionics specialist from the U.S. Air Force, Lithuania, November 2017.

NATO has a responsibility to be a leading protector of women's rights. The Secretary General has stated that strengthening the role of women in the armed forces is both the right and the smart thing to do. Allies acknowledge that integrating gender perspectives throughout NATO's core tasks contributes to a more modern, ready and responsive Alliance. The Alliance is committed to promoting the role of women in peace and security and to supporting the implementation of United Nations Security Council Resolution 1325 and related resolutions on this subject.

The **Secretary General's Special Representative for Women, Peace and Security** oversees all aspects of NATO's contributions to the Women, Peace and Security agenda. In 2017, the Secretary General appointed Canadian expert Clare Hutchinson as the new Representative.

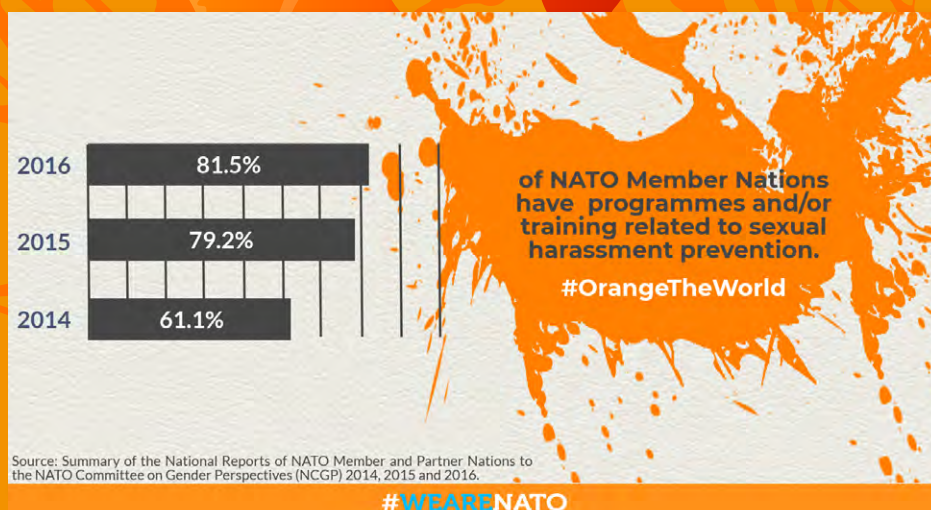
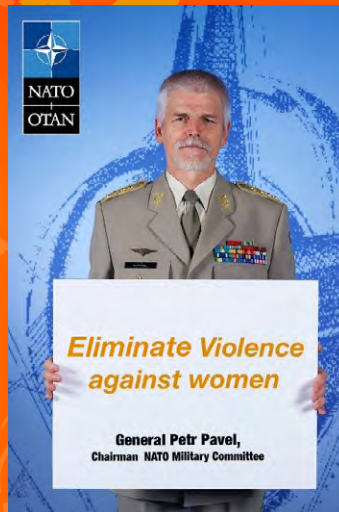
The Special Representative and her team work to strengthen the Alliance's outreach and cooperation with partner countries, international organisations and civil society. For example, the Special Representative and her office organise the Civil Society Advisory Panel on Women, Peace and Security to foster a regular dialogue with relevant civil society and expert stakeholders.

NATO invests in **incorporating gender perspectives** into the analysis, planning, execution, assessment and evaluation of NATO-led military missions and continues to deploy trained gender advisors to operations and missions at strategic, operational and tactical levels. In 2016, 96% of NATO countries included gender elements in pre-deployment trainings and/or exercises and 78% of NATO nations included gender in operational planning. Similarly, in 2016, there were 553 trained gender advisors active in 22 NATO member countries and 35 deployed on operations or missions.

The NATO Science for Peace and Security Programme also contributes to the Women, Peace and Security agenda. Among other projects, in 2017, the Programme launched a broad assessment on gender equality and integration in the Georgian Armed Forces, worked on the development of a National Action Plan for the implementation of UN Security Council Resolution 1325 in the Republic of Moldova, and carried out the 'Pilot Tailor-Made Gender Awareness Course for the NATO Community' to improve participants' understanding of what gender is and how it matters across NATO.

Orange the World

In 2017, NATO joined the United Nations' 'Orange Campaign': 16 days of activism against gender-based violence. NATO helped to raise awareness on this important topic, aiming to influence people to take action to end violence against women.





NATO Deputy Secretary General Rose Gottemoeller and Minister of Foreign Affairs of Canada, Chrystia Freeland at a panel discussion about 'Women, Peace and Security', Brussels, December 2017.

Why NATO must defend women's rights

In a December 2017 joint Op-Ed, the NATO Secretary General and Angelina Jolie, the UN Special Envoy, called for an end to gender-based violence and outlined a way for NATO to play a leading role in that effort. They affirmed NATO should:

- Deepen its commitment to integrating gender issues into its strategic thinking and reinforce a culture of integration of women throughout the Organization including in leadership positions
- Train others on the protection of human rights and civilians, including against sexual violence and promoting standard operating practices for soldiers in the field to prevent, recognise and respond to sexual and gender-based violence
- Invest in its gender advisors and in boosting gender-based violence reporting and monitoring mechanisms

'It is humanity's shame that violence against women, whether in peaceful societies or during times of war, has been universally regarded as a lesser crime. There is finally hope that we can change this. We owe it to ourselves – men and women alike – and to future generations.'



Meeting of the North Atlantic Council in Ministers of Defence Session, Brussels, February 2017.
Left to right: Mimi Kodheli (Albania); Roberta Pinotti (Italy); Jeanine Hennis-Plasschaert (The Netherlands); Ursula von der Leyen (Germany); Maria Dolores de Cospedal Garcia (Spain); Ine Marie Eriksen Soreide (Norway).

Gender Balance Statistics

Despite progress, there is still more work to be done to boost the representation of women at NATO, especially in senior-level posts. In 2017, the percentage of women remained 26% NATO-wide, 39% within the International Staff, and 16% within the International Military Staff at NATO Headquarters. Overall, 21% of senior leadership positions within the International Staff are held by women⁸.

Among the initiatives designed to address this issue is the NATO Women's Professional Network and Mentoring Programme, which launched its third cycle in 2017. The Programme aims to develop a pool of qualified female candidates and remove any structural barriers that may exist between staff.

In the North Atlantic Council, nine of NATO's Permanent Representatives are women⁹, with eight women serving as Ministers of Defence in NATO member countries at the end of 2017¹⁰.

In 2017, the NATO International Military Staff Office of the Gender Advisor collected national data on women in the armed forces of member countries in 2016. This showed that 96% of NATO members have all positions in their armed forces open to women (compared to 84% in 2015); and that the average percentage of women in the armed forces of NATO countries remains at 11%. The data also show that 7% of military personnel deployed in NATO operations in 2016 were women (compared to 6% in 2015).

Other important trends reflected in the report include:

- 66.7% of NATO members have support in place for single, divorced or widowed parents caring for children (compared to 48% in 2015)
- 59.3% of NATO members have programmes or policies to encourage work-life balance (compared to 52% in 2015)
- 77.8% of NATO members have a military entity dealing with gender perspectives (compared to 72% in 2015).

⁸ 'Senior Leadership' is defined as grades U1-U4, A5-A7 (and L-grade equivalents).

⁹ Canada, Estonia, France, Iceland, Luxembourg, Montenegro, Netherlands, United Kingdom, United States (As of December 2017).

¹⁰ Albania, Czech Republic, France, Germany, Italy, Netherlands, Slovenia, Spain (As of December 2017).



ORGANISATION



A political-military alliance of 29 countries, NATO is also an adaptable organisation, committed to being efficient, flexible and accountable. 2017 was an important year for NATO's continuing adaptation and innovation.

NATO Headquarters and Structures

NATO Headquarters in Brussels houses the Organization's International Staff and International Military Staff, along with 29 Allied delegations and military representations, 15 partner missions and staff from several of NATO Agencies.

It is the main forum where the discussions and consultations that shape NATO policy and practice take place, with roughly 6,000 meetings held at the Headquarters in 2017 alone.

In 2017, final preparations for the 2018 move to NATO's new headquarters continued. NATO's new headquarters is a key element – and symbol – of the Alliance's transformation for the 21st century. The new building, designed and built with respect for the environment, offers state-of-the-art facilities and will be able to accommodate NATO's changing needs long into the future.

Facts about the New NATO Headquarters

The new headquarters is designed and built with respect for the environment in mind, using fewer resources, more efficiently:

- The building design regulates lighting, humidity and temperature using energy-saving technologies and is expected to be 30% more efficient in the use of energy
- The windows covering the building allow it to take maximum advantage of natural light, reducing consumption of electricity
- State-of-the-art cogeneration units will provide most of the electricity and heating used on site
- A system of rainwater collection and storage will supply 90% of the water needed for the bathrooms, cleaning and landscaping
- Technologies in the new building will also help to recycle more, with materials from the previous buildings on site recycled and used for the parking areas. They represent the equivalent of 1,000 truckloads of material which would otherwise have needed to be transported to the site

A computer-generated representation of the new NATO Headquarters in Brussels © SOM ASSAR





Allied Defence Ministers, meeting of the North Atlantic Council, February 2017.

International Staff

Over 1,100 civilians work as part of the **International Staff at NATO Headquarters**, providing advice, guidance and administrative assistance to the national delegations. The International Staff supports the consensus-building and decision-making process of the Alliance and helps to implement the decisions that are made.

NATO has a merit-based recruitment process and strives to build a staff that represents the nearly one billion citizens it serves. In 2017, nationals of all member nations, except newly-joined Montenegro, were employed at NATO Headquarters.

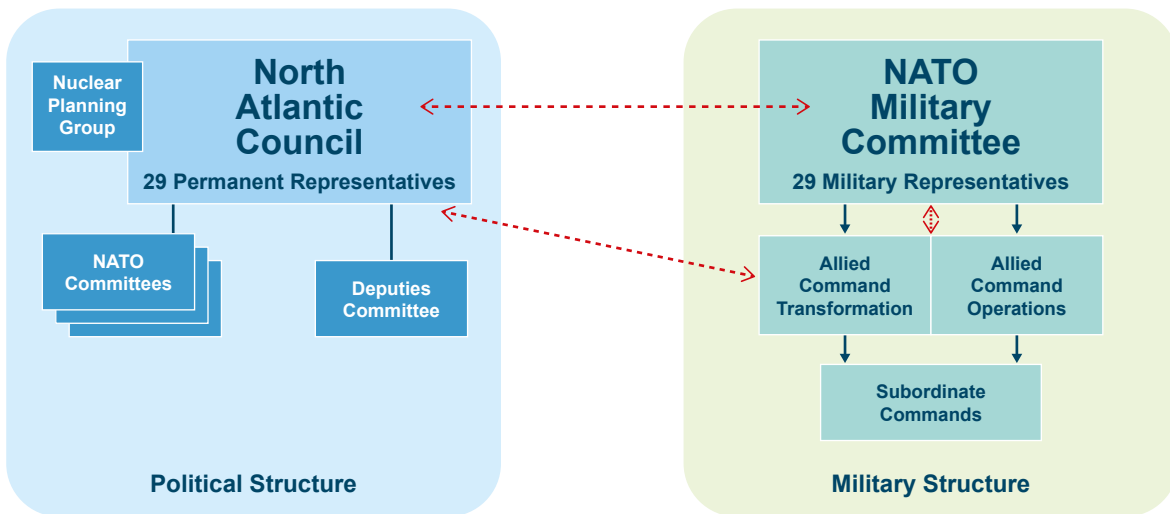
NATO is committed to working to achieve better diversity and gender parity in the Organization. For example, through its Diversity and Inclusion Action Plans, NATO seeks to better identify and address barriers to diversity and create policies and programmes that promote inclusion.

North Atlantic Council

The **North Atlantic Council is the principal political decision-making body within NATO**. It provides a forum for wide-ranging consultation between Allies on all issues affecting their peace and security. It brings together high-level representatives from each member country to discuss policy and operational questions requiring collective decisions.

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

NATO's Political and Military Structure



NATO Military Authorities

Nearly 5,500 military personnel and 700 civilians work collectively across the International Military Staff at NATO Headquarters and throughout the NATO Command Structure. All 29 Allies are represented in NATO's military structures.

The **Military Committee** is the senior military authority within NATO. It is composed of the Chiefs of Defence of NATO member countries and is led by a Chairman. In 2017, this was General Petr Pavel, Czech Armed Forces.

While NATO Chiefs of Defence convene several times throughout the year, the Military Committee meets on a day-to-day basis in Permanent Session with Military Representatives, who act on behalf of their national Chiefs of Defence. The role of the Military Committee is to discuss, deliberate and act on matters of military importance, working in the best interests of the Alliance, while at the same time representing national perspectives and positions. The Military Committee provides the North Atlantic Council with consensus-based military advice. It works closely with the two NATO Strategic Commanders to bring military plans, issues and recommendations forward for political consideration by the Council.



The Chairman of the NATO Military Committee on a visit to Australia, June 2017.

The executive body of the Military Committee is the **International Military Staff**. With a staff of approximately 500 people, 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. It also ensures that NATO decisions and policies on military matters are implemented by the appropriate NATO military bodies.

To carry out its core military functions, the Alliance relies on the **NATO Force Structure** and the **NATO Command Structure**.

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

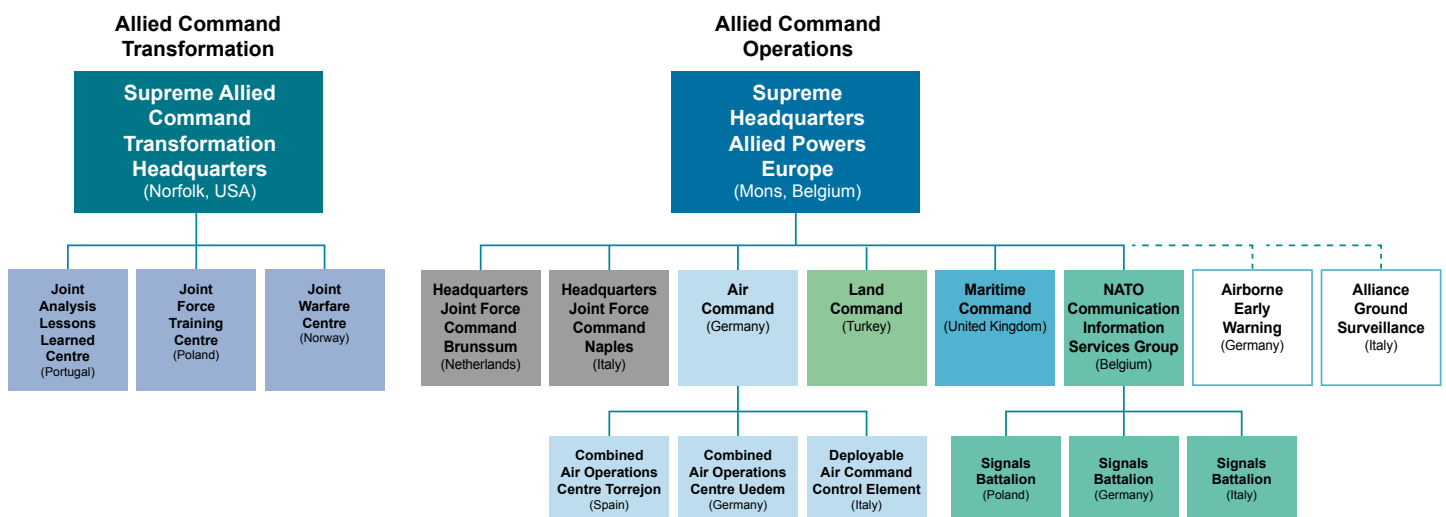
The **NATO Command Structure** has the strategic role to command and control the Alliance's joint operations. It consists primarily of Allied Command

Operations, Allied Command Transformation and their subordinate commands and headquarters.

Allied Command Operations is responsible for the planning and execution of all Alliance operations and missions. Its main headquarters is in Mons, Belgium and it is headed by the Supreme Allied Commander Europe, currently General Curtis M. Scaparrotti, United States Army. Allied Command Transformation leads the transformation of NATO's military structure, forces, capabilities and doctrine. Its main headquarters is in Norfolk, Virginia in the United States. It is headed by the Supreme Allied Commander Transformation, General Denis Mercier, French Air Force.

In 2017, the Alliance conducted a functional assessment of the NATO Command Structure. Following this review, NATO Defence Ministers agreed to an outline on how to adapt the NATO Command Structure. According to this blueprint, changes to the Command Structure will include, among others, the establishment of new commands.

NATO Command Structure



Agencies and Organisations

NATO Agencies play a central role for the Organization and its member states in identifying and delivering critical capabilities and services in support of the Alliance.

NATO Communications and Information Agency

The **NATO Communications and Information Agency** is NATO's technological and cyber arm. It operates and secures NATO's networks and delivers advanced technology to support Alliance priorities – including in the realms of air, missile and cyber defence. The Agency is spread over 30 locations, from North America to Afghanistan, with headquarters in Brussels and campuses in The Hague, the Netherlands, and Mons, Belgium. It also has staff deployed in support of NATO operations and missions on land and at sea.

Seventy per cent of the Agency's work is executed through contracts with industry from the 29 Allies. With a mix of civilian and military staff and a 200-strong team of cyber experts, the Agency is currently leading a EUR 3 billion update of NATO's information technology. This will make NATO's networks more resilient and provide both the political decision-makers and NATO's military commanders with improved situational awareness, communications, and command and control. In 2017, the Agency also led projects to provide connectivity to Montenegro and to upgrade NATO's satellite communications, among others.

NATO Support and Procurement Agency

The **NATO Support and Procurement Agency** is NATO's primary procurement and logistics services provider. The Agency provides full logistics assistance from acquisition to maintenance and life-cycle support, including dismantling of complex weapons systems at the end of their planned life-cycle. It also manages contractor support to operations on behalf of the NATO Commands, multinational groups and individual nations.

The Agency is headquartered in Luxembourg and has programmes in France, Hungary and Italy with outstations in Afghanistan, Kosovo and elsewhere. It employs more than 1,350 staff, with over 60 personnel deployed in operations.

The Agency's business activity has grown by more than EUR 1 billion in the last four years and now includes the acquisitions of NATO and national weapons systems. For example, the Agency is purchasing seven multi-role tanker transport aircraft in partnership with the Organisation for Joint Armament Cooperation for a number of nations. This level of business and workforce growth is predicted to continue in the foreseeable future with customer nations directly funding more than 90% of the Agency's activities.

NATO Science and Technology Organization

The **NATO Science and Technology Organization** delivers innovation, advice and scientific solutions to meet the Alliance's ever-changing needs. As the world's largest collaborative research forum in the field of defence and security, it fosters a high-impact programme of work. It nurtures a community of more than 5,000 actively engaged scientists and engineers from Allied and partner countries.

The Science and Technology Organization's annual programme of work includes over 300 projects that cover a wide range of fields such as autonomous systems, anti-submarine warfare, hypersonic vehicles, quantum radar, and the impact of social media on military operations.

The Organization is governed by the NATO Science and Technology Board. The Board administers the Organization's Scientific and Technical Committees and its three Executive Bodies: 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.



NATO Support and Procurement Agency deployable camp, Italy, November 2017

NATO Standardization Office

To operate together coherently, effectively and efficiently, Allies' forces and capabilities require agreed and compatible standards. The **NATO Standardization Office**, as an integrated civil-military office, supports the development and update of NATO standards.

In 2017, the Office focused on identifying, developing and implementing NATO standards to support Allies' defence planning priorities. Areas of special investment included logistics and intelligence. To contribute to the improvement of the Alliance's standards, the office also focuses on achieving better cooperation between experts within and across specialties and to identify lessons learned from NATO exercises. These efforts contribute to enhanced interoperability to achieve tactical, operational and strategic objectives.

NATO Funding

The costs of running NATO are funded through member countries' direct and indirect contributions. Indirect, or national, contributions are the largest and come in the form of Allies' participation in NATO-led operations and missions. Direct contributions are made to finance requirements of the Alliance as a whole, such as NATO-wide air defence or command and control systems. These costs are borne collectively, often through common funding, with all 29 members contributing according to an agreed cost-share formula, based on their Gross National Income.

Common-funding arrangements finance NATO's budgets: the **Civil Budget**, covering the costs related to running the NATO International Staff and Headquarters; the **Military Budget**, funding the costs of the integrated Command Structure; and the **NATO Security Investment Programme**, focused on military capabilities.

Projects can also be jointly funded by two or more Allies, meaning that the participating countries identify the requirements, priorities and funding arrangements for the project, but NATO provides political and financial oversight. The funding process is overseen by the North Atlantic Council, managed by the Resource Policy and Planning Board and implemented by the Budget Committee and the Investment Committee.

NATO also provides financial oversight for a number of Trust Funds that allow for the participation of non-NATO countries on specific country- or issue-based projects. Trust Funds are financed through national contributions on a voluntary basis.

Transparent and Accountable Management of Financial Resources

In recent years, NATO has invested in modernising the way it manages financial resources, with the goal of increasing overall accountability and transparency.

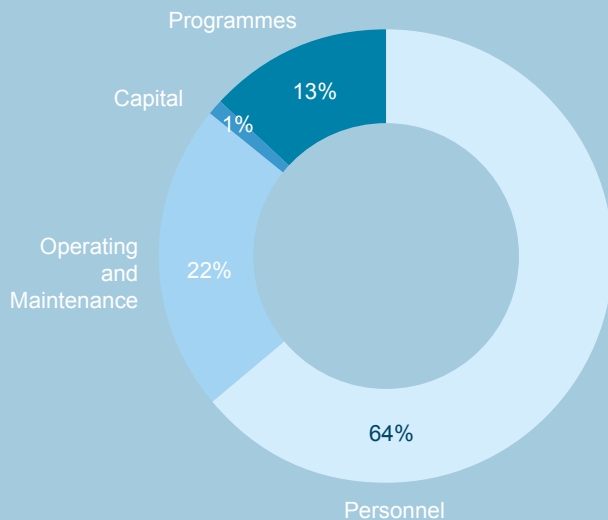
In 2017, the Organization continued to reform its financial regulatory framework, including by improving the consistency and comparability of financial reporting across NATO entities. These ongoing efforts are designed to improve financial transparency, accountability and to advance best practices in public finance across NATO.

At the same time, progress was achieved in strengthening the management of NATO common funding, including in the areas of delivery of common-funded military capabilities and common-funding resource planning process.

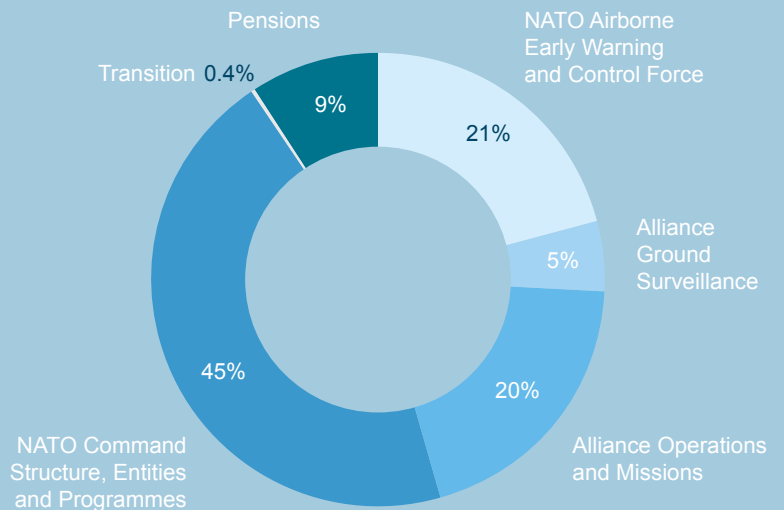
The independent International Board of Auditors for NATO also plays a key role in ensuring that joint and common funds are properly utilised by conducting financial and performance audits of the different NATO bodies.

Finally, the Alliance continues to make a wide range of NATO financial documents publicly available as part of its overall commitment to transparency.

2017 Core Civil Budget



2017 Military Budget Ceilings



Civil Budget

The Civil Budget funds personnel expenses, operating costs, and capital and programme expenditure of the International Staff at NATO Headquarters. It is approved by the North Atlantic Council, which ensures that the Civil Budget reflects the Alliance's strategic priorities, and is financed from national foreign ministry budgets (in most countries). The core Civil Budget for 2017, excluding pension liabilities, was approximately EUR 193 million. In 2017, progress on modernising the financial management of the Civil Budget continued, for example by introducing a new mechanism to enable Allies to better link resources provided to outputs delivered, improving the overall accountability and efficiency.

The Military Budget funds the International Military Staff, the two Strategic Commands and their associated command, control and information systems, including:

- Alliance Ground Surveillance
- Alliance Operations and Missions
- NATO Airborne Early Warning and Control Force
- NATO Command Structure, Entities and Programmes
- Pensions of retired NATO Command Structure civilian staff.

Military Budget

The Military Budget covers the operating and maintenance costs of the NATO Command Structure and other NATO military entities. It is composed of over 35 separate budgets and financed with contributions from Allies' national defence budgets (in most countries) according to agreed cost shares. The Military Budget is approved by the Council, overseen by the Budget Committee (with representatives from all NATO member countries) and implemented by the individual budget holders. The Military Budget ceiling for 2017 was EUR 1.3 billion. In all cases, military personnel are provided to NATO by the countries they serve and are funded through their national defence budgets.

NATO Security Investment Programme

The **NATO Security Investment Programme** covers major construction and technology investments that are beyond the national defence requirements of individual member countries. It supports the NATO Strategic Commands by providing installations and facilities, including air defence communication and information systems and military headquarters for the integrated structure and deployed operations.

The Programme is financed by member countries' Ministries of Defence according to an agreed cost share. It is approved by the Council and overseen by the Investment Committee (with representatives from all NATO member countries). The NATO Security Investment Programme's projects are implemented by individual member countries, by NATO Agencies, or by Strategic Commands, according to their areas of expertise.

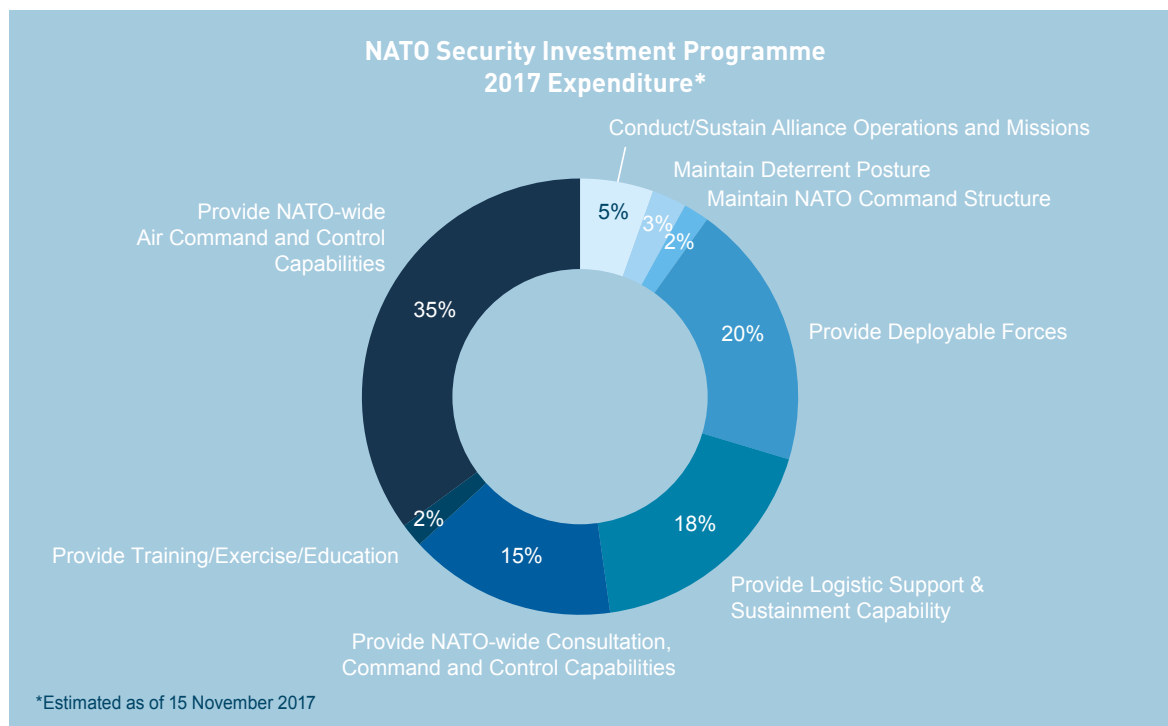
In 2017, the Programme's ceiling was EUR 655 million and the most significant expenditures occurred in the area of NATO-wide air command and control capabilities, especially the Air Command and Control System programme and Ballistic Missile Defence.

Improving Transparency

In line with the decision to increase NATO's transparency and accountability taken at the Wales Summit in 2014, the Alliance continued to work to enhance its public disclosure policy in 2017. As a result, **NATO publicly disclosed an increased amount of current information**. The policy also affected the disclosure of historical materials and introduced procedures for the systematic inclusion of documents originating from Allied Command Operations in the public disclosure process.

Documents released in 2017 included 138 letters of the Secretary General from 1991 to 1999; 59 documents from Supreme Headquarters Allied Powers Europe (SHAPE); a brief, one-volume history of the Supreme Headquarters Allied Powers Europe for 1956-1962; and 105 documents related to the Ustica incident of June 1980.

Work to enhance NATO Archives Online has also been completed, helping to further increase the number of publicly disclosed documents and make it easier for the public to access them.





NATO Secretary General with students of the Elliott School of International Affairs, George Washington University, Washington, DC, April 2017.

Public Communications

As an Alliance of 29 democracies, NATO takes very seriously its responsibility to be transparent. NATO works hard to communicate its policies, explain the purpose of its actions and stress Allied resolve to any potential adversary. The Alliance invests in speaking to people around the world – especially in Allied countries, in the Alliance’s immediate neighbourhoods and in those countries where NATO has ongoing operations.

This is done in many ways, including through daily engagement with traditional and social media, as well as people-to-people contacts. For example, NATO regularly engages with the international media and reaches audiences through speeches and ‘town-hall’ events by senior officials, press conferences, workshops, speaking tours and briefing programmes at NATO Headquarters in Brussels. NATO also maintains a number of websites and social media accounts.

At the same time, the Alliance monitors and analyses media coverage worldwide to understand perceptions of NATO, and to help counter disinformation in a timely manner. This is also done through an online portal devoted to ‘Setting the Record Straight’ and debunking myths on NATO-Russia relations.

Forward Presence

In 2017, NATO used its public communications to make clear that the four multinational battlegroups deployed to Estonia, Latvia, Lithuania and Poland are defensive, proportionate and in line with the Alliance’s international obligations, and that the Alliance remains open to meaningful political dialogue with Russia. In the spirit of transparency, videos, infographics and other digital material were used to show the contributing nations and location of each battlegroup. The battlegroups also organised regular events to engage with local communities.

Digital Outreach

NATO recognises the important value of social media. At the end of 2017, the official NATO Facebook page had almost 1.3 million likes, while NATO’s official Twitter account had close to 520,000 followers, up by almost 110,000 (+27%) since 2016. According to the 2017 Twiplomacy study, NATO Secretary General Jens Stoltenberg was the third most followed leader of an international organisation on Twitter, and among the most engaged.

Resolute Support Mission

The Resolute Support Mission is a NATO-led mission to train, advise and assist the Afghan security forces and institutions. The mission was launched on 1 January 2015, immediately following the stand-down of the International Security Assistance Force.

The legal framework for the Resolute Support Mission is provided by a Status of Forces Agreement, signed in Kabul on 30 September 2014 and ratified by the Afghan Parliament on 27 November 2014. The Status of Forces Agreement defines the terms and conditions under which NATO forces are deployed, as well as the activities they are authorised to carry out. The mission is also supported by United Nations Security Council Resolution 2189, unanimously adopted on 12 December 2014.

The Resolute Support Mission provides training, advice and assistance in eight key areas: multi-year budgeting; transparency, accountability and oversight; civilian oversight of the Afghan Security Institutions; force generation; force sustainment; strategy and policy planning, resourcing and execution; intelligence; and strategic communications.

Those countries not contributing troops to the Resolute Support Mission are supporting this mission in different ways, as well as the broad effort to strengthen the sustainment of the Afghan National Defence and Security Forces in the long term.

Beyond this training, advice and assistance mission, Allies and partner countries also contribute to the financing of the Afghan National Defence and Security Forces, and enhance the Enduring Partnership with Afghanistan, by strengthening political consultations with the country and by strengthening practical cooperation in areas of specific interest for Afghanistan.

These efforts are part of the broader engagement of the international community in Afghanistan to ensure that Afghanistan is never again a safe haven for terrorism.

Commander: General John W. Nicholson (USA)
NATO Senior Civilian Representative: Ambassador
Cornelius Zimmermann (DEU)

Resolute Support Mission Command (RSM) in Kabul
RSM Headquarters
Commander: General John W. Nicholson (USA)
Deputy Commander: Lieutenant General Rosario
Castellano (ITA)

Train, Advise and Assist Command (TAAC) Capital
Headquarters TAAC(C) in Kabul (TUR)
Commander: Brigadier General Ayhan Saygin (TUR)

Train, Advise and Assist Command (TAAC) North:
Headquarters TAAC(N) in Mazar-e Sharif (DEU)
Commander: Brigadier General André Bodemann (DEU)

Train, Advise and Assist Command (TAAC) East:
Headquarters TAAC(E) in Laghman (USA)
Commander: Brigadier General Paul T. Calvert (USA)

Train, Advise and Assist Command (TAAC) South:
Headquarters TAAC(S) in Kandahar (USA)
Commander: Brigadier General Lee Henry (USA)

Train, Advise and Assist Command (TAAC) West:
Headquarters TAAC(W) in Herat (ITA)
Commander: Brigadier General Claudio Minghetti (ITA)

39 Troop Contributing Nations (as of May 2017)

Albania	83
Armenia	121
Australia	270
Austria	10
Azerbaijan	94
Belgium	62
Bosnia and Herzegovina	55
Bulgaria	92
Croatia	95
Czech Republic	223
Denmark	97
Estonia	4
Finland	29
Georgia	872
Germany	980
Greece	4
Hungary	90
Iceland	2
Italy	1,037
Latvia	22
Lithuania	21
Luxembourg	1
Mongolia	120
Montenegro	18
Netherlands	100
New Zealand	10
Norway	42
Poland	198
Portugal	10
Romania	587
Slovakia	38
Slovenia	7
Spain	8
Sweden	25
The Former Yugoslav Republic of Macedonia ¹	39
Turkey	659
Ukraine	10
United Kingdom	500
United States	6,941
Total Strength²:	13,576

¹ Turkey recognises the Republic of Macedonia with its constitutional name.

² The troop numbers reported reflect the overall presence in Afghanistan of each of individual contributing nations. They are based on information provided directly from individual contributing nations and may include forces deployed in a support role for Resolute Support Mission. They should be taken as indicative as they change regularly, in accordance with the deployment procedures of the individual troop contributing nations.

Kosovo Force

The NATO-led Kosovo Force's mission is to contribute to maintaining a safe and secure environment as mandated by United Nations Security Council Resolution 1244. In carrying out its mission, NATO cooperates and assists the United Nations, the European Union and other international actors, as appropriate, to support the development of a stable and peaceful Kosovo. The Kosovo Force supports the development of professional, democratic and multi-ethnic security structures in Kosovo. This includes NATO's support for the ongoing development of the Kosovo Security Force through the provision of advice, training and capacity-building at Kosovo Security Force Brigade level and above. The Kosovo Security Force is as an all-voluntary, professional, multi-ethnic, lightly-armed force. Its basic missions include crisis response, assistance to civilian authorities in responding to natural and other disasters, explosive ordnance disposal and civilian protection tasks.

Commander: Major General Giovanni Fungo (ITA)

29 Troop Contributing Nations (as of May 2017)

Albania	28
Armenia	35
Austria	465
Bulgaria	21
Canada	5
Croatia	33
Czech Republic	9
Denmark	35
Estonia	2
Finland	25
Germany	530
Greece	112
Hungary	373
Ireland	12
Italy	551
Lithuania	1
Luxembourg	23
Moldova	41
Norway	2
Poland	262
Portugal	186
Romania	61
Slovenia	252
Sweden	3
Switzerland	234
Turkey	307
Ukraine	40
United Kingdom	29
United States	675
Total Strength:	4,352



*Turkey recognises the Republic of Macedonia with its constitutional name

Produced by NATO HQ SITCEN Geospatial Section, January 2016.

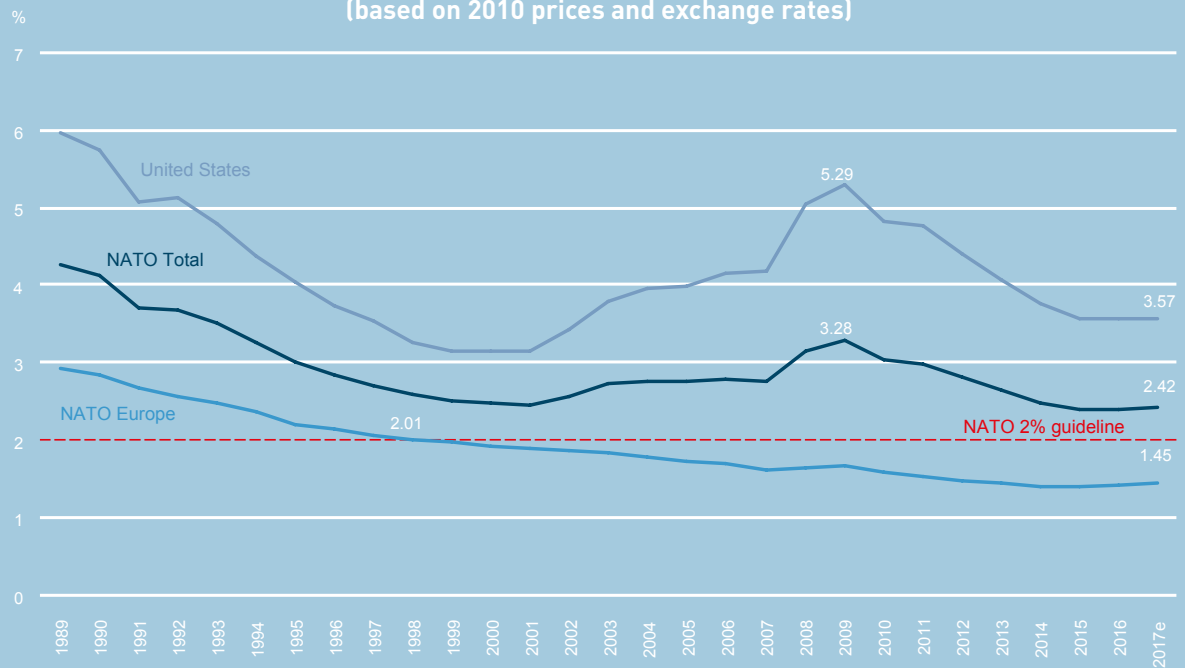
Defence Expenditure of NATO Countries (2010 – 2017)

NATO collects defence expenditure data from Allies on a regular basis and presents aggregates and subsets of this information. Each Ally's Ministry of Defence reports current and estimated future defence expenditure according to an agreed definition of defence expenditure. The amounts represent payments by a national government actually made, or to be made, during the course of the fiscal year to meet the needs of its armed forces, those of Allies or of the Alliance. NATO also makes use of up-to-date 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.

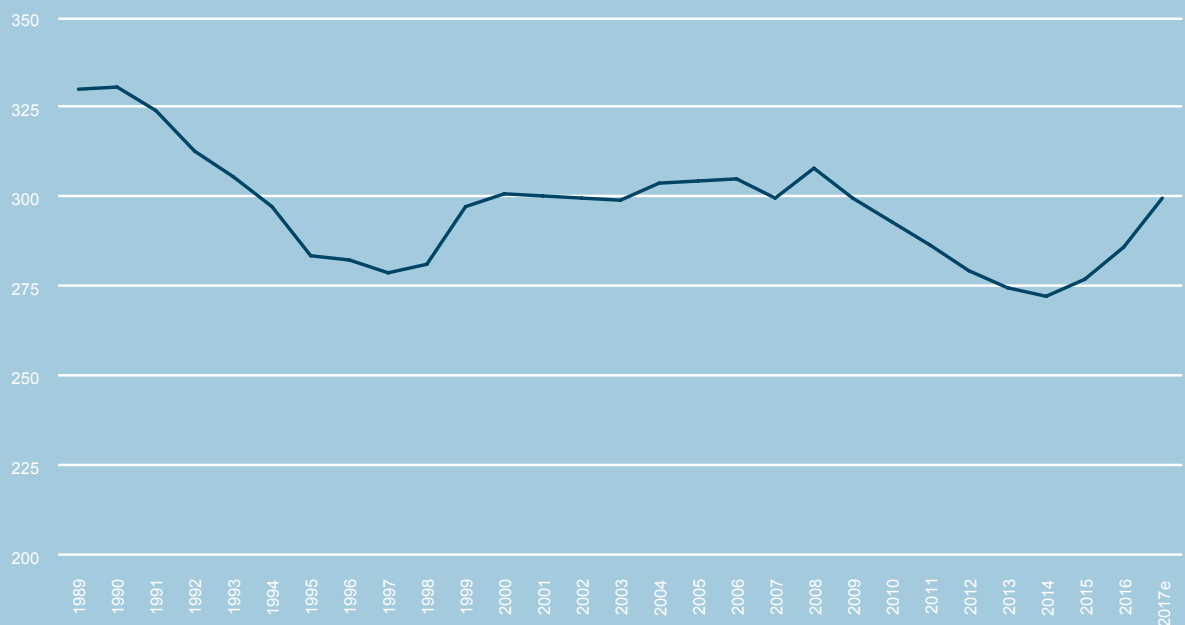
In view of differences between the definition of NATO defence expenditure and national definitions, the figures shown in this report may diverge considerably from those which are quoted by media, published by national authorities or given in national budgets. Equipment expenditure includes expenditure 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 is 9 February 2018. Figures for 2017 are estimates.

Graph 1 : Defence expenditure as a share of GDP (%)
(based on 2010 prices and exchange rates)

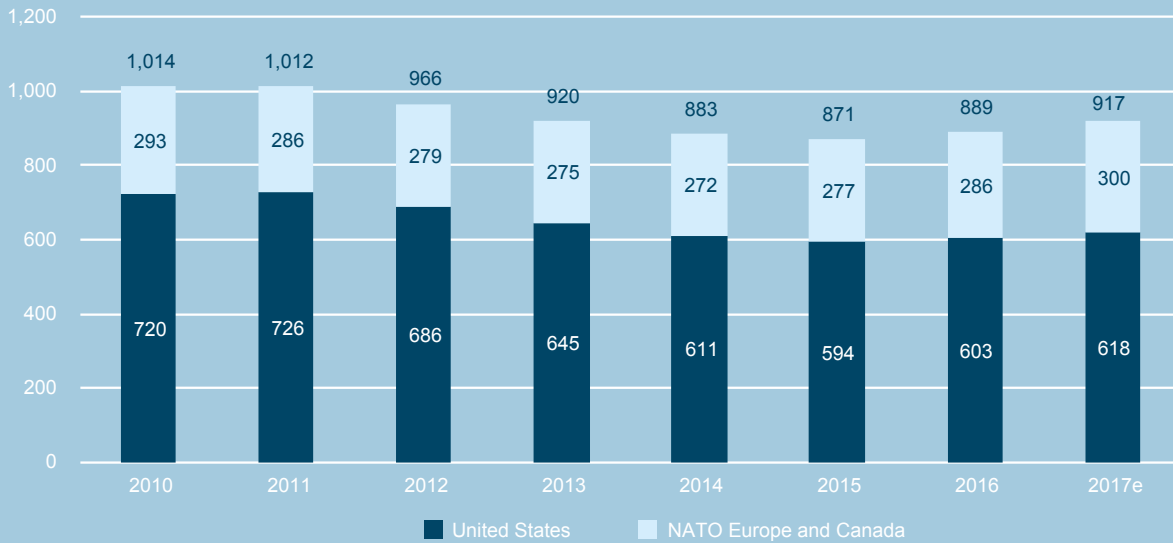


Graph 2 : NATO Europe and Canada - defence expenditure
(billion US dollars, based on 2010 prices and exchange rates)

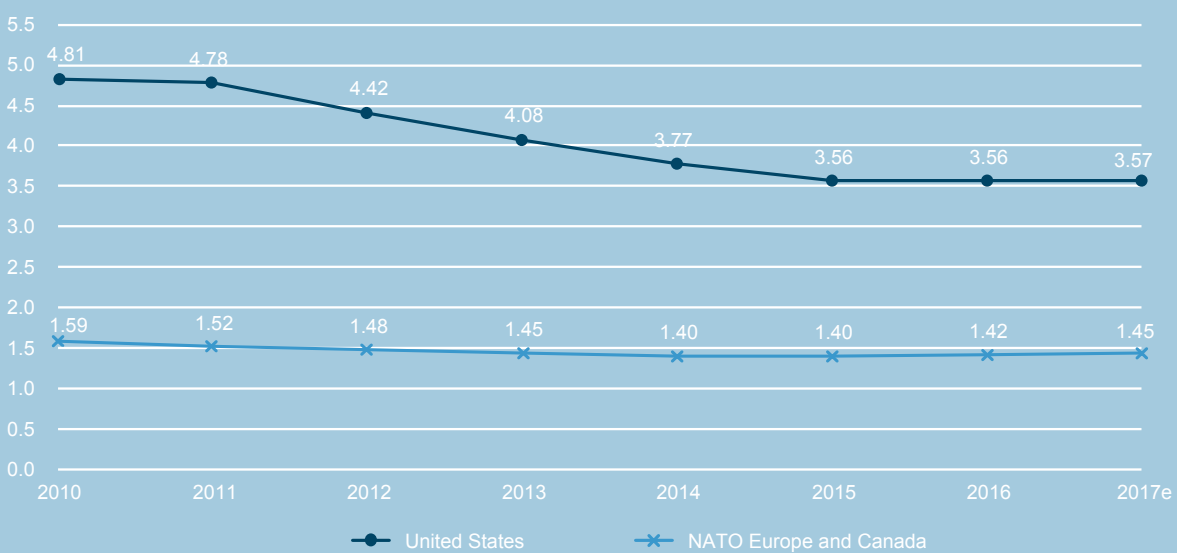


Note: includes enlargements which took place in: 1999 (3 Allies), 2004 (7 Allies), 2009 (2 Allies) and 2017 (1 Ally). Figures for 2017 are estimates.

Graph 3 : Defence expenditure
(billion US dollars, based on 2010 prices and exchange rates)



Graph 4 : Defence expenditure as a share of GDP (%)
(based on 2010 prices and exchange rates)



Notes: Figures for 2017 are estimates. The NATO Europe and Canada aggregate from 2017 includes Montenegro, which became an Ally on 5 June 2017.

**Table 1 : Defence expenditure
(million national currency)**

Country	Currency unit (million)	2010	2011	2012	2013	2014	2015	2016	2017e
Current prices									
Albania	Leks	19,321	19,877	19,820	19,022	18,788	16,671	16,250	17,199
Belgium	Euros	3,960	3,956	4,023	3,964	3,913	3,789	3,901	3,965
Bulgaria *	Leva	1,230	1,066	1,099	1,196	1,102	1,116	1,186	1,508
Canada	Canadian dollars	19,255	21,808	19,978	18,764	20,076	23,900	23,474	27,607
Croatia	Kunas	5,057	5,323	5,059	4,848	4,625	4,586	4,241	4,553
Czech Republic	Koruny	50,808	43,131	42,780	42,035	41,003	47,264	45,598	52,714
Denmark	Kroner	25,328	24,259	25,618	23,682	22,769	22,633	24,190	25,165
Estonia	Euros	251	280	340	361	386	418	450	479
France	Euros	39,241	38,443	39,105	39,402	39,149	39,199	39,950	40,852
Germany	Euros	34,925	34,630	36,168	34,593	34,749	35,898	37,598	40,447
Greece	Euros	5,966	4,934	4,384	3,999	3,939	4,073	4,190	4,213
Hungary	Forint	280,895	295,967	297,650	286,341	281,402	316,338	362,798	402,793
Italy	Euros	21,637	21,741	20,600	20,078	18,427	17,642	20,226	20,787
Latvia	Euros	189	206	193	212	221	254	364	470
Lithuania	Euros	246	248	252	267	322	425	575	724
Luxembourg	Euros	187	167	167	176	190	225	213	256
Montenegro	Euros	56	57	53	49	52	51	56	66
Netherlands	Euros	8,472	8,156	8,067	7,702	7,788	7,816	8,234	8,686
Norway	Kroner	39,279	40,534	41,560	43,518	46,234	46,900	50,937	55,309
Poland	Zlotys	25,608	26,979	28,365	28,467	31,874	39,940	37,082	39,206
Portugal	Euros	2,673	2,627	2,366	2,457	2,263	2,384	2,364	2,512
Romania	New Lei	6,630	7,255	7,282	8,160	9,014	10,337	10,738	14,765
Slovak Republic	Euros	859	766	794	729	752	889	907	1,004
Slovenia	Euros	583	479	423	382	366	361	406	425
Spain	Euros	11,132	10,059	10,828	9,495	9,508	10,000	9,014	10,739
Turkey	Liras	21,241	22,807	24,956	27,466	29,727	32,522	38,141	44,240
United Kingdom	Pounds	39,053	39,204	36,563	39,824	39,902	38,940	42,189	43,002
United States	US dollars	720,423	740,744	712,947	680,856	653,942	641,253	656,059	685,957
Constant 2010 prices									
Albania	Leks	19,321	19,427	19,172	18,347	17,845	15,819	15,452	16,062
Belgium	Euros	3,960	3,878	3,868	3,772	3,699	3,542	3,589	3,563
Bulgaria *	Leva	1,230	1,006	1,021	1,119	1,026	1,017	1,057	1,336
Canada	Canadian dollars	19,255	21,123	19,117	17,676	18,559	22,268	21,740	24,961
Croatia	Kunas	5,057	5,235	4,898	4,657	4,440	4,403	4,076	4,324
Czech Republic	Koruny	50,808	43,122	42,156	40,837	38,870	44,289	42,207	48,309
Denmark	Kroner	25,328	24,104	24,865	22,783	21,681	21,401	22,884	23,387
Estonia	Euros	251	266	313	321	339	362	383	391
France	Euros	39,241	38,084	38,297	38,290	37,825	37,465	38,036	38,581
Germany	Euros	34,925	34,263	35,242	33,058	32,621	33,035	34,146	36,173
Greece	Euros	5,966	4,894	4,365	4,078	4,091	4,275	4,440	4,413
Hungary	Forint	280,895	289,401	281,528	263,107	250,112	275,962	313,485	335,916
Italy	Euros	21,637	20,949	19,521	18,526	16,709	15,735	17,610	17,906
Latvia	Euros	189	194	175	189	194	222	318	400
Lithuania	Euros	246	235	233	244	291	383	513	620
Luxembourg	Euros	187	159	155	161	171	200	192	226
Montenegro	Euros	56	57	52	48	50	48	50	58
Netherlands	Euros	8,472	8,057	7,827	7,359	7,374	7,393	7,721	8,011
Norway	Kroner	39,279	39,465	39,622	40,244	41,985	41,299	44,006	47,299
Poland	Zlotys	25,608	26,135	26,847	26,865	29,933	37,226	34,419	35,858
Portugal	Euros	2,673	2,634	2,382	2,418	2,211	2,283	2,232	2,344
Romania	New Lei	6,630	6,927	6,641	7,196	7,818	8,739	8,886	11,980
Slovak Republic	Euros	859	754	771	705	728	862	883	969
Slovenia	Euros	583	474	416	370	352	344	383	391
Spain	Euros	11,132	10,056	10,817	9,452	9,484	9,914	8,911	10,538
Turkey	Liras	21,241	21,080	21,474	22,240	22,408	22,735	24,665	26,429
United Kingdom	Pounds	39,053	38,431	35,291	37,720	37,156	36,096	38,340	38,294
United States	US dollars	720,423	726,021	686,280	644,772	611,089	593,737	603,046	617,669

* Data do not include pensions.

**Table 2 : Defence expenditure
(million US dollars)**

Country	2010	2011	2012	2013	2014	2015	2016	2017e
Current prices and exchange rates								
NATO Europe	274,592	281,683	263,654	269,441	270,202	235,121	237,888	249,741
Albania	186	197	183	180	178	132	131	145
Belgium	5,245	5,500	5,169	5,264	5,192	4,202	4,315	4,458
Bulgaria *	832	758	722	811	747	633	671	871
Croatia	920	996	865	850	805	669	623	690
Czech Republic	2,660	2,437	2,185	2,148	1,975	1,921	1,866	2,249
Denmark	4,504	4,518	4,423	4,216	4,056	3,364	3,593	3,802
Estonia	332	389	437	480	513	463	497	538
France	51,971	53,441	50,245	52,316	51,940	43,474	44,191	45,927
Germany	46,255	48,140	46,470	45,932	46,102	39,813	41,590	45,472
Greece	7,902	6,858	5,633	5,310	5,226	4,517	4,635	4,737
Hungary	1,351	1,472	1,322	1,280	1,210	1,132	1,289	1,464
Italy	28,656	30,223	26,468	26,658	24,448	19,566	22,373	23,369
Latvia	251	286	248	281	293	281	403	529
Lithuania	326	344	324	355	427	471	636	814
Luxembourg	248	232	214	234	253	249	236	288
Montenegro	74	80	68	65	69	57	62	74
Netherlands	11,220	11,339	10,365	10,226	10,332	8,668	9,108	9,765
Norway	6,499	7,232	7,143	7,407	7,336	5,816	6,064	6,698
Poland	8,493	9,106	8,710	9,007	10,104	10,596	9,405	10,337
Portugal	3,540	3,652	3,040	3,262	3,003	2,644	2,615	2,824
Romania	2,086	2,380	2,100	2,452	2,692	2,581	2,633	3,658
Slovak Republic	1,138	1,065	1,020	968	997	986	1,003	1,129
Slovenia	772	666	543	507	486	401	449	478
Spain	14,743	13,984	13,912	12,607	12,614	11,090	9,971	12,074
Turkey	14,134	13,616	13,895	14,427	13,583	11,957	12,629	12,118
United Kingdom	60,329	62,852	58,016	62,263	65,690	59,492	56,964	55,237
North America	739,113	762,784	732,941	699,077	672,092	659,938	673,770	707,232
Canada	18,690	22,040	19,994	18,221	18,150	18,685	17,711	21,275
United States	720,423	740,744	712,947	680,856	653,942	641,253	656,059	685,957
NATO Total	1,013,705	1,044,467	996,595	968,518	942,294	895,059	911,658	956,974
Constant 2010 prices and exchange rates								
NATO Europe	274,592	265,944	260,840	257,667	254,159	255,562	264,604	275,379
Albania	186	187	184	177	172	152	149	155
Belgium	5,245	5,137	5,123	4,996	4,898	4,691	4,754	4,719
Bulgaria *	832	681	691	757	695	689	715	904
Croatia	920	952	891	847	808	801	741	787
Czech Republic	2,660	2,258	2,207	2,138	2,035	2,319	2,210	2,530
Denmark	4,504	4,286	4,421	4,051	3,855	3,805	4,069	4,158
Estonia	332	352	415	426	449	479	507	518
France	51,971	50,439	50,721	50,711	50,096	49,619	50,376	51,097
Germany	46,255	45,378	46,675	43,783	43,204	43,752	45,223	47,909
Greece	7,902	6,482	5,782	5,401	5,419	5,662	5,880	5,845
Hungary	1,351	1,392	1,354	1,265	1,203	1,327	1,508	1,615
Italy	28,656	27,746	25,853	24,536	22,130	20,840	23,323	23,715
Latvia	251	256	232	250	257	295	422	530
Lithuania	326	312	309	323	385	507	680	821
Luxembourg	248	211	206	213	227	265	254	299
Montenegro	74	75	69	63	66	64	66	76
Netherlands	11,220	10,670	10,367	9,747	9,766	9,791	10,225	10,610
Norway	6,499	6,530	6,556	6,659	6,947	6,833	7,281	7,826
Poland	8,493	8,667	8,904	8,910	9,927	12,346	11,415	11,892
Portugal	3,540	3,489	3,155	3,203	2,929	3,023	2,956	3,104
Romania	2,086	2,180	2,090	2,264	2,460	2,750	2,796	3,770
Slovak Republic	1,138	999	1,022	934	964	1,142	1,170	1,283
Slovenia	772	627	551	490	467	456	508	518
Spain	14,743	13,319	14,327	12,519	12,560	13,130	11,802	13,957
Turkey	14,134	14,027	14,289	14,799	14,911	15,128	16,413	17,586
United Kingdom	60,329	59,368	54,517	58,269	57,399	55,761	59,227	59,155
North America	739,113	746,525	704,836	661,929	629,104	615,352	624,148	641,898
Canada	18,690	20,504	18,557	17,158	18,015	21,615	21,102	24,229
United States	720,423	726,021	686,280	644,772	611,089	593,737	603,046	617,669
NATO Total	1,013,705	1,012,469	965,676	919,596	883,264	870,915	888,752	917,277

Note: The NATO Europe and NATO Total aggregates from 2017 include Montenegro, which became an Ally on 5 June 2017.

* Defence expenditure does not include pensions.

**Table 3 : Defence expenditure as a share of GDP and annual real change
(based on 2010 prices)**

Country	2010	2011	2012	2013	2014	2015	2016	2017e
Share of real GDP (%)								
NATO Europe	1.63	1.55	1.52	1.49	1.44	1.42	1.44	 1.46
Albania	1.56	1.53	1.49	1.41	1.35	1.17	1.10	1.10
Belgium	1.08	1.04	1.04	1.01	0.98	0.92	0.92	0.90
Bulgaria *	1.64	1.32	1.34	1.46	1.32	1.26	1.26	1.53
Croatia	1.54	1.60	1.53	1.47	1.41	1.37	1.23	1.26
Czech Republic	1.28	1.07	1.05	1.03	0.95	1.03	0.96	1.05
Denmark	1.40	1.31	1.35	1.23	1.15	1.12	1.17	1.17
Estonia	1.70	1.68	1.90	1.91	1.96	2.05	2.13	2.08
France	1.96	1.87	1.87	1.86	1.82	1.79	1.79	1.79
Germany	1.35	1.28	1.31	1.22	1.18	1.18	1.20	1.24
Greece	2.64	2.38	2.29	2.21	2.20	2.31	2.41	2.36
Hungary	1.03	1.05	1.03	0.95	0.86	0.92	1.02	1.06
Italy	1.35	1.30	1.24	1.20	1.08	1.01	1.12	1.12
Latvia	1.06	1.01	0.88	0.93	0.93	1.04	1.46	1.75
Lithuania	0.88	0.79	0.76	0.76	0.88	1.14	1.49	1.73
Luxembourg	0.47	0.39	0.38	0.38	0.38	0.43	0.40	0.46
Montenegro	1.80	1.75	1.66	1.47	1.50	1.40	1.42	1.58
Netherlands	1.34	1.25	1.23	1.16	1.15	1.12	1.15	1.15
Norway	1.51	1.51	1.47	1.48	1.51	1.46	1.54	1.62
Poland	1.77	1.72	1.74	1.72	1.85	2.22	2.00	1.99
Portugal	1.49	1.49	1.41	1.44	1.31	1.33	1.28	1.31
Romania	1.24	1.28	1.22	1.28	1.35	1.45	1.41	1.80
Slovak Republic	1.27	1.09	1.09	0.98	0.99	1.13	1.12	1.19
Slovenia	1.61	1.30	1.17	1.05	0.97	0.93	1.00	0.98
Spain	1.03	0.94	1.04	0.93	0.92	0.93	0.81	0.92
Turkey	1.83	1.64	1.59	1.52	1.45	1.39	1.46	1.48
United Kingdom	2.47	2.40	2.17	2.27	2.17	2.06	2.15	2.12
North America	4.46	4.43	4.09	3.77	3.50	3.33	3.33	3.35
Canada	1.16	1.23	1.10	0.99	1.01	1.20	1.16	1.29
United States	4.81	4.78	4.42	4.08	3.77	3.56	3.56	3.57
NATO Total	3.03	2.97	2.81	2.64	2.48	2.39	2.40	 2.42
Annual real change (%)								
NATO Europe	-1.19	-3.15	-1.92	-1.22	-1.36	0.55	3.54	 4.07
Albania	6.54	0.55	-1.32	-4.30	-2.74	-11.35	-2.32	3.95
Belgium	-3.70	-2.07	-0.27	-2.48	-1.94	-4.24	1.35	-0.73
Bulgaria *	-4.47	-18.22	1.54	9.53	-8.28	-0.84	3.88	26.42
Croatia	-6.38	3.53	-6.44	-4.93	-4.65	-0.84	-7.43	6.10
Czech Republic	-13.60	-15.13	-2.24	-3.13	-4.82	13.94	-4.70	14.46
Denmark	5.52	-4.83	3.15	-8.37	-4.84	-1.29	6.93	2.20
Estonia	-3.09	6.11	17.69	2.67	5.39	6.74	5.94	2.19
France	-0.94	-2.95	0.56	-0.02	-1.21	-0.95	1.53	1.43
Germany	1.44	-1.90	2.86	-6.20	-1.32	1.27	3.36	5.94
Greece	-18.94	-17.97	-10.81	-6.59	0.33	4.48	3.86	-0.60
Hungary	-8.08	3.03	-2.72	-6.54	-4.94	10.34	13.60	7.16
Italy	-3.73	-3.18	-6.82	-5.09	-9.81	-5.83	11.91	1.68
Latvia	-15.94	2.27	-9.53	7.89	2.53	14.79	43.13	25.80
Lithuania	-16.85	-4.32	-0.90	4.72	19.15	31.64	33.96	20.73
Luxembourg	24.44	-15.12	-2.30	3.69	6.42	16.60	-3.89	17.55
Montenegro	4.62	0.63	-8.11	-8.44	4.49	-3.50	4.33	15.14
Netherlands	-4.22	-4.90	-2.84	-5.98	0.19	0.26	4.43	3.76
Norway	-1.08	0.47	0.40	1.57	4.32	-1.63	6.55	7.48
Poland	8.00	2.06	2.73	0.07	11.42	24.37	-7.54	4.18
Portugal	-1.35	-1.45	-9.56	1.51	-8.56	3.24	-2.23	5.01
Romania	-7.31	4.48	-4.13	8.36	8.63	11.78	1.68	34.82
Slovak Republic	-12.02	-12.23	2.31	-8.63	3.22	18.53	2.44	9.67
Slovenia	2.38	-18.77	-12.07	-11.19	-4.74	-2.33	11.40	2.12
Spain	-8.87	-9.66	7.57	-12.62	0.33	4.54	-10.11	18.25
Turkey	1.25	-0.75	1.87	3.56	0.75	1.46	8.49	7.15
United Kingdom	2.92	-1.59	-8.17	6.88	-1.49	-2.85	6.22	-0.12
North America	-6.87	1.00	-5.58	-6.09	-4.96	-2.19	1.43	2.84
Canada	-14.25	9.71	-9.50	-7.54	5.00	19.98	-2.37	14.82
United States	-6.66	0.78	-5.47	-6.05	-5.22	-2.84	1.57	2.42
NATO Total	-5.39	-0.12	-4.62	-4.77	-3.95	-1.40	2.05	 3.21

Note: The NATO Europe and NATO Total aggregates from 2017 include Montenegro, which became an Ally on 5 June 2017.
* Defence expenditure does not include pensions.

Table 4 : Real GDP

Country	2010	2011	2012	2013	2014	2015	2016	2017e
Real GDP (billion US dollars)								
NATO Europe	16,834	17,175	17,157	17,276	17,601	17,987	18,330	18,803
Albania	12	12	12	13	13	13	13	14
Belgium	484	492	493	494	501	508	516	525
Bulgaria	51	52	52	52	53	55	57	59
Croatia	60	59	58	58	57	59	60	62
Czech Republic	207	211	209	208	214	225	231	241
Denmark	322	326	327	330	335	341	348	355
Estonia	19	21	22	22	23	23	24	25
France	2,647	2,702	2,707	2,722	2,748	2,778	2,811	2,861
Germany	3,417	3,542	3,560	3,577	3,646	3,710	3,782	3,878
Greece	299	272	252	244	246	245	244	248
Hungary	131	133	131	134	139	144	147	153
Iceland	13	14	14	14	15	15	16	17
Italy	2,125	2,137	2,077	2,041	2,043	2,064	2,083	2,116
Latvia	24	25	26	27	27	28	29	30
Lithuania	37	39	41	42	44	45	46	47
Luxembourg	53	55	54	56	60	61	63	65
Montenegro	4.1	4.3	4.2	4.3	4.4	4.5	4.7	4.8
Netherlands	836	850	841	840	852	871	890	919
Norway	429	433	445	450	459	468	473	483
Poland	479	503	511	519	536	556	572	597
Portugal	238	234	225	222	224	228	232	238
Romania	168	170	171	177	182	190	198	210
Slovak Republic	90	92	94	95	98	101	105	108
Slovenia	48	48	47	47	48	49	51	53
Spain	1,432	1,417	1,376	1,352	1,371	1,418	1,464	1,510
Turkey	772	858	899	975	1,025	1,088	1,123	1,191
United Kingdom	2,441	2,476	2,513	2,564	2,643	2,705	2,753	2,795
North America	16,578	16,868	17,235	17,538	17,988	18,469	18,743	19,178
Canada	1,613	1,664	1,693	1,735	1,780	1,796	1,823	1,878
United States	14,964	15,204	15,542	15,803	16,209	16,673	16,920	17,300
NATO Total	33,412	34,043	34,392	34,813	35,590	36,456	37,073	37,982

Note: The NATO Europe and NATO Total aggregates from 2017 include Montenegro, which became an Ally on 5 June 2017.

**Table 5 : GDP per capita and defence expenditure per capita
(2010 prices and exchange rates)**

Country	2010	2011	2012	2013	2014	2015	2016	2017e
GDP per capita (thousand US dollars)								
NATO Europe	30.3	30.8	30.6	30.7	31.2	31.8	32.2	 32.9
Albania	4.1	4.2	4.3	4.3	4.4	4.5	4.7	4.9
Belgium	44.4	44.8	44.6	44.4	44.8	45.2	45.6	46.2
Bulgaria	6.8	7.0	7.1	7.2	7.3	7.6	8.0	8.3
Croatia	13.9	13.9	13.6	13.5	13.5	13.9	14.5	15.0
Czech Republic	19.7	20.1	19.9	19.8	20.3	21.4	21.9	22.8
Denmark	58.0	58.6	58.5	58.8	59.4	60.0	60.7	61.5
Estonia	14.6	15.8	16.5	16.9	17.4	17.8	18.1	18.8
France	40.7	41.4	41.3	41.3	41.5	41.7	42.0	42.6
Germany	42.6	44.1	44.3	44.4	45.0	45.4	45.8	46.6
Greece	26.9	24.5	22.8	22.3	22.6	22.6	22.7	23.1
Hungary	13.1	13.3	13.2	13.5	14.1	14.6	15.0	15.6
Iceland	41.7	42.4	42.7	44.1	44.5	45.8	48.4	50.8
Italy	35.5	35.6	34.4	33.7	33.6	34.0	34.4	34.9
Latvia	11.3	12.3	12.9	13.4	13.8	14.3	14.7	15.7
Lithuania	12.0	13.0	13.7	14.3	14.9	15.4	15.9	16.7
Luxembourg	104.8	105.0	102.3	103.3	106.8	107.7	108.2	108.8
Montenegro	6.7	6.9	6.7	6.9	7.0	7.3	7.5	7.8
Netherlands	50.3	50.9	50.2	50.0	50.5	51.4	52.3	53.7
Norway	87.8	87.5	88.7	88.5	89.3	90.1	90.3	91.4
Poland	12.4	13.1	13.3	13.5	13.9	14.5	14.9	15.5
Portugal	22.5	22.2	21.4	21.2	21.5	22.0	22.4	23.1
Romania	8.3	8.4	8.5	8.8	9.2	9.6	10.1	10.7
Slovak Republic	16.5	17.0	17.3	17.5	18.0	18.7	19.3	19.9
Slovenia	23.4	23.5	22.9	22.6	23.2	23.7	24.5	25.6
Spain	30.7	30.3	29.4	29.0	29.5	30.6	31.5	32.5
Turkey	10.6	11.6	12.0	12.8	13.3	13.9	14.2	14.8
United Kingdom	38.9	39.1	39.4	40.0	40.9	41.5	42.0	42.3
North America	48.2	48.7	49.4	49.9	50.7	51.7	52.1	52.9
Canada	47.3	48.2	48.6	49.2	50.0	50.0	50.3	51.5
United States	48.3	48.7	49.4	49.9	50.8	51.9	52.3	53.1
NATO Total	37.1	37.6	37.8	38.1	38.7	39.5	39.9	 40.7
Defence expenditure per capita (2010 US dollars)								
NATO Europe	494	476	466	458	451	451	465	 481
Albania	64	64	64	61	59	53	52	54
Belgium	481	467	463	449	438	417	421	415
Bulgaria *	113	93	95	104	96	96	100	128
Croatia	214	222	209	199	190	191	178	190
Czech Republic	253	215	210	203	193	220	209	239
Denmark	812	769	791	722	683	670	710	720
Estonia	249	265	313	322	341	365	385	393
France	800	772	773	769	756	745	753	760
Germany	576	565	580	543	533	536	548	576
Greece	711	584	523	493	497	523	545	545
Hungary	135	140	136	128	122	135	154	165
Italy	479	462	428	405	364	343	385	391
Latvia	120	125	114	124	129	149	215	273
Lithuania	105	103	103	109	131	175	237	290
Luxembourg	489	405	387	391	407	465	435	500
Montenegro	120	121	111	102	106	102	107	123
Netherlands	675	639	619	580	579	578	600	620
Norway	1,329	1,318	1,306	1,311	1,352	1,316	1,391	1,481
Poland	220	225	231	231	258	321	297	309
Portugal	335	330	300	306	282	292	286	301
Romania	103	108	104	113	124	139	142	193
Slovak Republic	210	185	189	172	178	211	215	236
Slovenia	377	306	268	238	226	221	246	251
Spain	317	285	306	269	270	283	254	300
Turkey	193	189	190	194	193	193	207	219
United Kingdom	961	938	856	909	889	856	903	896
North America	2,149	2,154	2,018	1,882	1,775	1,723	1,736	1,772
Canada	548	594	532	487	506	601	583	664
United States	2,325	2,326	2,183	2,037	1,916	1,849	1,865	1,896
NATO Total	1,127	1,119	1,062	1,006	961	943	957	 982

Note: The NATO Europe and NATO Total aggregates from 2017 include Montenegro, which became an Ally on 5 June 2017.

* Defence expenditure does not include pensions.

Table 6 : Military personnel

Country	2010	2011	2012	2013	2014	2015	2016	2017e
Military personnel (thousands)								
NATO Europe	2,084	2,004	1,956	1,862	1,825	1,777	1,753	 1,784
Albania	11	10	7.9	6.8	6.7	6.2	5.8	6.8
Belgium	34	32	31	31	31	30	29	28
Bulgaria	30	29	26	28	27	25	25	25
Croatia	16	16	16	16	15	15	15	15
Czech Republic	24	22	22	20	20	21	23	24
Denmark	19	19	19	18	17	17	17	17
Estonia	5.4	5.9	6.0	6.3	6.3	6.0	6.1	6.2
France	234	227	219	213	207	205	209	209
Germany	235	205	192	184	179	177	178	180
Greece	128	117	110	110	107	104	106	106
Hungary	20	19	19	18	17	17	18	19
Italy	193	192	189	189	183	178	176	181
Latvia	4.8	4.8	4.7	4.6	4.6	4.8	5.2	5.7
Lithuania	7.9	8.0	8.3	8.4	8.6	12	12	13
Luxembourg	0.9	0.9	0.8	0.9	0.8	0.8	0.8	0.8
Montenegro	2.1	1.9	1.9	1.9	1.9	1.7	1.7	1.7
Netherlands	48	45	44	42	41	41	40	41
Norway	19	21	21	20	21	21	20	20
Poland	100	97	98	100	99	99	102	111
Portugal	43	35	34	33	31	28	28	26
Romania	67	66	66	66	65	64	63	60
Slovak Republic	14	13	13	12	12	12	12	12
Slovenia	7.1	7.2	7.1	6.9	6.8	6.6	6.5	6.8
Spain	131	127	125	122	122	122	121	121
Turkey	495	495	495	427	427	399	373	387
United Kingdom	198	191	184	179	169	163	161	161
North America	1,488	1,493	1,467	1,450	1,404	1,387	1,375	1,379
Canada	61	68	68	68	66	73	73	73
United States	1,427	1,425	1,400	1,382	1,338	1,314	1,301	1,306
NATO Total	3,572	3,497	3,423	3,312	3,229	3,164	3,128	 3,163

Note: The NATO Europe and NATO Total aggregates from 2017 include Montenegro, which became an Ally on 5 June 2017.

**Table 7a : Distribution of defence expenditure by main category
(percentage of total defence expenditure)**

Country	2010	2011	2012	2013	2014	2015	2016	2017e
Equipment (a)								
Albania	15.69	13.36	14.44	16.29	16.65	8.92	8.01	6.96
Belgium	6.79	6.27	3.57	2.84	3.52	3.44	4.66	5.30
Bulgaria *	15.41	6.33	3.68	4.52	1.03	3.47	9.15	29.54
Canada	13.81	9.67	8.31	11.16	13.03	10.47	10.61	19.42
Croatia	8.12	15.79	14.72	10.72	7.35	10.58	10.09	9.07
Czech Republic	12.42	13.30	14.78	9.49	6.53	11.76	6.70	11.12
Denmark	14.10	9.68	9.03	11.26	10.99	11.50	13.68	12.10
Estonia	11.88	10.11	13.69	14.48	22.15	12.82	17.86	19.24
France	30.20	28.17	30.58	24.53	24.64	25.04	24.44	24.17
Germany	17.59	16.41	16.45	12.74	12.94	11.93	12.21	13.75
Greece	17.98	5.86	7.47	12.06	8.17	10.40	13.45	15.47
Hungary	12.10	12.29	5.84	11.08	7.76	9.75	13.37	15.34
Italy	10.92	11.74	8.87	12.51	10.92	9.72	19.09	20.94
Latvia	15.62	10.78	10.45	12.09	7.55	13.60	19.05	17.22
Lithuania	10.00	9.38	11.20	9.23	14.06	21.55	30.06	31.09
Luxembourg	34.45	21.86	17.11	14.57	22.61	33.33	30.07	32.99
Montenegro	3.66	1.73	4.44	1.32	7.46	5.43	4.46	8.20
Netherlands	15.70	14.43	13.41	12.57	10.68	11.16	14.14	16.80
Norway	18.13	17.04	17.76	18.89	21.17	22.49	24.05	25.52
Poland	18.13	16.13	15.16	13.90	18.84	33.20	21.62	22.14
Portugal	13.20	12.07	9.34	8.65	8.43	8.70	9.95	10.31
Romania	8.80	7.57	4.14	10.71	15.77	19.65	20.43	33.20
Slovak Republic	9.81	7.15	9.56	7.39	11.12	18.28	15.32	20.42
Slovenia	18.00	5.70	1.20	1.27	0.66	1.85	1.02	4.01
Spain	12.10	6.74	22.86	12.37	13.49	14.82	6.65	19.31
Turkey	27.98	24.57	21.21	26.89	25.08	25.13	25.59	30.40
United Kingdom	24.47	22.01	19.54	21.89	22.82	21.75	21.56	22.03
United States	24.02	26.99	26.97	25.83	25.97	25.41	25.05	28.43
Personnel (b)								
Albania	75.66	77.07	69.97	75.25	68.05	78.15	68.05	68.20
Belgium	75.54	75.88	78.52	77.34	77.84	78.23	77.11	76.07
Bulgaria *	64.30	67.36	64.71	65.37	72.84	73.66	65.64	54.62
Canada	45.30	47.11	49.10	52.44	50.90	53.76	53.11	47.15
Croatia	71.56	67.17	68.13	68.06	69.25	63.64	67.13	62.77
Czech Republic	50.66	56.28	61.66	62.03	61.40	55.27	61.97	56.19
Denmark	50.81	52.22	49.05	51.74	51.27	52.01	49.51	48.95
Estonia	34.51	32.28	29.75	39.83	38.62	39.56	38.70	34.92
France	47.64	49.35	49.11	49.23	48.59	47.79	47.94	47.98
Germany	52.66	52.29	50.60	49.86	50.67	49.86	48.35	48.75
Greece	65.07	76.03	73.19	74.56	77.18	72.05	73.13	72.19
Hungary	56.35	50.64	47.69	48.96	49.77	48.21	49.66	42.41
Italy	75.08	74.78	77.05	75.00	76.41	77.55	70.79	66.41
Latvia	55.91	51.31	56.15	52.98	52.97	50.06	43.87	37.26
Lithuania	65.60	66.87	66.78	66.53	57.53	48.49	45.50	42.40
Luxembourg	45.63	52.29	54.23	51.10	49.31	42.77	45.56	38.85
Montenegro	73.63	82.88	82.68	87.68	78.53	78.03	75.32	72.78
Netherlands	52.28	54.66	57.54	58.53	56.50	55.51	51.77	50.97
Norway	42.69	43.43	42.38	41.02	39.36	38.70	37.28	35.48
Poland	56.79	57.80	57.34	57.70	51.45	41.96	47.15	47.92
Portugal	70.18	78.30	78.39	79.85	81.27	81.90	81.38	78.03
Romania	79.07	79.11	84.00	78.99	71.15	63.30	65.01	54.67
Slovak Republic	62.39	69.47	66.53	70.14	69.14	56.24	58.72	54.48
Slovenia	61.69	74.63	78.91	80.52	82.31	82.23	76.03	75.42
Spain	63.38	64.81	57.19	68.25	67.34	65.18	72.61	61.50
Turkey	49.75	53.02	56.02	54.58	56.88	56.82	57.69	53.28
United Kingdom	35.65	37.55	38.90	37.85	36.59	36.80	34.63	34.05
United States	46.70	33.01	32.12	34.38	35.45	36.64	45.01	42.07

* Defence expenditure does not include pensions.

(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 7b : Distribution of defence expenditure by main category
(percentage of total defence expenditure)**

Country	2010	2011	2012	2013	2014	2015	2016	2017e
Infrastructure (c)								
Albania	1.81	0.78	0.64	1.17	0.86	1.40	1.37	0.92
Belgium	1.75	1.69	1.59	2.28	1.81	0.93	0.95	1.31
Bulgaria *	2.39	1.53	0.76	0.47	0.63	1.27	0.63	0.50
Canada	4.11	5.48	5.47	4.12	3.81	3.63	3.03	3.61
Croatia	1.42	0.71	0.57	1.21	1.63	2.62	1.70	3.09
Czech Republic	5.79	2.51	1.61	2.72	2.34	3.32	3.91	4.00
Denmark	1.07	1.45	1.24	1.16	0.97	1.09	2.16	2.77
Estonia	13.73	13.57	8.85	11.54	8.20	8.45	12.15	11.28
France	3.13	2.68	3.42	2.21	2.33	2.80	2.70	2.88
Germany	5.16	4.13	3.53	3.55	3.75	3.60	3.39	3.91
Greece	0.76	1.26	0.79	0.63	1.10	0.65	0.58	0.37
Hungary	2.07	1.31	2.11	2.32	1.07	1.21	1.13	1.64
Italy	1.40	1.31	1.02	1.57	1.40	1.30	0.70	1.29
Latvia	5.78	9.29	4.16	6.26	8.89	6.64	12.83	17.56
Lithuania	1.97	1.37	1.47	2.04	2.17	2.16	3.59	5.20
Luxembourg	4.16	7.18	8.20	11.81	10.26	7.79	6.64	6.35
Montenegro	5.87	2.50	0.03	0.09	0.96	2.47	2.41	1.63
Netherlands	3.47	3.77	3.70	2.74	4.77	3.19	3.90	3.34
Norway	5.24	4.22	4.86	5.64	6.00	5.60	6.96	7.60
Poland	3.96	4.80	4.76	5.62	5.47	4.74	4.62	4.72
Portugal	0.43	0.01	0.04	0.04	0.11	0.25	0.06	0.01
Romania	1.81	1.47	1.19	1.16	1.09	1.27	2.77	2.09
Slovak Republic	4.22	1.01	0.37	0.29	0.57	1.99	3.75	3.95
Slovenia	2.67	2.61	2.02	1.33	0.65	0.61	1.14	0.45
Spain	1.25	1.88	0.85	0.67	0.66	0.97	0.97	0.91
Turkey	2.84	2.91	3.70	2.72	2.77	2.56	2.42	2.00
United Kingdom	1.62	1.64	1.91	2.04	1.95	1.63	1.96	1.95
United States	0.97	3.14	2.38	2.08	1.71	1.45	1.22	1.21
Other (d)								
Albania	6.83	8.79	14.95	7.30	14.44	11.53	22.57	23.92
Belgium	15.93	16.15	16.31	17.53	16.83	17.40	17.28	17.32
Bulgaria *	17.91	24.78	30.85	29.64	25.51	21.60	24.57	15.35
Canada	36.77	37.75	37.12	32.28	32.26	32.14	33.25	29.82
Croatia	18.91	16.33	16.58	20.01	21.78	23.16	21.08	25.06
Czech Republic	31.13	27.91	21.95	25.75	29.73	29.65	27.43	28.69
Denmark	34.02	36.65	40.68	35.84	36.78	35.40	34.65	36.18
Estonia	39.89	44.04	47.71	34.14	31.03	39.18	31.30	34.57
France	19.03	19.80	16.89	24.03	24.43	24.37	24.92	24.97
Germany	24.58	27.17	29.42	33.84	32.63	34.61	36.05	33.58
Greece	16.19	16.84	18.55	12.75	13.55	16.90	12.84	11.97
Hungary	29.47	35.76	44.35	37.64	41.40	40.83	35.84	40.62
Italy	12.60	12.17	13.06	10.93	11.27	11.42	9.42	11.37
Latvia	22.69	28.62	29.23	28.68	30.59	29.69	24.25	27.96
Lithuania	22.43	22.39	20.56	22.20	26.24	27.79	20.85	21.31
Luxembourg	15.76	18.67	20.46	22.52	17.82	16.11	17.73	21.81
Montenegro	16.84	12.89	12.85	10.91	13.06	14.07	17.80	17.39
Netherlands	28.55	27.14	25.34	26.16	28.05	30.14	30.20	28.90
Norway	33.93	35.31	35.00	34.45	33.46	33.21	31.71	31.40
Poland	21.12	21.27	22.73	22.78	24.24	20.11	26.61	25.21
Portugal	16.19	9.62	12.22	11.46	10.19	9.15	8.61	11.65
Romania	10.32	11.85	10.68	9.13	11.98	15.78	11.79	10.04
Slovak Republic	23.58	22.38	23.55	22.19	19.16	23.49	22.22	21.15
Slovenia	17.63	17.05	17.87	16.88	16.38	15.31	21.80	20.12
Spain	23.26	26.58	19.11	18.71	18.50	19.03	19.78	18.28
Turkey	19.43	19.49	19.07	15.80	15.27	15.49	14.30	14.31
United Kingdom	38.26	38.80	39.64	38.22	38.63	39.82	41.85	41.97
United States	28.30	36.86	38.53	37.72	36.87	36.51	28.73	28.29

* Defence expenditure does not include pensions.

(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 on Armed Forces financed within the Ministry of Defence 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 etc. They might also include "Other Forces" like Ministry of Interior troops, national police forces, *gendarmérie*, *carabinerie*, coast guards etc. In such cases, expenditure should be 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 Ministry of Defence should be included in defence expenditure. Pension payments made directly by the government to retired military and civilian employees of military departments should be included regardless of whether these payments are made from the budget of the Ministry of Defence or other ministries.

Expenditure for peacekeeping and humanitarian operations (paid by Ministry of Defence 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 costs are to be included in defence expenditure. Research and development costs should 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. The values for defence expenditure are expressed in current prices; constant prices; current prices and exchange rates; as well as constant prices and exchange rates.

Note to readers

Iceland has no armed forces. For nations of the Euro zone, monetary values in national currency are expressed in Euros for all years. Estonia adopted Euros from 2011, Latvia from 2014, and Lithuania from 2015. Montenegro joined the Alliance in 2017.

To avoid any ambiguity, the fiscal year has been designated by the year which includes the highest number of months: e.g. 2017 represents the fiscal year 2017/2018 for Canada and the United Kingdom, and the fiscal year 2016/2017 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
//	not applicable
	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 nation
 - 2.3.2 Payments to other nations
 - 2.3.3 Receipts from other nations
 - 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 7a) – lines 2.1 + 3.1
- Personnel (Table 7a) – lines 1.1 + 1.2 + 1.3
- Infrastructure (Table 7b) – lines 2.2 + 2.3
- Other (Table 7b) – lines 1.4 + 3.2 + 4



NATO Public Diplomacy Division
1110 Brussels - Belgium
www.nato.int

© NATO 2018