Ministry of Defence

Strategic Defence Review

Making Britain Safer: secure at home, strong abroad

2025

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Cover image: A drone operator from 2nd Battalion The Royal Yorkshire Regiment launches a drone on Salisbury Plain as part of a 'Recce-Strike' live fire event (2024). *Source: Corporal Rebecca Brown, MOD Crown Copyright 2024.*

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Prime Minister's Introduction

My first duty as Prime Minister is to keep the British people safe. That is why national security is the foundation of this Government's Plan for Change. In this new era for defence and security, when Russia is waging war on our continent and probing our defences at home, we must meet the danger head on. We must recognise the very nature of warfare is being transformed on the battlefields of Ukraine and adapt our armed forces and our industry to lead this innovation. And we must understand that global instability affects economic security too, driving down growth and driving up the cost of living for working families here at home.

That's why, in one of my first acts as Prime Minister, I launched this Strategic Defence Review, setting the Reviewers the formidable challenge of examining how our nation should meet this moment. The fundamental truth is clear: a step-change in the threats we face demands a step-change in British defence to meet them. We will never gamble with our national security. So I have already acted, announcing the largest sustained increase in defence spending since the Cold War.

We are delivering our commitment to spend 2.5% of GDP on defence, accelerating it to 2027, and we have set the ambition to reach 3% in the next Parliament, subject to economic and fiscal conditions. This investment will end the hollowing out of our armed forces and enable the UK to step up, to lead in NATO, and take greater responsibility for our collective self-defence.

But our response cannot be confined to increasing defence spending. We also need to see the biggest shift in mindset in my lifetime: to put security and defence front and centre—to make it the fundamental organising principle of government.

Our experience of the pandemic exposed the vulnerabilities of relying on international just-in-time supply chains and required a whole-of-society response. In that spirit, we must drive a new partnership with industry and a radical reform of procurement, creating jobs, wealth, and opportunity in every corner of our country—this is the 'defence dividend' which we are determined to seize. It must drive innovation at a wartime pace, making the UK the leading edge of innovation in NATO and equipping our forces with the full range of conventional and technological capabilities. And it must foster a collective national endeavour through which the state, business, and society unite in pursuit of the security of the nation and the prosperity of its people.

This landmark Strategic Defence Review will help to make this a reality. I am very grateful to Lord Robertson of Port Ellen, General Sir Richard Barrons, and Dr Fiona Hill for all their work to lead it. This Government will now drive a national effort to deliver it.

The Rt Hon Sir Keir Starmer MP

Foreword from the Secretary of State

The world has changed. The threats we now face are more serious and less predictable than at any time since the Cold War, including war in Europe, growing Russian aggression, new nuclear risks, and daily cyber-attacks at home.

Our adversaries are working more in alliance with one another, while technology is changing how war is fought. Drones now kill more people than traditional artillery in the war in Ukraine, and whoever gets new technology into the hands of their Armed Forces the quickest will win.

And since we began the Strategic Defence Review (SDR), the UK and our European allies have been challenged to step up on European security.

We are in a new era of threat, which demands a new era for UK Defence. This Review sets out a vision to make Britain safer, secure at home and strong abroad.

Delivering for Defence

Since the General Election less than a year ago, we have demonstrated that we are a Government dedicated to delivering for Defence.

We have announced the largest sustained increase to defence spending since the end of the Cold War, stepped up support for Ukraine, awarded Service personnel the biggest pay rise in over 20 years, signed the historic Trinity House Agreement with Germany, bought back over 36,000 military homes to improve housing for forces families and save UK taxpayers billions, set new targets to tackle the recruitment crisis, made it easier for veterans to access essential care and support under the new VALOUR system, and passed through Parliament the Armed Forces Commissioner Bill to improve service life.

This first-of-its-kind Strategic Defence Review was launched by the Prime Minister within two weeks of the General Election. It has been externally led by George Robertson, Richard Barrons, and Fiona Hill, who have worked closely with the Ministry of Defence to harness the best expertise from inside and outside Government to produce the first root-and-branch review of UK Defence in 25 years. We are extremely grateful for their exceptional work.

During the review process, 1,700 individuals, political parties, and organisations submitted over 8,000 responses, 200 companies provided written contributions, over 150 senior experts took part in the Review and

Challenge panels, and nearly 50 meetings took place between the Reviewers and our senior military figures. Members of the public also toured Defence sites as part of a 'Citizens' Panel' to offer their views. These views are presented throughout this report.

I want to say a huge 'thank you' to everyone who has been involved. We set up the SDR in this unique way to break old thinking, inject fresh ideas, but importantly, to ensure the SDR serves as Britain's Defence Review, not just the Government's.

A New Era

The SDR signifies a landmark shift in our deterrence and defence: moving to warfighting readiness to deter threats and strengthen security in the Euro-Atlantic.

This will be achieved by the UK leading within NATO and taking on more responsibility for European security. That's why our defence policy is 'NATO First'. The UK's strategic strength comes from our allies and, in a dangerous world, our unshakeable commitment to NATO means we will never fight alone. But 'NATO First' does not mean 'NATO only'—and we remain committed to our allies and partners across the world, as our security is closely connected.

The SDR sets a path for the next decade and beyond to transform Defence. We will end the hollowing out of our Armed Forces and lead in a stronger, more lethal NATO. We will also draw lessons from the war in Ukraine, which has demonstrated that a nation's Armed Forces are only as strong as the industry, innovators, and investors that stand behind them. And that technological innovation is vital to stay ahead of our adversaries.

Importantly, it sets a new vision for how our Armed Forces should be conceived—a combination of conventional and digital warfighters; the power of drones, AI, and autonomy complementing the 'heavy metal' of tanks and artillery; innovation and procurement measured in months, not years; the breaking down of barriers between individual Services, between the military and the private sector, and between the Armed Forces and society.

The SDR is the Plan for Change for Defence. It sets out the following new ambitions:

- **'NATO First'**—stepping up on European security by leading in NATO, with strengthened nuclear, new tech, and updated conventional capabilities.
- **Move to warfighting readiness**—establishing a more lethal 'integrated force' equipped for the future, and strengthened homeland defence.
- **Engine for growth**—driving jobs and prosperity through a new partnership with industry, radical procurement reforms, and backing UK businesses.
- **UK innovation driven by lessons from Ukraine**—harnessing drones, data, and digital warfare to make our Armed Forces stronger and safer.
- **Whole-of-society approach**—widening participation in national resilience and renewing the Nation's contract with those who serve.

The Government—and our military chiefs—strongly welcome this vision and direction. This will set the strategic framework for UK Defence. To achieve this vision, the Government will Reform, Invest, and Act.

Reform

On Day 1 in Government, we launched the Defence Reform programme—the deepest defence reforms for 50 years. The SDR strongly endorses this programme of change and recognises that one cannot succeed without the other.

From 1 April 2025, we established a new Military Strategic Headquarters (MSHQ), set up a new National Armaments Director (NAD) to drive our defence industrial strategy, and gave new powers to the Chief of the Defence Staff (CDS) to command the Service Chiefs for the first time. We have also ended the Levene Reforms and have replaced ten budget holders with four new budget areas for tighter budget control.

These changes will strengthen Defence with stronger leadership, clearer accountability, faster delivery, less waste, and better value for money. We will unlock nearly £6bn of new savings over the course of this Parliament through efficiency and productivity savings, civilian workforce changes, and structural simplification.

Defence Reform is a Parliament-long programme. More improvements will come over the next 12 months—increasing integration, reducing duplication, and improving delivery. We will also introduce radical reforms to the defence procurement system, which the Public Accounts Committee and Defence Select Committee have both called 'broken'.

Invest

On 25 February 2025, the Prime Minister announced the largest sustained increase to defence spending since the end of the Cold War—rising to 2.5% of GDP by 2027, and to 3% in the next Parliament when fiscal and economic conditions allow. We have already boosted defence by £5bn this year. Defence is now central to both our national security and our economic growth.

At the heart of this investment lies our total commitment to operate, sustain, and renew our nuclear deterrent, which is deployed every minute of every day to protect our people, nation, and way of life. The UK's nuclear deterrent is a truly national endeavour that has existed for over 60 years and sends the ultimate warning to anyone who seeks to do us harm.

A new £11bn 'Invest' annual budget has also been established under the NAD. This will fund kit for our front-line forces which is affordable and grows our UK industrial base. Our new partnership with industry and a decade of consistently rising defence spending will encourage more private finance to grow our world-leading scale-up and dual-use tech companies.

Act

This Government is endorsing the vision and accepting all 62 recommendations in the SDR, which will be implemented. In line with SDR findings, we are also taking further immediate action.

- We will secure the future of our nuclear deterrent, by committing to £15bn investment in the sovereign warhead programme this Parliament and supporting over 9,000 jobs.
- We will create a 'New Hybrid Navy', building the Dreadnought and SSN-AUKUS submarines, cutting-edge warships and support ships, transforming our carriers, and introducing new autonomous vessels to patrol the North Atlantic and beyond.
- We will create a British Army which is 10x more lethal to deter from the land, by combining more people and armoured capability with air defence, communications, AI, software, long-range weapons, and land drone swarms.
- We will create a next-generation RAF, with F-35s, upgraded Typhoons, next-generation fast jets through the Global Combat Air Programme, and autonomous fighters to defend Britain's skies and strike anywhere in the world.
- We will protect the UK homeland, with up to £1bn new funding invested in homeland air and missile defence and creating a new CyberEM Command to defend Britain from daily attacks in the grey zone.
- We will ensure Defence is an engine for growth across the UK, by investing £6bn in munitions this Parliament, including £1.5bn in an 'always on' pipeline for munitions and building at least six new energetics and munitions factories in the UK, generating over 1,000 jobs and boosting export potential.
- We will commit to continuous submarine production through investments in Barrow and Raynesway that will allow us to produce a submarine every 18 months. Through the AUKUS programme, this will allow us to grow our nuclear-powered attack submarine fleet to up to 12. This will reinforce our Continuous at Sea Deterrent (CASD) and position the UK to deliver the AUKUS partnership with the US and Australia.
- We will build up to 7,000 new long-range weapons in the UK to provide greater European deterrence and support around 800 jobs.
- We will invest in world-leading innovation in autonomous systems this Parliament to boost UK export potential. And we will invest more than £1bn to integrate our Armed Forces through a new Digital Targeting Web delivered in 2027.
- We will provide leadership in NATO, by transforming our aircraft carriers to become the first European hybrid air wings—with fast jets, long-range weapons, and drones.
- We will establish UK Defence Innovation with £400m to fund and grow UK-based companies.

- We will create a new Defence Exports Office in the Ministry of Defence to drive exports to our allies and growth at home.
- We will deliver a generational renewal of military accommodation, with at least £7bn of funding in this Parliament—including over £1.5bn in new investment for rapid work to fix the poor state of forces family housing.

Defence Investment Plan

We will develop a new Defence Investment Plan to deliver the SDR's vision. We will ensure the Plan is deliverable and affordable, considers infrastructure alongside capabilities, enables flexibility to seize new technology opportunities, and maximises the benefits of defence spending to grow the UK economy. This will supersede the old-style Defence Equipment Plan.

This will deliver the best kit and technology into the hands of our front-line forces at speed and, importantly, invest in and grow the UK economy. The Defence Investment Plan will be completed in Autumn 2025.

The Rt Hon John Healey MP

Britain's Defence Review

Foreword from the Reviewers

When the Prime Minister and the Defence Secretary asked the three of us—a politician, a soldier, and a foreign policy expert—to lead, externally, the new Strategic Defence Review, the world was already in turmoil. Russia, a nuclear-armed state, had invaded and brutally occupied part of a neighbouring sovereign state. And in doing this it was supported by China, supplied with equipment from Iran and by troops from North Korea, deployed in Europe for the first time ever.

The sheer unpredictability of these and other global events, combined with the velocity of change in every area, has created alarming new threats and vulnerabilities for our country—and a dangerous complexity in the world.

If anything, the geopolitical context has worsened since we started. The challenge to the free world has intensified through so-called 'great power' competition and a collapse of the post-Second World War consensus. The certainties of the international order we have accepted for so long are now being questioned—and not only by authoritarians. The international chessboard has been tipped over.

In a world where the impossible today is becoming the inevitable of tomorrow, there can be no complacency about defending our country. Defence can no longer be seen as contracted out only to our Armed Forces, good and brave as they are. With multiple threats and challenges facing us now, and in the future, a whole-of-society approach is essential. Everyone has a role to play and a national conversation on how we do it is required.

We, the Reviewers, were initially asked by the Prime Minister and the Defence Secretary to 'determine the roles, capabilities and reforms required to meet the challenges, threats and opportunities of the twenty-first century'. Over the past eleven months that is what we have endeavoured to do. This report, then, is the product of the intensive scrutiny of every aspect of Defence and it has involved one of the deepest and most thorough consultations on the subject ever.

It is a truly transformational and genuinely strategic review. It is designed to bolster deterrence by rebuilding our warfighting readiness. As the old saying goes, 'If you want peace, prepare for war'.

Our independent nuclear deterrent, one of the determining factors in the minds of our adversaries, is committed to NATO and as such adds to the security of the whole Euro-Atlantic community. It is being renewed.

We are proposing a combination of reinforced homeland resilience and a new model Integrated Force, putting NATO first.

We therefore ensure that the British people will be safer at home and more influential abroad. However, we will never, in the future, expect to fight a major, 'peer' military power alone. NATO is the bedrock of our defence, with 31 other countries committed to collective security. A billion people in the Euro-Atlantic area sleep easily each night, protected by the mutual defence clause, Article V of the North Atlantic Treaty. We must work hard to make sure this remains the case, bolstering the Alliance through our approach and our daily efforts.

By ruthlessly examining every aspect of Defence, the Review challenges the very idea of 'business as usual', just as our enemies too have developed and modernised. It proposes a new partnership with industry, led by a powerful new National Armaments Director, to ensure our forces have the equipment they need—on time and on budget. Taxpayers have a right to be confident that the money they pay to keep them safe is used wisely and appropriately.

The Review will boost the Reserves, re-invigorate training, tackle the troop accommodation problems, eradicate ingrained bureaucracy, and change the culture in Defence. Learning from the cutting-edge developments in use in Ukraine, the fundamental lesson for today is that with technology developing faster than at any time in human history, our own forces, and the whole of Defence, must innovate at wartime pace. The hollowing out of our forces—which was the hallmark of taking a big 'peace dividend' after the end of the Cold War—will, over time, be reversed.

We were asked to conduct our Review within the budgetary context of a transition to 2.5% of GDP.[1] We acknowledge with relief that this will apply from 2027 and not later. What is also significant is the ambition to spend 3% of GDP on defence in the 2030s if economic and fiscal conditions allow. Given that the present 2.3% (which includes significant investment in the nuclear deterrent, the nation's top defence priority, and other core commitments) might have forced savings in essential capabilities, this is good news.

We are confident that the transformation we propose for the harder world we now live in is affordable over ten years, given these promised new resources. However, as we live in such turbulent times it may be necessary to go faster. The plan we have put forward can be accelerated for either greater assurance or for mobilisation of Defence in a crisis.

We have conducted this Review with, and not to, the Ministry of Defence and we have worked closely with the Prime Minister and the Defence Secretary. There should therefore be no surprises—even if we did not seek consensus or shy away from being bold and radical.

The Review has benefited from the endeavours and expertise of our fellow reviewers, the 'Defence Review Team 6': Grace Cassy; Edward Dinsmore; Jean-Christophe Gray; Angus Lapsley; Robin Marshall; and Rt Hon Sir Jeremy Quin. We have also had all along heroic assistance from a dedicated, talented, multi-departmental team—drawn from within the MOD, the Armed Forces, other Government departments, and a cohort of international military liaison officers and civilian officials—to whom we are profoundly grateful.

Lord Robertson of Port Ellen KT GCMG

General Sir Richard Barrons KCB CBE

Dr Fiona Hill CMG

1 With the contribution of the UK Intelligence Community, defence spending will rise to a total of 2.6% of GDP from 2027.

1. Introduction and Overview

1. **A generational challenge demands a generational response**. For the first time since the end of the Cold War, the UK faces multiple, direct threats to its security, prosperity, and democratic values. The world itself is beset by volatility and deep uncertainty.

2. In response, the UK, with its allies—especially those in NATO—must once again be ready to deal with the most demanding of circumstances: **deterring and preventing a full-scale war by being ready to fight and win**. Until recently, such a war against another country with advanced military forces was unthinkable. It would likely be high-intensity, protracted, and costly in every way. Moving to warfighting readiness in this new era is essential.

3. With rapid advances in technology driving the greatest change in how war is fought for more than a century, **the UK must pivot to a new way of war**. It must continually harness new technology and think differently about what conventional 'military power' is and how to generate it. In modern warfare, simple metrics such as the number of people and platforms deployed are outdated and inadequate. It is through dynamic networks of crewed, uncrewed, and autonomous assets and data flows that lethality[2] and military effect are now created, with military systems making decisions at machine-speed and acting flexibly across domains.

4. **The UK's Armed Forces must once again be able to endure in long campaigns** through assured access to key capabilities—all underwritten by a thriving industry that is ready to scale and sustain innovation and production as required.

5. And in a decisive shift from the post-Cold War era, **a renewed emphasis on home defence and resilience is also imperative**, with 'sub-threshold' activities,[3] growing access to space and cyberspace, and unrelenting advances in weapons systems all making it easier for adversaries to cause the UK harm, even at distance.

6. Where previous reviews have more narrowly addressed the Armed Forces, this Strategic Defence Review (SDR) delivers the **'root-and-branch' review of UK Defence** that was commissioned by the Prime Minister in July 2024 in response to this rapidly changing world. It outlines the deep reform needed 'to **ensure the United Kingdom is both secure at home and strong abroad**—now and for the years to come'.[4]

7. Overseen by the Secretary of State for Defence, the SDR was unprecedented in being led by external Reviewers: Lord (George) Robertson; General Sir Richard Barrons; and Dr Fiona Hill. It has been conducted within the Terms of Reference set by the Government and latterly costed within an increased

2 Where 'lethality' refers to the combat power (disruptive and destructive force) of the Armed Forces.

3 'Sub-threshold' attacks do not always meet the legal threshold of 'war'. They include the use of espionage, political interference, sabotage, assassination and poisoning, electoral interference, disinformation, propaganda, and Intellectual Property theft. Such attacks are often difficult to attribute to a perpetrator with certainty due to the methods used and the frequent reliance of some states on proxy actors. In this Review, we use the term 'sub-threshold' attack. Others may refer to 'grey-zone attacks' because such acts lie in the 'grey zone' between 'peace' and 'war', challenging the clarity of the legal distinction between the two. The term 'hybrid warfare' is often used interchangeably with these terms but we take this to have a more specific meaning, whereby 'kinetic' military action is used simultaneously with sub-threshold attacks to pursue a state's objectives.

4 Strategic Defence Review 2024-2025: Terms of reference - GOV.UK, 17 July 2024.

defence budget of 2.5% of GDP from April 2027 and 3% in the 2030s, subject to economic and fiscal conditions.[5] The Review process, including its extensive engagement with internal and external expertise, is set out in the Appendix.

8. In this report, we set out:

   - **Why UK Defence needs to change**, considering the international and security context in the period to 2040 and the current state of Defence (Chapter 2).[6]
   - **What roles Defence should perform and where** in the coming years (Chapter 3).
   - **How the Armed Forces should fight and how wider Defence should support that fight**, with the transformation of UK warfighting delivered by an empowered and adaptive workforce (Chapter 4).
   - **Who Defence should fight alongside**: the centrality of allies and partners with which the UK can build industrial power and common capabilities, and ultimately fight and win (Chapter 5); and the importance of a renewed connection with UK society to ensure resilience and strategic depth in the event of crisis or conflict (Chapter 6).
   - **The capabilities with which the Integrated Force should fight** (Chapter 7), addressing the front-line elements and foundational enabling capabilities of UK Defence—creating a force fit for war in the 21st century through the new ten-year Defence Investment Plan.[7]

A new era of threat

9. **This is an important moment for the UK and its allies** (Chapter 2). Russia's full-scale invasion of Ukraine in 2022 was a strategic inflection point. It irrefutably demonstrated the changing and dynamic nature of the threat, with state-on-state war returning to Europe, adversaries using nuclear rhetoric in an attempt to constrain decision-making, and the UK and its allies under daily attack beneath the threshold of war as part of intensifying international competition. The conflict has also shown the power of emerging technology to change where, how, and with what war is fought. Armed Forces that do not change at the same pace as technology quickly risk becoming obsolete.

10. Importantly, Ukraine is just one flashpoint of many amid growing global instability and a **volatility that is exemplified by the remarkable rate of change in the international landscape** since this Review was launched in 2024. Most immediately relevant at the time of writing, this includes: negotiations for a ceasefire in the Ukraine-Russia war; the possible deployment of a 'reassurance force' to Ukraine in the event of a ceasefire; and major questions about the future of European security that inevitably follow the United States' change in security priorities, as its focus turns to

5 Strategic Defence Review 2024-2025: Terms of reference - GOV.UK, 17 July 2024; Prime Minister's Oral Statement to the House of Commons: 25 February 2025. The Prime Minister also announced the intention to recognise the contribution of the UK Intelligence Community (UKIC) to the defence of the UK, with Defence and UKIC together spending 2.6% of GDP on defence by 2027.

6 This Review has considered the strategic context in the period to 2040. However, the MOD's programming works on ten-year cycles. This is reflected in this report, which articulates a vision for Defence and a path to transformation by 2035.

7 Which will replace the Equipment Plan.

the Indo-Pacific and the protection of its homeland.[8] Fundamentally, the UK's longstanding assumptions about global power balances and structures are no longer certain.

11. UK Armed Forces have begun the necessary process of change in response to this new reality. But progress has not been fast or radical enough. **The Armed Forces remain shaped by the risks and demands of the post-Cold War era**—optimised for conflicts primarily fought against non-state actors on Europe's periphery and beyond. Although substantial and demanding, these operations also did not require 'whole-of-society' preparations for war, home defence, resilience, and industrial mobilisation.

A new era for UK Defence

12. In response to this strategic context, our Review articulates a new era for Defence. Building on changes already underway, **our vision is that, by 2035, UK Defence will be:**

A leading tech-enabled defence power, with an Integrated Force that deters, fights, and wins through constant innovation at wartime pace.

Defence must be able to fulfil its fundamental role: to deter threats to the UK and its allies by being ready for war, and to provide the definitive insurance policy should deterrence fail.

8 Opening Remarks by Secretary of Defense Pete Hegseth at Ukraine Defense Contact Group, Brussels, Belgium, 12 February 2025.

This should be pursued as part of a whole-of-society approach to deterrence and defence under which Defence combines its strengths with those of wider Government, industry, and society.

Roles for UK Defence

13. The starting point for this Review is the Government's 'NATO First' policy (Chapter 3). There is an unequivocal need for the UK to redouble its efforts within the Alliance and to **step up its contribution to Euro-Atlantic security** more broadly—particularly as Russian aggression across Europe grows and as the United States of America adapts its regional priorities. In a shift in approach, the Alliance should be mainstreamed in how Defence plans, thinks, and acts.

14. **'NATO First' does not mean 'NATO only'**. The UK should take a pragmatic approach to bolstering collective security in the Euro-Atlantic through stronger bilateral and minilateral partnerships.[9] The Alliance itself recognises the importance of working with partners outside the region—reflecting the connection between Euro-Atlantic security and that of other regions such as the Middle East and Indo-Pacific. Defence must also be able to pursue and protect the UK's significant interests, commitments, and responsibilities outside the region, including the defence of its sovereign territory.

15. Nevertheless, the fundamental importance of meeting Alliance commitments and shaping deterrence in the Euro-Atlantic every day is reflected in the **enduring and mutually reinforcing roles that Defence must fulfil**. The three core Defence roles are:

- **Role 1:** Defend, protect, and enhance the resilience of the UK, its Overseas Territories, and Crown Dependencies.
- **Role 2:** Deter and defend in the Euro-Atlantic.
- **Role 3:** Shape the global security environment.

The two enabling roles for Defence are to:

- Develop a thriving, resilient defence innovation and industrial base.
- Contribute to national cohesion and preparedness.

Transforming UK warfighting

16. To meet the threats of today and tomorrow, **Defence must fundamentally change how it fights and how it supports that fight**: rapidly increasing the Armed Forces' lethality and enhancing their ability to fight at the leading edge of technology (Chapter 4). Drawing on lessons from the war in Ukraine and enabled by organisational change under Defence Reform, the whole of Defence (the Armed Forces and Department of State together) should be driven by **the logic of the innovation cycle**—able to find, buy, and use innovation, pulling it through from ideas to front line at speed.

17. **At the heart of this transformation are three fundamental changes in approach**. Defence must be:

Integrated by design. For the Armed Forces to be more lethal than the sum of their parts, they **must complete the journey from 'joint' to 'integrated'**: designed and directed as one force

9 'Minilateral' refers to smaller groupings of countries.

under the authority of the Chief of the Defence Staff, and delivered according to this design by the single Services and Strategic Command. Under this new model, there is no fixed force design to be delivered by a specified date. The design and capabilities of the Integrated Force, and the way that wider Defence supports it, must continue to evolve as threats and technology do. The Integrated Force must be **capable of operating in different configurations**: as part of NATO Component Commands by design; in coalition; and as a sovereign force. To deliver a step-change in lethality, the Integrated Force must be **underpinned by a common digital foundation and shared data**. Delivery should be a top priority. A single 'digital mission'—to deliver a digital 'targeting web'[10] in 2027—should enable Defence to succeed where it has previously failed, as should the creation of an expert Digital Warfighters group that can be deployed alongside front-line personnel (Chapter 4.1).

Innovation-led. Today, much of the best innovation is found in the private sector, while the increasing prevalence of dual-use technologies[11] has widened the net of potential suppliers that can contribute to Defence outcomes. **Defence must embrace its role in seeding innovation and growth**, rapidly adopting new technology to keep the Integrated Force at the forefront of warfare. In particular, Defence should build relationships with the investors behind the innovators. External expertise should be systematically accessed through a new Defence Investors' Advisory Group whose membership includes venture capital and private equity investors, while private finance should be crowded in under new funding models. To set itself up for success internally, Defence should reorganise existing structures to create two distinct organisations under the National Armaments Director:

- A Defence Research and Evaluation organisation,[12] focused on enabling external early-stage research and providing a gateway to academia.
- The new UK Defence Innovation (UKDI) organisation,[13] focused on harnessing commercial innovation, including dual-use technologies. UKDI will have a ringfenced annual budget of at least £400m (Chapter 4.2).

Industry-backed. To develop a thriving, resilient innovation and industrial base that can scale in support of the Integrated Force, **Defence must create a new partnership with industry**. Under the forthcoming Defence Industrial Strategy and the leadership of the National Armaments Director, this involves **overhauling acquisition processes** from top to bottom: engaging industry early in procurement processes on desired outcomes; ensuring that suppliers are rewarded for productivity and for taking risks; and reducing the burden

10 The digital targeting web would connect 'sensors', 'deciders', and 'effectors'. This creates choice and speed in deciding how to degrade or destroy an identified target across domains and in a contested cyber and electromagnetic domain.

11 Technology developed for civilian use but with potential military applications.

12 Potentially retaining the Dstl brand.

13 Announced in March 2025. Government to turbocharge defence innovation - GOV.UK.

on potential suppliers from startups to primes. At the heart of this partnership should be a new, segmented approach to procurement:[14]

- Major modular platforms (contracting within two years).
- Pace-setting spiral and modular upgrades (contracting within a year).
- Rapid commercial exploitation (contracting within three months), with at least 10% of the MOD's equipment procurement budget spent on novel technologies each year.

Exports and international capability partnerships[15] **should also be mainstreamed** into acquisition processes from the outset, with responsibility for defence exports returned to the Ministry of Defence (MOD) and a new framework for building and sustaining government-to-government relationships. Investment decisions should consider associated costs to ensure they are genuinely affordable—for example, through-life upgrades, acquisition and support, and attendant changes to infrastructure (Chapter 4.2).

18. By more purposefully using its market power and by prioritising UK-based business, Defence should also strive to **deliver for the UK economy while delivering for the warfighter**. Defence has **significant untapped potential to be a new engine for growth** at the heart of the UK's economic strategy. Radical root-and-branch reform of defence procurement—combined with substantial investment in innovation, novel technology, advanced manufacturing, and skills—would grow the productive capacity of the UK economy. Defence should aim high, measuring success in the number and scale of defence and dual-use technology companies in the UK. Success will also see **significant improvement in Defence productivity, competitiveness, exports, and value for money**, supported by the new Defence Reform and Efficiency Plan (Chapter 4.2).[16]

19. **This transformation of UK Defence must ultimately be delivered by its people** (Chapter 4.3), empowered through changes in culture and 'people' policies that remove red tape and eradicate behaviour that is unacceptable in the workplace. Targeted intervention is needed to tackle Defence's workforce crisis—improving recruitment through faster, more flexible options such as military 'gap years', and improving retention through the MOD's planned 'flexible working' initiative and prioritised investment this Parliament in accommodation that falls well short of the standards required.

14 Announced by the Chancellor of the Exchequer in March 2025. Spring Statement 2025, p. 36.

15 Such as AUKUS and the Global Combat Air Programme (GCAP). Under AUKUS, Australia, the UK, and the US will develop conventionally armed, nuclear-powered submarines that are interchangeable, as well as advanced technologies such as AI, autonomous systems, cyber, hypersonic missiles, and underwater warfare. Under GCAP, Italy, Japan, and the UK will develop a sixth-generation aircraft—part of the Future Combat Air System, comprising crewed aircraft, uncrewed platforms, next-generation weapons, networks, and data-sharing.

16 Prime Minister's Oral Statement to the House of Commons: 25 February 2025.

20. **The focus must be on maximising the effectiveness of the 'whole force'**:[17]

    - To fulfil the roles set out in this Review, there is no scope for reducing the number of highly trained and equipped Regulars across all three Services, even as the forces move to a much greater emphasis on autonomy. Overall, we envisage an increase in the total number of Regular personnel when funding allows. This includes a small uplift in Army Regulars as a priority.
    - Increasing the number of Active Reserves by 20% when funding allows (most likely in the 2030s) and reinvigorating the relationship with the Strategic Reserves.
    - Reshaping the Civil Service workforce with an emphasis on performance, productivity, and skills, reducing costs by at least 10% by 2030.
    - Releasing military personnel in back-office functions to front-line roles and automating 20% of HR, Finance, and Commercial functions by July 2028. This should be a minimum first step.
    - Reforming training and education so that it is much more adaptive to operational lessons, ensures managed risks can be taken in military training, and creates greater capacity and flexibility through developing a single virtual environment. Civilian qualifications and education provision should be used where possible to increase efficiency and to reduce the barriers between Defence, industry, and wider society.

Strengthening deterrence through alliances and partnerships

21. **The UK must bolster collective security and create strategic depth by actively investing in its relationships** (Chapter 5). Finite resources mean the UK cannot be everything to everyone. It must prioritise its approach, informed by the roles outlined in Chapter 3 and using the full range of tools available to it.

22. Bilateral agreements and capability partnerships—with the United States and European NATO Allies—offer a powerful tool through which to strengthen relationships and Euro-Atlantic stability. The same is true of minilateral activity, including through the Joint Expeditionary Force, E3, and E5 formats,[18] supplemented by implementation of the UK-EU Security and Defence Partnership. AUKUS and the Global Combat Air Programme must be developed as exemplars of capability collaboration and a powerful signal of the UK's ambition to bring partners from different geographic regions closer together in support of collective security. Doubling down on support to Ukraine in pursuit of a durable political settlement is critical, as is learning from its extraordinary experience in land warfare, drone, and hybrid conflict.

Home defence and resilience: a whole-of-society approach

23. **A renewed focus on home defence and resilience is vital to modern deterrence**, ensuring continuity in national life in a crisis (Chapter 6). Reconnecting Defence with society

17 Incorporating the Regular and Reserve forces, civil servants, and contractors.

18 The Joint Expeditionary Force (JEF) is UK-led and comprises nine other members: Denmark; Estonia; Finland; Iceland; Latvia; Lithuania; the Netherlands; Norway; and Sweden. The E3 is a format for diplomatic cooperation between France, Germany, and the UK, while the E5 is a format for diplomatic cooperation between France, Germany, Italy, Poland, and the UK.

should be the starting point, as part of a national conversation led by the Government on defence and security. This can be achieved in part through expanding Cadet Forces by 30% by 2030 (with an ambition to reach 250,000 in the longer term) and working with the Department for Education to develop understanding of the Armed Forces among young people in schools.

24. **A more substantive body of work is necessary to ensure the security and resilience of critical national infrastructure** (CNI) and the essential services it delivers. The MOD should explore, with wider Government, a 'new deal' for the protection and defence of CNI that is rooted in partnership with private-sector and allied operators. To support this, the Royal Navy should play a new leading and coordinating role in securing undersea pipelines, cables, and maritime traffic.

25. **The Government must also be able to achieve a sustainable and effective transition to war if necessary**. A new Defence Readiness Bill should provide the Government with powers in reserve to mobilise Reserves and industry should crisis escalate into conflict. It should also facilitate external scrutiny of UK warfighting readiness.

The Integrated Force: a force fit for war in the 21st century

26. **The essential task is to transform the Armed Forces, restore their readiness to fight, and reverse the 'hollowing out' of foundational capabilities** without which they cannot endure in protracted, high-intensity conflict (Chapter 7).

27. **The UK must continue to dedicate its independent nuclear deterrent to NATO** (Chapter 7.1), adapting its alliances, industrial base, and military capabilities to ensure it can continue to deter the most extreme threats. The UK will need a full spectrum of options to manage escalation as part of NATO, delivered by its nuclear and conventional forces in combination. Defence should commence discussions with the United States and NATO on the potential benefits and feasibility of enhanced UK participation in NATO's nuclear mission. Further investment in conventional deep precision strike and Integrated Air and Missile Defence would increase options for deterring and responding to high-impact threats.

28. Senior Ministers must drive efforts to sustain the nuclear deterrent as Defence's top priority and as a 'National Endeavour'. The programme to replace the sovereign warhead is critical and will require significant investment this Parliament. Confirming the intended numbers of SSN attack submarines would provide clarity on the required build capacity and tempo for all nuclear-powered submarines. To secure the long-term future of the nuclear deterrent, the Government should start work in this Parliament to define the requirement for the successor to the Dreadnought class submarine.

29. An immediate priority for force transformation should be a **shift towards greater use of autonomy and Artificial Intelligence within the UK's conventional forces** (Chapter 7). As in Ukraine, this would provide greater accuracy, lethality, and cheaper capabilities—changing the economics of Defence. This shift towards AI and autonomy should exploit the parallel development of a common digital foundation, a protected Defence AI Investment Fund, and an initial operating capability for a new Defence Uncrewed Systems Centre established by February 2026.

30. The Armed Forces should accelerate their transition to a 'high-low' mix of equipment—for example, through:

    - The **Royal Navy's** 'Atlantic Bastion' concept for securing the North Atlantic for the UK and NATO and its plans for hybrid carrier airwings (Chapter 7.2).
    - The **Army's** 'Recce-Strike' model for land fighting power, aiming to deliver a ten-fold increase in lethality.[19] This new model should underpin the transformation of the two divisions and Corps Headquarters committed to NATO's Strategic Reserves Corps (Chapter 7.3).
    - The **RAF's** development of the Future Combat Air System—a sixth-generation, crewed jet operating with autonomous collaborative platforms (Chapter 7.4).

31. With the Integrated Force fighting as one across all five domains, **greater attention must be given to the space and cyber and electromagnetic (CyberEM) domains**:[20]

    - Assured access to operate in, from, and through space underpins UK security and prosperity. The MOD should invest in the resilience of military space systems, with a focus on space control, decision advantage, and capabilities that support

19 Measured against a conventional armoured brigade model.

20 Cyberspace and the electromagnetic spectrum are now treated as a single military domain (Chapter 7.6).

'Understand' and 'Strike' functions. A reinvigorated Cabinet sub-Committee should set the UK's strategic approach to space, maximising synergies between the UK civil space sector and clear military needs (Chapter 7.5).

- The CyberEM domain is similarly essential to securing and operating in all other domains and is fundamental to the digital targeting web. Hardening critical Defence functions to cyber-attack is crucial. Defence must move to a more proactive footing in this domain. A new CyberEM Command—established within Strategic Command—should emulate Space Command in ensuring domain coherence, rather than directing execution. An initial operating capability should be established by the end of 2025 (Chapter 7.6).

32. Under Defence Reform, **Strategic Command** will be responsible for delivering, at the direction of the new Military Strategic Headquarters, many of the joint enablers and specialist capabilities for the Integrated Force—from Defence Intelligence to the Integrated Global Defence Network, Defence Medical Services, and Special Forces and Special Operations Forces. **UK Special Forces**—the 'tip of the spear'—represent a working model of the Integrated Force, leading the way in innovation of new technologies and systems across all domains. Defence must continue to enhance its Special Forces, ensuring UK sovereign choice by maintaining this strategic capability at the very highest level.

33. Where some past reviews have focused on front-line equipment at the expense of foundational capabilities, we have sought to redress this balance. We recommend a focus on:

- **Empowering Defence Intelligence** as the functional leader of all defence intelligence organisations—pursuing common priorities and standards, underpinned by a new Defence Intelligence charter, and, in time, fully interoperable with the UK Intelligence Community (Chapter 7.9).
- **Rebuilding Defence Medical Services**, cohering disparate defence medical resources and initiating a sprint review with the Department of Health and Social Care to ensure personnel needs can be met in peacetime and in war (Chapter 7.10).
- **Restoring the Strategic Base**[21] **from which the Armed Forces deploy**: delivering a Defence Infrastructure Recapitalisation Plan by February 2026 to address years of underfunding and identify ways to maximise the value of the estate as a national asset (Chapter 7.11).
- **Targeted investment in joint support enablers and munitions**. Defence should maintain an 'always on' munitions capability, laying the industrial foundations for production to be scaled up at speed if needed. This should be complemented by the further development of novel directed energy weapons (Chapter 7).

21 The network of infrastructure (airports, seaports, warehouses, mounting centres, preparation bases), 'movement assets' (such as trains and shipping), and activities to transport troops and materiel.

The transformation imperative

34. **Prudent sequencing is needed to ensure the Armed Forces have what they need, when they need it,** within the resources available and to achieve the best possible return on investment. This includes being ready to accelerate efforts to transform the Armed Forces and restore readiness should conditions deteriorate further, or to mobilise UK Defence rapidly in the event of a crisis. In this new and uncertain era, nobody should be surprised if it became necessary to transform further and faster.

35. **There is no reason to delay in changing fundamentally how Defence works**, however, leveraging Defence Reform—the ongoing programme of organisational and cultural change (Box 1)—as a driver for reform across the Department of State and the Armed Forces. Unlike other departments in Government, the MOD does not control the timetable for confrontation and conflict. 'Events' and the UK's adversaries do. Bold and decisive action is needed. **'Business as usual' is not an option.**

36. We are acutely aware that words such as 'transformation' have been used before in defence reviews but the intention has seldom been delivered. A key factor in success in the coming years will be Defence Reform. Where the SDR states what Defence must do in the next decade and beyond, Defence Reform will ultimately determine how, and how successfully, it is delivered. To support implementation, we have identified key interventions and deadlines to further catalyse progress where in the past it has been slow and lacked accountability. The MOD will necessarily take this work forward in creating detailed implementation plans—an essential part of the department taking ownership of the Review's findings and recommendations.

Box 1: Defence Reform: setting Defence up for success

The purpose of Defence Reform is to establish robust and streamlined governance, clearer accountabilities, and faster decision-making processes across the Ministry of Defence and the Armed Forces. The starting point is the restructuring of Defence under four areas (Figure 1).

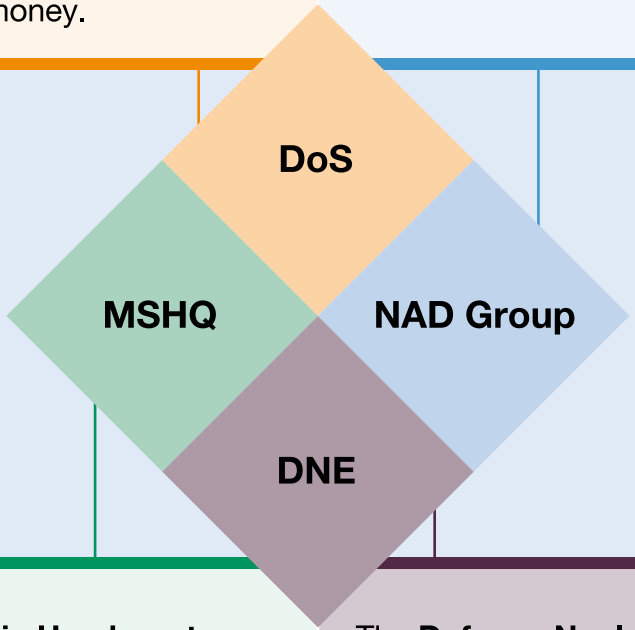
Figure 1: Responsibilities of senior officials and military personnel under Defence Reform

The **Department of State (DoS)**, led by the Secretary of State and ministerial team, supported by the Permanent Under-Secretary of State (PUS) who is:

- The lead policy adviser, providing the vision, strategy, and departmental plan.
- The Principal Accounting Officer, accountable to Parliament for ensuring Defence operates within budget and delivers value for money.

The **National Armaments Director Group (NAD Group)**, led by the National Armaments Director (NAD) who is:

- Responsible for the readiness of the national 'arsenal' to meet the requirements of defence plans.
- Responsible for shaping and delivering acquisition reform and an industrial strategy to boost the UK's defence industry.



The **Military Strategic Headquarters (MSHQ)**, led by the Chief of the Defence Staff (CDS) who is:

- The professional head of the UK's Armed Forces, accountable for their readiness to fight and win.
- In formal command of Service Chiefs.
- Senior Military Adviser to the Prime Minister and the Secretary of State for Defence.

The **Defence Nuclear Organisation (DNO)**, led by the Chief of Defence Nuclear (CDN) who is:

- The focal point, sponsor, and Additional Accounting Officer for the **Defence Nuclear Enterprise (DNE)**, from strategy to delivery.
- The DNE is the partnership of organisations that operate, maintain, renew, and sustain the UK's nuclear deterrent.

We strongly endorse the organisational change launched by the Defence Secretary and pursued under Defence Reform. As it progresses, it should focus on:

- Supporting a 'One Defence' mindset through career management structures that reward behaviour and action accordingly, with NATO a primary consideration. More radical options to break down single Service siloes, such as joint promotion boards or central career management, should be explored.
- Delivering a step-change in the department's financial and programme management. As the Principal Accounting Officer, the Permanent Under-Secretary must retain primary responsibility for financial planning and must be able to account for the department's financial position, even as other senior leaders are given greater financial authority within their respective areas of responsibility. Further streamlining programme and project approvals might be achieved through full implementation of the industry-standard 'three lines of defence' model for risk assurance.[22] Incorporating HM Treasury and the Cabinet Office Commercial Function in this model offers the basis for an improved working relationship.
- Ensuring the role of the National Armaments Director is focused on engaging with industry and international partners to progress the Government's defence industrial and exports agenda. This will require delegating authority for acquisition management and other elements of the work of the National Armaments Director Group.
- Supporting the continual adoption of new technologies, in particular Artificial Intelligence (AI), that will enable Defence to take leaps forward both in how it fights and the productivity with which it delivers. The MOD must engage in the implementation of the AI Opportunities Action Plan,[23] led by the Department for Science, Innovation and Technology, wherever possible.

We have primarily taken our lead from, or worked with, the Defence Reform team on the most effective organisational structures for governance and delivery within Defence. However, in this report, we occasionally make suggestions on roles and responsibilities for consideration as the Defence Reform programme is developed further.

22 Where the portfolio or programme manager is the first point of risk assurance (or 'line of defence'), the internal approvals board is the second point, and the National Audit Office provides the third point of assurance through external scrutiny.

23 AI Opportunities Action Plan, 13 January 2025 – GOV.UK.

2. The Case for Transformation

1. **The UK is entering a new era of threat and challenge**. The world is more volatile and more uncertain than at any time in the past 30 years and it is changing at a remarkable pace.

2. **The UK and its allies are once again directly threatened by other states with advanced military forces**. The UK is already under daily attack, with aggressive acts—from espionage to cyber-attack and information manipulation—causing harm to society and the economy. State conflict has returned to Europe, with Russia demonstrating its willingness to use military force, inflict harm on civilians, and threaten the use of nuclear weapons to achieve its goals. More broadly, the West's long-held military advantage is being eroded as other countries modernise and expand their armed forces at speed, while the United States' (US) security priorities are changing, as its focus turns to the Indo-Pacific and to the protection of its homeland.

3. This is only one part of the picture, however. In this more complex world, the UK must deal with a wide array of challenges to its security, prosperity, and values at the same time. It must also be ready to absorb and respond to surprises and shocks, recognising that it cannot prevent or protect against all risks and threats.

4. Previous reviews have recognised the rapid deterioration of the international security environment. However, the speed of change in Defence has not kept pace with the threat or the scale of the challenge. **The imperative for a shift in approach is clear**.

The strategic context to 2040

5. The environment in which Defence must operate in the coming years is shaped by two major and accelerating trends:

   - **Growing multipolarity and intensifying strategic competition** between states—and with non-state actors—for political, military, economic, and technological power. As part of this competition, states are seeking to reshape the rules-based international order that has governed international relations since the Second World War.[24] The clear shift in US security priorities underlines how urgent and different managing strategic competition now is.
   - **Rapid and unpredictable technological progress** that drives strategic competition and continually changes how armed forces must be organised, equipped, and fight.

6. These trends will interact with a **backdrop of persistent transnational challenges**, including:

   - **Climate change and environmental degradation**, which: are creating new geographical realities and competition for resources; are driving migration, instability, and more frequent humanitarian disasters; and demand military adaptation for operations in more extreme weather conditions. Of particular importance to Defence is the likelihood that the Arctic and High North will be 'ice-free' each summer by 2040, providing access to more actors and creating a new site for competition within the UK's wider neighbourhood.

24 The 'rules-based international order' is the set of laws, rules, norms, and institutions established since 1945 to enable international cooperation in areas such as security, trade and development, human rights, arms control, and technology standards.

- **The enduring threat of terrorism**. The threat posed by overseas terrorist groups is rising again, demanding attention and resources.[25] Daesh and al-Qa'ida have evolved, while state support is increasing some terrorist groups' capabilities, including in cyberspace.
- **Uneven global demographic change**, which is altering global power balances and driving domestic and regional instability, including through migration, urbanisation, and new demands on governments for employment and social welfare support.

7. Confronting any one of these challenges is difficult. **Confronting them simultaneously poses a huge test for the UK and for Defence**.

Growing multipolarity and strategic competition

8. Intensifying strategic competition will make it **more difficult for the UK and its allies to shape the world and events** in their interests. Regional settlements and solutions may be necessary as it becomes harder for states to achieve common goals at the global level. The relationship between the US and China will be a key factor in a more multipolar world marked by 'great power' competition and in which global power is more widely—if unevenly—distributed across regions and countries. This competition is not just among states: terrorist organisations, organised crime groups, proxy actors and partner groups, and powerful private actors all seek to shape the geopolitical environment to their advantage.

9. **Managing competition between states—and the potential for escalation to crisis and conflict—will be more challenging**. States such as Russia are intentionally blurring the lines between nuclear, conventional, and sub-threshold threats, complicating the ability of the UK and its allies to manage potential escalation and miscalculation. Technology creates new paths for escalation by creating new ways to disrupt and coerce, for example, in cyberspace and space. States and non-state actors are ever-more aggressive in using sub-threshold activities to seek advantage.

10. At the other end of the spectrum, nuclear-armed states like Russia and China are putting nuclear weapons at the centre of their security strategies, increasing the number and types of weapons in their stockpiles. The coming decades will be defined by multiple and concurrent dilemmas, proliferating and disruptive technologies, and the erosion of international agreements and organisations that have previously helped to prevent conflict between nuclear powers. Strategic stability will be challenged, with new and more complex pathways to escalation that the UK and its allies will need to address. Allied assurance will become more complicated as others may be incentivised to develop nuclear weapons of their own.

25 The Hamas attack on Israel on 7 October 2023 killed seventeen British nationals: the single largest loss of British life from a terrorist attack since 2017. The Houthi targeting of Red Sea shipping has demonstrated the vulnerability of global supply chains to threats from non-state actors.

11. **Russia: an immediate and pressing threat**. Russia's full-scale invasion of Ukraine makes unequivocally clear its willingness to use force to achieve its goals, as well as its intent to re-establish spheres of influence in its near-abroad and disrupt the international order to the UK and its allies' disadvantage. While the Ukraine conflict has temporarily degraded Russian conventional land forces, the overall modernisation and expansion of its armed forces means it will pose an enduring threat in key areas such as space, cyberspace, information operations, undersea warfare, and chemical and biological weapons. Russia's war economy, if sustained, will enable it to rebuild its land capabilities more quickly in the event of a ceasefire in Ukraine.

12. **China: a sophisticated and persistent challenge**. China is increasingly leveraging its economic, technological, and military capabilities, seeking to establish dominance in the Indo-Pacific, erode US influence, and put pressure on the rules-based international order. Chinese technology and its proliferation to other countries is already a leading challenge for the UK, with Defence likely to face Chinese technology wherever and with whomever it fights. China is likely to continue seeking advantage through espionage and cyber-attacks, and through securing cutting-edge Intellectual Property through legitimate and illegitimate means. It has also embarked on large-scale, extraordinarily rapid military modernisation across its forces. This includes:

    - A vast increase in advanced platforms and weapons systems, such as space warfare capabilities.
    - The unprecedented diversification and growth of its conventional and nuclear missile forces, with missiles that can reach the UK and Europe.
    - More types and greater numbers of nuclear weapons than ever before, with its arsenal expected to double to 1,000 nuclear warheads by 2030.

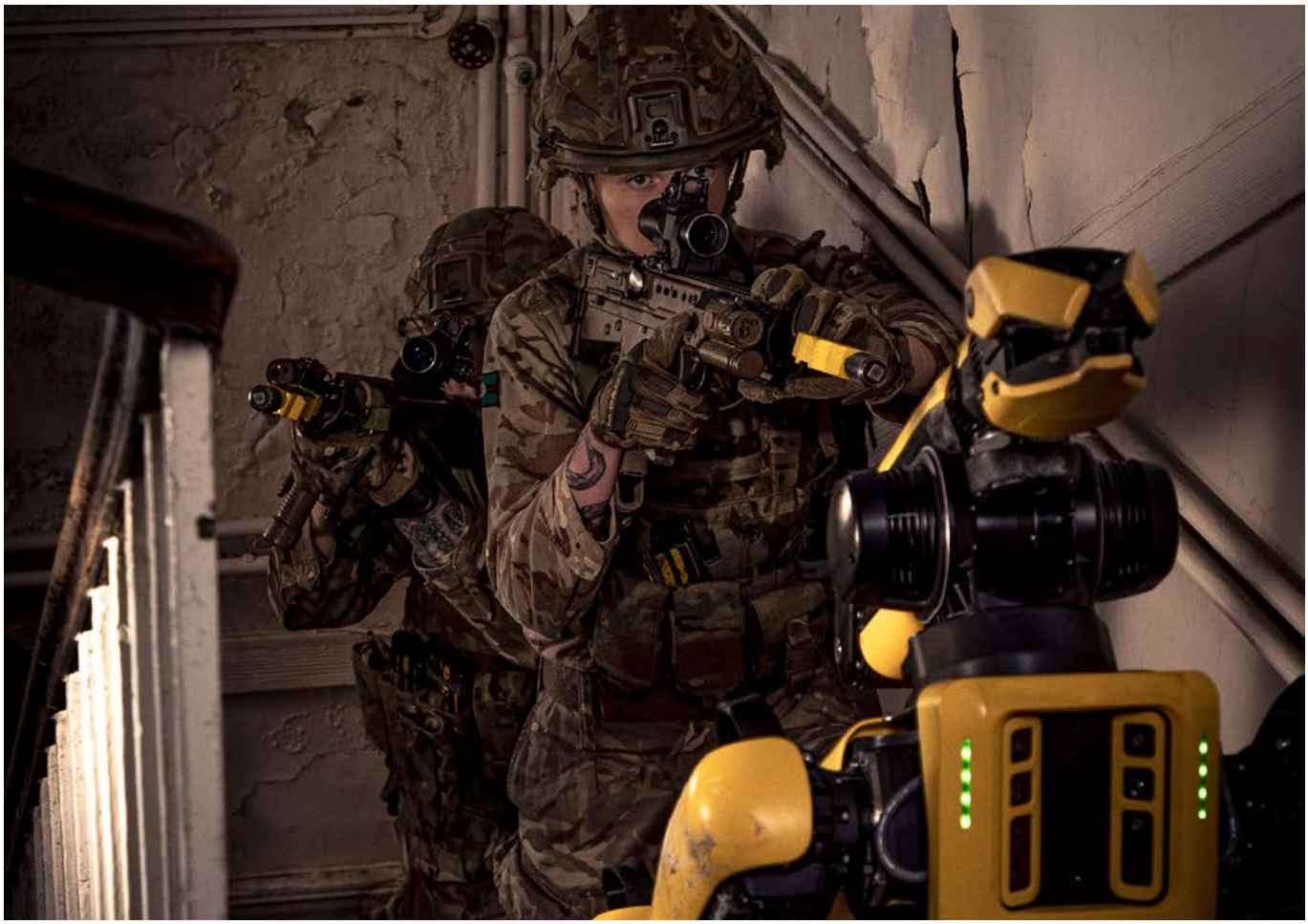
13. **Iran and the Democratic People's Republic of Korea (DPRK): regional disruptors**. Iran will continue to conduct destabilising activities across the region, including sponsoring proxies and partners such as Hamas, Hezbollah, the Houthis, and Iranian-aligned Iraqi militias. Its escalating nuclear programme presents a risk to international security and the global non-proliferation architecture. The DPRK will likely pursue further nuclear modernisation to guarantee regime survival and coerce its neighbours. Both countries are developing missile programmes with growing reach, and they continue to pose a direct threat to the UK in cyberspace.

14. **Continued alignment and new sources of hostility**. China and Russia have deepened their relationship and there will continue to be grounds for both strategic and opportunistic alignment with Iran and the DPRK. However, the dynamics of these relationships will be conditioned by differing interests and longstanding mistrust. They will likely continue seeking to draw others into their transactional networks in pursuing a variety of objectives. As global power dynamics change, it will be important to scan for new threats, including from emerging 'middle powers' that may be hostile to UK interests.

Rapid and unpredictable technological change

15. **Rapid advances in technology offer both opportunity and risk**, changing the global distribution of power. Emerging technologies are **already changing the character of warfare more profoundly than at any point in human history**. Progress will continue across a range of technologies whose collective impact will be highly unpredictable (Box 2).

16. Warfare will be shaped by an evolving mixture of high- and low-end military capabilities.[26] The widespread availability of commercial, off-the-shelf capabilities will enable a broader range of state and non-state actors to develop and possess them. This will have significant implications for deterrence and escalation management, as well as for the UK's freedom of manoeuvre across land, sea, air, and space. It will also change the economics of defence, with low-cost weapons being used to damage or exhaust expensive military capabilities. Technological advancements are outpacing the development of regulatory frameworks to govern many of the most potentially disruptive technologies. The UK's competitors are unlikely to adhere to common ethical standards in developing and using them.



26 For example, widely available cheap attack drones are already used by states in combination with advanced missiles to overwhelm air defences.

Box 2: Technologies that are redefining warfare

Advantage on the battlefield will not come from a single technological advance but from the combination of existing capabilities and a range of emerging technologies that include:

- **Artificial intelligence (AI), machine learning, and data science**, improving the quality and speed of decision-making, the resilience of digital networks, and operational effectiveness. Forecasts of when Artificial General Intelligence[27] will occur are uncertain but shortening, with profound implications for Defence.
- **Robotics and autonomy**, with armed forces increasingly using uncrewed and autonomous capabilities to generate mass and lethality.
- **Enhanced precision weapons** that mean targets can be struck with greater accuracy from ever greater ranges.
- **Directed energy weapons**, such as the UK's DragonFire, which have the potential to reduce collateral damage and reliance on expensive ammunition.
- **Hypersonic missiles**, which, travelling at over five times the speed of sound, may offer greater range and greater ability to evade defences.
- **Space-based capabilities** that enable all aspects of modern operations. States are rapidly developing ways to disrupt military and civilian assets in and from space.
- **Quantum**. Advances in quantum computing offer the potential to break encryption, making secure communications much more difficult. Quantum technologies have the potential to reduce dependence on satellite-based GPS, which may be vulnerable to interference.
- **Cyber threats** that will become harder to mitigate as technology evolves, with AI, quantum technology, and the increasing dependence on satellite communications likely driving the most disruptive changes to the cyber threat landscape.
- **Engineering biology** that creates the potential to enhance the capacity of the armed forces through advances in medicine, healthcare, and wellbeing, possibilities for new energetic and explosive materials, as well as avenues for enormous harm in the shape of new pathogens and other weapons of mass destruction.

27 Where AI matches or surpasses humans' ability to understand, learn, and apply knowledge across a range of situations unaided.

What does this mean for the UK and for Defence?

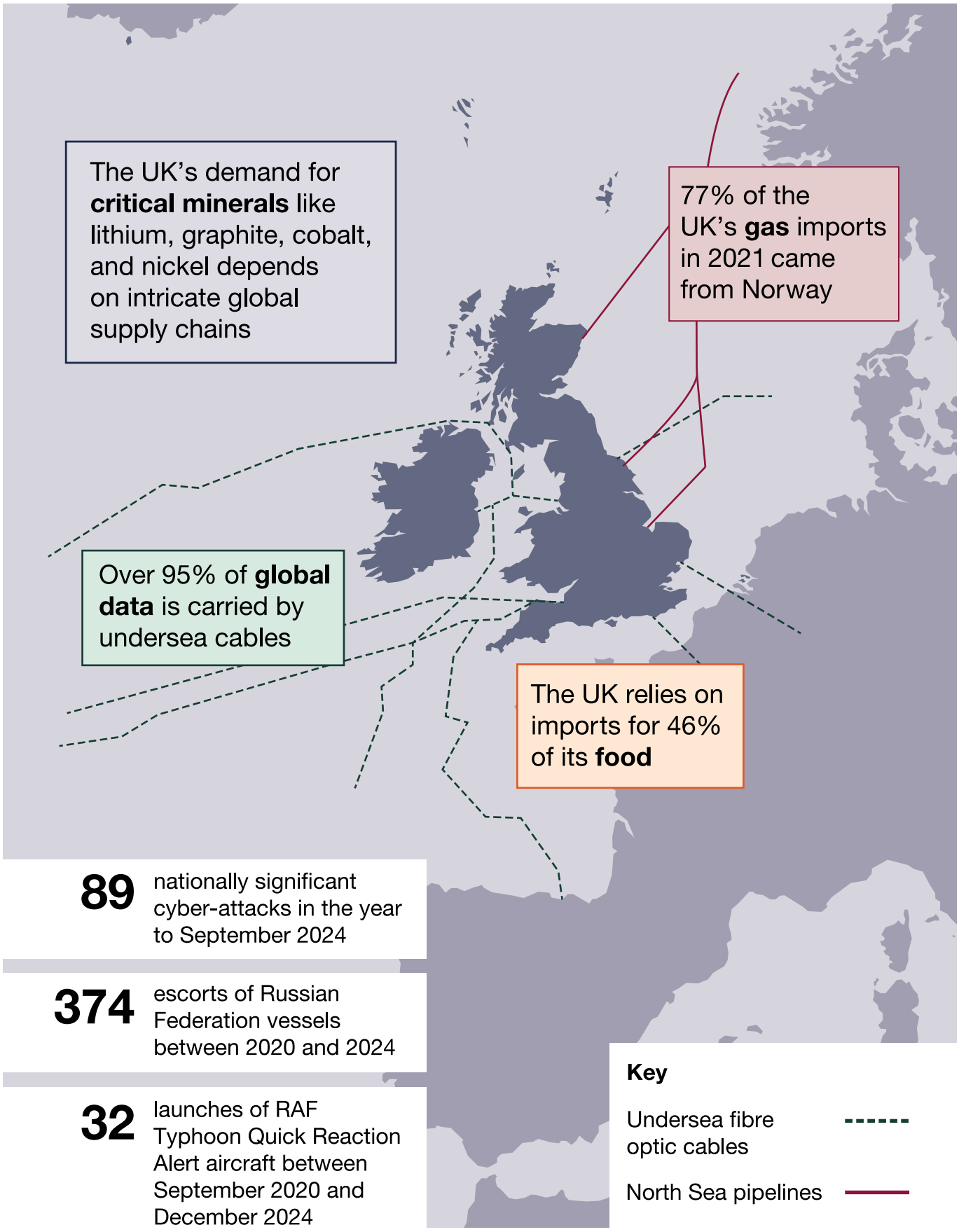
17. **Defence must prepare for a much more difficult world** of heightened competition, more frequent crisis, and conflict that sees conventional military attacks combined with intensified sub-threshold aggression (Box 3) and potentially with threats to use nuclear or other weapons of mass destruction. The UK is already subject to daily sub-threshold attack, targeting its critical national infrastructure, testing its vulnerabilities as an open economy and global trading nation (Figure 2), and challenging its social cohesion. Changes in the strategic context mean that UK Defence must plan on the basis that NATO Allies may be drawn into war with—or be subject to coercion by—another nuclear-armed state. With the US clear that the security of Europe is no longer its primary international focus, the UK and European Allies must step up their efforts.

Box 3: Potential effects of war on the UK's way of life

Based on current ways of war, if the UK were to fight a state-on-state war as part of NATO in 2025, it could expect to be subject to some or all of the following methods of attack:

- Attacks on the Armed Forces in the UK and on overseas bases.
- Air and missile attack (from long-range drones, cruise, and ballistic missiles) targeting military infrastructure and critical national infrastructure (CNI) in the UK.
- Increased sabotage and cyber-attacks affecting on- and offshore CNI.
- Attempts to disrupt the UK economy—especially the industry that supports the Armed Forces—including through cyber-attack, the interdiction of maritime trade, and attacks on space-based CNI.
- Efforts to manipulate information to undermine social cohesion and political will.

Figure 2: UK daily life: overseas dependencies and threats



The state of Defence today

18. **The starting point for this Review is a UK military with innumerable strengths**, respected worldwide for its dedication and professionalism. The UK remains at the forefront of NATO efforts to safeguard the Euro-Atlantic against growing Russian aggression in all domains, providing the ultimate guarantee of UK and Allied security in declaring its nuclear deterrent to the Alliance. The Armed Forces are a vital and agile instrument in achieving Government priorities: securing NATO's front line in Estonia and Poland; airdropping aid for the Palestinian people into Gaza; helping to defend Israel against Iranian air attack; protecting international shipping lanes in the Red Sea; defending the UK against persistent cyber-attack; and enhancing UK relationships with its allies and partners in support of collective security.

19. **Defence also remains an integral part of the UK economy and wider society**, supporting 440,000 high-quality jobs across the country and driving social mobility through the training it offers to Armed Forces personnel and civil servants, including thousands of apprentices. Examples of innovation excellence within Defence demonstrate its ability to deliver cutting-edge capabilities to warfighters and the potential to deliver greater economic growth across the UK.

20. **However, Defence is still largely shaped by the operations of the post-Cold War era**, primarily conducted against non-state opponents. The size and readiness of the Armed Forces declined as the threat posed by the Soviet Union receded. The Cold War's large standing force of over 311,000 Regular personnel has fallen to just over 136,000, with only a small set of forces ready to deploy at any given moment and the rest held at varying levels of readiness. Defence spending reduced in parallel, from 4.1% of GDP in 1989 to 2.3% today.

> We do need to put more into our defences because otherwise it won't be long before something more significant happens and we will think it should've been more of a priority
>
> **—Citizens' Panel member, Rollestone Camp**

21. **This trajectory of declining investment has been made more acute in recent years** by additional financial pressures, including inflation and currency fluctuations following the Covid-19 pandemic and Russia's full-scale invasion of Ukraine. Positive efforts to improve military personnel's salaries and buy equipment designed to meet future threats have added further pressure on departmental finances.

22. More fundamentally, **Defence's wider ways of working remain suited to a peacetime era**, with innovation stifled and bureaucracy consuming precious time and effort. The result is an organisation that is not currently optimised for warfare against a 'peer' military state:[28]

28 A 'peer' adversary is a country that can match the UK's military capability and/or that of its allies.

- **A focus on 'exquisite' capabilities has masked the 'hollowing out' of the Armed Forces' warfighting capability**. Stockpiles are inadequate, further reduced by the important and necessary transfer of materiel to Ukraine. The Strategic Base lacks capacity and resilience following years of underinvestment. Medical services remain optimised for counter-terrorism operations and lack the capacity for managing a mass-casualty conflict.
- **Procurement systems and Defence's relationship with industry have not materially changed since the Cold War.** Risk reduction and consensus decision-making are prioritised over productivity and innovation at the pace of technological change. Export opportunities are too frequently an afterthought in planning. Optimism about equipment cost and timelines for delivery means the Equipment Plan is consistently over-budget and outdated capabilities remain in the field for too long. Defence struggles to prioritise science and technology spending and exploit innovation for operational advantage. It is insufficiently prepared for the digital battlefield, lacks scale and resilience in data flows, and carries intolerable levels of cyber risk.
- **Poor recruitment and retention, shoddy accommodation, falling morale, and cultural challenges have created a workforce crisis**. The numbers of UK Regulars and Reservists have been in persistent decline (by 8% since 2022 for the Regular Armed Forces). The shortfall impacts disproportionately on the skills most critical to UK advantage, as it does for allies and partners.

The case for transformation

23. The Armed Forces have begun the essential process of transformation in response both to this changing context and to lessons from the war in Ukraine. However, they remain fundamentally shaped by the risks and demands of the post-Cold War era, when successive Governments reasonably sought to maximise the 'dividend' offered by peace in Europe.

24. The MOD, wider Government, and industry must be better prepared for high-intensity, protracted war. The sweeping and rapid changes to the international security environment mean it is not enough to change only how and with what the Armed Forces fight. To deter threats through being ready for war, **the whole of Defence must change how it supports the Armed Forces as part of a more flexible policy response**: deterring attacks that blur the lines between competition and conflict across all domains, harnessing the very best technologies at wartime pace, and drawing on support from across Government, industry, society, and allies. The following chapters chart the course of this transformation.

3. Roles for UK Defence

1. The fundamental role of the Armed Forces is to **deter threats so that fighting a war—in defence of the UK, the Overseas Territories and Crown Dependencies, and allies—is not necessary**. It must be unequivocally clear to potential adversaries that the UK and NATO have the ability and will to fight.

2. The UK last faced a direct military threat from a highly capable state adversary during the Cold War. Since then, it has relied largely on an expeditionary approach to disrupt potential threats before they could reach Europe. In parallel, the UK has guarded against the possible re-emergence of more significant threats through its nuclear deterrent and membership of NATO. This is no longer sufficient. The dynamic nature of today's threats (Chapter 2) presents a vastly more complex security challenge.

3. As the Prime Minister has stated, navigating this environment demands **an integrated, whole-of-society approach to deterrence and defence**. Most importantly, **the Government must be able to act and adapt with agility** to create doubt and dilemmas for adversaries and to maintain escalation dominance—detecting and attributing attacks, choosing when and how to respond, and being able to sustain that response and escalate again if necessary. To achieve this, **the UK will need to**:

    - **Increase its options for threatening retaliation**—whether developed nationally or with allies—to convince a potential adversary that the cost of its actions will outweigh the potential benefits.
    - **Build national resilience to attacks and shocks**, enhancing the UK's ability to withstand and recover quickly and to deny adversaries potential benefits. Infrastructure that is critical to the UK economy and way of life must be protected. Re-establishing credible national preparations for war, home defence, and industrial mobilisation is a priority.
    - **Nurture strong relationships with allies**. No state can address all these challenges alone. Together, the UK and its allies have greater economic, military, and diplomatic influence than any of their potential adversaries—individually or combined.

4. **Defence plays a central role in this whole-of-society approach**. It is a key instrument of Government: home to the UK's nuclear deterrent, multi-domain conventional and Special Forces; and sole provider of highly specialist capabilities that are vital to national security, such as counter-terror and counter-chemical, biological, radiological, and nuclear expertise. To achieve maximum effect in support of Government objectives—whether in war or during periods of heightened competition or crisis—it must seamlessly direct these forces across domains[29] and with allies, drawing on partners across Government, industry, and wider society.

29 The five domains are maritime, land, air, space, and cyberspace and the electromagnetic spectrum.

A 'NATO First' approach to deterrence and defence

5. **Collective security, underpinned by formal alliances and partnerships, is a force multiplier for the UK's deterrence and defence**. At the forefront of the UK's many valuable alliances is NATO, which has brought peace to the Euro-Atlantic for more than 75 years. Under Article V of NATO's founding treaty, the UK would always expect to fight a 'peer' military adversary alongside Allies. But the Alliance provides more than just strength in numbers in the event of a crisis. It provides a unique forum for collective action and industrial collaboration in the Euro-Atlantic, and facilitates agreement on global issues and partnership with countries beyond the region.

6. There is an unequivocal need for the UK to redouble its efforts within the Alliance and to **step up its contribution to Euro-Atlantic security** more broadly—particularly as Russian aggression across Europe grows and as the United States of America (US) adapts its regional priorities.

7. **The defining principle of this Review is therefore 'NATO First'** (Box 4). This demands a different approach from that taken since the end of the Cold War. The Alliance must be the starting point for how the Armed Forces are developed, organised, equipped, and trained in order to contribute to deterrence in the Euro-Atlantic, shaping the environment and potential adversaries' thinking every day. This approach will require organisational and cultural change within Defence and across Whitehall, given the vital support provided by other Government departments. Efforts to deepen bilateral and minilateral relationships should similarly be geared to strengthening Europe's security architecture (Chapter 5).

Box 4: What does 'NATO First' mean for UK Defence?

Defence will be integrated with NATO by design. This demands that NATO is:

- **Foremost in how Defence plans**. The UK should prioritise its ability to contribute to NATO plans (including for defending the UK), which should be at the heart of capability development and force design. The UK must play a leading role in developing Alliance plans, standards, and verification.
- **The foundation of how Defence thinks**: mainstreamed through policy, doctrine and concepts development, education, and talent management.
- **Embedded in how Defence acts**: ensuring national activity prioritises and enhances NATO objectives and integration. This includes operations, exercises, industrial strategy, and defence engagement activity.

8. As NATO renews its own approach to deterrence and defence, the UK must:

    - Back up its commitment to Article V by **putting NATO at the heart of how it plans to fight in the Euro-Atlantic area**. The UK should prioritise its ability to fight as part of NATO strategic and operational plans, actively support their development, and contribute leadership within the command structures that will execute them. This must continue to be underwritten by the UK's nuclear deterrent, assigned to the defence of NATO and adapted as nuclear threats to the Alliance increase.
    - **Put NATO at the centre of its force development**, with a focus on shaping and meeting ambitious NATO Capability Targets designed to strengthen the Alliance's military capabilities and to improve burden-sharing between Europe and Canada on the one hand and the US on the other.
    - **Meet civil defence and resilience planning obligations** under Article III of the NATO founding treaty to strengthen deterrence and assure the UK's ability to project power in support of NATO in the Euro-Atlantic and beyond.[30] The UK must also ensure it can provide military and civilian Host Nation Support to NATO, including in times of crisis and war.
    - **Support NATO's development in areas critical to warfighting**. This should include: leading the way in new concepts; encouraging NATO to reflect priority defence and dual-use technologies in capability

30 Article III of NATO's Washington Treaty states that Parties to the Treaty 'separately and jointly, by means of continuous and effective self-help and mutual aid, will maintain and develop their individual and collective capacity to resist armed attack.'

planning processes; and influencing standards and operating practices accordingly. Drawing on experience, expertise, and capabilities developed through national and minilateral activity—for example, as part of the Joint Expeditionary Force—would further support NATO-wide innovation. Engaging with and leveraging the work of NATO's UK-based innovation organisations[31] would be mutually beneficial in pursuing this goal.

- **Engage fully in NATO-led efforts to strengthen transatlantic industrial cooperation** as a central plank of collective deterrence and defence, with NATO an increasingly important convenor and standard-setter. Influencing NATO standards and adopting them by default is key.

9. **A 'NATO First' approach does not mean 'NATO only'**. The Alliance itself recognises the importance of working with partners such as the Indo-Pacific Four[32]—reflecting the connection between Euro-Atlantic security and that of other regions such as the Middle East and Indo-Pacific. The UK also has significant interests, commitments, and responsibilities beyond the Euro-Atlantic. These include: the defence of UK sovereign territory; the UK's status as one of five permanent members of the United Nations Security Council; the Five Eyes intelligence alliance;[33] and flagship capability partnerships AUKUS and the Global Combat Air Programme. All are critical to UK and allied security and to shaping the international security environment.

Core defence roles

10. The Review has identified **enduring and mutually reinforcing roles** that Defence must fulfil to deliver the outcomes set by the Government within the resources available. They have informed our recommendations on the transformative methods and capabilities in the chapters that follow. In alignment with a NATO First approach, under Role 1 and Role 2 effort and resources are focused on defence and deterrence in the Euro-Atlantic, centred on home defence and resilience. Role 3 uses all Defence levers—as part of a cross-government effort—to defend where the UK must and to shape the environment in favour of national interests where it can. Delivery of all three roles will depend on capabilities deployed in the space and cyber and electromagnetic domains as well as common foundational enablers. It is intended that the UK Special Forces would also contribute to delivery of all three roles where needed, as part of a Defence-wide effort to deliver crisis response, whether in the UK, the Euro-Atlantic, or beyond.

11. To meet the most significant threats facing the UK, **the roles for Defence are:**

Role 1: Defend, protect, and enhance the resilience of the UK, its Overseas Territories, and Crown Dependencies

- The nature of today's threats mean Defence must once again have credible plans for defending UK home territory as part of NATO, rooted in improved national resilience

31 NATO Innovation Fund and DIANA (the Defence Innovation Accelerator in the North Atlantic).

32 The Indo-Pacific Four are Australia, Japan, the Republic of Korea, and New Zealand.

33 Australia, Canada, New Zealand, the UK, and the US.

(Chapter 6)—a NATO Article III obligation. The Armed Forces must also be able to defend and protect the Overseas Territories and Crown Dependencies and be ready to deploy globally to support British nationals overseas during crises.

Role 2: Deter and defend in the Euro-Atlantic

- Defence must contribute daily to deterrence in the Euro-Atlantic, with a force optimised for warfighting to protect and defend NATO territory and Allied populations against attack, underpinned by the UK's nuclear deterrent. The UK must apply its strengths in support of the Alliance, enhancing deterrence by driving modernisation. This role responds directly to the UK's Article V commitment under which the security of one Ally is the security of all, and under which the UK would always expect to fight a 'peer' military adversary alongside NATO Allies.

Role 3: Shape the global security environment

- Defence must shape the global security environment in favour of the UK's interests, supported by the prioritised use of all the levers available to it, as part of a wider Government effort (Chapter 5). Military deployments beyond the Euro-Atlantic should be used to retain deeper and broader 'match fitness' of the Armed Forces, developing and demonstrating warfighting leadership, innovation, and human and technical capabilities. To ensure such deployments do not detract from delivery of Roles 1 and 2, the Armed Forces must be able to return at speed to the Euro-Atlantic if necessary.
- The Review recommends the Middle East and the Indo-Pacific as the next priority regions after the Euro-Atlantic for Defence engagement. The growing links between Russia, China, Iran, and the Democratic People's Republic of Korea complicate calculations of deterrence and escalation management across regions.

Enabling Defence roles

12. There are two further enabling roles for UK Defence that are fundamental to the delivery of Roles 1–3. These roles make the UK stronger and the Armed Forces better able to deter and defend. They are explored throughout this Review in greater detail. These enabling roles are:

Develop a thriving, resilient defence innovation and industrial base

- To support a move to warfighting, the UK's defence innovation and industrial base must be able to adapt and surge to meet emerging priorities and demands (Chapter 4.2). A new partnership with industry is essential to ensure the Armed Forces are permanently connected to innovation and that industry can scale up production at speed to sustain larger and longer campaigns. Investing in the capabilities and technologies that will drive UK operational advantage will in turn create broad-based economic growth across the country.

Contribute to national preparedness and cohesion

- Defence's core roles can only be credibly achieved if supported by a whole-of-society effort to build national resilience and preparedness for crisis or conflict (Chapter 6). Defence must play its part in this, communicating clearly with the

public about the threats facing the UK and what is involved to deter and defeat them, and working across Government to address potential vulnerabilities that might be exploited by adversaries. Defence must maintain an active presence across the four nations of the Union and step up its efforts to recruit and retain a workforce that represents the whole of British society to harness the best talent the country has to offer.

Recommendations:

1. While Defence plays a central role in protecting the UK's security, prosperity, and values, the nature of today's threats means it cannot do this alone. To ensure the UK can act with the necessary agility in deterring adversaries in competition, crisis, and conflict, the MOD must work with wider Government to:
   - Increase options for retaliation in response to an attack—or the threat of attack—on the UK and its allies.
   - Build national preparedness and resilience, ensuring the UK can withstand attacks and recover quickly.
   - Nurture a robust strategic culture, ensuring senior leaders and officials across Government are equipped with the knowledge, skills, and intellectual framework to understand the nuclear dimensions and escalation risks of today's strategic environment. This should be regularly exercised and tested through wargames and table-top exercises.
   - Rebuild the relationship with, and better utilise, the intellectual base outside Government to support long-term adaptation in deterrence and defence policy, working with industry, think tanks, and academia to ensure there is a thriving network of expertise and debate.
   - Cohere these efforts with close allies, developing and exercising mechanisms for political decision-making in response to crises, especially where they fall short of war.

2. A 'NATO First' policy is essential as the UK steps up its contribution to Euro-Atlantic security. This demands a different approach from that taken since the end of the Cold War. The Alliance should be mainstreamed in how Defence plans, thinks, and acts. Defence must establish a roadmap for delivering this deeper interoperability with NATO Allies and for leading the way on shared approaches and standards by January 2026. Implementation should commence no later than July 2026.

4. Transforming UK Warfighting

Vision for UK Defence by 2035:

A leading tech-enabled defence power, with an Integrated Force that deters, fights, and wins through constant innovation at wartime pace.

1. **This Review charts a new era for Defence, restoring the UK's ability to deter, fight, and win**—with allies—against states with advanced military forces by 2035. This vision could be achieved more quickly should circumstances demand it and should more resources be made available.

2. The measure of military effectiveness today is not solely the number of people, vehicles, planes, and ships fielded by the Armed Forces. Military power is increasingly generated and assessed in terms of:

    - How quickly the Armed Forces and industry can innovate and operationalise technology that is developing faster than ever in human history.
    - How effectively the Armed Forces use networked assets—increasingly dominated by uncrewed and autonomous platforms—to create agility, lethality, mass, and endurance.

3. As described in Chapter 2, the UK Armed Forces have begun the necessary process of change in response to this new reality. But progress has not been fast or radical enough, limited to important but small-scale experimentation and the acquisition of a small number of valuable capabilities. To meet the threats of today and tomorrow, **Defence must fundamentally transform how it works: changing how it fights and how it supports that fight**.

4. Lessons from the war in Ukraine and organisational change under Defence Reform are both critical starting points. The whole of Defence—the Armed Forces and the Department of State together—should be driven by **the logic of the innovation cycle**:

    - **Find it:** Defence must be able to seed early-stage research and identify external innovation that will keep the UK's Armed Forces at the leading edge of technology, using its purchasing power to shape the commercial market.
    - **Buy it:** Defence must be able to pull innovation through from ideas to the front line at speed, getting new capabilities into the hands of warfighters and creating the conditions for the market to invest, experiment, and scale.
    - **Use it:** for maximum impact, Defence must continually develop its people's skill set, adapt its organisation, and exploit a common digital foundation to which all software-enabled assets connect.

5. With dual-use technology increasingly central to military advantage, Defence should **more purposefully use its market power to create economic growth**—prioritising UK-based businesses without losing the benefits of competition—while also delivering for the warfighter. Success in embedding the innovation cycle will also see **significant improvement in Defence productivity,**

competitiveness, exports, and value for money, maximising the return on the resources available to it, supported by the new Defence Reform and Efficiency Plan.

6. At the heart of this transformation are three fundamental changes in approach. Defence must be:

   - **Integrated by design:** delivering a digitally integrated combat force that is more lethal than the sum of its parts and interoperable with NATO (Chapter 4.1).
   - **Innovation-led:** rapidly adopting new technology to keep this Integrated Force at the forefront of warfare (Chapter 4.2).
   - **Industry-backed:** developing a thriving, resilient innovation and industrial base that can scale innovation and production in support of the Integrated Force (Chapter 4.2).

7. This diagnosis is not new. But Defence has not yet made the organisational and cultural change necessary for success. Pressing on with 'root and branch' reform to what Defence does and how—supported by the acquisition of select digital capabilities—offers the potential for rapid improvements in the Armed Forces' lethality. With adversaries' intentions and capabilities changing so significantly, and with technology changing warfare so quickly, **'business as usual' is no longer an option**. The time for action is now.

Recommendation:

3. Defence must transform how it works to become a leading tech-enabled defence power, with an Integrated Force that deters, fights, and wins through constant innovation at wartime pace. To drive this transformation, Defence must more systematically ensure that its efforts deliver both for the warfighter and for the UK economy—with the forthcoming Defence Industrial Strategy an important opportunity to embed radical reforms. Success will require the MOD to develop an understanding of the relationship between its military competitiveness and the performance of the defence innovation and industrial base. As a starting point, the MOD should establish and track metrics for:
   - The lethality of the Armed Forces.
   - Productivity within Defence and, separately, of industry.
   - The national economic impact of Defence spending and procurement (including departmental research and development spend), especially within the defence and dual-use technology sectors.

4.1 The Integrated Force Model

1. The UK has long been at the forefront of efforts to deliver a combat force that is 'joint' and 'multi-domain'. However, in practice, the single Services have largely evolved separately in terms of design, equipment, and training—creating siloes. The result is a force that joins up only on the battlefield: the effectiveness of the Armed Forces on operations is determined by the capabilities available to each Service at the point of deployment, rather than as the result of joined-up planning and delivery.

2. For the Armed Forces to be more lethal than the sum of their parts, they **must complete the journey from 'joint' to 'integrated'**, inverting the model so that authorities for design and delivery flow top-down from a single point of military authority. This step-change in approach is dependent on the elevation of the Chief of the Defence Staff (CDS) under Defence Reform as the head of the new Military Strategic Headquarters (MSHQ) with command over the Service Chiefs. The Services must be integrated in planning, readiness, deployment, and procurement. And this Integrated Force must be underpinned by the common digital foundation and shared data that are central to today's software-defined warfare.

Integrated by design

3. The key features of the Integrated Force are:

   - **A single force design** that delivers a more lethal and agile combat force. The UK's nuclear, conventional, and Special Forces are connected in a unified effort, with non-nuclear force elements designed and directed by CDS as one force to achieve the goals set by the Secretary of State. This coherent combat force trains and fights across domains under a single vision, drawing on the unique strengths and expertise of the single Services and Strategic Command. CDS is responsible for the readiness and endurance of the Integrated Force, supported by the Service Chiefs. In designing this unified force, CDS must balance investment between front-line capabilities and the foundational enablers that sustain the force in protracted, high-intensity warfare.
   - **A common set of foundational enablers**. The full range of supporting activity and capabilities[34] are delivered according to a single scheme set by CDS and the MSHQ. Delivery of this design is directed by CDS and led by the Service Chiefs. It is supported by the new National Armaments Director (NAD), whose remit incorporates defence innovation, procurement, support, infrastructure, and Defence Digital.

34 Such as training, exercises, infrastructure, logistics, medical services, intelligence, stockpiles, and munitions.

- **Digital enablement at its core**. A common digital foundation of data, Artificial Intelligence (AI), synthetic environments, and networks connects people and platforms across all domains, and with allies and partners. This gives the Integrated Force agility, speed of manoeuvre, and effective targeting to outmatch opponents.
- **Collaboration with other Government departments in real time**, not least the UK Intelligence Community,[35] to achieve maximum effect in response to national security challenges.

4. To fulfil the roles for Defence outlined in Chapter 3, **the Integrated Force must be able to operate in different configurations**. It should be:

- Integrated into NATO by design (Box 4 in Chapter 3), capable of operating as part of NATO Component Commands while still drawing on the UK's common enablers and other elements of the Integrated Force, such as the UK Intelligence Community.
- Capable of integration when operating in coalition, including as a leading framework nation[36] and as a contributing partner.
- Capable of operating as an integrated, sovereign force when needed. This will particularly apply in meeting the UK's responsibilities to the Overseas Territories.

5. Where previous reviews have established a fixed force design to be delivered by a specified date, this Review instead advocates **a model of constant innovation of the Integrated Force at wartime pace**, delivered through a new partnership with industry (Chapter 4.2). This ensures that commercial innovation and the ability to scale and sustain supply is built into how the Armed Forces are conceived and operate. Under this model, **there is no end state for the Integrated Force**: its design and capabilities—and the way that wider Defence supports it—must continue to evolve as threats and technology do.

Digitally enabled integration

6. **Digital integration is essential to achieving a step-change in lethality.** Data and digital systems are the fundamental underpinnings of all modern military capabilities, making them more capable, resilient, and lethal. They are integral to developing a force dominated by AI, uncrewed, and autonomous systems, and in preparing the ground for the profound potential impact of Artificial General Intelligence. They can no longer be viewed as a capability choice to be weighed up against traditional military platforms, like missiles, ships, or tanks. They require priority funding and delivery.

35 Comprising the Security Service (MI5), the Secret Intelligence Service (SIS or MI6), and GCHQ.

36 Providing the organisational leadership, military enablers, and many force elements for an operation, into which partners 'plug' specialised capabilities.

Urgently fix the foundations

7. There are pockets of excellence working towards this vision across Defence.[37] However, Defence's digital transformation has been hindered by the loss of central funding, lack of defined and consistently applied standards and architecture, and a persistent shortage of key digital skills within the Armed Forces and Civil Service.

8. **Defence should be ruthlessly focused on delivering the core digital platform for the warfighter**. The Chief Information Officer (CIO) must have clear authority to establish and supervise common technical standards, including those related to cyber security and data management. With the CIO defining the core platform and standards at the 'centre', exploitation primarily shifts to the edge: front-line personnel can experiment and create the digital applications they need at speed, feeding their insights back into the central design. Delivering the core platform requires:

    - **Concentration on the core enterprise capabilities**: resilient and secure communications networks, an assured data fabric,[38] and the ability for users to consume services and exploit AI and autonomous capabilities in real time, in any location, and at scale. This requires rapid progress in delivering the Secret Cloud.[39]
    - **Robust cyber security**. Legacy systems should be retired to reduce the currently intolerable levels of cyber risk carried by Defence.
    - **Embracing open architectures and shared technical standards**, from standardised drone hardware ports to universal communications and AI protocols. Simplicity is key.
    - **Treating data as a strategic asset**, with protected computing and data infrastructure, and assured data flows from allies and the UK Intelligence Community. Appointing a data/AI lead within each procurement capability portfolio (Chapter 4.2) would ensure that data and AI are considered through the full lifecycle of new capabilities.

> Invest in the people … they have to understand the tech. You can build it and buy it, but they need to be able to use it
>
> **—Citizens' Panel member, RAF Waddington**

9. To maximise the benefits of cutting-edge technology and of the common digital architecture, Defence must also make a concerted effort to develop the necessary digital, AI, cyber, and electromagnetic warfare skills that are central to modern warfighting.

37 Particularly in the Special Forces. Projects ASGARD (Army), EVE (Royal Navy), and NEXUS (RAF) are also using digital and data innovations to connect forces on the ground, in the air, or at sea with other networked assets to provide machine-speed decision support for reconnaissance and strike.

38 Data fabric is a sophisticated system that enables the efficient management and integration of large amounts of data across multiple sources. It is vital for informed decision-making and strategic planning in an increasingly digital world, where data is produced and stored in diverse locations and formats. Just as a well-designed transport network ensures smooth and efficient travel, a data fabric connects and harmonises different data sources, allowing for a comprehensive and coherent view of the data landscape.

39 A secure and scalable platform for storing and sharing information classified at Secret.

10. Establishing **a dedicated Digital Warfighter group would allow Defence to deploy digital and conventional warfighters on operations side-by-side**, maximising opportunity for rapid learning and adaptation. The Digital Warfighters would exploit technology such as sensors, AI-powered systems, and drones to achieve a decisive advantage: analysing battlespace data in real time, predicting threats, optimising operational strategy, speeding up decision-making, and improving communication and integration across domains. This new group should exemplify best practice for recruitment, retention, and training: attractive to those who would not typically see Defence as a career option; benefiting from flexible opportunities within structured career streams; and a cohort of Regular, Reserve, civilian, and industry personnel.

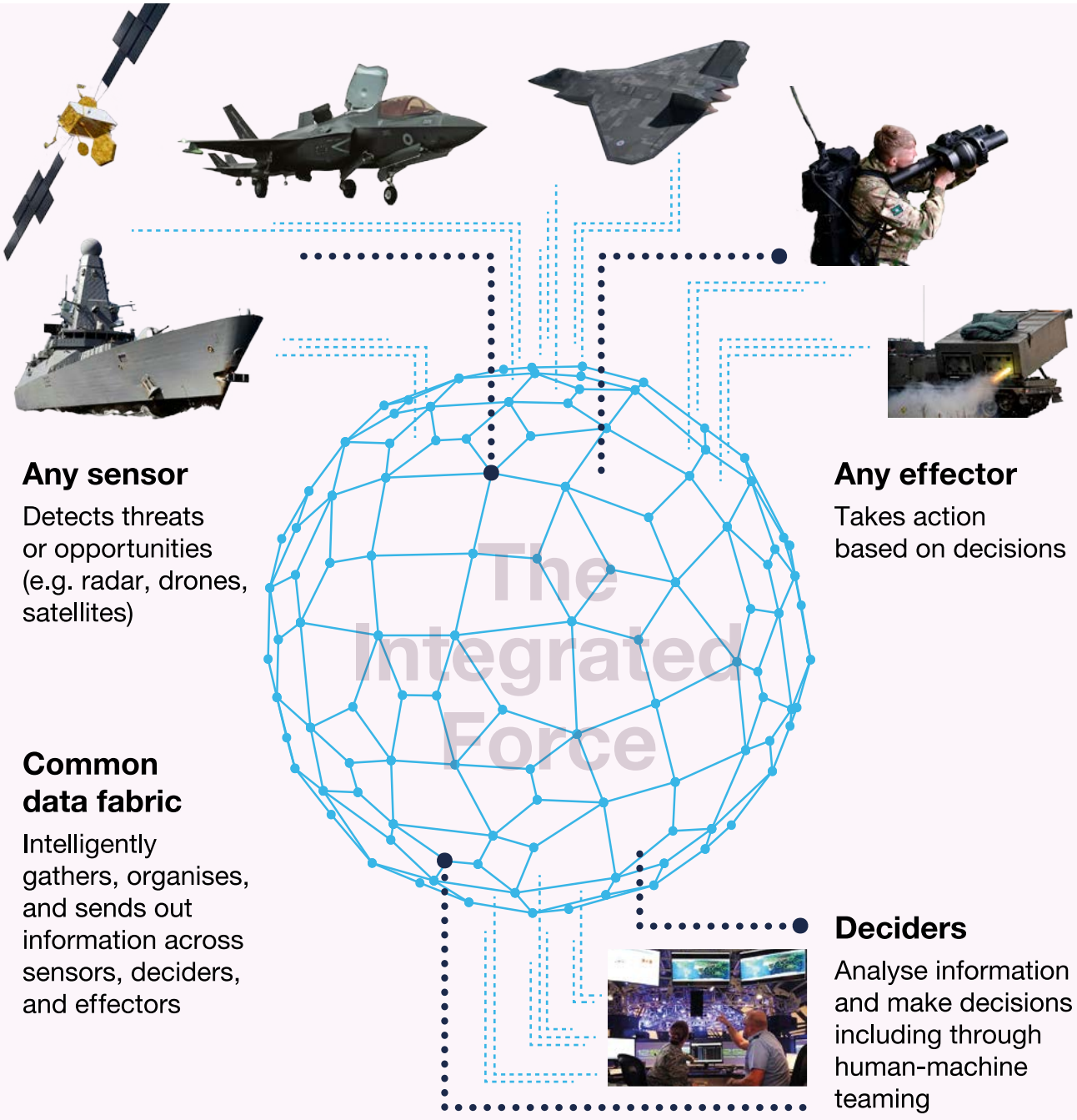
A single digital mission: the digital targeting web

11. **A clear, unifying mission would enable Defence to succeed where it has previously failed**, catalysing progress in laying the foundations. Establishing a new digital 'targeting web' (Box 5 and Figure 3) would have this catalytic effect while ultimately enhancing the Armed Forces' precision and lethality at scale and reach. With the MSHQ providing the central demand signal for this new web, digital leaders should be held to account for implementation. An external Advisory Panel should be established to support the vision and mission delivery.

Box 5: The digital targeting web

Informed by lessons from Ukraine, the digital targeting web would **connect 'sensors', 'deciders', and 'effectors'**. This creates choice and speed in deciding how to degrade or destroy an identified target across domains and in a contested cyber and electromagnetic domain. For example, a target might be identified by a sensor on a ship or in space before being disabled by an F-35 aircraft, drone, or offensive cyber operation. Informed by AI and supported by a common synthetic environment, the targeting web epitomises how the Integrated Force must fight and adapt. Its very existence contributes to deterrence.

Figure 3: Illustration of the digital targeting web



Recommendations:

4. The Government should implement the Integrated Force model to achieve full integration within Defence, delivering a more agile and lethal combat force. To ensure accountability for the continual adaptation of the Integrated Force over time, Defence should:
    - Submit an annual statement to the Secretary of State on force design that identifies what has changed.
    - Undertake an annual evaluation of the effectiveness of the Integrated Force model, measured through demonstrable improvements in: availability of assets; sustainability; pace of exploitation; rates of experimentation through to adoption; NATO interoperability; and speed of decision-making.
5. Digital integration is essential if the UK Armed Forces are to significantly increase their lethality. The MOD should (a) protect digital spend as a no-fail priority and (b) embed a culture of constant innovation with a target of minimum annual shift of 10% expenditure from current to next-generation capabilities on its enterprise digital platforms and services. To ensure accountability for delivery:
    - Progress in establishing the fundamental capabilities of a core common platform—under the authority of the Chief Information Officer—should be reported to the Secretary of State on a quarterly basis.
    - Progress should be catalysed through a single digital mission: to deliver a digital targeting web in 2027, requiring access, in whole or in part, to a Defence-wide Secret Cloud, with a minimum viable product available in 2026.
    - The MOD should report to the Secretary of State by July 2026 on assurance of critical data flows, with a plan for scaling up dissemination and exploitation of data in warfare and across Defence.
    - A new Digital Warfighter group should be established, with appropriate recruitment and pay freedoms, by July 2026. This new group should allow Defence to deploy digital and conventional warfighters on operations side-by-side.

4.2 Innovation and Industry: A New Approach for Deterrence and Growth

1. **Innovation and industrial power are central to deterrence and decisive factors in war**. The conflict in Ukraine provides a stark reminder of the imperative of maintaining sufficient inventories of munitions and spares, the fast replenishment and resupply by industry, and a rapid, continual cycle of innovation between industry and the front line.

2. Today, much of the best innovation is found in the private sector, while the increasing prevalence of dual-use technologies has widened the net of potential suppliers that can contribute to Defence outcomes. **There is a deep range of partners outside Defence that it must work to bring in** alongside its prime contractors, from technology and innovation startups and scale-ups,[40] to small and medium-sized enterprises, private investors, and the trade unions and their members, who are the workforce without which a step-change in industrial productivity would not be possible.

3. **Defence has a crucial role to play in developing the thriving and resilient base** that underpins warfighting competitiveness and readiness (Chapter 3). But it is stuck in Cold War-era procurement cycles and relationships with industry. Current MOD processes stifle adaptation and productivity, imposing unattractive timelines, requirements, and costs on smaller companies. Innovation cycles increasingly happen in days and weeks, not months and years. Yet for projects valued above £20m, it takes 6.5 years on average for a contract to be awarded.

4. **To deliver our vision for UK Defence, business as usual is no longer an option**. Through the UK's support to Ukraine, we have seen what effective joint working between the MOD and industry looks like. Processes designed for peacetime have been revolutionised to enable delivery at speed. Defence must now mainstream these practices, transforming acquisition processes and making sure through-life support is considered from the outset.

5. Defence also has **significant untapped potential to be a new engine for growth** at the heart of the UK's economic strategy. It already makes a vital contribution to the UK economy. In 2023/24, the MOD spent c.£29bn with UK industry.[41] Defence exports were valued at £14.5bn in 2023. Defence supports 440,000 jobs across the UK and over 24,000 apprenticeships, with significant economic and social benefit (Figure 4).[42] Yet it can go further.

40 A 'scale-up' company is one that has moved beyond the startup phase, having proven its business model.

41 MOD regional expenditure with industry 2023/24 - GOV.UK.

42 Military apprenticeships starting in 2018/19 delivered a gross economic benefit of around £600m by 2023/24. Measuring the Net Present Value of Further Education in England 2018-19 - GOV.UK.

6. Radical root-and-branch reform of defence procurement—combined with substantial investment in innovation, novel technology, advanced manufacturing, and skills—would grow the productive capacity of the UK economy, ensuring that **Defence investment delivers both for the warfighter and for the economy**.

Figure 4: The nationwide defence industry

7. To succeed, **Defence must be more purposeful in its approach to industry**. It is uniquely positioned to use its buying power to support economic growth, given its significant market size, its ability to purchase at scale through coordinated procurement, and a constantly evolving need for technology. Prioritising UK-based business, Defence should aim high: success should be measured in the number and scale of deep tech suppliers in the UK in areas such as Artificial Intelligence (AI), autonomy, advanced manufacturing, quantum, and space—with high-Intellectual Property (IP) companies delivering leading-edge capabilities for Defence while creating high-skilled, high-paid jobs and driving exports in software, IP, and equipment.

8. **The forthcoming Defence Industrial Strategy provides an important opportunity to drive the necessary radical reform**. It should clearly lay out how the MOD and industry must evolve, with leadership provided within Defence by the new Defence Growth Board[43] and the National Armaments Director (NAD).

Seeding innovation and growth

9. **Defence must embrace its unique market position**—including the power of its role as a 'first customer' for startups—to seed innovation and growth. A more comprehensive and ambitious approach should include:

- **Maximising existing MOD investment in research and development** (R&D)—some £2.6bn in 2023/24.[44] This should be supported by collaboration with the Department for Science, Innovation and Technology (DSIT), Department for Business and Trade, UK Research and Innovation (UKRI), and the Advanced Research and Innovation Agency to ensure taxpayer-funded research supports Defence priority problem sets. Expert science and technology (S&T) and innovation voices must be heard at the top table in MOD to shape the strategic vision for this investment and support its delivery.
- **A concerted effort to unlock private capital and expertise**. Private-sector interest in the defence sector is growing but barriers to private investment remain. Defence must develop better relationships with, and understanding of, the financial services sector. New funding models should be explored to make defence innovators a more attractive proposition for private capital, reduce the cost of finance for defence companies, and increase the ability to pool capital with allies.
- **A cross-government initiative to develop regional clusters**[45] for specific technologies and to stimulate place-based growth, from cyber in Manchester to AI in the North East of England and marine autonomy in Plymouth. The partnership to develop Barrow-in-Furness (Box 6), home to the UK's nuclear deterrent,

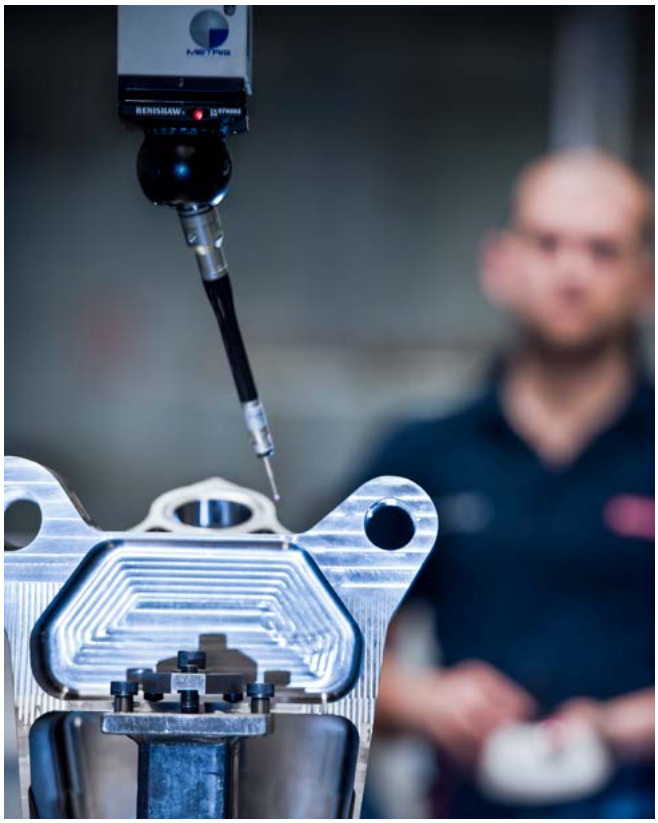
43 Spring Statement 2025, p. 19. The board will co-chaired by the Defence Secretary and Chancellor of the Exchequer.

44 Net expenditure. MOD departmental resources: 2024 – GOV.UK.

45 A regional cluster is a geographical concentration of interconnected businesses, supported by universities and research institutions, built around specialist knowledge, expertise, and experience.

offers a useful model for local-national partnerships that combine national and regional funding and expertise to develop local strengths. Consideration must also be given to the defence industries across the devolved nations—Scotland, Wales, and Northern Ireland—when taking forward these plans.

- **Creating a pipeline of skills and creative talent** that will help Defence and industry to deliver cutting-edge capabilities while developing the foundations for economic growth. The MOD should work with the Department for Education, DSIT (including directly with UKRI), and universities to invest in science, technology, engineering, and mathematics, and other specialist skills.



Box 6: Developing towns and regions through local-national partnership: Barrow-in-Furness

Launched in 2024, the Plan for Barrow recognises the town's critical importance for maintaining the UK's nuclear deterrent. Through more than £200m of government investment over the next ten years, 'Team Barrow'—a partnership between the Government, Westmoreland and Furness Council, and BAE Systems—will address historic underinvestment and high levels of deprivation, helping to regenerate and revitalise the area to the benefit of Defence, the local community, and the local economy.

Team Barrow is a model of cross-government collaboration. Alongside the MOD and the Ministry of Housing, Communities and Local Government, the Departments for Transport, Education, Business and Trade, Work and Pensions, and Health and Social Care are all playing a crucial role through funding or supporting initiatives. These include improved transport connectivity, additional homes and new public spaces, revised education offers, support to local businesses, and plans to alleviate skills shortages.

10. **Delivering this more ambitious approach will require the MOD to set itself up for success internally.** There is a distinct difference between seeding early-stage scientific research (from basic principles to lab testing) and shaping the commercial sector through collaboration and contracts. Success in these two undertakings depends on different ways of working, skills, partners, and networks. Defence must treat them separately, **reorganising existing teams to create two new structures** (Box 7). These teams' agendas should be cohered as core elements of the new National Armaments Director Group, coalescing around thematic and technological missions that in turn align with capability plans and industrial sectors.[46] These new departmental organisations should focus on:

    - **Seeding early-stage scientific research**. A new Defence Research and Evaluation (DRE) organisation—created as an evolution of the current Dstl and Defence Science and Technology teams[47]—should act as a gateway to academia and research institutions across the UK and allied countries, leveraging Government-funded, world-class S&T more effectively to make it worthwhile for universities to invest in long-term capacity- and capability-building.
    - **Harnessing commercial innovation**. A new UK Defence Innovation organisation (announced in March 2025)[48] should provide the mechanism by which Defence quickly finds and then buys innovative commercial products and services from the UK and allied countries, including dual-use technologies. By connecting external innovation with Defence procurement, this organisation should act as an engine for growth in the defence and dual-use technology sectors. It will have a ringfenced annual budget of at least £400m.[49]

> We should be investing in brains, minds, and innovation. You've always got to leverage your strengths
>
> **—Citizens' Panel member, HM Naval Base Portsmouth**

11. Under this revised model for S&T and innovation, the Chief Scientific Adviser (CSA) in the Department of State will continue the essential role of providing science policy guidance and connecting externally with the Government's CSA network, universities, and other scientific institutions. The MOD should routinely draw on the available S&T and innovation expertise to inform procurement decisions.

46 From Technology Readiness Levels 1 to 9, which represent the development stage of technologies, from lab testing of an idea (level 1) through to the technology in use on operations (level 9).

47 The department may wish to retain the Dstl brand for this more focused organisation.

48 Government to turbocharge defence innovation – GOV.UK. The leader of this new organisation should have an appropriate title for external engagement, such as 'Chief Innovation Officer'.

49 Spring Statement 2025, p. 18 – GOV.UK.

Box 7: Finding and steering early-stage research and commercial innovation

The new **Defence Research and Evaluation** organisation should work with academic and research institutions to:

- Design and deliver an early-stage science and technology (S&T) research portfolio with strong programme management, aligned with National Armaments Director priorities, and drawing on consultation with internal and external partners. DRE should share problem sets with academia and research institutions to develop their understanding of the problems facing Defence.
- DRE's internal research should robustly prioritise a small number of national security issues where sovereign ownership and skills are crucial, supported by partnership with one or two universities to develop expertise and talent.[50] The central, dominant effort should be on:
  - Chemical and biological defence.[51] This is the essential and urgent activity.
  - Novel and unconventional weapons systems, including energetic and explosive materials.
  - Counter-terrorism technology and manufacturing, including specialist munitions.
  - Maintenance of unique testing capabilities, such as Porton Down laboratory.[52]

  This potentially requires contributions from other Government departments, given its utility beyond Defence.
- Empower the Scientific Adviser network to ensure evidence-based decision-making and scientific advice is adopted across Defence and work closely with the Front Line Commands under the leadership of the National Armaments Director.
- Enhance allied and NATO scientific efforts, including shaping and participating in international, classified research where this aligns with National Armaments Director priorities.
- Horizon scan for early advancements in S&T that could shape long-term defence capabilities and identify where Government can spur and shape the market through proof-of-concept contracts.
- Revisit key priorities regularly, cutting projects that are not delivering and ensuring headroom in the budget for emerging themes.
- Develop closer relationships across the S&T ecosystem, especially with universities. This should include establishing thematic experts working with universities, the UK Intelligence Community, and others in Government across areas of national priority.

50 Given security requirements, it is likely that only one or two universities or small clusters will provide the relevant training and expertise.

51 The Atomic Weapons Establishment will continue to steward early-stage scientific research on behalf of the Defence Nuclear Enterprise (Chapter 7.1).

52 Porton Down laboratory is an exemplar of Defence's critical, world-leading capabilities, as evidenced by its role in identifying the military-grade nerve agent, Novichok, used by Russia in attempted assassinations in the UK in 2018.

- As a subset of these relationships, forge 'anchor partnerships' with a small set of trusted universities to leverage Government-funded, world-class S&T more effectively, and to make it worthwhile for universities to invest in long-term capability-building. These institutional relationships should be reviewed every five years and adapted to ensure relevance to Defence priorities.

The new **UK Defence Innovation** organisation should shape and draw on external innovation expertise to:

- Find existing full, partial, or 'good enough' commercial solutions, including dual-use technologies—sharing problem sets with industry, not specifications.
- Drive the adoption of innovation by connecting innovators to Defence procurement teams co-located in the National Armaments Director Group and accessing protected funding for rapid commercial exploitation.
- Identify where it could stimulate the market as a 'first customer'.
- Coordinate a significantly streamlined set of innovation hubs (across the Front Line Commands) and innovation challenges (under the Defence and Security Accelerator) in alignment with Defence's priorities and in support of innovation-led startups and scale-ups.
- Be responsible for developing regional clusters and supporting local-national partnerships—using locally based staff to build understanding of local business sectors.
- Build relationships with other Government departments, especially with the Department for Business and Trade and the Department for Science, Innovation and Technology. This should include delivering the Defence Industrial Strategy and 'Scan' activities under the AI Opportunities Action Plan.
- Pivot to 'outcomes-based' partnerships with:
  - Startups, scale-ups, and spinouts, creating the current and next waves of technology products and services.
  - Innovation organisations, private equity, venture capital, and other investors within the UK and NATO member states.

A new partnership with industry

12. Under the NAD's leadership and the forthcoming Defence Industrial Strategy, Defence must overhaul its acquisition processes to improve productivity and **create a new partnership with industry**, moving away from the customer-vendor relationship and creating the conditions under which high-IP companies can scale and grow. This requires a more intelligent approach:

    - Engaging industry early in the procurement process on desired outcomes and problem-solving.
    - Ensuring that suppliers are rewarded for their productivity and for taking greater risk in their investments.
    - Removing barriers to collaboration, especially for smaller companies.

13. At the heart of this partnership should be a **segmented approach to procurement**[53] (Figure 5) that builds on the Integrated Procurement Model[54] and recent changes to the Defence Equipment & Support Operating Model. Segmentation would increase the range of suppliers available to Defence by tailoring processes and timelines to the type of acquisition, supplier, and risk involved. Protecting the budget for rapid commercial exploitation (the third segment) would ensure that high-tempo innovation is not squeezed out by investment in major platforms, more reliably unlocking private finance.[55] Commercial practices must be updated through routine use of more flexible, evergreen contracts.[56] Routine access to digital twins[57] and predictive models (simulations) would also reduce the time from concept to delivery.

14. **Service-agnostic capability portfolios** that pool funding and expertise for technology areas would further support agile procurement and embed common standards across the Integrated Force. In-year funding flexibility would allow the NAD to move resources where they were most needed within a portfolio. The costs and processes for both acquisition and through-life support should be incorporated into each portfolio to ensure affordability and improve readiness.

53 Announced by the Chancellor of the Exchequer in March 2025. Spring Statement 2025, p. 36 – GOV.UK.

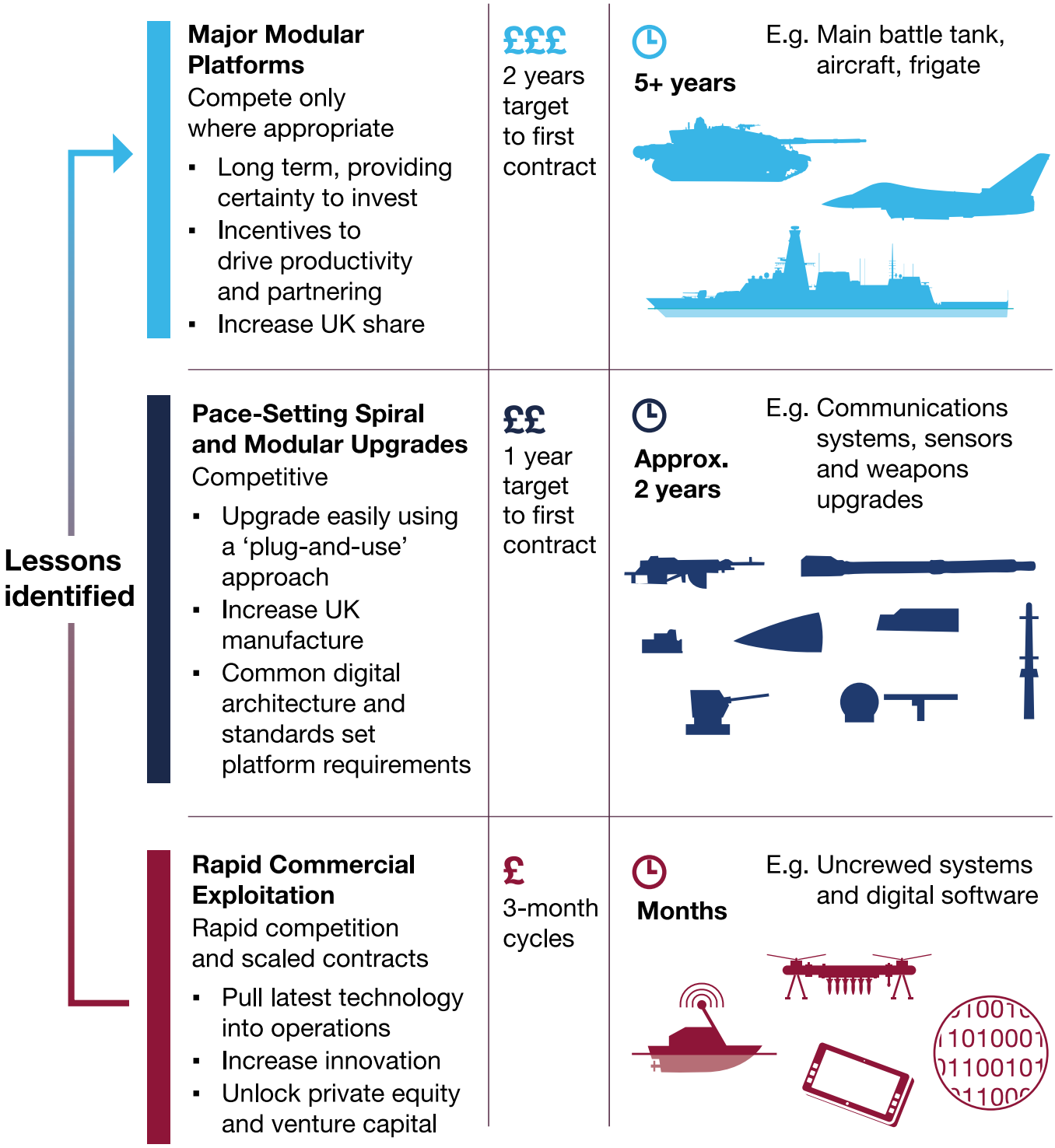
54 The Integrated Procurement Model – GOV.UK, launched in April 2024, seeks to accelerate the delivery of military capability across the Armed Forces.

55 Acquisition processes for the 'rapid commercial exploitation' segment should build on the experience of the Future Capability Team in Defence Equipment & Support.

56 An 'evergreen' contract automatically renews itself after the deadline or expiration date. For software procurement, the Commercial X approach—using a new framework to accelerate procurement for micro or small business—could be scaled up to enable a faster cycle of testing and development before buying at scale.

57 A digital twin is a virtual representation of an object or system that accurately reflects the physical object. It is updated using real-time data. The digital twins, models, and data should adhere to standards defined by the MOD's Chief Information Officer (Chapter 4.1).

Figure 5: Market segmentation for smarter procurement



Bolstering exports and capability partnerships

15. **If we fight together, we should build together**. It is no longer affordable for NATO Allies, especially within Europe, to develop their own exquisite capabilities at low production volumes. The existence of more than 165 land platforms across NATO illustrates the scale of the problem. Defence exports and international capability partnerships—such as AUKUS and the Global Combat Air Programme (Box 8)—provide a potential solution, offering economies of scale and mass, new paths to innovation and economic growth, interoperability with allies, and a stronger collective defence industrial base. They underpin the UK's relationships and ultimately strengthen collective security (Chapter 5).

16. **Exports and capability partnerships must be considered in procurement decisions from the outset**. A new approach to exports will drive the UK's market share, boost capabilities, and strengthen growth. Most importantly, it will underpin the long-term health of the defence sector. Defence exports are about more than just trade undertaken by private companies. Success is based on long-term relationships between Governments and militaries. The MOD must once again assume responsibility for developing both the capabilities for export and the relationships that underpin them. To enhance export opportunities, the UK should develop a new framework for an enhanced government-to-government mechanism alongside ongoing, post-sale military-to-military collaboration. The National Armaments Director must have the ability to increase coordination and collaboration with allies (in and outside NATO), including through agreeing common standards and greater collaboration on R&D.

Box 8: International collaboration in action: AUKUS and the Global Combat Air Programme (GCAP)

AUKUS and GCAP will deliver next-generation capabilities for the UK Armed Forces through collaboration with close allies. Under AUKUS, Australia, the UK, and the US will develop conventionally armed, nuclear-powered submarines that are interchangeable, as well as advanced technologies such as Artificial Intelligence, autonomous systems, cyber, hypersonic missiles, and underwater warfare. Under GCAP, Italy, Japan, and the UK will develop a sixth-generation aircraft—part of the Future Combat Air System, comprising crewed aircraft, uncrewed platforms, next-generation weapons, networks, and data-sharing.

But these programmes deliver more than cutting-edge military capabilities. It is estimated that, at its peak, the AUKUS attack submarine programme will have more than 21,000 people working on it at UK sites, with the work generating an additional 7,000 skilled roles. The AUKUS nations' ITAR exemption and reciprocal export control arrangements by the UK and Australia have had a beneficial impact in enabling allies to collaborate. GCAP supports over 3,500 UK jobs, sustaining a skilled workforce for the UK's combat air industry.

Robust prioritisation in acquisition decisions

17. **A robust Balance of Investments (BOI) process is vital if the MOD is to prioritise capabilities for acquisition effectively**, making trade-offs between departmental objectives. To ensure the new Defence Investment Plan (the successor to the Equipment Plan) is genuinely affordable, the BOI process should consider associated costs—for example, through-life upgrades, acquisition and support, and attendant changes to infrastructure. When assessing potential investments, the Secretary of State must have access to assured data as well as detailed analysis of through-life costings and the affordability of the proposed capability within the overall Defence portfolio. Authority for deletions from the programme should rest with the National Armaments Director in conjunction with the Service Chiefs, providing combined advice to the Secretary of State.

Recommendations:

6. To boost private investment in the defence and dual-use technology sectors, and to support new entrants and innovation, the MOD should develop a dedicated strategy for the financial services sector by March 2026. Important starting points include: establishing a Defence Investors' Advisory Group whose membership includes venture capital and private equity investors; and exploring alternative funding and financing models for Defence programmes and projects.
7. By December 2025, the MOD should establish a revitalised system for science and technology and innovation that more directly responds to the annual problem set provided by the MSHQ to the National Armaments Director (NAD). The MOD should reorganise existing structures into two new organisations under the National Armaments Director Group:
    - A Defence Research and Evaluation organisation, focused on enabling external early-stage research. Highly expert Defence researchers should serve as affiliated faculty to partner universities, starting in the 2026–27 academic year.
    - The UK Defence Innovation organisation, focused on harnessing commercial innovation, including dual-use technologies.

    These two organisations should work in collaboration with the Chief Scientific Adviser. The NAD should set ambitious targets for pull through and scaling, reporting quarterly to the Secretary of State on these efforts.

Recommendations:

8. The MOD must establish a new partnership with industry that maximises internal and industrial expertise, accelerates acquisition processes, manages risk and cost, and engages a wider set of suppliers. Greater agility and productivity should be delivered through service-agnostic capability portfolios and a segmented approach to procurement:
    - Major modular platforms (contracting within two years).
    - Pace-setting spiral and modular upgrades (contracting within a year).
    - Rapid commercial exploitation (contracting within three months). This segment should benefit from protected funding, with at least 10% of the MOD's equipment procurement budget spent on novel technologies each year.[58]

    This new approach to market segmentation and capability portfolios should be established by March 2026.
9. To ensure long-term accountability for delivery:
    - Two productivity Key Performance Indicators should be agreed for the National Armaments Director—one focused on departmental productivity (for which accountability should be shared with the Chief of the Defence Staff), and one externally focused on supply chain productivity.
    - Senior Responsible Owners of service-agnostic capability portfolios and acquisition programmes for major modular platforms should remain in post for at least five years, without disadvantage to promotion.
10. By April 2026, the MOD should develop a package of support for its industrial partners that removes barriers to collaboration and drives better, more cost-effective results: reducing by at least 50% the burden of Defence Standards and Conditions; working across Government to amend the Single Source Contract Regulations; reforming regulations, Intellectual Property handling, and security clearance requirements; and providing access to intelligence, data, and test and evaluation sites.
11. The MOD should establish a mechanism for assessing the full implications of largescale capability partnerships with allies, including in NATO. This should be supported by a multilateral capability plan with NATO Allies that identifies capabilities for joint procurement, agrees common standards, and drives interoperability. Delivery would be enhanced by mutual recognition of well-founded test and evaluation regimes across the Alliance, saving time and money.

58 Spring Statement 2025, p. 18 – GOV.UK.

Recommendations:

12. The UK must establish the necessary conditions for boosting defence exports and joint capability partnerships under the leadership of the National Armaments Director. This should include:
    - Clear governance, accountability, and streamlined processes. Responsibility for UK Defence and Security Exports should be transferred from the Department for Business and Trade to the MOD. The MOD should coordinate with other relevant departments to achieve its export goals.
    - A new framework for building and sustaining government-to-government relationships, including through ongoing military-to-military collaboration, with a view to delivering export opportunities for UK businesses.
    - A review of export licensing policies. This should include considering how to improve prioritisation and provide clarity to industry and international partners.
13. The MOD must have a robust Balance of Investment process in which the Secretary of State has access to detailed analysis of through-life costings and the affordability of the proposed capability within the overall Defence portfolio. To support this:
    - The MOD's Cost Assurance and Analysis Service must have 'open book' access to data and the authority and independence to provide regular advice to Ministers, including on overall budget affordability.
    - The MOD must digitise acquisition and support processes as soon as funding allows.

4.3 'One Defence': People, Training, and Education

1. **People are fundamental to UK Defence and to delivering the transformation set out in this Review**. Defence has, in many ways, a good offer: compelling starting salaries, purposeful work, skills training and education, prestige, and the opportunity to see the world. The Armed Forces are rightly respected for their skill, professionalism, and dedication worldwide. At a time when strategic depth in the Defence workforce is increasingly important to deterrence, it must now meet the longstanding challenge of recruiting and retaining new generations with different requirements—a challenge shared by many UK allies and partners. Defence must also free its workforce from the red tape and risk aversion that inhibits action at all levels of the organisation.

2. Initiatives underway within the MOD are an important start in addressing these challenges. To succeed, however, **Defence must be more radical in unleashing innovation and productivity in pursuit of its central purpose**: to deter through being ready to fight and win wars. This chapter takes existing initiatives as its starting point. Its recommendations are aligned with the goals of the 2023 Haythornthwaite Review[59] but are the priority for catalytic change in creating a 'One Defence' approach to people, training, and education.

High-level workforce planning and development

3. Defence needs a dynamic 'blend' of Regulars, Reserves, and civil servants to give it the mix of skills, experience, and strategic depth required for the threats of this era. This blend will need to evolve over time as threats, warfare, and technology evolve. This demands high-level workforce planning and development in support of Defence outcomes that is **'whole force'**, **outcome-focused, and skills-based**: putting the right people in the right roles and using the range of tools available to meet changing need, including through recruitment and retention efforts, greater harnessing of industry skills in select areas, and a focused training and education offer.

4. To fulfil the roles set out in this Review, **there is no scope for reducing the number of highly trained and equipped Regulars across all three Services**, even as the forces move to a much greater emphasis on autonomy (Chapter 7). Increasing the total number of Regular personnel should be prioritised when funding allows, likely in the next Parliament. Care and attention must be given to roles occupied by Regulars away from the front line. They deliver these roles with pride and skill but it potentially weakens UK fighting strength, allowing operational skills and training to atrophy.

59 'Agency and agility: Incentivising people in a new era', 2023 – GOV.UK.

5. **The diversity of knowledge, skills, experience, and behaviours that Reserves bring from their outside jobs are an invaluable strength**. We anticipate it will become necessary to increase the UK's Active Reserve forces by at least 20% when funding allows, most likely in the 2030s. In the meantime, to restore mass and resilience in a crisis, Defence must make much better use of the resources available by urgently reinvigorating how it engages with the Strategic Reserve (ex-Regulars who have a mobilisation obligation, Chapter 6) and improving recruitment and retention within the Active Reserves. We support the MOD's work to simplify the structures and types of Reserves, amplify the visibility and recognition of their roles, and make it easier to scale specialist skills and mobilise them en masse if required. To support this work, the department should:

   - Better publicise the 'specialist' roles available in the Reserves (such as lawyers, engineers, and cyber specialists) and ensure their capability, skills, and advice are made available to the whole workforce.
   - Protect time, funding, and equipment for Reserves in the training programme, gaining efficiencies and scale by aligning Regular and Reserve specialisations and roles.

6. **Civil servants are central to Defence outcomes and must be treated as such**. Defence must invest with purpose in the Civil Service it needs—reshaping the workforce with a focus on performance, productivity, and skills. The genuinely integrated nature of the military and civilian workforce is a significant advantage and must not be lost.

7. The opportunity and need to improve productivity and efficiency cannot be ignored, however.[60] MOD Civil Service costs should be reduced by at least 10% by 2030. **Accelerating efforts to harness Artificial Intelligence (AI), automation, and augmentation technology** would enable military personnel (some 5,000) and civil servants in roles in Human Resources, Finance, and Commercial functions to move into front-line roles and reduce administrative costs. This will result in a smaller Defence Civil Service over time but the focus should be on productivity, not headcount.

8. Additionally, conducting a baseline review of all Head Office and Staff Headquarters roles would identify which substantially benefit from being undertaken by military personnel, with a view to releasing a significant number to operational roles (in line with the approach taken by allies and partners). Service Leavers, employed as Reserves or civil servants, are a suitable substitute in the limited areas where military experience is required and where the use of technology is not an option.

Fixing recruitment and retention

9. The MOD faces a longstanding recruitment and retention crisis. Young people today want different things from their employers, including more flexibility and hybrid working. They expect to change jobs multiple times throughout their careers. Critically, they also have fewer connections to the Armed Forces. There is no quick fix to these challenges.

60 The Government has committed all departments to reducing their administrative budgets by 15% by the end of the decade. Spring Statement 2025, p. 25 – GOV.UK.

10. **Long-term success depends on reconnecting society with the Armed Forces and the purpose of Defence**, supported by a Government-led national conversation (Chapter 6). The work of the Office for Veterans' Affairs is key to connecting positively with society and recruiting the next generation, through setting veterans up for success. This should be supported by targeted interventions in recruitment and retention, focusing on initiatives that have the greatest impact and that attract the widest possible range of talent.

11. **For recruitment, the focus should be on speed**, drastically shortening the period between applicants expressing interest and joining. A more modern, accommodating approach is required, including through: more flexible medical and fitness standards, reducing the number of pre-existing conditions that are a barrier to entry; and shorter commitments that give people a flavour of military careers, offering them a route in while building skills and experience they can take with them for life. The Australian military's 'gap years' offers an exciting model from which to learn.

> I was impressed the most by the people that we've met—the professionalism, dedication, the passion, and the excitement they've portrayed to us
>
> **—Citizens' Panel member, HM Naval Base Portsmouth**

12. **To improve retention, the MOD must prioritise delivering its 'flexible working' initiative**, enabling military personnel to dial their commitment up and down throughout their career—a major shift from current practice. Where accommodation falls well short of the standard required, it must be rapidly improved (Chapter 7.11). Providing support towards home ownership (paid off through return of service and in line with costs for service accommodation) should also be explored. Policies that support families—including flexible working and greater stability in location and postings—should be embraced.

13. In the event of Defence returning to enduring deployments at scale, pastoral, practical, and financial support for families will be fundamental to personnel retention and should be accounted for in operational planning.

A culture of empowerment

14. **To drive innovation and productivity, Defence people must be empowered to deliver**, cutting through bureaucracy and addressing risk aversion. 'People' policies must be revised on the principle of trust. Line managers must be encouraged to use common-sense judgement within a prescribed framework, rather than codifying strict entitlements in thousands of pages of policy. Technology must also play a role, including in improving counter-fraud detection (as in other Government departments and the private sector).

15. **Success relies on creating an environment in which all people can develop and deliver**. Defence leadership must do much more to root out behaviour that is unacceptable and counterproductive in the workplace: creating an environment in which victims are supported and feel willing and able to report wrongdoing; and fulfilling its duty of care to those accused of wrongdoing while allegations are investigated. Where wrongdoing is proven, there must be zero tolerance: those who cannot change their behaviour should be dismissed—and this must be widely noticed to have an effect. We welcome the legislation to create an Armed Forces Commissioner to improve Service life—as a direct point of contact for Armed Forces personnel and their families—and the new Tri-Service complaints unit for the Armed Forces.[61]

16. Defence will not get to the heart of the problem unless the workforce becomes more representative of society, **harnessing all talents to deliver the strongest possible workforce**.[62] The MOD must take a data-led approach to understand and address the systemic behavioural, structural, and leadership problems that currently prevent people from progressing within, and delivering for, Defence. Work currently driven in single Service siloes must be brought together to make the most of good ideas. Sustained focus by Ministers and the Defence Board is needed, as well as powerful, independent oversight of delivery, accountable to the Secretary of State.

An adaptive training and education system

17. The Defence training and education system is in many respects highly effective and well regarded. Institutions such as the Royal College of Defence Studies and the military academies and colleges are leaders in their field. They continually attract the next global leaders of defence and national security, underpinning alliances and partnerships. Educational centres such as the Defence Academy offer the opportunity for military personnel to learn alongside civil servants and industry representatives, and to develop technical skills and technological expertise.

61 Fundamental changes to Armed Forces processes to better support Women in UK Defence – GOV.UK, 18 March 2025.

62 For example, women make up only 12% of Regular personnel.

18. **Defence training and education should be designed to deliver innovation at speed**, given this is the difference between victory and failure in war. Its design should also ensure **Defence trains how it will fight**, with provision based on the following principles:

    - **'Whole force by default'** to develop a shared culture and credible warfighting capability. Where activity can be delivered by and for 'One Defence' it should be, with single Service provision only where domain expertise is paramount.
    - **NATO First**, using NATO's exercise programme, doctrine, and planning process as the basis for UK training and education. Where there is a valid argument for exceptionalism, the UK should seek to influence NATO to adopt its own approach (noting that the UK already does more than any other Ally to develop and maintain joint doctrine).
    - **Adapts at pace of changing warfare and technology**, applying innovations and lessons from operations to education, doctrine, and concepts. Current policy[63] is not geared to truly innovative training approaches, instead driving risk-averse behaviours and levels of assurance. Addressing this is a **key component of delivering the innovation cycle** (Chapter 4).

19. **Training policy must ensure sensible, managed risks can be taken in military training**, so that they are not unduly taken on the battlefield instead, reversing a recent trend towards safety at all costs. Validation testing must be used to prepare the commander to win, incentivising learning through mistakes. Using NATO-validated standards by default[64] would free up national training and exercising to be much more experimental by reducing the need for multiple validations. Supplementing live training with virtual training environments would also offer greater opportunities for Regulars and Reserves to learn, as well as other benefits such as the ability to test concepts, undertake mission rehearsal, advance UK and NATO integration, and increase export opportunities.

20. **Defence should only run training and education itself when it cannot be obtained externally at suitable quality and cost**. Further Education colleges offer potential, while strategic, outcomes-based partnerships with universities should bring cutting-edge research into training and education. This shift in approach would be aided by **adopting civilian qualifications and standards where there is a suitable equivalent in common use**—for example, for air traffic controllers or paramedics—supplementing them with military qualifications only where necessary. This would improve skills development and the entire people ecosystem: recruitment and retention; employment for veterans; zig-zag careers between Defence and other sectors; integration with industry; and mobilisation of the Reserves in the event of war.

63 JSP 822 – Defence Direction and Guidance for Training and Education

64 Rather than NATO-accredited validation, which will not always be necessary or available.

Foundational skills for the Integrated Force

21. **Constant innovation across Defence must be supported by an agile approach to skills development within the whole force**. Defence must press on in rolling out a simple but effective 'Pan-Defence Skills Framework',[65] using it to link workforce planning to Defence outcomes (such as improved readiness) and to enable career mobility. Extending the Framework to industrial partners (incentivised through commercial processes) and the Strategic and Active Reserves would enable the MOD to understand where skills are available in the supply chain, where Defence carries risk, and where there are solutions.

22. **Some skills are foundational to warfighting and the modern workplace**, essential to implementing the innovation cycle and becoming a more intelligent partner to industry. Defence must invest in the following key skills across the whole force as a matter of urgency:

- **Leadership**, which must be taught, trained, exercised, and rewarded throughout the system. This is about creating leaders that adapt, enable their teams, and reimagine the organisation, including using AI and digital technologies.
- **Financial, commercial, and programme management**, including in commissioning and contract and service management. The pursuit of professional qualifications should be encouraged.
- **Cyber**, ensuring all personnel are aware of growing cyber risks and equipped to take essential measures.
- **Digital, AI, and data skills**, of which there is a persistent shortage but an opportunity to lead in NATO if Defence gets this right. The whole workforce must be equipped with the essential skills required. The need for more specialist skills should be addressed through the creation of a Digital Warfighter group (Chapter 4.1).

65 A new 'whole force' approach to identifying, defining, and managing the skills of Defence people and their associated roles.

Recommendations:

14. The MOD must take a ‘whole force’, skills-based approach to workforce planning to deliver Defence outcomes and meet the evolving requirements of the Integrated Force over time. In the current strategic and fiscal situation:
    - There should be no further reduction in the number of Regulars across the three Services.
    - The number of Active Reserves should be increased by 20% when funding allows.
    - Civil Service costs should be reduced by at least 10% by 2030.

    For a truly ‘One Defence’ workforce, the Reserves and civil servants should have protected access to the necessary funding, time, and equipment for training alongside Regulars. To maximise existing resources, the MOD should seek to move all Regular personnel from administrative into front-line roles and should automate at least 20% of Human Resources, Finance, and Commercial functions by July 2028. This should be delivered as a minimum first step.
15. To create a workplace where all are empowered to deliver, the MOD must:
    - Remove the red tape and excessive bureaucracy created by ‘people’ policy, process, and assurance. It should rewrite its ‘people’ policies in accordance with the principle of trust, starting with the top ten by May 2026. Technology should be used to make day-to-day processes such as claiming expenses and auditing easier, with positive and efficient user experience a key criterion.
    - Develop a plan to prioritise and address the structural, behavioural, and leadership barriers to the creation of a more representative and meritocratic workforce that resolutely delivers a more capable warfighting and deterrent force. This plan should be established by June 2026. Recommendations for independent oversight of implementation should be made by October 2025.
16. Defence must offer novel ways of entry into the Armed Forces that attract more people from a wider range of backgrounds, submitting a plan with timelines for delivery to the Secretary of State by November 2025. Options include:
    - Offering shorter commitments that appeal to more of society, including the MOD’s forthcoming plans for ‘gap years’.
    - Developing a series of Tri-Service ‘phase 0’ camps to which applicants can report within 30 days of expressing initial interest, with suitable recruits offered roles at the camps’ conclusion.
    - Applying medical standards that are tailored to role types, accounting for advancements in medical treatments and reflecting shorter assumed periods of service. Terms and conditions can be changed to move liability for some pre-existing conditions to the applicant, thereby enabling many more who want to join on those terms to do so.

Recommendations:

17. To aid retention, Defence should explore options to support Service personnel's aspirations for home ownership. This would strengthen the bond between those that serve and the communities that support them. It should be accompanied by an approach that reduces the frequency with which people must move to new locations if that is their preference, staying in roles longer or moving to roles in the same location.

18. To meet the changing needs of the Integrated Force, education must be 'whole force by default, single Service by exception'. By the end of 2026, Defence must establish a career education pathway for the whole force—Regulars, Reserves, and Civil Service—designed to respond to the changing ways of warfare over time and with NATO at its heart. To drive integration, the MSHQ should:
    - Oversee which personnel undertake key courses at each stage of the education pathway.
    - Direct the delivery of staff training from the Initial Staff Course up, with single Service input.
    - Provide the required integrated elements of single Service courses.
    - Own the funding for joint education to remove the incentives for single Services to 'opt out'.

19. Training and education must be adaptive to operational lessons, innovation, and research. The MOD must rewrite the relevant policy by January 2026, empowering those who deliver training to revise courses at speed and consulting them in the policy's design. The department should also:
    - Develop a single virtual training environment that is integrated into Defence's common digital architecture, drawing on existing resources where this is beneficial. Procurement programmes must embed a requirement for a synthetic wrap and virtual training that is good enough to reduce reliance on live training.
    - Adopt civilian qualifications and standards where possible and use civilian providers for education and training where it is available at a similar cost or less. A review of current standards, qualifications, and in-house training should be completed by the end of 2025. Where there are significant barriers to progress, the MOD should work with the Department for Education, other relevant Government departments, and industry to develop a plan to overcome them.

20. Defence must invest in foundational leadership, financial, commercial, and technology skills across the civilian and military workforce. This should include: the flexibility to reward the development of expertise in specialist areas, including through pay and promotion freedoms; and developing a two-way secondment programme with a focus on short-term, informal schemes that are effective and can be delivered quickly. A plan for delivery should be developed by March 2026.

5. Allies and Partners

1. **Alliances and partnerships are the bedrock of global stability and are even more important to the UK in the context of growing risk and uncertainty** (Chapter 2). They are essential to the Integrated Force and the ability to deter, fight, and win: delivering combined strength through interoperability; pooling financial and technological resources to innovate, with military and economic benefits; building industrial and supply chain resilience; and mitigating geographical disadvantages.

2. **The UK should bolster collective security by actively investing in these relationships**, taking as its starting point the relationships set out in the next section ('Defence's Global Relationships') as well as the UK's membership of international bodies such as the UN Security Council, the Group of 7 (G7), and NATO. Defence has a lot to offer, from the operational capabilities of its Armed Forces to its professional military education establishments. These efforts should be coordinated with other departments, most notably the Foreign, Commonwealth and Development Office (FCDO), to maximise Defence's unique and powerful contribution to the Government's ambitions and approach to international relations. **Finite resources mean the UK cannot be everything to everyone. Defence will need to prioritise its approach**, informed by the roles outlined in Chapter 3 and using the full range of levers available to it.

The United States of America

3. The **United States of America** (US) is the UK's closest defence and security ally, reflecting a longstanding and common interest in contributing to global security in this era of strategic competition. The US is facing a major strategic challenge, with two near-peer nuclear competitors in the form of China and Russia. The UK should work with it to **maximise the relationship's potential as a force multiplier in renewing deterrence**: modernising their respective military forces; leveraging the UK's niche capabilities and overseas bases; connecting the Euro-Atlantic with key allies in the Indo-Pacific to strengthen collective security in both regions; and building collective defence industrial capacity.

4. **There is enormous potential for expanding industrial and technological collaboration with the US in particular**. Bilateral technology collaboration is already unmatched, with the UK participating in more US-led technology projects for military advantage than any other country.[66] Defence should explore how to boost the mutual benefits of this investment, developing deeper collaboration in areas such as autonomy, Artificial Intelligence (AI), electromagnetic warfare, modelling, and simulation. **An important channel for this is AUKUS**, which provides a singular opportunity to develop military advantage and thriving innovation and industrial bases with close allies.

NATO Allies in Europe

5. Greater political and military leadership by European Allies within NATO is the best way to meet the challenge posed by Russia. In support of the UK's NATO First approach, **bilateral agreements with Allies in Europe are a particularly powerful tool** through which to create strategic depth, strengthening the Alliance and stability in the Euro-Atlantic:

66 The UK contributes to more US Coalition Warfare projects and Foreign Comparative Testing with the US than other countries, in addition to a broad portfolio of multilateral and bilateral technology programmes.

- The MOD should build on the 2010 Lancaster House Treaties[67] with **France** and the landmark 2024 Trinity House Agreement[68] with **Germany** as the basis for increasingly close co-operation: developing shared outlook, cutting-edge capabilities, burden-sharing arrangements, and industrial capacity and growth.
- The new UK-**Poland** Treaty will provide the basis for an even closer relationship, with the two countries working together to bolster NATO's Eastern Flank, tackle disinformation and hybrid military threats, and with defence industrial cooperation anchored in air defence and complex weapons cooperation, as well as the export of Type 31 (Arrowhead) frigates to Poland.
- The negotiation of a new defence agreement with **Norway**, building on the 2024 Joint Declaration on the Norwegian-UK Strategic Partnership, offers potential for enhancing bilateral interoperability on NATO's Northern Flank, as well as cooperation on protecting critical undersea infrastructure and countering hybrid threats.
- The UK should continue to deepen and adapt its relationship with **Italy**—a crucial bilateral partner on NATO's Southern Flank and contributor to security in the Mediterranean—through the Global Combat Air Programme, conducted jointly with Japan, and deepening interoperability between the two countries' Carrier Strike Groups.

67 Lancaster House Treaties – GOV.UK.

68 Trinity House Agreement – GOV.UK.

- **Turkey** remains a key NATO and bilateral Ally for the UK, with strong military integration and defence industrial collaboration. As an influential G20 member located at the crossroads between the Black Sea, the Caucasus, the Middle East, and Africa, Turkey is imperative to UK security interests across Europe and on NATO's flanks.

6. **Minilateral action with Allies—especially with the E3, E5, and Joint Expeditionary Force (JEF)—should also be used to bolster European security**. Defence should continue working with its Allies to develop the JEF as a capable and willing coalition committed to improving NATO's deterrence posture in Northern Europe and the High North. The goal should be to generate and embed new approaches to collective deterrence within the Alliance. The UK should also consider building relationships with allies with interests or capabilities that could add value to UK Defence and where the UK has a credible offer to make, such as with Black Sea NATO Allies.

7. To complement the UK's NATO First approach and enhance cooperation between NATO and the European Union (EU), **the MOD should support implementation of the UK's Security and Defence Partnership with the EU**. The EU is a defence and security actor of increasing significance, whose unique regulatory and financial levers can complement NATO's role as the primary guarantor of European security—as demonstrated by the European Commission's recent proposals for the rearmament of EU member states.[69]

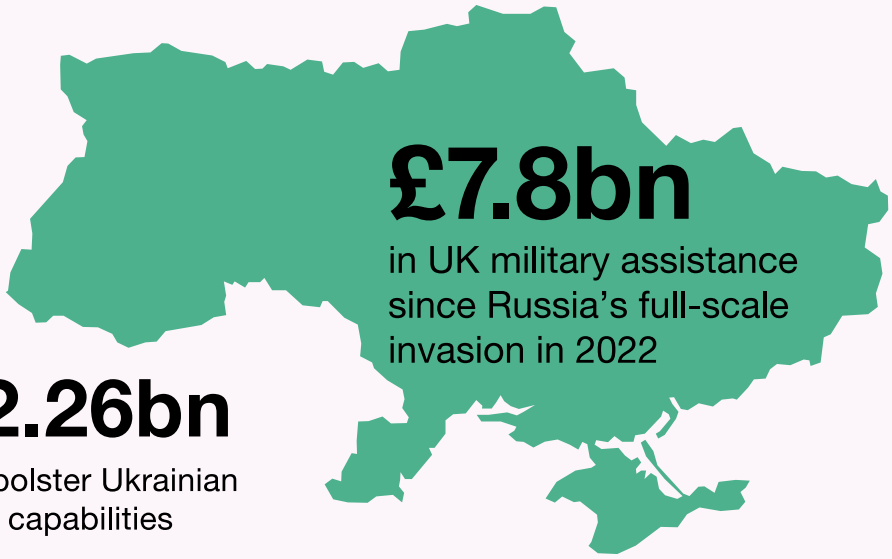
Ukraine

8. This is **a once-in-a-generation inflection point for collective security in Europe**: securing a durable political settlement in Ukraine that safeguards its sovereignty, territorial integrity, and future security is essential to deter Russia from further aggression across the region. The UK is doubling down on its support to Ukraine, stepping up its international leadership, and sustaining its unprecedented commitment of £3bn in military support to Ukraine every year for as long as it takes (Figure 6).

9. The UK should explore further ways to sustain Ukraine's defence industrial capacity and its security—for example, by increasing joint ventures between the UK and Ukraine's defence industries and, once the immediate conflict is over, supporting Ukraine in accessing new markets for its defence industry, including for servicing and modernising legacy Soviet equipment in use by third countries. **Defence should also learn from Ukraine's extraordinary experience in land warfare, drone, and hybrid conflict** in developing its own modern approach to warfighting.

69 European Commission, 'Press statement by President von der Leyen on the defence package', 4 March 2025; Joint White Paper for European Defence Readiness 2030, March 2025.

Figure 6: UK support to Ukraine since Russia's full-scale invasion in 2022



£7.8bn
in UK military assistance since Russia's full-scale invasion in 2022

+£2.26bn
loan to bolster Ukrainian defence capabilities

£1.5bn+
contributed to the International Fund for Ukraine to fund critical capabilities

55,000+
Ukraine personnel trained in the UK under Operation INTERFLEX

Approx. 400
capabilities delivered to Ukraine including through rapid procurement with defence industry

20+
types of equipment including bespoke air defence, electromagnetic warfare, and anti-armour systems

Beyond the Euro-Atlantic

10. Defence must work bilaterally and through NATO to **bolster the capabilities of its allies and partners in other theatres of importance to the UK**, notably the Middle East and the Indo-Pacific. This involves a combination of security assistance, capability partnerships, and trade. The UK's offer should:

- **Focus Defence investment in those relationships that offer the greatest strategic advantage** without detracting from deterrence efforts, warfighting, and capability development in the Euro-Atlantic.
- Be the **partner of choice for exports and capability partnerships** (Chapter 4.2) to develop next-generation capabilities, bolster resilience in production capacity, and secure supply chains.

- Draw on cross-government and external expertise, especially in academia and industry. This includes using **small, flexible teams of military and/or civilian technical experts** to support partners in specialist areas such as cyber, space, intelligence, and counter-hybrid warfare without diverting operational personnel.
- **Use impactful but low-cost activities that offer a 'spread bet'** against unpredictable future developments by maintaining understanding of partner countries and global complexities. Examples include high-level ministerial engagements, intelligence-sharing, export opportunities, training and education offers, and technology collaboration. There is great value in investing in even the thinnest web of wider relationships so that the UK can draw on existing collaboration and partnerships as circumstances change, supplementing the deeper and more focused relationships set out in this chapter.

11. The UK should build on its relationships in the **Middle East**, bolstering security and developing long-term trade opportunities and technology and capability partnerships across the region to further economic growth. The Middle East is significant to UK security and prosperity due to its position as an artery of global trade and its role in global energy supplies. The UK's footprint in the region and increased investment in strategic defence partnerships supports the Government's economic growth agenda. UK trade with members of the Gulf Cooperation Council (GCC)[70] is currently valued at £57bn a year and the region accounts for over £5bn in defence exports each year—the single largest UK market.

70 Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates.

12. The **Indo-Pacific** is strategically important to the UK as a global economic and political powerhouse and arena of increasing geopolitical tension. Growing Chinese assertiveness is a key driver of regional and global instability. In particular, China's military exercises around Taiwan risk dangerous escalation in the Taiwan Strait, while its aggressive actions are fuelling tension in the South China Sea. Defence can contribute to wider Government efforts to defend and shape international rules and norms in the region through **strengthening regional partners and protecting freedom of navigation**. It should maintain military-to-military channels of communication with China to deepen mutual understanding and avoid miscalculation and inadvertent escalation in the event of a crisis.

13. **AUKUS**, with Australia and the US, and the **Global Combat Air Programme**, with Japan and Italy, **are flagship examples of capability partnerships that strengthen allies and collective security** in both the Euro-Atlantic and Indo-Pacific—a powerful signal of the UK's ambition to bring partners from different geographic regions closer together. Bolstered by joint military exercises, these partnerships send strong deterrent messages to adversaries by delivering transformative technology for modern, high-intensity warfighting. They also drive innovation and export opportunities for all countries involved. **The UK must make every effort to ensure these two partnerships are exemplars of successful capability collaboration**.

14. **Defence should continue to invest in the Five Power Defence Arrangements** with Australia, Malaysia, New Zealand, and Singapore to promote cooperation and interoperability in the region. Ministerial engagements and defence activity should be used to enhance export opportunities. UK activity in the Indo-Pacific and around the world must **continue to be underpinned by the Five Eyes intelligence alliance**—a critical element in the defence and security of its five members since the Second World War. Defence should work with partners across Government to support the Five Eyes' role in tackling current and future threats, including through intelligence-sharing, capability development, and operational coordination.

15. To ensure maximum effect within limited resources, the UK must pursue **improved burden-sharing with European partners in the Indo-Pacific**, identifying where and how the UK can most effectively contribute to security and stability in the region.

Building relationships through the UK's global network

16. **The UK's global network serves an important purpose in delivering Defence's core roles** (Chapter 3). Defence must build and sustain relationships to enhance its understanding of regional and global dynamics and to mitigate risks. To develop these relationships and protect UK interests, Defence should use the full range of levers available, which should be set out in a new Defence Diplomacy Strategy.

17. We support the ongoing work to create a single **Integrated Global Defence Network** (IGDN, incorporated

into Figure 7),[71] consolidating Defence's overseas network (people, places, technology) under one command and giving Defence greater agility and reach. The network must be managed in a way that delivers the most significant and meaningful effect in achieving UK and Defence goals.

18. The **UK's Overseas Bases** remain a critical element of the IGDN in defending UK sovereign territory, shaping UK interests, supporting global crisis response, and enabling enduring relationships and cooperation between the UK and partner nations.[72] As circumstances and technology change, it is important to adapt the bases to ensure they are sized for purpose and safe and secure to operate while meeting the commitment to defending UK sovereign territory. Many of these Overseas Bases are located in UK Overseas Territories, which support a wide range of security capabilities. Sovereignty over the Territories must be protected against all challenges so that, for those who live in the Territories as British nationals, their right of self-determination is upheld. This includes:

    - Maintaining a defensive military posture in the Falkland Islands, South Georgia and the South Sandwich Islands, and other British interests, including upholding the Antarctic Treaty system.
    - Maintaining the UK military presence in Gibraltar, including for maritime force protection operations, upholding the sovereignty of British Gibraltar Territorial Waters, as well as providing a base at a strategic location at the western entrance to the Mediterranean to provide critical support to UK—and allied—military objectives.
    - Protecting the joint UK-US base on Diego Garcia as a bulwark of regional and global security. This should be achieved through the May 2025 deal with Mauritius (supported by the US) under which the UK will maintain full control over this vital base, ensuring its operational sovereignty well into the next century.

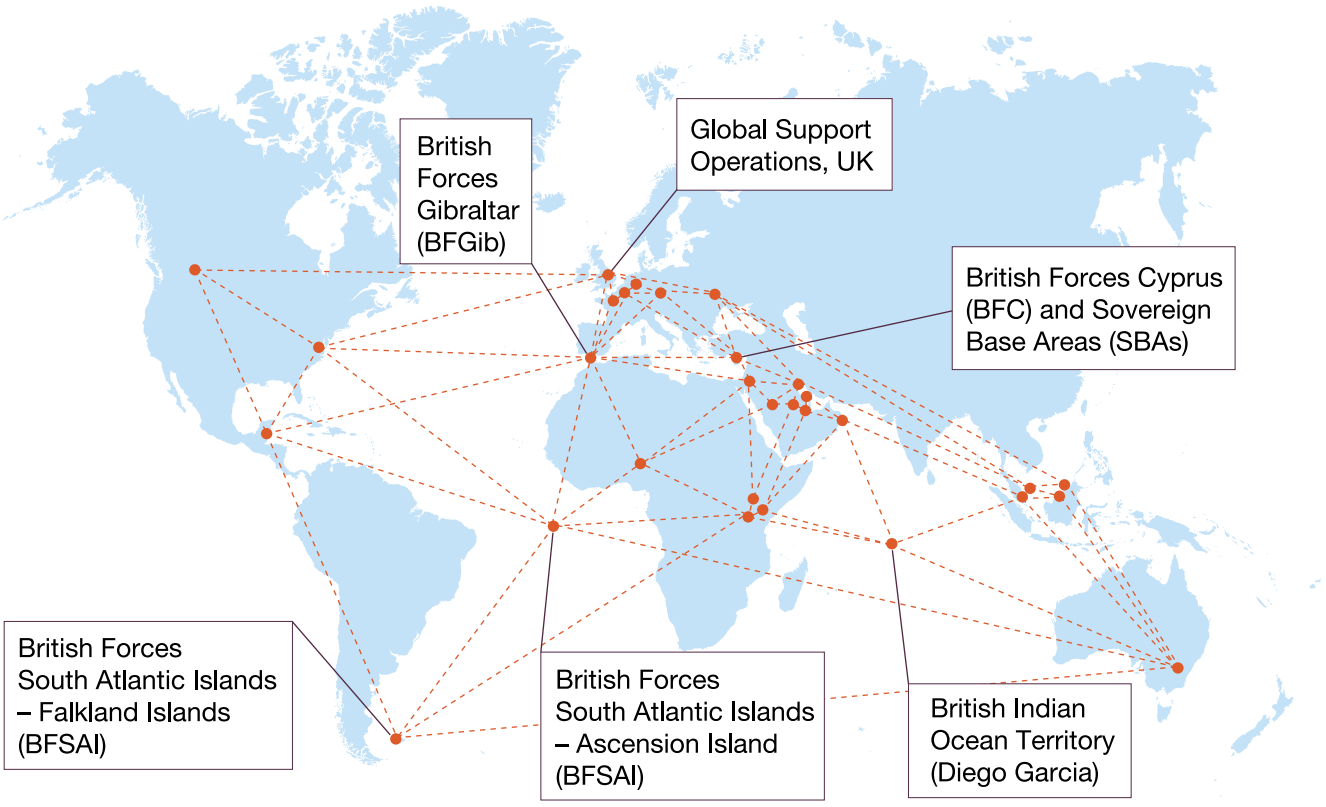
19. To maintain strong 'understand' and 'engage' functions, **international defence engagement should be a distinct military and civilian career stream**, creating a more professionalised and informed workforce and developing understanding of specific regions. A dedicated training programme should be formed in collaboration with the FCDO, universities, and think tanks. Incentives to retain knowledge and expertise should include pathways to senior appointments that recognise international engagement postings.

> We're collaborating with other countries all the time in defence and that needs to be spoken about more … It makes me feel we're in a better place because that collaboration is reassuring
>
> **—Citizens' Panel member, Rollestone Camp**

71 The IGDN includes the Defence Attaché network, Overseas Bases, training estates, Loan Service Personnel, Advisers, Liaison/Exchange Officers, British Defence Staffs, Global Strategic Hubs (the Sovereign Base Areas in Cyprus, Gibraltar, Germany, Oman, Kenya), Support Units, and personnel in NATO's Command and Force Structures.

72 These include Bahrain, Brunei, Kenya, Oman, Singapore, the United Arab Emirates, and the Republic of Cyprus.

Figure 7: Defence's overseas footprint



8 British Defence Staffs

Gulf – Riyadh
West Africa – Abuja
East Africa – Nairobi
Asia Pacific – Singapore
Eastern Europe – Kyiv
Oceania – Canberra
France – Paris
US – Washington, DC

6 Army training estates

BATUS (Suffield, Canada)
BATUB (Belize)
Global Hub Germany
BATUK (Kenya)
Brunei
Duqm, Oman

6 Hubs

Sovereign Base Areas, Cyprus
Gibraltar
Germany
Oman
Kenya
Singapore

Further locations not shown are those related to Permanent Joint Headquarters (PJHQ), UK Maritime Component Command (UKMCC) in Bahrain, and NATO

Key stats

8,500
MOD military and civilian personnel deployed overseas

239
Defence Section Staff (incl. Deputy Military Attachés)

91 countries
with Defence Attachés and Advisers

81 countries
with non-resident Attachés

Recommendations:

21. The MOD should co-ordinate with other Government departments and agencies to prioritise the use of the defence instrument in support of UK defence and wider foreign policy. It should do so based on a new Defence Diplomacy Strategy to be completed by December 2025.
22. The UK should seek closer bilateral relations with NATO Allies to strengthen collective security in the Euro-Atlantic, developing cost-effective means of delivering priority capabilities and strengthening Europe's collective industrial base.
23. The MOD should explore further opportunities to bolster the UK's ironclad commitment to Ukraine. Options include industrial collaboration and—once the immediate conflict is over—developing Ukrainian access to new markets that shore up its defence industry as well as its future security.
24. The UK should ensure AUKUS and the Global Combat Air Programme are exemplars of co-innovation and industrial collaboration between allies. Underscoring its commitment to success, the UK should double down on both pillars of the AUKUS agreement, using Pillar 2 to test and develop a template for future technology partnerships.
25. To support the development of the Integrated Global Defence Network, the MOD should:
    - Complete a review of its principal elements by April 2026, optimising Defence's overseas footprint for delivering its core roles (Chapter 3). This should be worked through in close coordination with the One HMG platform managed by the Foreign, Commonwealth and Development Office.[73]
    - Develop a military and civilian career stream for international defence engagement, creating deep understanding of regions of interest to the UK. Pathways to senior appointments should include completion of at least one international posting (with an emphasis on NATO), giving Defence access to a pool of deep expertise for more effective engagement across the world.

73 'One HMG' incorporates all UK Government overseas property and associated corporate services known as the 'Platform'.

Defence's Global Relationships: The SDR's Starting Point

Defence's starting point for implementing the approach to alliances and partnerships set out in Chapter 5 is a network of robust relationships that delivers global reach for the UK as part of its wider foreign and security policy.

Euro-Atlantic

The UK's defence relationship with the **United States of America** (US) is unlike any other. The strength of the partnership is borne of generations of UK and US defence personnel tackling global challenges together. With around 900 military personnel and civil servants across 30 US states, the UK ensures it is ready to operate with the US from 'Day 1' of major operations. Likewise, the US bases over 10,000 forces at six RAF sites across the UK, providing US forces with access to Europe and beyond. Regular joint exercises—such as those in the Indo-Pacific with the US and Australia in 2023 and with the US and Japan in 2025—sustain close and valuable interoperability. However, it is the speed and willingness to act when collective security interests are threatened that has cemented this relationship, as demonstrated by the joint US-UK response to persistent Houthi attacks on international shipping in the Red Sea.

The relationship is more than purely 'military' in nature. The defence sector is vital to the UK and US economies. The UK's Foreign Military Sales portfolio with the US is valued at more than $18.6bn. The F-35 programme also has strong industrial benefits for the UK, with approximately 15% of the value of each aircraft produced in the UK.

The UK's defence relationship with **France** is fundamental to its security. The 1995 Chequers Declaration stated that there is no situation in which a threat to a vital interest of one is not a threat to both. This remains true in 2025. As nuclear powers with highly capable militaries and global footprints, the UK and France share a unique responsibility for European and global security. The relationship benefits from important and distinctive features: nuclear cooperation; a shared industrial base in complex weapons; and the Combined Joint Expeditionary Force.

Germany's approach to security and defence since Russia's 2022 invasion of Ukraine, in combination with the Bundestag's March 2025 vote to allow increased borrowing for defence spending, creates opportunities for enhanced partnership. These opportunities are embodied in the 2024 Trinity House Agreement. Common to both France and Germany is the shared ambition to deliver conventional deep precision strike capabilities, collaboration on which can deliver an important contribution to European strike capability through the ELSA programme,[74] while underpinning the E3 relationship.

74 The European Long Range Strike Approach, a multinational effort to enhance Europe's defence systems by the 2030s.

The UK's close partnership with **Estonia** and **Poland**—and its commitment to deterring Russian aggression along NATO's Eastern Flank—is demonstrated through Operation CABRIT, under which a British Army brigade is held at readiness in the UK and deploys its fighting power to reinforce the permanently-based UK battlegroup that helps to secure NATO's flank in Estonia and provides a reconnaissance capability in Poland. The UK and Estonia recently agreed a new defence roadmap and signed a joint declaration that will see the UK's 4th Light Brigade Combat Team held at high readiness from July 2025. This means that thousands of troops will be on standby to deploy to Estonia at short notice. In 2025, the RAF will take part in a NATO Air Policing mission in Poland. The UK-led DIAMOND initiative, of which Poland is a member, will improve NATO's Integrated Air and Missile Defence through enhancing networked air defence systems across Europe.[75]

The UK and **Norway's** close bonds are built on shared geography and history. This partnership is typified by Norway's commitment to joining the 2025 deployment of the UK Carrier Strike Group. Under NATO's Operation Baltic Sentry to enhance maritime surveillance, the UK and Norway are also working together to protect critical undersea infrastructure, with the UK contributing Rivet Joint and P-8 Poseidon maritime surveillance aircraft.

As a member of the Five Eyes intelligence community, and a key NATO Ally in the Arctic, High North, and North Atlantic, **Canada** remains vital in assuring transatlantic security. The UK and Canada are exploring opportunities to build on a 50-year history of British Army training at BATUS (British Army Training Unit Suffield),[76] driving innovation through next-generation test and evaluation facilities.

The accession of **Sweden** and **Finland** to NATO means the UK can work with **Joint Expeditionary Force** (JEF) partners—which includes other key allies such as **Denmark**, **Iceland**, **Latvia**, **Lithuania**, **the Netherlands**, Estonia, and Norway—to support and complement NATO operations. The JEF recently began tracking potential threats to undersea infrastructure and monitoring the Russian shadow fleet. The initiative highlights the potential for JEF to trial the use of innovative technologies to boost collective security in Europe.

The UK's defence relationship with **Romania** continues to expand following the recent signing of a new treaty on military cooperation. **Greece** is a key ally for the UK in the Eastern Mediterranean, facilitating UK operations across Europe and the Middle East. The **Republic of Cyprus** is a key regional partner with which the UK enjoys close cooperation on defence, security, and regional stability. The UK retains the Sovereign Base Areas of Akrotiri and Dhekelia, which are strategically important and maintained in accordance with the 1960 Treaty of Establishment. The UK is committed to the UN's peacekeeping mission, recognising its role in maintaining stability on the island.

75 Current members of the DIAMOND initiative are France, Germany, Latvia, Norway, Poland, Sweden, and the UK.

76 Home to one of the largest training estates on which the British Army operates.

Middle East

The UK enjoys some of the deepest, broadest, and oldest relationships in the **Middle East** of any European nation. The Gulf provides essential access and basing, enabling the UK to support international security and freedom of navigation—critical for domestic energy security and seaborne trade. The UK Armed Forces are in turn a natural partner for the six countries of the **Gulf Cooperation Council**, offering world-class military education and training, and access to the UK industrial base and key equipment programmes, in support of longstanding military partnerships.

The UK has proven itself a dependable partner with a shared commitment to regional and global stability. The joint defence industrial and military partnership with **Saudi Arabia** builds on the longstanding bilateral relationship, while Defence continues to develop its relationship with the **United Arab Emirates**. Joint Air Squadrons with **Qatar** are central to bilateral collaboration, with the potential to expand into land and other domains. The UK's ties with **Oman** are enduring, with scope for further development through joint training and logistic capabilities to support greater regional integration. The Naval Support Facility in **Bahrain** enables the UK's persistent maritime presence in the Middle East, underscored by the UK's commitment to join the US-Bahrain Comprehensive Security Integration and Prosperity Agreement (C-SIPA). The UK benefits greatly from its long relationships with **Kuwait** and **Jordan**, and from continued cooperation with **Egypt** and **Iraq**, which remain key regional security partners.

Defence continues to maintain the capability to mount, or contribute to, limited interventions in support of **international counter-terrorism operations**, such as ongoing defence support to counter-Daesh operations. Over the past decade, the RAF has conducted over 10,000 aerial sorties over Iraq and Syria as part of an international effort to halt the spread of Daesh and suppress its recovery, while over the past year, British aircraft and warships have protected international maritime trade in the Red Sea from Houthi attacks.

The Indo-Pacific

The UK's relationships with **Australia**, **Japan**, **the Republic of Korea**, and **New Zealand** are vital to regional and global security, developed bilaterally, minilaterally, and through NATO. The UK continues to join operations and exercises with these key partners, including through the deployment of HMS Tamar and HMS Spey to the region. Their permanent presence in the Indo-Pacific helps to promote maritime security and provide humanitarian assistance and disaster relief. These types of deployments are supported by the UK's permanent military presence in **Singapore**, which plays a crucial role in enhancing collaboration with Five Power Defence Arrangements countries and in supporting the British Army's presence in **Brunei**. As with other Commonwealth countries, the UK recognises the integral and valued contributions by **Nepal**, with **Gurkhas** making up 8% of the British Army.

The UK has an enduring and dynamic partnership with **Australia**, underpinned by a modern Defence and Security Cooperation Treaty. The broad partnership ranges from cutting-edge capability collaboration, including through AUKUS, to exports of equipment such as Thales' 2087 sonar. **Japan** is a close and significant partner in the region, shown by collaboration—with Italy—to develop the next generation of combat aircraft and joint exercising under Exercise Vigilant Isles. The UK Carrier Strike Group will sail to Australia in 2025, visiting Japan as part of its deployment, in a further demonstration of UK commitment to regional stability and security and to upholding the international order.

Recognising the role that **India** plays on the global stage, the UK continues to develop the bilateral defence relationship across a range of shared interests, including in the Indian Ocean region and through capability cooperation. The February 2025 announcement of the UK-India Defence Partnership represents an important next step for bilateral defence cooperation, focusing on next-generation weapons in the critical area of air defence. The UK's Defence Roadmap with **Indonesia** underpins wider Government efforts to develop a comprehensive bilateral partnership. The relationship with **Pakistan** is historic, with a shared focus on security objectives. Engagement with **ASEAN** (the Association of Southeast Asian Nations) remains important, given its central role in promoting regional stability and cooperation, as well as providing sustained engagement with key 'middle ground' powers.

Rest of the world

Africa is the focus of intense competition as its economies grow, with growing Russian and Chinese influence and exploitation of instability across the continent for their own ends. The UK continues to support strategic partners in Africa, promoting peace and stability through focused defence education, training, and capacity-building, and addressing 'upstream threats' to UK interests. This includes tackling threats posed by terrorist organisations and other non-state actors through established relationships with **Kenya**, **Nigeria**, and **Ghana**, and with **Somalia**.

The UK continues to recognise the importance of strategic dialogue with partners in **Latin America**—primarily **Brazil** and **Chile**—to promoting peace, security, and prosperity in the region. **The Caribbean** is particularly important, given the UK's obligations to the defence and security of its Overseas Territories. The UK continues to provide humanitarian and disaster relief as a priority when necessary.

As one of the largest financial contributors to **UN peacekeeping operations**, the UK has enduring deployments of around 250 military personnel to locations such as Somalia, South Sudan, and Cyprus, which see British troops working alongside peacekeepers from other countries, building their capability, and enabling the UN to deliver its peacekeeping mandates.[77]

77 UK reaffirms commitment to UN peacekeeping operations as Minister announces new funding for programmes - GOV.UK, 15 May 2025.

6. Home Defence and Resilience: A Whole-of-Society Approach

1. **The UK must harbour no illusions about the threats it faces, its vulnerabilities, and the pressing nature of the response needed** (Chapter 2). In times of competition and crisis, the ability to cope with sub-threshold attacks or major shocks is critical to maintaining national life. In a war setting, either at home or on mainland Europe, the nature of attacks on the UK will change and intensify, demanding nationwide response and endurance. What has happened to Ukraine since 2022 shows what modern conflict can be like, including the ripple effects reaching far beyond the battlespace.

2. For deterrence to be credible in this context, the Government must:

   - **Build national resilience** to threats below and above the threshold of an armed attack through a concerted, collective effort involving—among others—industry, the finance sector, civil society, academia, education, and communities.
   - **Increase national warfighting readiness** so that, if needed, the UK can transition to, scale for, and sustain a war against a 'peer' adversary—an obligation to NATO under Article III of the Washington Treaty.

3. **The Prime Minister has made clear the importance of a whole-of-society approach to the UK's security and resilience** to be taken forward as part of a new national security strategy.[78] Defence has a foundational interest in, and is integral to, cross-government resilience policy and home defence planning led by the Cabinet Office.[79] Measures outlined throughout this Review will contribute to this effort, from a transformed relationship with industry and investors, to better use of, and connection with, the Reserves and veterans across the country, and developing skills and external relationships through Defence training and education. But **there is more that Defence can and must do to support a whole-of-society approach to deterrence and defence**.

Reconnecting with society

4. The Government must promote unity of effort across society, leading a national conversation to raise public awareness of the threats to the UK, how Defence deters and protects against them, and why Defence requires support to strengthen the nation's resilience. At the core of this initiative should be efforts to counter threats to information integrity as a critical component of national cohesion.

5. Defence must play its part in this work under one of its two enabling roles (Chapter 3), using the publication of this Review as a catalyst. **The connection between the UK Armed Forces and wider society is the longstanding and necessary foundation for the defence of the country**. The Armed Forces recruit from, and operate with the consent of, the society they serve and protect. Defence is at the heart of many local communities across the UK, often formed around military and industrial bases (Figure 8). It also plays a significant role in advancing

78 Prime Minister's Oral Statement to the House of Commons: 25 February 2025 – GOV.UK.

79 The Cabinet Office-led Home Defence Programme will provide an additional layer of defence, security, and resilience planning, focused on alignment between military and civilian effort in a period of international hostilities affecting the UK.

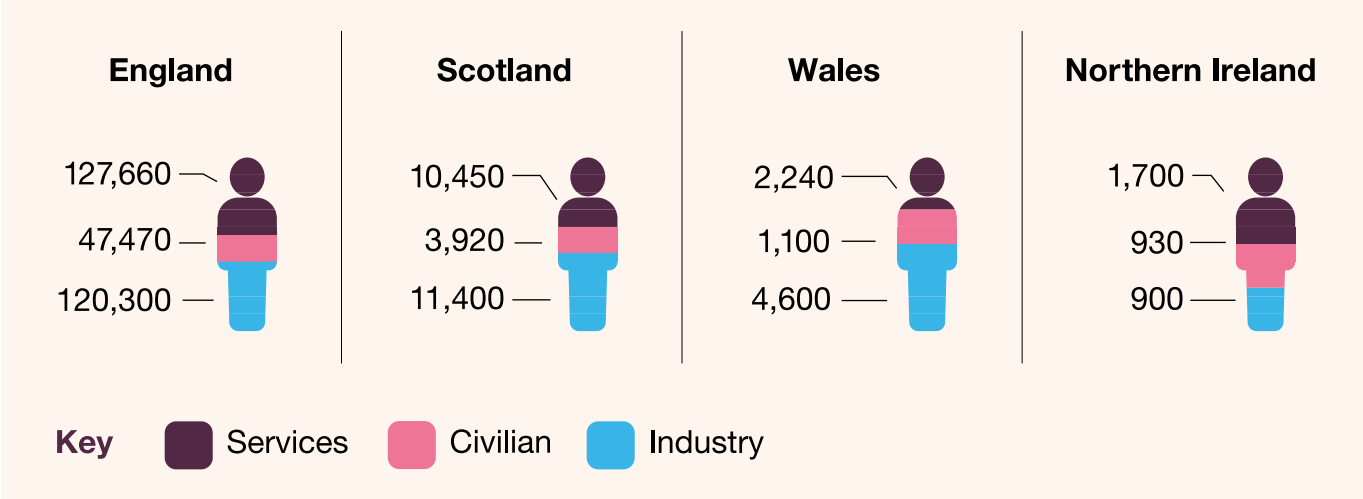
social mobility by offering diverse career pathways and education opportunities to individuals from all backgrounds. However, decades of fighting wars overseas and shrinking personnel numbers have led to a society with less awareness of Defence.

> Education on the part of the MOD is huge. They should make us understand what they're doing for us, and why we should be giving our tax money to help fund what they're doing
>
> **—Citizens' Panel member, MOD Corsham**

6. **Building society's understanding of what the Armed Forces do and increasing their visibility is imperative.** This can be achieved through:

   - Public engagement days. The Reserves' Forces and Cadets' Associations will be a valuable organisation in delivering this engagement.
   - Working with the Department for Education to develop understanding of the Armed Forces among young people in schools.
   - Expanding the Cadet Forces, which provide skills and qualifications to young people, inform and inspire future Defence personnel—from diverse backgrounds across the country—and support economic growth. This will benefit all four nations of the UK.
   - The provision of Defence training. Inviting leaders of FTSE100, other relevant companies, and civil society organisations to attend Defence courses—either bespoke offerings or parts of courses such as those offered by the Defence Academy—would increase understanding of society's role in national resilience and industrial mobilisation in the event of war. This should not be seen as a profit-making exercise. It is central to the success of Defence in the new threat environment.

Figure 8: Defence representation and direct industry jobs across the UK



Protecting critical national infrastructure

7. **The smooth running of daily life and the economy depends on critical national infrastructure (CNI) and the continuity of essential services**. State-backed cyber-attacks and sabotage campaigns already cause substantial disruption to UK public services, incurring significant recovery costs. Based on adversaries' current doctrine, in the event of a major war the UK should expect sub-threshold attacks to intensify as part of a 'hybrid' campaign that also involves kinetic attacks on civilian and military infrastructure—onshore, offshore, and in space.

8. **A more focused and substantive body of work is necessary to ensure the security and resilience of UK CNI** across the spectrum from competition through to crisis and conflict. Accelerating and building on existing work, this should result in a clear definition of what is in scope as well as the adequate protection of core elements of CNI, including those on which Defence and wider Government rely. A priority for Defence should be to articulate—as part of the Cabinet Office-led Home Defence Programme—which elements of UK CNI are integral to sustaining operations and projecting force overseas, and which therefore must be protected in scenarios both below and above the threshold of war. It should also support Government efforts to strengthen legislative powers—in particular:
    - A wider review of legislation such as the Submarine Telegraph Act 1885, which provides for the protection of undersea communications infrastructure from wilful or negligent damage.[80]
    - The forthcoming Cyber Security and Resilience Bill—led by the Department for Science, Innovation and Technology—which is intended to strengthen UK cyber defences, ensuring that the CNI and digital services on which the UK public and businesses rely are more resilient and secure.

9. In many cases, CNI operators do not have the ability to protect the infrastructure they own in the face of such complex and evolving threats. **The MOD should explore, with wider Government, options for a 'new deal' for the defence of CNI**, rooted in partnership between Defence and private-sector and allied operators of infrastructure that is most critical to the continuity of essential services in the UK. Models used by Nordic and Baltic states provide useful examples of how to incentivise, support, and work with operators to mutual benefit. To support this new deal, the Royal Navy should take a new leading and coordinating role in securing undersea pipelines, cables, and maritime traffic carrying the information, energy, and goods upon which national life depends (Chapter 7.2).

80 Provisions under the Act for the protection of underseas communications cables have remained sufficient until relatively recent developments in threat.

10. **It will also be important to have additional capabilities for the protection of bases and CNI in the event of crisis or conflict**—ensuring the protection of key sites such as energy, food, water, telecoms, medical supplies, and transport infrastructure. This should be the joint responsibility of several organisations across Government (including the MOD Guard Service and the UK Intelligence Community) and industry, increasing resilience and strategic depth by ensuring Regulars and Reserves can concentrate on warfighting, not basic tasks. As part of this, options should be explored for the development of a new force that is modelled on the Reserves and connects local communities with Defence: recruited and employed locally, with a narrowly defined remit and training commitment. This could be organised under the Reserves Forces structure, led by the Army, and armed and equipped with basic communications, weapons, and technology such as drones. Plans must nest into the Home Defence Programme and be routinely tested and assured as part of the UK's broader exercise programme.

Strengthening the nation's readiness for war

11. Preparation for war is crucial to an effective response to armed attack. It can also help to deter an adversary from such an attack in the first place. In such extreme but no longer unthinkable circumstances, nations go to war, not just armed forces. **The Government must have the necessary plans, powers, and personnel to achieve an effective and sustainable transition to war if required**. For Defence, this should include maintaining up-to-date military plans for home defence. In addition, Defence should work with the Cabinet Office, through the Home Defence Programme, to:

    - Articulate its requirements of civilian authorities in a crisis, with priorities assigned to other Government departments and plans for mobilising the Reserves and industry if required. We welcome Cabinet Office proposals to codify 'civilian assistance to military authorities' in crisis and conflict as part of this work.
    - Ensure UK plans are coherent with NATO planning, in line with Alliance obligations.
    - Learn from the best practice of NATO Allies, particularly Nordic and Baltic states, and apply insights from the UK's own experience of training Ukrainian recruits under Operation INTERFLEX.[81]
    - Establish a programme of exercises to test plans for response to an armed attack on the UK and/or NATO Allies, including at the political and national levels. This programme should be used to identify emerging gaps in plans as threats and wider circumstances change.

12. The Government must have, if needed, the means to prepare and respond as threats to the UK or its allies escalate and—crucially—before crisis becomes war. Existing legislative frameworks lack the flexibility to facilitate this. New home defence legislation, in the form of **a Defence Readiness Bill, should give the Government additional powers in**

81 Operation INTERFLEX is the UK-led multinational operation to train and support the Armed Forces of Ukraine.

reserve to support the mobilisation of industry and Reserves. This could include measures to:

- Improve the preparedness of key industries, including powers to ensure sufficient supply of services, access to CNI, and resources for Defence.
- Support the mobilisation of wider Defence, including industry and Reserves.
- Improve the resilience of Defence's warfighting infrastructure (Chapter 7.11) by introducing plans to mobilise private and commercial assets.[82]
- Ensure that the UK is ready to operate within a NATO framework.
- Enable external scrutiny of the Armed Forces' warfighting readiness through annual publication of key data such as the percentage availability of all in-service programmes, schedule data of all in-development and upgrade programmes, and a summary of assessments on programme affordability (Chapter 4.2).

13. **The Strategic Reserve—comprising ex-Regular personnel with enduring legal obligations—is central to military mobilisation and must be reinvigorated**. To develop and test plans to mobilise the Reserves, the MOD should map Reservists' locations and skills and make a more concerted effort to engage them under a refreshed veterans' communications strategy. This strategy should articulate the Defence offer to those who have left the Armed Forces and what Defence may need from them in the future. The MOD must also incentivise Strategic Reservists' engagement by providing appropriate levels of training (Chapter 4.3) and increased access to volunteer roles.

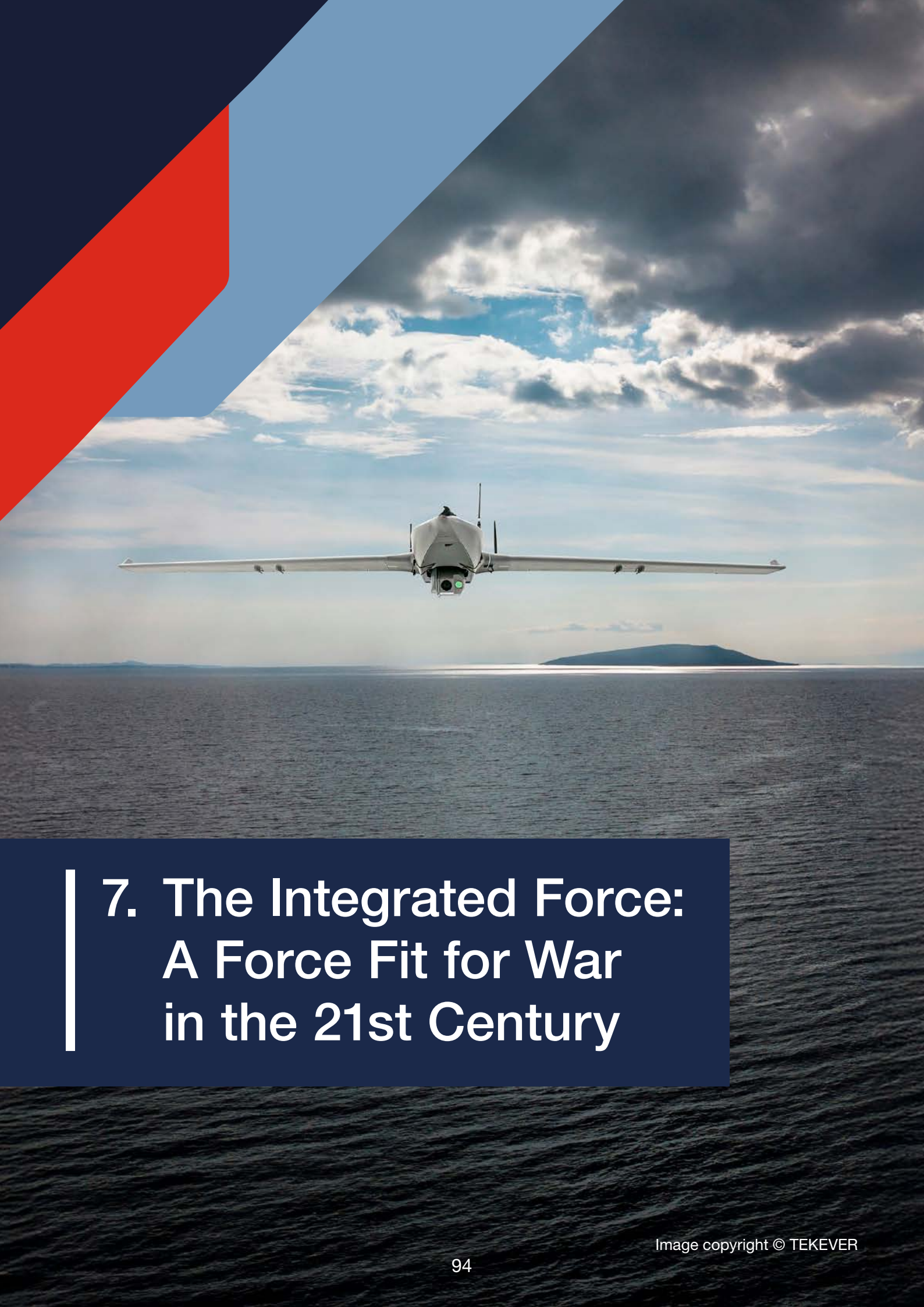
82 For example, the MOD's recent agreement with Associated British Ports widens Defence access to port facilities across the UK.

Recommendations:

26. We welcome the Prime Minister's launch of a national conversation on defence and security. This should be centred on a two-year series of public outreach events across the UK, explaining current threats and future trends, the role wider society must play in the UK's security and resilience, and the rationale for investing more in defence and security as an insurance policy. Defence must play its part in this effort, with the Armed Forces becoming more visible in society. To achieve this, the MOD should:
    - Work with the Department for Education to develop understanding of the Armed Forces among young people in schools.
    - Expand in-school and community-based Cadet Forces across the country by 30% by 2030, with an ambition to reach 250,000 in the longer term. There should be greater focus within the Cadets on developing STEM (science, technology, engineering, mathematics) skills and exploring modern technology. Defence, wider Government, and partnerships with the private sector must provide appropriate leadership, support, and funding to deliver this expansion.
    - Immediately give the Defence Academy and other Defence centres of training and educational excellence commercial freedoms to operate, lifting the restriction that only irreducible spare capacity can be offered externally. By February 2026, the Defence Academy should establish a plan for inviting company leaders, from FTSE100 companies and wider, onto Defence courses as appropriate.
27. Much greater focus is needed on ensuring the UK's critical national infrastructure (CNI) is protected from attack below and above the threshold of war. Defence should more actively support the Cabinet Office in its work to set and enforce robust standards of protection and resilience for infrastructure, defining and prioritising the CNI on which Defence and wider Government relies in the first instance. A more comprehensive approach should include:
    - Strengthening Government powers to protect CNI where necessary, completing the process of updating existing legislation or bringing forward new legislation by the end of this Parliament (2029).
    - Exploring options for a 'new deal' for the protection of CNI in partnership with private-sector and allied operators. As part of this, the MOD should develop options for the protection of CNI in the event of crisis or conflict, including a new Reserve Force, with plans presented to the Secretary of State by December 2026.

Recommendations:

28. Alongside plans for defending the UK in the event of war, Defence should work across Government to put in place a suite of measures that would significantly improve national readiness. Important areas of focus include:
    - A new Defence Readiness Bill that gives the Government powers in reserve to respond effectively in the event of escalation towards a war involving the UK or its allies. The Bill should mandate annual reporting on UK warfighting readiness to facilitate external scrutiny.
    - Ensuring plans made under the Home Defence Programme meet Defence's needs in the event of escalation to war, including mobilisation of Reserves and industry, and ensuring Defence has ready access to private-sector infrastructure for operations. This should be underpinned by legislation as necessary.
    - Stepping up engagement with the Strategic Reserve, sustained through annual training and volunteer roles. A digitised approach to Reserves management should be established by January 2027.



7. The Integrated Force: A Force Fit for War in the 21st Century

1. Our Review has so far addressed what Defence must do, where, and how in response to the changing security context and within the funding available (Chapters 3–6). This chapter **sets the direction for an Integrated Force that is fit for war in the 21st century**, identifying initial capabilities for acquisition as part of a continually evolving force that is developed in line with **our vision for UK Defence by 2035:**

A leading tech-enabled defence power, with an Integrated Force that deters, fights, and wins through constant innovation at wartime pace.

2. Delivery of warfighting power has always changed with technology and circumstances but the rate of change today is unprecedented. Any conflict with a 'peer' opponent in the next few years would likely see the UK and its allies confronting a military force capable of fielding newer weapons such as drones, advanced conventional weapons, and more effective surveillance and air defence weapons systems—all connected by digital networks and data.

3. **To meet this challenge, the UK must pivot to a new way of war** (Box 9). The essential task is to transform the Armed Forces, restore their readiness to fight, and reverse the 'hollowing out' of foundational capabilities without which they cannot endure in protracted, high-intensity conflict. Delivery will take place through the new, ten-year Defence Investment Plan. There are pockets of excellence on which to build: recent experimentation by the Services points the way for the future direction of the Integrated Force, while the equipment programme already features some transformative acquisitions such as the Future Combat Air System. But Defence must move further and faster to increase lethality while on the path to rebuilding mass and endurance.

Box 9: The Integrated Force: capability for war in the 21st century

The goal must be to create an Integrated Force that is more lethal than the sum of its parts and skilled in warfare in different forms. This force must be as ready to fight a battle for terrain as it is to fight a battle of will at long range without boots on the ground:

- Lethality, mass, and endurance are increased, as crewed platforms at sea, undersea, on land, and in the air are blended with a growing proportion of uncrewed and autonomous collaborative platforms in agile and novel ways.
- Highly sophisticated weapons such as long-range precision missiles offer greater reach and are complemented with larger numbers of much less sophisticated weapons such as single-use drones and shells.
- Survivability in a more transparent battlespace is increased through greater dispersion, protection, and mobility.
- Decisions are made and implemented much faster, with all elements of the Integrated Force connected in shared understanding and through a single digital targeting web, rooted in a common digital foundation (Chapter 4.1).

Common to all outcomes is the constant battle to dominate all five domains. This battle is underwritten by the ultimate guarantee provided by the UK's independent nuclear deterrent.

4. **An immediate priority for force transformation should be a shift towards greater use of autonomy and Artificial Intelligence (AI) within the UK's conventional forces**. As in Ukraine, this would provide greater accuracy, lethality, and cheaper capabilities—changing the economics of Defence. This shift should be facilitated by the parallel development of a common digital foundation and digital targeting web (Chapter 4.1), as well as protected investment in AI research and development. Uncrewed and autonomous systems should be incorporated into the Integrated Force in high numbers over the next five years. They should be networked with crewed fifth- and sixth-generation assets as part of a 'high-low' mix of capabilities, while these systems' design must be tailored to the conditions in which they will operate—whether undersea, at sea, on land, or in the air. Having taken a generational leap forward, Defence must then stay at the cutting-edge of drone technologies using the principles of the innovation cycle outlined in Chapter 4.

5. **Targeted investment is also required to rebuild joint support enablers and munitions across the conventional force**, with restored stockpiles of munitions, parts, and fuel ultimately dispersed across the UK and potentially to storage facilities in Europe. Defence should maintain an 'always on' munitions capability so that production can be scaled up at speed if needed. It should also lay the industrial foundations for an uplift in munitions stockpiles to meet the demand of high-tempo warfare, with economic benefits felt across all four nations of the UK. This should be **complemented by the development of novel directed energy weapons** to create low-cost and sustainable alternatives to missiles.

6. **Prudent sequencing of investment in capabilities over the next ten years** will require difficult decisions and a switch in spending to new priorities. This should be combined with a willingness to buy off-the-shelf and supplement military capabilities with civilian options where necessary. This sequencing will ensure that Defence can deliver an Integrated Force fit for war against a 'peer' adversary, accelerate along the path set out by this Review should international security conditions deteriorate further, or rapidly mobilise Defence in a crisis. Flexibility in terms of sequencing and procurement options will also be vital should the UK deploy troops to Ukraine in support of a ceasefire.

Recommendation:

29. Building on recent experimentation and existing acquisition plans, Defence must move further and faster to transform, moving to warfighting readiness across the Integrated Force. Priorities across the conventional elements of the Armed Forces over the next five years include:
    - A shift towards greater use of autonomy and Artificial Intelligence. To support this, Defence should establish an initial operating capability for a new Defence Uncrewed Systems Centre by February 2026. The MOD should also create a protected Defence AI Investment Fund to accelerate the adoption of Artificial Intelligence across Defence, prioritising the most promising use-cases.
    - Creating an 'always on' munitions production capacity, ready to scale up for higher-tempo production in the event of escalation to war.

7.1 The UK's Nuclear Deterrent

1. **A modernised nuclear deterrent is the bedrock of the UK's defence and the cornerstone of its commitment to NATO and global security**. The UK's nuclear weapons deter the most extreme threats to national security and provide critical insurance against the gravest risks and uncertainties of the future. For more than 55 years under Operation RELENTLESS, the Royal Navy has operated a nuclear-armed submarine every hour of every day—the Continuous At Sea Deterrent—to deliver this important mission.

2. **Nuclear deterrence can no longer be considered separately from the wider strategic environment**, as described in Chapter 2. Any future crisis or conflict in which the UK is engaged may include nuclear-armed or nuclear-aspiring states willing to use nuclear threats to compel or constrain UK and allied decision-making. Ensuring the UK can continue to deter such threats and remain free from coercion requires sustained investment across the Defence Nuclear Enterprise and in the UK's alliances, skills, and industrial base. UK nuclear policy remains unchanged (Box 10).

Box 10: UK nuclear policy

The foundation of the UK's approach to deterrence remains a minimum, credible, independent UK nuclear deterrent, assigned to the defence of NATO. The purpose of the UK's nuclear weapons is to preserve peace, prevent coercion, and deter aggression. The UK's nuclear weapons are operationally independent. Only the Prime Minister can authorise their use, ensuring that political control is maintained at all times. The UK would consider using nuclear weapons only in extreme circumstances of self-defence, including the defence of its NATO Allies.

The UK is deliberately ambiguous about precisely when, how, and at what scale it would contemplate the use of nuclear weapons. The UK does not publicise figures for its operational stockpile, deployed warhead, or deployed missile numbers. This posture enhances its deterrent effect by complicating the calculations of potential aggressors and reduces the risk of deliberate nuclear use by those seeking a first-strike advantage.

The UK will not use, or threaten to use, nuclear weapons against any non-nuclear weapon state party to the Treaty on the Non-Proliferation of Nuclear Weapons. This assurance does not apply to any state in material breach of those non-proliferation obligations. The UK reserves the right to review this assurance if the future threat of weapons of mass destruction, such as chemical and biological capabilities, or emerging technologies that could have a comparable impact, makes it necessary. To ensure that the deterrent is not vulnerable to pre-emptive action by potential adversaries, the UK maintains four Ballistic Missile Submarines (SSBN, Ship Submersible Ballistic Nuclear) so that at least one will always be on a Continuous At Sea Deterrent patrol. It is committed to maintaining the destructive power needed to guarantee that the UK's nuclear deterrent remains credible and effective against the full range of state nuclear threats from any direction. The UK continues to keep its nuclear posture under constant review in light of the international security environment and the actions of potential adversaries.

Deterrence and assurance: working with NATO Allies

3. Russia's increasing reliance on nuclear coercion will be the central challenge for the UK and its NATO Allies in the coming decades. Russia is modernising and expanding its extensive set of nuclear capabilities, which are designed for employment at multiple levels of warfare. Its strategies for warfighting rely on the threat of limited nuclear use to terminate a conflict on advantageous terms. China's unprecedented nuclear expansion will place demands on US nuclear forces and the deterrence it extends to the Euro-Atlantic. Potential collaboration and opportunism among these and other nuclear challengers—of the type seen in Ukraine—add further complexity to deterrence, escalation dynamics, and allied assurance.

4. Partnership with the United States—underpinned by the 1958 Mutual Defence Agreement (recently renewed by this Government) and the 1963 Polaris Sales Agreement—continues to be fundamental to UK and US nuclear security goals and to UK nuclear deterrence. As the US confronts the unprecedented challenge of facing two near-peer nuclear powers, Russia and China, **the UK must explore how to support the US and its NATO Allies in strengthening extended deterrence across the Euro-Atlantic**.

5. As the only European country to assign its nuclear capability to the defence of NATO, the UK is **well-placed to lead Europe in enhancing its contribution to deterrence and assurance in the Euro-Atlantic**. The UK must work with Allies to ensure NATO's deterrence posture is fit for purpose across the spectrum of conflict, underpinned by collective investment in the range of capabilities necessary to deter nuclear use at any scale. This must include intellectual investment to ensure that the Alliance's civilian and military leaders understand the nuclear dimensions of any future crisis or conflict in which their countries are engaged.

6. Although France is not a formal part of NATO's nuclear planning structures, the UK and France have long recognised that a threat to the vital interests of one would constitute a threat to the vital interests of the other. The UK should seek a closer relationship with its European nuclear ally, building on the Lancaster House Treaties in areas of political, technical, and policy collaboration.

> We need to have everything in place in case something happens—we need that insurance policy
>
> **—Citizens' Panel member, Rollestone Camp**

A sustained commitment to arms control, disarmament, and non-proliferation

7. The Nuclear Non-Proliferation Treaty (NPT) is the cornerstone of the non-proliferation and disarmament regime and the only credible route to universal nuclear disarmament. The regime is now under strain. Historical structures for maintaining strategic stability and reducing nuclear risks have not kept pace with the evolving security picture. Others did not follow the disarmament progress led by the UK and the US during the 2000s. With the New START Treaty set to expire in February 2026, the future of strategic arms control—at least in the medium term—does not look promising.[83]

8. To maintain international confidence in the nuclear non-proliferation regime, **continued UK leadership within the NPT is imperative**. A strong NATO nuclear mission is also essential as it is one of the most significant non-proliferation tools available to assure Allies that they do not need nuclear weapons of their own.

Delivering the nuclear deterrent as a 'National Endeavour'

9. **The decisions made within this Parliament will be crucial for maintaining the UK's independent nuclear deterrent**, a complex, scientifically advanced portfolio spanning decades. The Defence Nuclear Enterprise (DNE, Box 11) is expending enormous effort to sustain the Continuous At Sea Deterrent and to adapt its estate and capabilities, with delays in decision-making and programme delivery since the end of the Cold War leading to cost growth across the portfolio in recent years. The launch of a 'National Endeavour' approach to the Enterprise is beginning to drive resilience across critical enablers of the nuclear deterrent. Success will require persistent leadership and focus at the highest levels of Government and a significant shift in mindset across all departments crucial to delivery.

10. **A transformed partnership with industry, building on existing efforts within the DNE, is also essential**. The scale of what industry must deliver to sustain and renew the nuclear deterrent is vast. The MOD must incentivise companies to prioritise nuclear activities and invest resources across the Enterprise to deliver to cost and schedule. Other factors influencing industrial productivity—including better infrastructure and a skilled workforce—must also be addressed.

83 New START, signed in 2010, places limits on the number of US and Russian deployed strategic nuclear warheads.

Box 11: The Defence Nuclear Enterprise (DNE)

The DNE is the partnership of organisations that operate, maintain, renew, and sustain the UK's nuclear deterrent. The DNE's core organisations in Government are the Defence Nuclear Organisation, Royal Navy, Submarine Delivery Agency, Atomic Weapons Establishment, and Strategic Command. The DNE is currently investing across the following areas to sustain the deterrent for as long as required:

- Four Dreadnought class nuclear-powered ballistic submarines to replace the current Vanguard class. The first boat is due on patrol in the early 2030s.
- Seven Astute class conventionally armed, nuclear-powered attack submarines (SSNs) and the design of the next-generation SSN-A (AUKUS).
- A replacement UK sovereign warhead (ASTRAEA), while maintaining the existing stockpile.
- Critical elements of the DNE's infrastructure to adapt naval bases and manufacturing processes, supporting growth to sustain future fleet needs and weapons requirements.
- The establishment of a Nuclear Fuels Programme, which will re-establish a nuclear fuel cycle for reactor fuel for defence purposes.

Long-term stability in the Defence Nuclear Enterprise

11. As a multi-generational effort, **the renewal of the nuclear deterrent requires long-term direction** so that the MOD and industry can manage risk and improve performance and value for money over time. Clarity is needed on how this programme interacts with a wider set of demands for nuclear-powered, conventionally armed submarines, including the next-generation attack submarines under the AUKUS partnership. The programme to replace the sovereign warhead is critical and will require significant investment this Parliament. The Government must maintain the current financial arrangements that ringfence nuclear from wider departmental pressures to ensure stability in the nuclear portfolio. This includes funding for industrial infrastructure to mitigate risk in submarine build. **Public and parliamentary support is also vital** at a time when the importance, scale, and cost of the Enterprise are increasing.

Recommendations:

30. The UK must facilitate greater coherence between conventional and nuclear components of NATO's deterrence and defence posture. This should incorporate all domains and the entire spectrum of conflict, including high-intensity war against nuclear-armed states. Action should include:
    - Further investment in conventional deep (long-range) precision strike and Integrated Air and Missile Defence (Chapter 7.4) to provide the broadest range of options for deterring and responding to high-impact threats.
    - Strengthening NATO- and UK-led training and exercises, addressing potential escalation and conflict scenarios with nuclear-armed states.
    - Commencing discussions with the United States and NATO on the potential benefits and feasibility of enhanced UK participation in NATO's nuclear mission.
31. The UK must continue to champion its nuclear responsibilities while seeking to renew the arms control, disarmament, and non-proliferation regime, centred on the Nuclear Non-Proliferation Treaty. However, the UK's priorities and objectives in seeking this renewal must be realistic about the absence of willing partners in Moscow and Beijing.
32. The National Security Council (Nuclear) committee of senior Ministers should review progress on the 'National Endeavour' for delivering the UK's nuclear deterrent at least twice a year. These meetings should bring together Ministers from all departments essential to its delivery.
33. The Government must take a comprehensive approach to improving industrial productivity as a key factor in delivering and maintaining the UK's nuclear deterrent. This includes:
    - Ensuring it has the flexibility to incentivise industry investment in infrastructure and asset management. This should include serious consideration of amendments to the Single Source Contract Regulations.
    - Removing barriers to productivity that sit outside industry's direct control. Projects such as the National Nuclear Strategic Plan for Skills and the Barrow Transformation Fund should be prioritised,[84] with other Government departments committing to providing funding at the necessary pace and scale.
    - Exploring opportunities for legislative reform that could, in extreme circumstances, direct industry to prioritise defence nuclear requirements in the sovereign supply chain or enable compulsory acquisition of assets where necessary to protect national security.

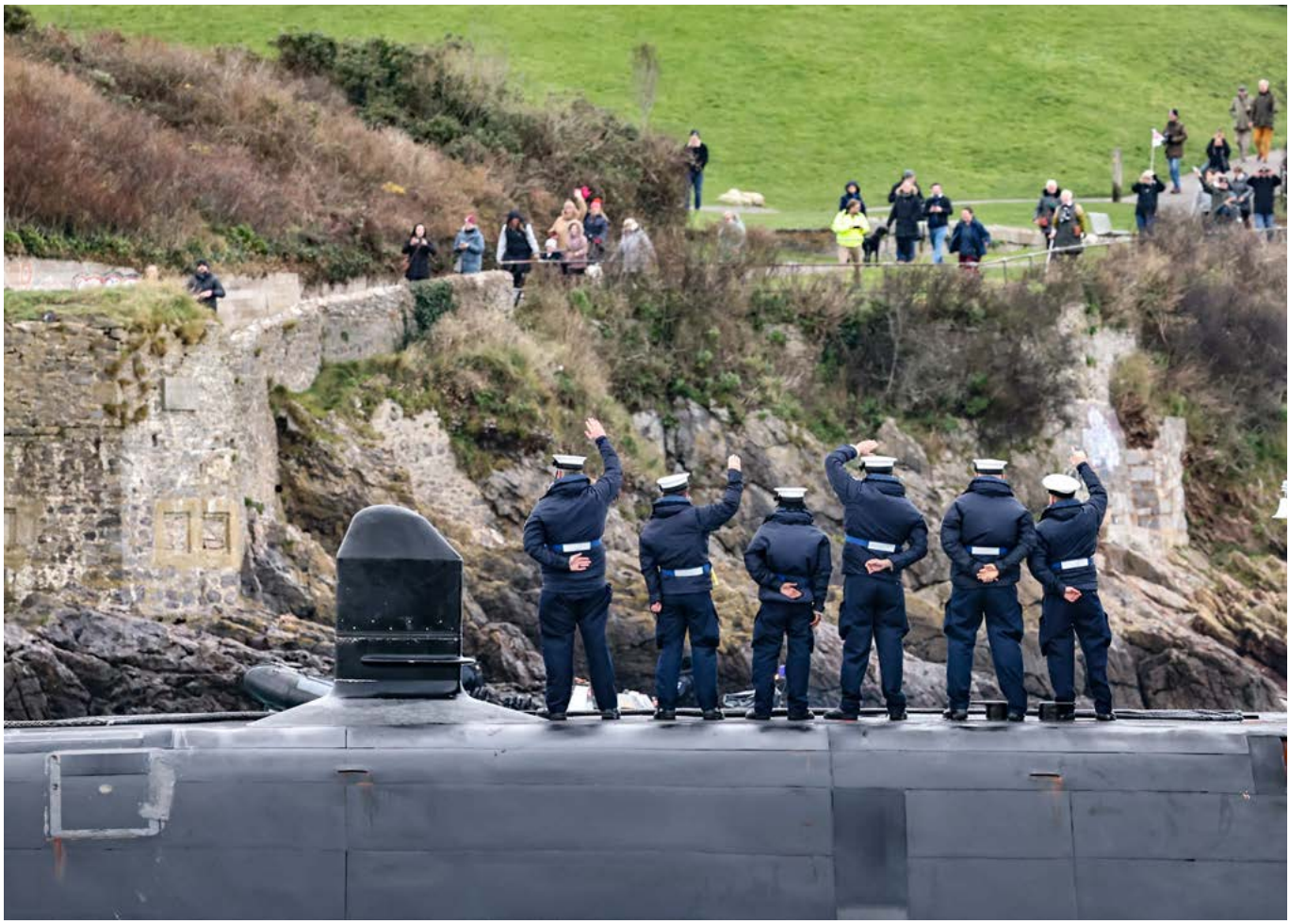
84 The National Nuclear Strategic Plan for Skills and the Barrow Transformation Fund represent a significant package of investment in skills, jobs, and communities that are vital to meeting the UK's growing defence and civil nuclear requirements.

Recommendations:

34. To avoid the costs of the past, the Government must commit to not extending the life of the Dreadnought class submarines beyond their intended end-of-service dates from the mid-2050s. It should start to define the requirement for the post-Dreadnought nuclear deterrent within this Parliament.

35. To sustain long-term support for the UK's nuclear deterrent and to ensure stability in delivering the portfolio, the Government should:

    - Develop mechanisms for enhanced parliamentary scrutiny—under appropriate conditions—to provide confidence that taxpayer money is being spent wisely in pursuit of the nation's highest defence priority.
    - Deliver a 'National Endeavour' public communications campaign that conveys the fundamental importance and necessity of the deterrent.
    - Confirm the intended numbers of SSN attack submarines, including the next-generation attack submarines under the AUKUS partnership, as soon as possible to provide the necessary assumptions for the required build capacity and tempo.



7.2 Maritime Domain

1. Maritime security is a strategic imperative for the UK. **Global trade, undersea pipelines and data cables, and offshore energy installations are critical for sustaining daily national life**. However, the maritime domain is increasingly vulnerable. Technological change and the proliferation of advanced conventional weapons pose increasing threats to maritime security, while adversaries are more willing to threaten the free flow of critical commodities such as food and energy to hold the UK and its allies at risk. The Royal Navy must be prepared to deter maritime incidents similar to the sabotage of the Nord Stream 2 gas pipeline and the cutting of undersea data cables in UK and international waters. The Navy must also be prepared for new geographical realities created by climate change, with the High North becoming more important to the UK and its NATO Allies as it becomes more accessible.

2. **To meet the demands of a new era of threat, the Royal Navy must fulfil new roles and continue to evolve how it fights**: moving towards a dynamic mix of crewed, uncrewed, and increasingly autonomous surface and sub-surface vessels and aircraft; and developing next-generation capabilities such as SSN attack submarines via the trilateral AUKUS partnership.

The role of the Royal Navy

3. The purpose of the Royal Navy, in support of the roles for UK Defence set out in Chapter 3, is to:

   - **Role 1: Defend, protect, and enhance the resilience of the UK, its Overseas Territories, and Crown Dependencies:** delivering the Continuous At Sea Deterrent (CASD), the bedrock of the UK's defence. The Royal Navy should also assume responsibility for leading and coordinating industry and wider Government in protecting critical undersea infrastructure and maritime traffic.

- **Role 2: Deter and defend in the Euro-Atlantic:** contributing to NATO Regional Plans through the provision of: CASD; fifth-generation carrier strike capability; anti-submarine warfare, with a focus on securing the North Atlantic through its Atlantic Bastion plan (Box 12); littoral strike; and Type 45 destroyers providing Integrated Air and Missile Defence (Chapter 7.4).
- **Role 3: Shape the global security environment:** using Defence levers where the Navy can deliver the greatest effect, including capability partnerships, exports, and training and education, enhanced by the Navy's permanent presence and periodic deployments beyond the Euro-Atlantic.

Transformation

4. **Transformation over time will require changes in how the Navy develops its workforce and training**. As complex systems become easier to operate with a smaller training burden, the Royal Navy should adjust its personnel balance to include greater numbers of Reservists to generate efficiencies and release Regulars for front-line operational roles. As it reconsiders its training estate needs, the Navy should ensure there is 'capacity by design' so that it can continue to provide training to allies and partners without impacting national requirements.

Box 12: Multi-domain integration in action: Atlantic Bastion

Atlantic Bastion is the Royal Navy's plan to secure the North Atlantic for the UK and NATO against the persistent and growing underwater threat from a modernising Russian submarine force. The UK's anti-submarine warfare capabilities are a central aspect of European defence and are important capabilities with which to meet the Alliance's changing needs.

Atlantic Bastion uses a comprehensive and layered sensor network—operating on, above, and below the water—to create an integrated, multi-domain approach, delivered in collaboration with the RAF, Strategic Command, the UK Hydrographic Office, NATO, and commercial partners. The Royal Navy will deploy: a Type 26 anti-submarine warfare frigate force, equipped with mission bays[85] to facilitate rapid upgrades and spiral development; uncrewed surface vessels; and uncrewed underwater vehicles. These capabilities will be harnessed with acoustic detection systems powered by Artificial Intelligence and integrated into the digital targeting web (Chapter 4.1)—accelerating targeting decision-making across Defence and with the UK's allies.

85 Mission bays are areas occupying the full width of a ship that can be rapidly reconfigured for alternative missions, including as an amphibious platform for raiding or Special Forces operations. They provide flexibility in terms of a ship's role and task.

5. **Defence must also create the conditions for sustained innovation and industrial support to the Navy**. An 'always on' supply line for shipbuilding is essential to retain industry skills and reduce the delays in delivering new ships that otherwise lead to additional support costs for 'running on' ageing platforms. Long-term partnering agreements with funding commitments over multiple years or decades, such as those underpinning the delivery of SSN-AUKUS, would help to realise efficiencies and de-risk major investments while also contributing to UK economic growth. More flexible regulation is also needed to support vital experimentation in areas such as autonomy, including through the creation of regulatory 'sandboxes'—designated areas at sea in which the Navy and industry can test and deploy new technologies.

Capabilities

6. **The Royal Navy must continue to move towards a more powerful but cheaper and simpler fleet**, developing a 'high-low' mix of equipment and weapons that exploits autonomy and digital integration. Carrier strike is already at the cutting-edge of NATO capability but much more rapid progress is needed in its evolution into 'hybrid' carrier airwings, whereby crewed combat aircraft (F-35B) are complemented by autonomous collaborative platforms in the air, and expendable, single-use drones. Plans for the hybrid carrier airwings should also include long-range precision missiles capable of being fired from the carrier deck.

7. **Close coordination with the rest of Government, industry, and allies will be needed to protect critical undersea infrastructure**—potentially as part of a new model for Government-operator collaboration (Chapter 6). To support this, the Navy should:
   - Improve its detection capacity and its ability to coordinate tasks via enhanced command and control through the development of a Global Decision Support System. It should focus on the Euro-Atlantic in the first instance.
   - Use the Multi-Role Ocean Survey ship and fleets of autonomous vehicles to counter threats to critical undersea infrastructure.
   - Maintain reaction systems through which allies can track potential threats together.

8. **Amphibious Advance Force operations remain a critical focus for the Royal Marines Commando Force**, operating in some of the most extreme environments and offering political choice for action worldwide. These operations should increasingly **focus on supporting NATO requirements**, including integrating into the UK-led Strategic Reserve Corps when appropriate (Chapter 7.3).

9. To maximise the UK's warfighting capabilities, **the Royal Navy should explore alternative approaches to delivering a balanced and cost-effective fleet**. This may include using commercial vessels and burden-sharing with NATO Allies to augment the Royal Fleet Auxiliary (RFA) Fleet Solid Support ships in non-contested environments. The dedicated professional seafarers and ships of the RFA underpin the Royal Navy's vital operational outputs through the provision of logistics, aviation, and medical support. Its unique capabilities sustain CASD, carrier strike, and amphibious operations and make a critical contribution to homeland resilience. These must be maintained.

Recommendations:

36. The Royal Navy must play a new, leading and coordinating role in securing the UK's critical undersea infrastructure and maritime traffic that is vital to daily national life. As part of this, the Royal Navy must work with wider Government and commercial partners to develop enhanced maritime surveillance through existing and novel capabilities.

37. The Royal Navy must continue its transformation in the skills, equipment, and ways of operating needed for the 21st century maritime domain as part of an Integrated Force. This should include:

    - Moving to a 'hybrid' carrier airwing, comprising crewed combat aircraft, autonomous collaborative platforms in the air, single-use drones, and, eventually, long-range missiles capable of being fired from the carrier deck.
    - Rapid evolution of anti-submarine warfare through the integration of underwater, surface, and airborne drones (including Protector) with Type 26 frigates, P-8 maritime patrol and reconnaissance aircraft, and SSN attack submarines.
    - Rapid evolution of mine-hunting to be delivered with autonomous platforms.
    - Exploring possible development from a Type 45 destroyer to a minimally crewed or autonomous air dominance system that could integrate directed energy weapons and enable better connectivity to other assets within the UK's Integrated Air and Missile Defence system.

38. Given the global market for autonomous and uncrewed systems, the Royal Navy should engage with commercial partners—including private finance—and other Governments to rapidly deliver an integrated frigate force for anti-submarine warfare, comprising crewed, uncrewed, and autonomous platforms. This project—enhancing the capabilities of the Type 26—should be an exemplar of how private money is attracted to defence technology and linked to export-led opportunity under a new partnership with industry (Chapter 4.2).

39. More flexible regulation is needed to enable experimentation in areas such as autonomy. By April 2026, Defence should establish options to enhance the mandate of the Defence Maritime Regulator to allow the Royal Navy and industry to use a dedicated regulatory 'sandbox' to test and deploy new technologies.

40. The Royal Navy should explore alternative approaches to augmenting the Royal Fleet Auxiliary to deliver a balanced, cost-effective fleet that maximises the UK's warfighting capabilities. This may include using commercial vessels and burden-sharing capabilities with allies to augment assets such as the Fleet Solid Support ships in non-contested environments.

7.3 Land Domain

1. **War is fought across five domains but people and the land they live on are at the heart of it all**. Even as ways of warfare change (Chapter 2), military force projected from the land—and sustained by land-based resources—will continue to play a fundamental role in deterring and, if required, defeating adversaries. While land warfare remains dominated by firepower and manoeuvre, the rapid adoption of new technologies is changing the operating environment.

2. **The Army is in transition from the force required for the interventions of the post-Cold War era** to a force ready to play its part in NATO's 'deterrence by denial', requiring greater lethality, mass, and endurance. It must be prepared to support a renewed focus on national resilience and global crisis response, as well as playing an expeditionary role—able to seize, hold, or retake ground, primarily in support of NATO in mainland Europe.

3. Last recapitalised in the 1990s, much of the Army's capabilities—including Challenger 2 tanks, AS90 artillery, and ammunition—have rightly been gifted to Ukraine. As the Army rebuilds, **investment must be paired with changes to how it is organised, operates, and is equipped**. The Army has some capability enhancements already underway, including Challenger 3, Ajax, and Boxer. It is also taking a progressive approach in developing a new model for land fighting power (Box 13). But it must be bolder. It can deliver **a ten-fold increase in lethality** by harnessing precision firepower, surveillance technology, autonomy, digital connectivity, and data.

The role of the British Army

4. The purpose of the British Army, in support of the roles for UK Defence set out in Chapter 3, is to:

   - **Role 1: Defend, protect, and enhance the resilience of the UK, its Overseas Territories, and Crown Dependencies:** contributing to national defence and resilience plans through an enhanced Standing Joint Command (UK) and its nationwide network of Joint Military Commanders. In war, additional capabilities will be required to support the protection of critical national infrastructure (Chapter 6).
   - **Role 2: Deter and defend in the Euro-Atlantic:** providing one of two Strategic Reserve Corps to NATO, in line with NATO's Regional Plans, ready to deploy rapidly from the UK to anywhere in the Euro-Atlantic area. The Army must also sustain its contribution to NATO's forward presence in Estonia and Poland.
   - **Role 3: Shape the global security environment:** delivering essential 'train, advise, assist, and accompany' missions with key allies and partners that unlock the greatest benefit in delivering Defence's core roles.

   These relationships must be prioritised as part of Defence's overall strategy for its global footprint (Chapter 5).

Transformation

5. The Army will deliver essential elements of the Integrated Force as Advanced, Reaction, and Response forces for deployment under UK or NATO command. This will be underpinned by resilience and regeneration operations in the UK:

   - The UK-led, multinational NATO Allied Rapid Reaction Corps (ARRC) Headquarters already provides the Corps Headquarters and two divisions for one of two new Strategic Reserve Corps (SRCs). SRCs must be ready to execute pre-planned options tasked by SACEUR to manage escalation (before a decision by NATO to invoke Article V) and to deploy anywhere in Europe. This corps will be integrated with UK and Allied capabilities across all domains as part of the Integrated Force. Consideration should be given to prepositioning ammunition and heavier equipment in appropriately dispersed storage facilities in Europe, supporting NATO readiness and reducing the demand for strategic movement.

Box 13: Multi-domain integration in action: Project ASGARD and 'Recce-Strike'

In increasingly complex modern warfare, Project ASGARD will enhance the Army's ability to find ('recce') and destroy ('strike') enemy targets. It brings together digital networks and data, Artificial Intelligence (AI), and intelligence capabilities with firepower to find and strike enemy forces at greater distances than ever before across the battlespace. It will fully integrate surveillance capabilities (including cyber and space) with firepower (such as artillery, long-range missiles, aircraft, and single-use uncrewed aerial systems) via the digital targeting web (Chapter 4.1). This will provide machine-speed decision support through AI. The Army will scale and share the concept across Defence, allies, and partners so that it becomes a force multiplier.

- Standing Joint Command (UK) will oversee and command the Army's contribution to the planning, preparation, and delivery of Defence support to UK national resilience. With most of the Army's deployable capability committed to NATO, its capacity to support domestic resilience would be significantly reduced if it were mobilised for war.

6. **The quality of its people is the foundational strength of the British Army**. The Army should be a mix of Regular and Reserve personnel with a minimum of 100,000 soldiers, of which 73,000 should be Regular. There remains a strong case for a small increase in Regular numbers when funding allows (accounting for the costs of additional people, equipment, and training). The Army must be able to rapidly expand and mobilise Reserve forces, providing strategic depth and credibility to the UK's defence commitments. The Army should reinvigorate the Active and Strategic Reserves, which will be critical for providing contingent capability and access to expertise that can be mobilised rapidly if needed. It should benefit from the proposed 20% increase in Active Reserve numbers when funding allows (Chapter 4.3).

7. **Training must be a strategic and institutional priority to restore the Army's readiness to fight at all levels**. The Army has already begun changing its approach to individual and collective training to prepare for warfighting at scale. Using advanced simulation would provide more effective and efficient training but live firing over distances of 100km or more remains essential to assuring the Army's fighting capability. This will require partnering with allies and sharing access to suitable training facilities, especially across NATO.

Capabilities

8. **The Army will continue to need armoured platforms and attack helicopters to confront a major state adversary, fighting to take and hold ground**. Armoured platforms improve the survivability of personnel in an increasingly transparent battlefield, including from the rapid evolution of drones in combination with precision and wide area weapons. To improve interoperability and efficiencies of scale, Defence should seek collaboration with NATO Allies on the acquisition of key land platforms (Chapter 4.2).

9. **Autonomous and uncrewed (land and aerial) systems are now an essential component of land warfare**, integrated with core armoured platforms in a dynamic 'high-low' mix of capability. A '20-40-40' mix is likely to be necessary: 20% crewed platforms to control 40% 'reusable' platforms (such as drones that survive repeated missions), and 40% 'consumables' such as rockets, shells, missiles, and 'one-way effector' drones. Investment in attack and surveillance drones should be prioritised, along with counter-drone systems. The Army must be able to keep pace with high-tempo innovation in drones and associated capabilities such as electromagnetic warfare (Chapter 7.6), supported by 'always on' manufacturing.

Recommendations:

41. The Army must modernise the two divisions and the Corps HQ that it provides to NATO as one of the Alliance's two Strategic Reserves Corps (SRC). The SRC should be led by the Corps HQ (Allied Rapid Reaction Corps) and enabled by, and command, Corps-level capability. The first division should comprise a fully deployable Headquarters, three manoeuvre brigades with armoured and mechanised capabilities, support brigade, and associated enablers. Planning should include the integration of the Royal Marines Commando Force into the SRC when appropriate (Chapter 7.2).
42. The Army must accelerate the development and deployment of its new 'Recce-Strike' approach—combining existing capabilities and technologies, such as armoured platforms, with constantly evolving technology—as part of its efforts to modernise the SRC. It should be bolder in its ambition, seeking to increase lethality ten-fold.
43. The Army must evolve its mix of Regulars and Reserves, with a minimum of 100,000 soldiers, of which 73,000 are Regular. A small uplift in Regular personnel should be considered when funding allows (accounting for the costs of equipping and training these personnel), while the Army should benefit from the proposed 20% increase in Active Reserve numbers (Chapter 4.3). It should focus the current Active Reserve only on tasks that it can deliver well and with value for money. It must reconnect to its Strategic Reserve as a core aspect of military mobilisation planning (Chapter 6).
44. The Headquarters Standing Joint Command (UK) should command all UK military support to national resilience under the MSHQ and be resourced accordingly. It should also be deployed to lead wider efforts to reconnect Defence with society, as part of a 'whole-of-society' approach to deterrence and defence (Chapter 6).
45. Global crisis response at very high readiness in the land domain should be led by 16 Air Assault Brigade. Airborne parachute capability and capacity should remain focused on specialists and a single battalion group.

7.4 Air Domain

1. Air power is vital to the protection of the UK and the freedom to fight and win. **Over the next two decades, the UK and its allies will have to compete harder for control of the air**, fighting in a way not seen for over 30 years due to the rapid development of adversarial capability specifically designed to counter Western strengths. Complex aerial attack and defence is becoming ever more difficult. Surveillance and air defence weapon systems are becoming much more capable. The primacy of crewed aircraft is being fundamentally challenged.

2. The Royal Air Force (RAF) offers the Integrated Force's quickest means of striking targets, with the flexibility, speed, and reach to deliver effect globally. Although the quality of RAF capability is unquestionable, its lean size reflects the requirements of a post-Cold War era, centred on counter-terrorism, counter-insurgency, and air policing. With the return of state-on-state conflict in Europe, **the RAF must improve its productivity, agility, and adaptability to build greater readiness and resilience**. In doing so, it should work with industry and allies to sustain this specialist sector and exploit emerging technology, including through partnerships such as the Global Combat Air Programme (GCAP).

The role of the RAF

3. The purpose of the RAF, in support of the roles for UK Defence set out in Chapter 3, is to:

   - **Role 1: Defend, protect, and enhance the resilience of the UK, its Overseas Territories, and Crown Dependencies:** policing UK airspace against airborne terrorism and defending against state threats; and playing a lead role in Integrated Air and Missile Defence (IAMD, Box 14). The UK must be able to secure its access and advantage in, through, and from space on a sovereign basis and with NATO Allies (Chapter 7.5).

- **Role 2: Deter and defend in the Euro-Atlantic:** contributing to NATO plans through the provision of: joint intelligence, surveillance, and reconnaissance, including airborne early warning and control capability; air-to-air refuelling; IAMD; high-readiness air forces with sufficient stockpiles; and advanced combat aircraft for the carrier airwings.
- **Role 3: Shape the global security environment:** supporting global stability through periodic operations and exercises with key allies and partners; and advancing UK interests through capability collaboration programmes like GCAP, identifying and developing export opportunities, shaping international defence policies through NATO, and offering training and education.

Transformation

4. **The RAF needs a wide range of skills and talent for the technology-enabled warfighting of today and tomorrow**. Its focus should be on retaining unique experience to build leaders and specialists, while its plans to increase its Reserves by 50% could be enhanced to make better use of specialist skills. Outstanding training is needed for the RAF to remain effective but current arrangements for fast jet training are inadequate, meaning UK pilots are currently sent abroad to train.

Box 14: Multi-domain integration in action: Integrated Air and Missile Defence (IAMD)

Capable and effective IAMD for the UK can only be accomplished as part of a NATO endeavour. As lead UK Command for IAMD, the RAF is responsible for delivering the timely, resilient, and integrated command and control (C2) that is critical to success. The tools to achieve effective C2 include: GUARDIAN, the Air Battle Management system fully integrated into the NATO IAMD C2 network; and NEXUS, a cloud-based C2 decision-making solution employing Artificial Intelligence.

The RAF combat air force provides the core of UK IAMD 'effect' capability, with Typhoon and F-35 providing the UK and NATO with air defence against air and cruise missile attack. These platforms are also a key part of the IAMD offensive counter-air and deep precision strike capability that underpins conventional deterrence, projecting force at range from the UK to nullify threats before they are launched.

The air component also contributes to UK IAMD through Protector and P8-A Poseidon aircraft which, alongside the Royal Navy's Type 45 destroyer, deliver near-continuous maritime surveillance and strike capabilities from the sea.

5. The changing nature of the threat to UK and allied security (Chapter 2) means that **RAF logistic support arrangements must be more resilient to disruption and military assault**, requiring a different approach to fighting from air bases, and deeper, more dispersed stockpiles of munitions, spare parts, and fuel. The RAF is already sharpening its approach through 'Agile Combat Employment': the ability to disperse and operate aircraft from many locations across NATO's area of operations. This must be accelerated, including through planning for the use of UK commercial airfields in times of crisis (Chapter 6). Particular attention should be given to contingency planning for RAF Brize Norton, the main hub in the UK for much of what the RAF delivers globally. Augmenting the RAF's fleet of Voyager, C-17, and A400M aircraft with civilian charter options for transporting people and cargo, and for air-to-air refuelling in non-contested environments would offer greater flexibility, efficiency, and value for money.

Capabilities

6. **The future of the RAF lies in accelerating its adoption of the latest technology and innovation**, setting the pace for warfighting as the leading European air force. Control of the air is currently delivered by Typhoon—undergoing a comprehensive set of upgrades[86]—and two squadrons of the F-35B fifth-generation aircraft. Typhoon, and later the F-35, will be replaced by a sixth-generation jet as part of the Future Combat Air System. This will consist of a combination of crewed, uncrewed, and autonomous aircraft, effectors, and multi-domain network connectivity.

7. **Augmenting crewed systems with autonomous collaborative platforms** provides mass and capability across a range of tasks, including air defence, strike, and electromagnetic attack. A crewed combat air platform will remain at the heart of a system-of-systems approach, particularly in airborne air defence to counter peer adversaries' aircraft, until Artificial Intelligence and autonomy reach the necessary levels of capability and trust.

8. **More airborne early warning and control (AEW&C) aircraft and ground-based radar would enable the UK to maintain round-the-clock airborne surveillance** in support of UK and NATO offensive and defensive operations. These aircraft provide significant advantages in warfighting, such as more persistent deep strike options. There may be opportunities for cost-sharing with NATO Allies in procuring more E-7 Wedgetail AEW&C aircraft.

9. **The need for enduring surveillance and strike in less-contested air threat environments will remain**, particularly in support of counter-terrorism operations. The uncrewed aircraft Reaper and its successor Protector have been highly successful, including in the provision of surveillance, reconnaissance, and strike in recent Middle East operations. Protector should be enhanced with maritime surveillance equipment and connectivity to give it wider utility.

86 This includes radar, defensive aids, avionics, and weapons to enhance combat effectiveness and deliver operational advantage against an evolving threat.

Recommendations:

46. The RAF must stay at the leading edge of combat air's evolution, through the transition from exclusively crewed combat air platforms to a Future Combat Air System (FCAS) with a mix of crewed, uncrewed, and increasingly autonomous platforms, integrated into the UK's digital targeting web:
    - To assure the future of UK combat air, investment in autonomous collaborative platforms (ACPs) should be considered alongside investment in FCAS and the Global Combat Air Programme. The ACPs must be designed to operate in collaboration with the fourth-, fifth- and future generations of combat aircraft and to operate from the UK aircraft carriers.
    - More F-35s will be required over the next decade. This could comprise a mix of F-35A and B models according to military requirements to provide greater value for money.
47. The RAF must further enhance its agility and adaptability to build greater warfighting readiness by:
    - Maintaining E-7 Wedgetail airborne early warning and control aircraft. Further E-7 should be procured when funding allows (taking account of infrastructure and operating costs). This may be expedited by a cost-sharing arrangement with NATO Allies.
    - Exploring providing Protector with a maritime surveillance capability, integrated with P-8 Poseidon maritime control and reconnaissance aircraft and Type 26 frigates.
    - Initiating investment in improving the foundations of the UK's Integrated Air and Missile Defence capabilities to bolster home defence.
    - Augmenting the existing fleet of A400M with either more A400M, civilian charter, and/or sponsored service options, reducing routine demand on RAF air transport that does not require military capability.
48. The RAF must drive greater productivity to enhance its resilience:
    - RAF Brize Norton should be a high priority for investment and improvement in partnership with private finance, as part of a new partnership with industry (Chapters 4.2 and 7.11). Given it is not affordable to establish a military alternative to Brize Norton should it be unavailable for operations, alternative commercial facilities must be planned and, if necessary, legislated for under the new Defence Readiness Bill (Chapter 6).
    - Hawk T1[87] and Hawk T2 should be replaced with a cost-effective fast jet trainer. The current flying training arrangements for fast jets must be urgently revised to optimise capacity, building in maximum use of contractors and provision for training overseas students.
    - A review of storage and other standards is required to remove regulations that place unnecessary constraints on training and impose significant unnecessary cost in the lifecycle of highly expensive weapons. This review should be completed by June 2026.

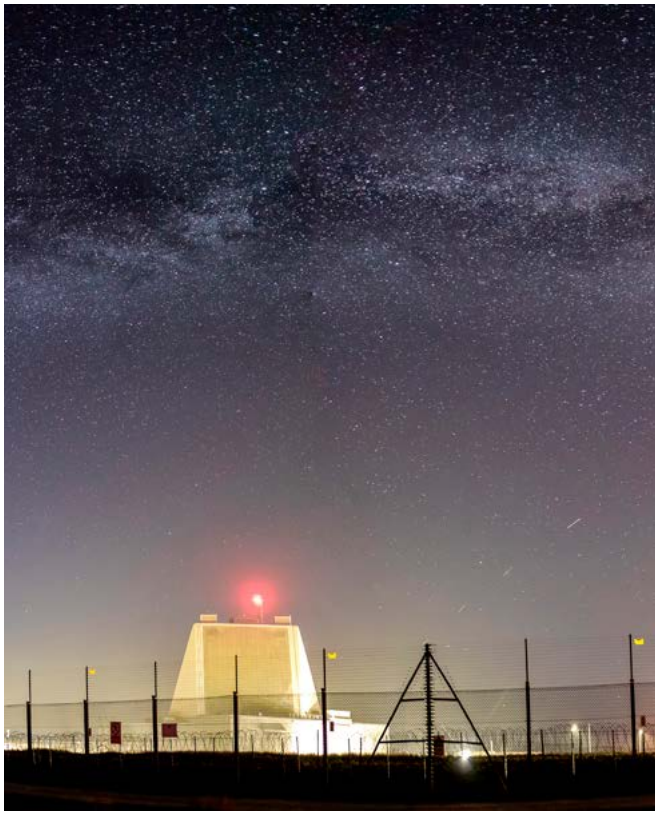
87 The aircraft flown by the Red Arrows aerobatic display team.

7.5 Space Domain

1. **Space is a critical national infrastructure sector, a site of growing competition, and a domain that is central to warfighting**. Assured access to operate in, from, and through space underpins the UK's security, prosperity, and daily life. Nearly 20% of national GDP is reliant on satellite services, while disruption to GPS would cost the UK economy an estimated £1bn a day.[88] Equally, space-based capabilities—such as data relays and satellite communications, satellite-based intelligence, surveillance and reconnaissance (ISR), Positioning, Navigation and Timing (PNT), and missile warning and tracking—are changing how wars are fought as quickly and as fundamentally as they are changing the economy.

2. Effective use of space is critical to the ability of the Integrated Force to understand, communicate, move, and fight. But **the domain is increasingly congested and contested**. Most notably, the combined operational satellite fleets of China and Russia grew by 70% in 2019–21. Both countries have sought to weaponise space, demonstrating the capability and the will to use sophisticated anti-satellite weapons in all orbital regimes. Adversaries' global precision weapons, guided by space-based navigation systems, already hold UK strategic capabilities at risk. There are few internationally agreed rules and norms governing space-based activities, which makes planning and acting with certainty more difficult. Commercial actors are increasingly active and influential in the arena, lowering the barriers to entry for state and non-state actors alike and further complicating potential governance arrangements.

3. Defence must improve its ability to deter threats to, and if necessary protect, its interests in space. In addition to acquiring select sovereign capabilities, applying the recommendations outlined in Chapters 4.2 and 5 would deliver **a more ambitious approach to assuring access to space, both on a sovereign basis and with NATO and other key allies**—enhancing Defence's role as an engine for economic growth and strengthening collective security while delivering for the warfighter.



88 According to the 2018 Blackett Review – GOV.UK.

Delivering and assuring space-based capabilities for Defence

4. With counterspace capabilities proliferating rapidly, **Defence must urgently develop the resilience of its military space systems**. Creating redundancy in the UK's options for accessing space will be key, increasingly delivered through commercial systems. Investment should be focused on three areas without which the Integrated Force will not be able to operate effectively:

    - **Space control**. To support UK freedom of action in space, investment should be focused on Space Domain Awareness (such as Earth-based sensors), command and control at levels of classification above Secret (developed in cooperation with the UK Intelligence Community and allies such as the United States of America), and counterspace systems (both co-orbital and Earth-based).
    - **Decision advantage**. Satellite communication and data relays are fundamental to the Armed Forces' ability to understand the battlespace, exchange information, and make and communicate decisions in real time. The SKYNET 6A and 6EC satellite communications programmes must maintain operational relevance or be supplanted by alternatives.
    - **Supporting 'Understand' and 'Strike'**. A variety of space-based systems—including ISR and PNT—support rapid, accurate, and effective targeting. Defence should work with the Department for Science, Innovation and Technology (DSIT) to ensure Defence requirements are reflected in cross-government efforts to deliver resilient space-based PNT systems.

5. This should be **supplemented by action with Allies in NATO** to ensure the Alliance has an effective space policy, doctrine, and plans.[89] It should also seek partners with which to develop the overhead, persistent ISR capability that is needed for effective Integrated Air and Missile Defence in the Euro-Atlantic.

6. **As a burgeoning dual-use sector in the UK, space offers Defence plentiful opportunity for exports as well as for international capability partnerships**. The global space economy is forecast to reach $1.8tn by 2035, primarily driven by commercial demand. Defence has an important role to play in shaping the UK space market and supporting exports to Europe, Asia, and the Middle East. This would help to position the UK for greater prominence within NATO alongside the United States and France; build relationships with allies and partners; develop a critical industry for Defence; and support UK jobs, skills, and economic growth.

89 Building on existing UK membership of minilateral groupings such as the Combined Space Operations initiative (a multilateral forum for improving space cooperation and building common, interoperable, and resilient capabilities in space) and the US-led space coalition under Operation Olympic Defender (a multinational coalition formed to globally integrate military space power, enable Joint and Combined Forces, deter aggression, and if necessary, defeat adversaries in order to retain military advantage).

7. **Space should be a priority technology portfolio for the new National Armaments Director**, creating closer links across the military, civil, and industrial space complex, and connecting external sources of expertise and innovation with Defence's acquisition and export processes (Chapter 4.2).

Cross-government prioritisation for a civil-military domain

8. The UK space enterprise is complex, stretching across Government, commercial providers, and research and academic institutions. Within Government, responsibility is further fragmented between departments and multiple agencies: while DSIT is the cross-government policy lead, UK Space Command is the domain lead within Defence, tasked—as a joint command—with protecting and defending UK and allied interests in space, and delivering space-based capabilities in support of the Integrated Force.

9. **A reinvigorated Cabinet sub-Committee[90]—or equivalent ministerial group—should set the UK's strategic approach to space** to maximise policy, operational, and capability synergies between the UK civil space sector and military needs. Providing strategic direction for the UK space sector, and for the Government's role within it, would also enhance private-sector confidence to invest.

Recommendations:

49. The MOD should invest in the resilience of UK military space systems with a focus on space control, decision advantage, and capabilities that support the 'Understand' and 'Strike' functions. The department should periodically review the SKYNET 6A and SKYNET 6EC satellite communications programmes to ensure this capability will be resilient and operationally relevant upon entry into service.

50. In support of Integrated Air and Missile Defence in the Euro-Atlantic, the MOD should seek partners to develop a next-generation, overhead, persistent intelligence, surveillance, and reconnaissance capability. This should provide the ability to sense, warn of, and track threats in the Euro-Atlantic.

90 The National Space Council was re-established by the previous Government in 2023 but was not reconstituted after the 2024 General Election.

7.6 Cyber and Electromagnetic Domain

1. **The cyber and electromagnetic (CyberEM) domain is at the heart of modern warfare, the enabling domain that integrates all others**. It is the only domain contested by adversaries every day: the UK is in constant confrontation with adversaries in cyberspace, defending national infrastructure that provides essential services to Government and to the public, and protecting logistics supply chains. As in Ukraine, the first blows of any conflict will likely be struck in this invisible battlefield.

2. **The Armed Forces' ability to fight is highly dependent on access to the electromagnetic spectrum and resilience to digital service loss**, including as a result of cyber-attack. Achieving precision and lethality in all domains, at scale and reach, relies on winning the CyberEM contest (Box 15). The domain is the foundation of the new digital targeting web that will enable choice and speed in deciding how to degrade or destroy an identified target (Chapter 4.1). For a force whose fighting power is delivered by crewed, uncrewed, and autonomous platforms working as one, action in this domain is vital to mission success.

Box 15: Operations in the cyber and electromagnetic domain

'CyberEM' incorporates:

- Cyberspace operations, both offensive and defensive.[91] This includes technical operations against the IT networks or technology used by adversaries, seeking to make them function less effectively or cease functioning altogether. The National Cyber Force was established in 2020 to deliver offensive cyber operations in support of Defence and other national security priorities, such as tackling serious and organised crime. The role of Defence Digital in strengthening Defence's critical functions against cyber-attack is crucial (Chapter 4.1). This is as much about educating personnel as it is about technology.
- Electromagnetic warfare,[92] operating across an increasingly congested electromagnetic environment. Activities include degrading command and control, jamming signals to drones or missiles, suppressing an adversary's ability to communicate or target, and intercepting adversary communications (signals intelligence, SIGINT)—and the countermeasures that protect UK and allied forces against such activities.

3. Defence and the UK Intelligence Community have made significant investments in the CyberEM domain over recent decades. There are pockets of excellence in Defence but they risk being less than the sum of their parts. Defence also faces crucial recruitment challenges, which should be addressed in part by the development of the Digital Warfighter group (Chapter 4.1) and harnessing private-sector skills (Chapter 4.3). **Without change, the CyberEM domain will remain a limiting factor in achieving a tech-enabled Integrated Force** capable of outthinking and outmanoeuvring adversaries.

A more proactive posture

4. To protect its ability to communicate and operate in the face of a persistent and highly dynamic threat, **the Integrated Force must be able to fuse the disparate CyberEM activity of a small number of expert organisations**[93] **and retain the initiative** in pursuit of campaign objectives, including as part of NATO operations. This requires a single point of authority—a new CyberEM Command as part of Strategic Command (Box 16)—with responsibility for integrating capabilities on behalf of CDS and the MSHQ.

91 Actions in or through cyberspace that project power, creating effects that achieve military objectives (offensive) or are intended to preserve friendly freedom of action in cyberspace (defensive).

92 The electromagnetic spectrum (EMS) uses energy that travels in waves and spans across a broad spectrum. We all depend on this energy to carry out day-to-day activities every hour of every day. When we tune in to a radio, watch TV, send a text message, or cook food in a microwave, we are using EM energy. Electromagnetic warfare (EW) uses directed energy to cut off access to the EMS, blocking signals between technologies and rendering them inoperable.

93 For example: the Army's Cyber and Electromagnetic Effects Group; the Air and Space Warfare Centre; the Royal Navy's Information Warfare Group; and Space Command.

5. As the domain lead, the CyberEM Command should command defensive cyber operations, set Defence demand for offensive cyber operations, and cohere Defence contributions to activity in the domain, while preserving single Service expertise and ability to act. Under these strengthened authorities, **there are important principles as to how this new command should operate**. It should:

   - Provide a robust governance mechanism through which National Cyber Force (NCF) activity is prioritised and tasked by Defence. CyberEM Command will have authority to set enterprise-wide operational priorities for activities in the domain on behalf of CDS and will be the point of contact for the NCF. This should not affect the NCF's authorities or how it conducts operations. Where cyber effects must be aligned as part of military operations, this integration will remain the responsibility of the relevant Joint Commander, supported by CyberEM Command.
   - Act as governance lead for cyber security for the Armed Forces, within broader cyber security governance for Defence provided by the Chief Information Officer.
   - Act as primary interlocutor for Defence on offensive and defensive cyber operations, liaising across Government and with allies and partners on these.
   - Ensure that more centralised direction on prioritisation of, and standards for, cyber, electromagnetic warfare, and information operations does not impede the work of the single Services and Director Special Forces in achieving multi-domain integration in real time and at high tempo. Delivery should be left to the most appropriate lowest level (which may at times be the centre).

Box 16: A CyberEM Command to cohere but not execute

The CyberEM domain should be led in a similar way to UK Space Command, centralising the authorities and responsibilities for decision-making to avoid duplication and reduce inefficiency. The new CyberEM Command should act as a 'hub', integrating the full range of military operations and bringing coherence to how Defence understands, develops, and accesses capability with allies and industry.

The CyberEM Command should:

- Provide conceptual and force development insights to the MSHQ to support it in cohering force development across the Integrated Force.
- Provide operational advice and oversight, including in recommending priorities for future requirements to the MSHQ while responding to direction set from the centre.
- Improve Defence coherence of disparate CyberEM activity and capabilities in advance of and during conventional military operations.
- Set Defence demand for offensive cyber operations conducted by the National Cyber Force, acting as a single Defence customer.
- Direct defensive cyber operations, including setting priorities, directing tasking to supporting agencies, and allocating resources to unlock rapid operational decision-making.
- Direct military commands to comply with Defence standards for cyber resilience set by the Chief Information Officer and Defence Digital.
- Act as the principal military point of contact in the CyberEM domain for industry, wider Government, and NATO.
- Direct the content of CyberEM education, training, and doctrine for the military.
- Lead the overarching strategy for electromagnetic warfare (EW) capability development, setting hardware and software standards in alignment with NATO, and providing coherent, prioritised requirements to Military Intelligence Services (Chapter 7.9), the wider UK Intelligence Community, and international partners. To support this:
  - A Spectrum Coordination Office should be set up to coordinate joint electromagnetic spectrum operations, supporting civilian-military coordination and battlespace management in a warfighting scenario to align with NATO's approach. This structure could sit within CyberEM Command, providing advice to Permanent Joint Headquarters and the Chief of Joint Operations.
  - Individual Services should be empowered to develop their own EW capabilities in accordance with standards set by CyberEM Command.

6. As the domain lead, the new command would also act as **a single military point of contact for those seeking to engage with the Armed Forces on CyberEM**. This includes:

   - **MOD policy teams** and those responsible for upskilling the whole force in evolving ways of warfare.
   - **Other Government departments**—especially the Department for Science, Innovation and Technology as the EM spectrum policy lead—to enhance spectrum-sharing arrangements, create a single approach to battlespace management in a warfighting scenario, and develop shared understanding of how to manage potential collateral damage caused by EM spectrum operations.[94]
   - **International counterparts**, such as the armed forces of the United States and other Five Eyes partners.
   - **NATO**, more effectively leveraging excellence found across the Armed Forces to support the Alliance as it develops its CyberEM capabilities, enabling collaboration and shared understanding.

7. Information operations[95] (IO) are closely related to the CyberEM domain as part of the wider information environment, conducted in cyberspace as well as in the physical world, using capabilities in all domains. Although IO is not a unique function of the CyberEM domain, it is increasingly important to consider them together. Cyber tools, electromagnetic warfare, and IO are all essential for targeting, for example. The new CyberEM command should make it easier to cohere and coordinate these activities.

Recommendation:

51. By the end of 2025, the MOD should establish an initial operating capability for a new CyberEM Command within Strategic Command. This new command should emulate Space Command's blueprint for domain coherence: cohering, but not executing, military action across cyberspace and the electromagnetic spectrum, and with responsibility for executing offensive cyber operations remaining with the National Cyber Force. CyberEM Command should be led by an officer with domain expertise and of sufficient rank to provide functional leadership within the UK system. It must be a 'whole force' endeavour, with its structure largely filled by a mixture of civilians and Reserves, given that greater expertise exists in the civilian sector. The workforce should be planned and developed as part of the Digital Warfighter group (Chapter 4.1).

94 Electromagnetic spectrum operations shape or exploit the electromagnetic environment or use it for attack or defence, including to support operations in all other operational environments. Operations include but are not limited to: signals intelligence; intelligence, surveillance, target acquisition, and reconnaissance; navigation warfare; and battlespace spectrum management.

95 Information operations are central to shaping behaviours and gaining information and decision advantage, operating at the strategic, operational, and tactical levels in the physical world and in cyberspace. Defence plays a strong supporting role in national strategic communications campaigns.

7.7 Strategic Command

1. To support the Integrated Force, **Strategic Command will be responsible for delivering, at the direction of the MSHQ, the following joint enablers and specialist capabilities**: Defence Intelligence and intelligence, surveillance, and reconnaissance; joint command and control for targeting; the Integrated Global Defence Network; the new CyberEM Command; Special Forces and Special Operations Forces; Defence Medical Services; and the Defence Academy.[96] For these capabilities, Strategic Command will set and enforce common standards and training within its domain expertise across the whole force and under a single vision.

2. In a change from previous practice, under Defence Reform **the MSHQ will now be the single 'brain' for the Integrated Force**, owning and directing strategic functions such as concept and capability development, force design, wargaming, and integrated Balance of Investment processes and decisions, to deliver better choices and options for Ministers as well as more effective military campaigns in the future. Certain areas of joint capability concept and warfare development, such as doctrine and training, will remain with Strategic Command.

3. While Strategic Command will retain its innovation team, the jHub, this unit's work will be coordinated by the new UK Defence Innovation organisation (Chapter 4.2) in response to a common set of priorities for the innovation function.

Permanent Joint Headquarters

4. Permanent Joint Headquarters (PJHQ) is part of Strategic Command. Located in Northwood, it commands UK military operations around the world. This includes national operations and joint and multinational military operations. As the Armed Forces prepare to deter, fight, and win against a 'peer' military adversary, PJHQ should:

   - Focus more closely on the defence of UK territory, airspace, and waters as an enduring concern. Its senior commander—the Chief of Joint Operations (CJO)—should establish a single view of operational requirements for the defence of the UK for consideration by the MSHQ (Chapter 6).
   - Provide the single UK operational point of contact for NATO Joint Force Commands and Component Commands in support of NATO-led deterrence, including through warfighting operations as necessary under NATO's Regional Plans. During Alliance operations, NATO Commanders will direct the UK forces assigned to them by CDS, while PJHQ will deliver and support those forces in coordination with the Services and Strategic Command.
   - Lead on operations where the UK has committed forces to support allies and partners in non-NATO settings. These forces should be commanded by CJO on behalf of CDS.

96 Under Defence Reform, Defence Support and Defence Digital will move to the National Armaments Director Group.

- Prepare for and execute national contingency plans for emergencies outside the UK, such as operations in support of the Overseas Territories and the evacuation of UK citizens from overseas in an emergency. However, responsibility for Military Aid to the Civil Authorities in response to UK-based crises—such as a CBRN (chemical, biological, radiological, nuclear) incident—should remain with the Standing Joint Commander (UK).

5. Given that PJHQ plays a vital role in UK military operations, it must be resilient to physical attack (including air and missile strikes) and cyber-attack. The changing intent and capabilities of the UK's adversaries mean that its current location poses unnecessary risks to the assured command of future UK military operations, including in defence of the UK itself.

Recommendation:

52. The vital role of Permanent Joint Headquarters in commanding UK military operations means the MOD should ensure it is more resilient to both physical and cyber-attack.

7.8 Special Forces

1. The UK's Special Forces are the 'tip of the spear' of the Armed Forces: integrated by design and able to reach strategically significant targets in the most challenging places, operating in all domains, both overtly and covertly. **Defence must continue to enhance its Special Forces**, ensuring UK sovereign choice by maintaining this strategic capability at the very highest level.

2. The rapid and growing diversification of threats demands Special Forces that can deter through retaining first-mover advantage, outmanoeuvring peer adversaries in support of national objectives. The UK Special Forces also play a key role in protecting the UK and its vital interests across a range of threats, with the ability to recover British citizens abroad. This includes hostage rescue and non-combatant evacuation in the most demanding of circumstances, as well as specialist military capabilities to support the police and civil authorities. These force-driving roles (Chapter 3) continue to put a premium on the highest-end capabilities within Special Forces, with the ability to underwrite the UK's covert edge. **It is critical that Defence assets are maintained, equipped, and held at readiness to ensure the Special Forces can always act decisively and at speed.**

3. **UK Special Forces already represent a working model of the Integrated Force**: leading the way in the innovation of new technologies and systems across all domains. They must continue to deepen their integration with partners across Government, including the UK Intelligence Community, and with allies and industry, driven by the logic of innovation cycle (Chapter 4).

4. Wider Special Operations are not confined to delivery by UK standing Special Forces. **The UK's single Service-designated Special Operations Forces (sS SOF) provide additional choice and resilience**. This expansion of forces and associated capabilities in the near term improves the UK and NATO's warfighting ability, exemplified by the UK's contribution to, and framework for, NATO's Special Operations Taskforce 2026. This allows the UK to contribute meaningfully at NATO Level 1 with sS SOF (such as the Army Rangers), Level 2 with specialist capabilities (for example, 16 Air Assault Brigade and Commando Force), and Level 3 with exquisite sovereign support from UK Special Forces. This is critical given that NATO commitments will be a core driver of Defence activity under the NATO First approach.

7.9 Intelligence

1. **Demand for high-fidelity intelligence will continue to increase** as the global environment deteriorates and as threats to the UK and its allies intensify. Alongside counter-terrorism requirements, there is now a burgeoning demand for intelligence that builds the UK's understanding of, and supports actions to counter, state adversaries. In parallel, advances in technology are changing the types of intelligence needed and the speed at which it must be collated, analysed, and disseminated if it is to be relevant to decision-making. Data volumes are rapidly expanding and must be harnessed to enable effective decision-making, including through using Artificial Intelligence.

2. Meeting these changing demands in times of already heightened competition is challenging. But as the UK rebuilds its warfighting capability, it must also **ensure it can prioritise resources and scale capacity to meet crisis and wartime intelligence requirements**. Conflict with a 'peer' military adversary today would create a demand for intelligence that significantly surpasses that of the Afghanistan and Iraq wars. Timely indicators, warnings, and assessments of adversary strategy and capabilities are essential for pre-empting and preparing for war, including the generation of warfighting advantage by scaling up industrial capacity. Intelligence is also a critical operational enabler and must be integrated into command and control, targeting, cyber operations, electromagnetic warfare, information operations, and force protection as part of the Integrated Force.

3. The UK has access to world-class intelligence capabilities, from Defence Intelligence (DI)[97] to the UK Intelligence Community (UKIC), the Five Eyes intelligence alliance, and the UK's bilateral intelligence relationships. **Within Defence, however, intelligence capabilities are underpowered and fragmented**. Of particular concern is the status of DI, which is dedicated to meeting the needs of Defence. Although demand for its services is increasing, there are approximately 500 fewer people working in DI today than in 2019 and its digital programmes have been subject to significant cuts and deferments. There are also **barriers to interoperability between Defence and UKIC**, risking their collective capabilities delivering less than the sum of their parts.

4. **Enhancing Defence intelligence capabilities to better meet today's threats and optimising for warfighting—across technology, data, people, and processes—is essential.** The MOD should invest in DI to build its capability and capacity. In addition, Defence should maximise its existing intelligence capabilities (DI, PJHQ Joint Intelligence (J2), UK Special Forces J2, and Royal Navy, Army, RAF and Space Command intelligence, surveillance, and reconnaissance organisations) as part of the Integrated Force. It should do so by establishing a single defence intelligence enterprise. This enterprise should operate under the banner of 'Military Intelligence Services' (MIS) with functional leadership provided by DI.

97 Defence Intelligence is one of few intelligence organisations worldwide that carries out collection, reporting, assessment, targeting and operations, including counter-intelligence.

This would reduce fragmentation of intelligence provision within Defence, facilitate data-sharing, and catalyse the modernisation of its capabilities by integrating collection, reporting, assessment, targeting, and operations. It would also enable Defence to break down barriers to collaboration with partners across Government, including UKIC.

5. Within MIS, DI should have functional responsibility for:

   - Leading and improving all aspects of the intelligence cycle, including working to a coherent set of priorities; setting common collection and analytical standards; and improving data-sharing with UKIC through adopting common data standards, handling controls, and vetting procedures.
   - Driving improvements to intelligence capability—such as data fabric, sensors, decision-making, exploitation and targeting capabilities—and shared services within MIS.
   - Ensuring prioritisation and coherence in adopting critical technologies, coordinated and deconflicted with partners across Government.
   - Aligning architecture and standards with the Defence-wide digital network, platforms, and services for information held at above Secret.
   - Supporting Defence's cyber security lead, ensuring the resilience of digital systems to cyber-enabled espionage.

6. Defence's people, capabilities, and data are attractive targets for hostile intelligence services that are willing to go beyond well-established espionage norms. **Robust counter-intelligence (CI) capabilities are critical** for countering these threats and for reassuring the UK's allies and partners that it is serious about protecting their equities. The MOD must create a single counter-intelligence unit that brings together Defence expertise and specialist capabilities[98] alongside UKIC investigations into human and cyber espionage and 'insider threat' activity. This would ensure resources are focused on protecting the most critical Defence capabilities, at home and overseas, against the most serious threats. The unit would also provide a single point of contact within Defence for industry—to protect critical supply chains from disruption and to procure innovative technology—and for CI collaboration with NATO, Five Eyes, and other partners.

98 From within the Royal Navy, British Army, Royal Air Force, and Civil Service.

Recommendations:

53. Intelligence is foundational to the UK's deterrence and warfighting ability. Defence Intelligence (DI) must be equipped with the tools to attract, develop, and retain a motivated workforce. This might include pay and recruitment freedoms in line with the UK Intelligence Community (UKIC). To avoid counterproductive competition for potential applicants, Defence should work with other departments and agencies in the national security system to ensure a strong talent pipeline across Government, including through the development of:
    - A cross-government national security workforce strategy.
    - A strong training offer that nurtures critical specialist skills.
    - Secondments for military personnel and civil servants, including into industry, to develop expertise in emerging technologies, cyber skills, and knowledge of best practice in technology adoption.
54. Defence should cohere and maximise its expert intelligence capabilities under a single enterprise, 'Military Intelligence Services' (MIS), by November 2025. DI's functional leadership of MIS should be underpinned by a new Defence Intelligence Charter that codifies its role and authorities.
55. To achieve interoperability with partners across Government, including UKIC, Defence should:
    - Work to develop a coherent set of intelligence priorities and timely and secure data-sharing across Government by aligning with UKIC data standards and vetting procedures.
    - Encourage a Government-wide review of handling processes for intelligence material to ensure it can be shared more readily in times of crisis and war.
56. By November 2025, the MOD must establish a single Defence Counter-Intelligence Unit within DI with a mandate to protect Defence from hostile intelligence services, working closely with UKIC.

7.10 Defence Medical Services

1. Ensuring the health and operational medical care of the UK's Armed Forces is vitally important to deterrence and defence, **enabling the Integrated Force to fight and endure on operations and in conflict**. A moral and legal duty on the part of Government, healthcare is also among the top three factors in personnel retention.

2. The MOD is not solely responsible for delivering this care. The Defence Medical Services (DMS)[99] are responsible for primary occupational healthcare, medical support, and rehabilitation during conflict—with the DMS rehabilitation service widely known for its excellence. But Defence is inextricably dependent on the NHS for the provision of secondary and tertiary care by design.[100]

3. Within Defence, medical care is fragmented and has long been subject to neglect and underfunding. The operational relationship with the NHS has also been de-prioritised in recent years. **Rebuilding medical capacity and capability together with the NHS, coupled with organisational reform within Defence, is critical** if UK forces are to remain fighting fit in peacetime, while preparing to meet operational demands when at war. Through this partnership, **Defence can also play its part in the Government's mission to build an NHS fit for the future**.

A Defence–Health partnership

4. Defence must work with the Department of Health and Social Care (DHSC) to **ensure the national health ecosystem—Defence, the NHS, and the private sector—has the capacity and capability to meet personnel needs**. The link between DMS and the NHS extends beyond the provision of secondary and tertiary care. A significant proportion of Reserves work in the NHS, meaning that NHS pressures become DMS pressures, notably in workforce shortages and the fragility of the global supply chain. The reverse is also true: the deployment of Reserves in Defence medical care requires careful planning given the impact on NHS staffing. In the event of a major war, the NHS must also be prepared to deal with mass military casualties.

5. **To strengthen this partnership, the departments should conduct an urgent sprint review**, creating a shared understanding of current capacity, current and potential future need, and shared plans for delivery. This review should account for the priorities identified in NATO's recent Medical Action Plan,[101] rebuilding medical capabilities for warfighting. It should include integrated crisis plans.

99 A group of military medical healthcare services, comprising single Service capabilities and a headquarters in Strategic Command.

100 'Primary' healthcare is a patient's first point of contact—for example, general practice, community pharmacy, dentistry, and eyecare. 'Secondary' healthcare includes planned or elective care, usually in a hospital, as well as urgent and emergency care and mental health care. 'Tertiary' care relates to highly specialist treatment.

101 The five priority areas of the NATO Medical Action Plan are: regulatory frameworks and legislation; workforce shortages; mass casualty planning; patient evacuation; and medical logistics.

6. **Increasing shared capacity is a priority**. This will require investment by Defence but it is not solely a question of funding. Defence must become an employer of choice for medical staff (Regular and Reserves) by offering flexible employment, education, and training—facilitated by aligning with the NHS on pay, benefits, and terms and conditions. A 'Sponsored Reserve' model or equivalent has the potential to increase medical Reserve numbers, with more personnel held at readiness. Private-sector healthcare offers further options for supporting personnel in maintaining and recovering fighting fitness, including the significant number currently categorised as non-deployable.

7. **Developing specialist clinical capability is also crucial to supporting the Integrated Force in crisis and at war**. DMS should proactively share expertise and skills with the NHS and private healthcare providers. Sustaining Defence investment in clinical research and development (R&D), working with industry and academia, is essential. While some of this R&D may be unique to Defence, much will have wider clinical value and use, including within the NHS.

Reforming Defence's medical system

8. Establishing a **single 'Defence Medical Enterprise' under the functional leadership of DMS** would further strengthen a key component of the national health ecosystem as part of the Integrated Force—cohering the single Services and Strategic Command, and the mix of military personnel, civil servants, and contractors.

9. **The Director General of DMS should have responsibility for:**

   - Providing functional direction to the Defence medical workforce, including setting common priorities, standards, and training.
   - Theatre-level medical units and training centres.
   - Individual clinical training, education, and accreditation for both military and civilian elements of the Defence medical workforce, delivered by the Defence Medical Academy.
   - A single approach to the career management and administration of all medical personnel across the Front Line Commands, including medics and paramedics.

   The Front Line Commands should retain sufficient capacity and expertise to implement technical direction from DMS and ensure that force elements held at readiness are integrated into the Defence Medical Enterprise.

10. To support this reform, **renewed attention should be given to DMS physical and digital infrastructure** following a long period of neglect: over half of Defence's medical estate is over 50 years old and legacy IT systems are unable to support today's requirements. Investments in digitisation such as Project CORTISONE[102] are crucial to the seamless sharing of data between DMS and the NHS.

102 Project CORTISONE is the DMS digitisation programme designed to appropriately record, manage, and exploit healthcare information created by DMS when delivering patient healthcare.

Recommendations:

57. The MOD must work closely with the Department of Health and Social Care (DHSC) to ensure that the Defence Medical Services (DMS) and the NHS together have capacity to meet Defence medical needs, including in the most extreme circumstances. The two departments must conduct a sprint review of system-wide capacity and capability. Ministers in the MOD and DHSC must also have direct access to information on the collective readiness of Defence, the NHS, and private healthcare to meet the demands of warfighting and other strategic health emergencies involving DMS. An independent review board, akin to the US Defense Health Board, should assure ecosystem readiness, reporting periodically to Ministers, the Defence Board, and Parliament.

58. DMS should be empowered as the functional lead of a single Defence Medical Enterprise that meets personnel's healthcare needs in peacetime, on operations, and in war. As part of rebuilding DMS and the wider enterprise in line with NATO's Medical Action Plan, the MOD should:

    - Invest in medical evacuation and medical stockpiles at a scale that matches military commitments and deployments, as well as critical capabilities like counter-chemical, biological, radiological, and nuclear equipment.
    - Create a 'whole force' plan that identifies workforce requirements, incentivisation, and measures to return non-deployable personnel to fighting fitness as quickly as possible as part of an enduring approach agreed with the NHS. Strategic Command should develop this plan by March 2026.
    - Establish a ten-year physical infrastructure plan for Defence medical by February 2026, working closely with the Defence Infrastructure Organisation as it develops its own plan for recapitalisation across the Defence estate (Chapter 7.11). Resourcing options for medical infrastructure might include drawing on the NHS and private finance.

7.11 Infrastructure

1. **The estate is where Defence lives, works, trains, and operates in the UK and on bases overseas**. The centrality of infrastructure to Defence outcomes has not, however, been reflected in its treatment since the end of the Cold War. It has been serially underfunded and capability planning has often taken inadequate account of infrastructure requirements and costs,[103] despite the clear and important link between the two.

2. Recent efforts to address longstanding problems—through estate optimisation,[104] increasing annual expenditure from a low base, and work to develop a new Defence Housing Strategy—are a good start. But the profound nature of the challenge means these will not be enough to ensure Defence infrastructure is fit for purpose. **Increased departmental funding over time must be accompanied by fundamentally different ways of working, implemented as a matter of priority**, if Defence is to meet the scale of the challenge. With the right approach, the Defence estate can, **as a national strategic asset, contribute to the wider resilience and security of the UK.**

The path to infrastructure recapitalisation

3. **The MOD should create a single Recapitalisation Plan that establishes a holistic assessment of Defence infrastructure requirements over the next decade**, taking account of the department's work under the Defence Housing Strategy and Defence Estate Optimisation programme. This plan should identify priorities and options for investment, opportunities for maximising the value of the estate, estimated costs, and provisional timelines for delivery. It should **differentiate between the distinct opportunities and needs of different segments in the Defence infrastructure portfolio**.

4. **Homes for personnel and their families** should be a priority within the infrastructure portfolio. Enhancing the standard of Service Family Accommodation (SFA) and Single Living Accommodation (SLA) is essential to the morale and retention of Service personnel, as is ending the uncertainty regarding access to SFA by personnel in long-term, non-married relationships (including same-sex couples). Years of squeezing funding for the maintenance of SFA and SLA has contributed to a crisis in recruitment and retention. Current plans for investment do not arrest the overall

103 This includes force design, people policy, training, and other Defence Lines of Development with direct implications for infrastructure requirements.

104 Defence Estate Optimisation is a £5.1bn portfolio that is moving Defence towards a more affordable estate with the right infrastructure in the right places to deliver Defence outputs. Under this programme, Defence is building modern facilities, including headquarters, specialist facilities, and accommodation, to enable unit moves that support future force design and release sites for disposal (for example, through sales or leases).

rate of decline. The Government's decisive deal to buy back thousands of military homes offers an important opportunity to reset the parlous state of SFA following decades of underinvestment, with benefits likely to be felt in Scotland, Wales, and England in particular. The MOD should reinvest the proceeds from housing development on Defence land as well as drawing in private capital. The forthcoming Defence Housing Strategy should consider all options, including redesigning and remodelling the SFA estate to deliver wider societal benefit, increasing housing density where appropriate while supporting the Government's commitment to housebuilding. Supporting service personnel's aspirations for home ownership should also be explored, as outlined in Chapter 4.3.

5. **Parts of the estate that ultimately support warfighting**, including training, operations, and support, should also be prioritised. The Strategic Base should be treated as a front-line capability that is fundamental to the UK's ability to defend the homeland and deploy forces overseas. The Recapitalisation Plan should identify priorities for investment in the Strategic Base, including where operational infrastructure does not meet requirements under force development plans. It should also identify opportunities for mutually beneficial partnerships across Government and with the private sector. The Home Defence Programme, led by the Cabinet Office, should incorporate an infrastructure 'pillar' to ensure the Strategic Base is resilient in the event of war (Chapter 6).

Maximising assets for national goals and income generation

6. There is **significant opportunity to exploit the Defence estate**—which covers approximately 1% of the UK's landmass—**to generate income for the MOD and meet the wider needs of Defence and the Government**. Disposal may release funding for immediate use but it is not always the most effective way to generate revenue and realise value. The protective security that shields many Defence sites makes it a particularly attractive host for strategically important, dual-use infrastructure—opening up the possibility of crowding-in private-sector expertise and capital, while assuring capacity for Defence in times of crisis and conflict.

7. As a starting point, the MOD should identify opportunities that may emerge through:

   - **Releasing more land for building new housing across the UK**, following the March 2025 announcement of a new cross-government taskforce dedicated to this effort.[105]
   - **Artificial Intelligence (AI) infrastructure build-out**. As set out in the Government's AI Opportunities Action Plan,[106] AI data centres are critical infrastructure for training, deploying, and operating advanced AI systems.
   - **Sustainable energy generation and carbon sequestration**, using a 'market innovation only' model. Energy systems across Defence and the UK must be decarbonised at the same time as meeting growing energy demand. Building energy infrastructure on the Defence estate and/or using it for carbon sequestration would reduce the department's energy bills and risk, add to National Grid resilience, and provide income streams for the Government. Increasing renewable energy production on Overseas Bases has the potential to generate financial and resilience benefits.
   - Making sites available to startups and scale-ups, where possible, for **product testing and evaluation** to help nurture innovation (Chapter 4.2).

Transforming infrastructure management

8. Funding alone will not fix the longstanding problems affecting Defence infrastructure. **A fundamental change is needed in how, and how effectively, the MOD manages the estate**. Major decisions on infrastructure must be based on better information, while delivery must be accelerated through vastly improved contract management and productivity gains. To achieve this, the MOD should develop:

   - Comprehensive oversight of assets, liabilities, rates of obsolescence, and lifecycle costs across the estate.
   - Real-time understanding, through digitisation, of the needs across the estate.

105 Public land unlocked for the next generation of home owners - GOV.UK, 27 March 2025. The taskforce comprises the MOD, HM Treasury, the Ministry of Housing, Communities and Local Government, and Homes England.

106 AI Opportunities Action Plan, 13 January 2025 – GOV.UK.

- The legal and commercial skills to match industry, achieved through external recruitment and internal upskilling.
- Access to deep expertise of the type found in the private sector.

9. The National Armaments Director must **ensure that infrastructure requirements are fully integrated into capability development and investment decisions**, with robust and streamlined approvals and governance. All equipment plans, including in the ringfenced Defence Nuclear Enterprise, should be reviewed to ensure that suitable infrastructure provision has been made. Where it has not, a detailed operational plan should be devised to manage any shortfall within the relevant programme budget in the longer term. Any future changes to SFA or SLA driven by capability decisions should be funded as part of the relevant capability programme to ensure existing plans to build and maintain housing assets are not unduly impacted.

10. To embed infrastructure considerations into decision-making, the Chief Executive of the Defence Infrastructure Organisation should be a formal consultee on Defence and Command plans. All Front Line Command boards should establish a board member with responsibility for infrastructure. As Defence Reform progresses and as the Defence Housing Strategy is developed, the MOD should consider whether infrastructure management would be more effective if military accommodation were managed separately from the rest of the estate portfolio, reflecting its distinct requirements.

Recommendations:

59. The MOD must deliver an overarching infrastructure Recapitalisation Plan to the Secretary of State by February 2026. The plan should identify (a) opportunities for drawing in private-sector expertise and capital as quickly as possible and (b) mechanisms for realising this potential as a matter of urgency. It should take account of the department's existing work under the Defence Housing Strategy and Defence Estate Optimisation programme.

60. The MOD's forthcoming Defence Housing Strategy, due later this year, must set out how it will (a) improve the overall standard of accommodation, in alignment with commercial best practice for ensuring high-quality, good-value accommodation and (b) widen eligibility for those in long-term relationships. Defence should prioritise and increase funding this Parliament for accommodation sites that are in most urgent need of repair.

61. Under the Recapitalisation Plan, the MOD must assess how best to generate income and maximise the value of its assets, adjusting the Defence Estate Optimisation programme accordingly. Where alternative use or disposal is the right option, the Defence Infrastructure Organisation must have a strategy for the risk-adjusted maximisation of proceeds, engaging actively with the private sector. Where proceeds are realised from housing development on Defence land, the MOD should ensure these are reinvested in the renewal or future development of military accommodation. Where Defence retains land, it must maximise the use of its assets, including through site development and energy generation. Cross-government and private-sector partnership is essential.

62. Long-term resolution of Defence infrastructure problems requires a highly professional approach to estate management that is digitally enabled and led by an experienced commercial and legal team. The MOD should:

    - Ensure that infrastructure requirements are fully integrated into capability development and investment decisions.
    - Ensure that Defence is making full use of a fully integrated, digital, real-time Estate Management system.
    - Simplify and accelerate its commercial processes by adopting industry build standards and Cabinet Office contracts for standard services. There should be no bespoke Defence contracting and build requirements except where these are critical to infrastructure protection and/or resilience in time of crisis.
    - Develop faster, more agile ways of working that are proportionate to the risk involved. Burdensome authorisation processes should be scrapped to avoid costly 'stop-start' project management.

Appendix: Review Process

The SDR has proceeded in three phases:

i. **Information-gathering, July–September 2024:** alongside a public call for evidence, we commissioned departmental responses to, and sought expert views on, propositions relating to UK Defence.

ii. **'Review and Challenge', October–November 2024:** we convened 27 panels comprised of more than 150 experts to test the department's responses to our propositions. In parallel, we attended a table-top exercise on current and future defence capabilities with senior personnel from the MOD and the Armed Forces.

iii. **Decision-making and finalisation, December 2024–May 2025:** the testing of our findings continued as we drafted the final report and finessed our recommendations. Engagement across Whitehall and with allies and partners continued, including in preparation for publication.

Throughout the process, we have engaged extensively with allies, partners, industry, and wider society (Box 17). Our work was enhanced by the many contributions to the information-gathering phase and by working closely with all parts of the MOD. Assessing the department's propositions collaboratively enabled a rich Review and Challenge process by teams of accomplished external experts. We consider our Review was done with the department, rather than imposed on it, and many of our recommendations flow from having unlocked the rigour and creativity in today's Defence leaders. We updated the Secretary of State for Defence on our progress throughout, as well as the Prime Minister and the Chancellor of the Exchequer.

The following individuals contributed to the Review and Challenge phase of the Strategic Defence Review, taking part in the panel sessions. Names marked with * indicate Panel Chairs.

Ms Madeleine Alessandri*
Maj Gen (Rtd) Robin Anderton-Brown
Sir Ian Andrews
Cdre (Rtd) Ian Annett*
Dr Sophy Antrobus
Mr Andy Bamford*
Brig (Rtd) Ben Barry
Mr Adrian Baguley
VAdm (Rtd) Paul Bennett
Ms Anita Bernie
Maj Gen (Rtd) Michael von Bertele
Sir Simon Bollom
Mr Norman Bone
Mr Desmond Bowen*
Gen Sir Adrian Bradshaw
Ms Samira Braund
Lt Gen (Rtd) Martin Bricknell
Prof Justin Bronk
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Dr Phil Budden
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Ms Grace Cassy*
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Lt Gen (Rtd) Doug Chalmers
Prof Malcolm Chalmers*
Maj Gen (Rtd) James Chiswell*
Prof Michael Clarke*
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Sir Jon Coles
Mr Matt Collins
Maj Gen (Rtd) John Collyer
Mr Alex Cooper
Ms Gloria Craig
Air Cdre (Rtd) Andrew Curtis
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Mr Edward Dinsmore*
Mr Brian Dubrie
Prof John Economou
Maj Gen (Rtd) Angus Fay
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Prof Sir Lawrence Freedman
Lt Gen (Rtd) Sir Robert Fry
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Mr Andy Gamble
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Mr Will Green
Lt Gen (Rtd) Sir Andrew Gregory
Ms Judith Gough
Ms Kate Guthrie*
Mr John Hanley
Ms Angela Henderson
Prof Beatrice Heuser
Dr Michael Holden
Mr Martin Howard
Mr Will Jessett
Lt Gen (Rtd) Ivan Jones
Mr Peter Jones
Ms Sarah Kenny
Maj Gen (Rtd) Seumas Kerr
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Mr Stephen Lillie
Ms Claire Logan
Sir Stephen Lovegrove
HC Jane Marriott
Mr Robin Marshall*
Prof Ciaran Martin*
Mr Brian McBride
Mr Tom McKane
Lt Gen John Mead
Ms Oona Muirhead
Prof Dame Fiona Murray*
Prof Tracy Myhill
Maj Gen (Rtd) Paul Nanson
Prof Vipin Narang
Sir Robin Niblett
Ms Alexandra Notay
Prof Anu Ojha
Prof Sir David Omand
Air Mshl (Rtd) Philip Osborn
Sir William Patey
Lt Gen (Rtd) Sir Mark Poffley*
VAdm (Rtd) Duncan Potts
Mr Conrad Prince
Sir Jeremy Quin*
Mr John Raine
Ms Suzanne Raine
Mr Nick Reynolds
Sir Oliver Robbins*
Mr Joe Robinson
Sir Charles Roxburgh
Air Mshl (Rtd) Peter Ruddock
Dr Emma Salisbury
Mr Matthew Savill
Dr Gundbert Scherf
Ms Susan Schofield
Lord Mark Sedwill*
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Lt Gen (Rtd) Stuart Skeates
Maj Gen (Rtd) David Shouesmith
Dr Dave Smith
Brig (Rtd) Mike Stone
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Mr Paul Taylor
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Mr Simon Venn
Ms Sally Walker
Mr Peter Watkins
Dr Jack Watling
Prof Tim Watson
Ms Alison White*
Mr Marcus Willett
Sir Gareth Rhys Williams
Dr Heather Williams
HMA Dame Caroline Wilson
Mr Dominic Wilson
Prof Andy Wright
Sir Alex Younger

Box 17: Engaging those with a stake in Britain's Defence review

Our Review has been informed by an unprecedented level of consultation: 1,700 individuals and organisations submitted over 8,000 responses. This included approximately 800 responses from within the MOD, the Armed Forces, and the veteran community. Alongside this, we received written contributions from over 30 UK allies and partners, from Australia to the US, Iceland to Japan, Norway to New Zealand. We have engaged with many embassies in London. We have also engaged deeply with NATO, including directly with the Supreme Allied Commander Europe. Through dialogue with Australian partners, we captured insights from Australia's Defence Strategic Review 2023, which was similarly led externally to its Government.

We received written contributions from over 200 companies in the defence supply chain and wider industry. With our fellow reviewers, the 'Defence Review Team 6', we have also engaged with defence industry primes, the Defence Suppliers Forum, and smaller enterprises that play a critical role in driving innovation and advancing UK capabilities. Our request for insight from the UK knowledge sector and those of allies elicited over 100 written submissions to the SDR from think tanks and academic bodies.

As part of the review process, we have frequently engaged with parliamentarians, including through a debate in the House of Lords and by providing oral evidence to the House of Commons Defence Committee. Select Committee Reports—such as those on readiness for war and on the implications of the Ukraine war[107]—have proven invaluable.

In a first of its kind for Defence, a Citizens' Panel was established in late 2024 to understand what can be 'reasonably expected' in the eyes of the public. Panel members drawn from a cross-section of society were taken to four MOD sites, including single Service bases and MOD Corsham, HQ Defence Digital. On each visit, panel members were briefed by Defence personnel. They also had an opportunity to ask questions and see innovative Defence capabilities. At the end of this process, the panel offered a range of perspectives on Defence. These views are presented throughout this report.

107 House of Commons Defence Committee, First Report of Session 2023–24, Ready for War?, HC 26; House of Lords International Relations and Defence Committee, First Report of Session 2024–25, Ukraine: a wake-up call, HL Paper 10.