Ministry of Defence

Defence Nuclear Enterprise

2026 Annual Update to Parliament

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Foreword from the Secretary of State

The Rt Hon Wes Streeting MP
Secretary of State for Defence

Since its inception, the United Kingdom has used its nuclear deterrent every day. It remains as relevant today as it was then. The threats we face are increasing in scale, complexity and diversity. This demands a new era for UK Defence. We are clear in our commitment to delivering the nuclear deterrent through a triple lock (guaranteeing that the UK will (i) build four Dreadnought submarines, (ii) maintain our nuclear deterrent, (iii) and commit to the delivery of all future upgrades required to ensure the safety and effectiveness of our submarines).

Over the past year, the Defence Nuclear Enterprise (DNE) has delivered a number of historic milestones. In September 2025, His Majesty the King commissioned HMS Agamemnon, the sixth Astute Class submarine, into the Royal Navy. That day also saw the steel cut for the fourth and final Dreadnought boat, a landmark moment in the start of its construction.

And in July 2026, the Prime Minister and I announced an £8.4bn investment into the next stage of the Dreadnought build programme. This will support tens of thousands of jobs across the country and is an excellent example of how taxpayer investment into major government projects should deliver opportunities and growth in every postcode. This investment into the Dreadnought Class is essential to keep the UK secure in an increasingly dangerous world.

The DNE is responsible for hundreds of projects and programmes, including some of the largest and most complex undertaken by government. Its work is on a vast scale, and it is of vital importance to our national security. To deliver, it requires a whole of society approach. That is why we are coordinating action to ensure we are all, across government, industry and civil society, doing our part to deliver a National Endeavour. I am grateful to my colleagues in those organisations as we continue to drive this forward together.

The success of the National Endeavour requires a strong Defence, one that strives for greater efficiency, value for money, and reduced duplication. This streamlined approach is being embedded across all corners of the department through Defence Reform. Under the Chief of Defence Nuclear, the DNE has worked to break down siloes, strengthen delivery, and ensure greater integration between its programmes, with the rest of the department, and with wider

government. This coordinated effort will benefit nuclear programmes, strengthen the National Endeavour, and bolster our national security.

In 2025, the department published the Strategic Defence Review (SDR), which re-iterated the importance of investment in the DNE's critical programmes, infrastructure and pace of delivery. The Defence Investment Plan (DIP) provided the backing for these ambitions. The government has committed to investment in the DNE, including £15bn investment into the warhead programme, and £6bn into infrastructure programmes in Barrow-in-Furness and Raynesway which will grow the capability of the enterprise to be able to produce a submarine every 18 months in the future.

I am pleased to report strong progress against the nuclear recommendations within the SDR, including:

- Increasing industrial productivity by removing barriers and investing in the people and places that support our Nuclear National Endeavour, including through amendment of the Single Source Contract Regulations (SSCR), the implementation of John Fingleton's review of nuclear regulation, investing in Team Barrow and Team Plymouth, and delivering our Skills Plan;
- Progressing work for the UK to join the NATO dual capable aircraft nuclear mission once we have taken delivery of F-35A aircraft; and
- Working with Parliament to establish a new House of Commons-only Committee, appointed by the Prime Minister, to conduct scrutiny of DNE expenditure and programmes – to provide the public with the confidence that taxpayer money is being spent wisely on this critical area.

Last year's update made clear that the government would be making the investments that Defence needs to ensure the protection of our nation. As the DIP set out, the money spent on defence by the end of the decade will be 2.7% of GDP, up from 2.3% in 2024. Between FY26/27 and FY29/30, we will invest in excess of £20bn more into the DNE when compared to the previous four years of DNE spend.[1]

This increase in investment sends a clear signal of our commitment to global security, and to our Allies. The UK's nuclear deterrent remains declared to the defence of NATO, and we continue to deepen our relationships with the US, France, and Australia. In July 2025, we reaffirmed and strengthened our longstanding nuclear cooperation with France through the Northwood Declaration, recognising that there is no extreme threat to Europe which would not prompt a response by both nations. The AUKUS partnership saw an important development in February this year when HMS Anson docked at HMAS Stirling near Perth. The US is our closest defence ally, underpinned by our long-standing cooperation on all nuclear matters including nuclear policy, operations and technology.

This investment into the DNE is driving growth and prosperity across the country. We are maintaining a strong industrial base, working with a supply chain of over 6,000 UK-based businesses, and the Defence Industrial Strategy is delivering a new era for our defence industry by establishing Defence Growth Deals which will turbo-charge investment and innovation in nuclear hubs including Barrow and Plymouth.[2] We are also continuing to deliver our Nuclear

[1] The Defence Investment Plan
[2] Defence Industrial Strategy 2025: Making Defence an Engine for Growth

Skills Plan, breaking down barriers to opportunity by bringing highly skilled nuclear jobs to regions that have historically faced challenges. This is expected to support a growth in workforce from 47,000 across the UK today to 65,000 by 2030.

The DNE's progress over this past year represents what government can do when it is able to pull together partners from across the country and from all walks of life. From industry to our schools and universities, to small and medium suppliers, the National Endeavour is bringing real change as we continue down the path of recapitalisation of the UK's nuclear capabilities. It is thanks to the tireless work of these engineers in Barrow, scientists in Aldermaston, submariners out on patrol, and thousands more besides, that the nuclear deterrent remains the very cornerstone of our national security.

The Rt Hon Wes Streeting MP

Secretary of State for Defence

September 2026

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Introduction

The UK's nuclear deterrent, delivered since 1969 by the Royal Navy through Operation RELENTLESS, remains at the heart of our national security.

To modernise and sustain the nuclear deterrent, the DNE is recapitalising much of the enterprise simultaneously. This includes two submarine build programmes and a further one in design, two warhead programmes, re-establishing a nuclear fuel cycle for reactor fuel for defence purposes, and the delivery of all the infrastructure and facilities required to build and maintain these capabilities.

The scale and complexity of the DNE portfolio is unique across government. Delivering this programme of recapitalisation requires a National Endeavour, bringing together the efforts of tens of thousands from across government, industry, and academia. Over the last twelve months, we have delivered significant progress, including bolstering our skills base, investing in regional nuclear hubs, reforming our regulation and planning laws, and driving improvements in industrial productivity and innovation.

We are building the resilience of the UK's industrial base and strengthening the critical enablers which sustain the National Endeavour. This will help deliver the capabilities required to sustain our nuclear deterrent now and into the future, whilst sustaining long-term opportunities for economic growth arising from our defence nuclear programmes.

This report outlines the milestones across the DNE's major projects and programmes, including the Astute and Dreadnought build programmes and developments in the replacement warhead programme. It also outlines progress in developing our supporting infrastructure and critical enablers and demonstrates the government's continued commitment to delivering a credible and effective deterrent.

The DNE comprises the organisations that **operate, maintain, renew and sustain the UK's nuclear deterrent**. It brings together the core organisations of the Defence Nuclear Organisation (DNO) within the Ministry of Defence, the Royal Navy, Cyber & Specialist Operations Command (CSOC), and AWE Nuclear Security Technologies (AWE).

Our Defence 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 2025 SDR reconfirmed that the UK remains unwaveringly committed to our nuclear deterrent, for as long as it is needed, to protect the UK and our NATO Allies from the most extreme threats.[3] This commitment is even more salient as the international security environment becomes increasingly challenging. Nuclear risks are rising, as other states continue to increase, modernise, and diversify their nuclear arsenals.

The government maintains this absolute commitment to our nuclear deterrent through the nuclear deterrent 'triple lock':

- Building new nuclear submarines in Barrow-in-Furness, supporting high-quality, high-status apprenticeships and jobs, with the supply chain benefits being felt right across the country.
- The maintenance of CASD – securing protection for both the UK and NATO Allies.
- The delivery of all future upgrades needed for those submarines to patrol the waters and keep our country safe.

We continue to maintain the UK's nuclear deterrent – the UK's top priority defence mission. This includes all elements of the system, including the submarines, the Trident missile system and the UK's sovereign warhead. The UK's nuclear deterrent mission is delivered by the Royal Navy through Operation RELENTLESS, which has been deterring potential adversaries and protecting the UK and our allies continuously since 1969.

[3] Strategic Defence Review, Making Britain Safer: secure at home, strong abroad

Nuclear deterrence is the cornerstone of NATO security, and the independent strategic nuclear forces of the UK contribute significantly to the overall security of the Alliance. Since 1962, we have declared the UK's deterrent to the defence of NATO and we will continue to maintain this unshakeable commitment to the Alliance, safeguarding European and Euro-Atlantic security. We will work with Allies to ensure that NATO's nuclear deterrent capabilities remain safe, secure and effective, adapt to emerging challenges – including the growing and diversifying nuclear threats, and continue to contribute to the indivisible security of the Alliance.

As part of our NATO First approach to deterrence and defence, we are committed to strengthening NATO's nuclear mission and ensuring the Alliance's posture remains fit for purpose across the entire spectrum of conflict. To further bolster this commitment, the RAF will purchase new F-35A fighter jets and join NATO's dual capable aircraft nuclear mission. This decision will complement the UK's operationally independent nuclear deterrent.

The security of the UK is our foremost responsibility, and we will retain the nuclear deterrent for as long as the security situation requires. However, we are committed to the long-term goal of a world without nuclear weapons in a transparent, verifiable, and irreversible manner, with undiminished security for all. The Treaty on the Non-Proliferation of Nuclear Weapons (NPT) is the only credible route to nuclear disarmament, and we are committed to its full implementation. This year, the UK participated in the NPT Review Conference, as we pursue a path to disarmament, non-proliferation and peaceful uses through multilateral dialogue.

How we deliver Defence Nuclear

The DNE works closely with industry, academia, and partners across government to deliver our programmes. With a supply chain of over 6,000 UK-based businesses and a workforce of over 47,000, with demand set to grow to around 65,000 by 2030, the DNE provides considerable economic benefits across the UK. It supports well-paid jobs, investment in science and technology, and the training and upskilling of our workforce. The DNE's work, and the upgrades to our sites and Naval bases, generate substantial regional and local economic investment and opportunity, supporting regeneration and sustainability in communities that are critical to this National Endeavour.

The DNE's programmes represent a substantial investment into industry. It spent £12bn in the financial year 2025/26 and has a projected spend of over £100bn through UK suppliers over the next ten years. Recognising the criticality of our nuclear deterrent, the DNE operates under a ring-fenced budget with greater delegated spending authority than before, enabling faster decision making and a stronger focus on outcomes and delivery.

The Royal Navy have been operating the Vanguard Class submarines since 1993. The Vanguard Class will be replaced by the Dreadnought Class.

The Trident missile and supporting systems fitted onto the Vanguard Class submarines are manufactured by the US. We have bought title to a number of Trident missiles drawn from a shared pool of assets, as agreed with the US under the 1963 Polaris Sales Agreement (PSA) as amended for Trident in 1982. The Trident missile system is operated independently by both the Royal Navy and the US Navy.

The UK's Trident missiles are fitted with our Mk4A warhead, the design of which is sovereign to the UK and maintained by AWE in Aldermaston. AWE ensures the effectiveness and performance of nuclear warheads and assures the safety and security of our stockpile. They also lead the development of the UK's replacement warhead, Astraea.

The nuclear deterrent is supported by the Astute Class nuclear-powered, conventionally-armed submarines, which also undertake other defence and intelligence tasks, including involvement in maritime task groups.

All classes of UK submarines are powered by nuclear propulsion, the reactors for which are manufactured by Rolls-Royce Submarines Ltd at their Raynesway facility, near Derby. Nuclear propulsion technology is critical to sustaining CASD, allowing our submarines to remain dived to undertake long-range patrols without detection by potential adversaries.

Alongside this, the UK has begun exploring options to re-establish reactor fuel for defence purposes in a way that is fully consistent with the UK's international obligations under the NPT.

Taken together, the DNE's partnerships and programmes provide the capabilities required to maintain CASD as the bedrock of the UK's national security.

National Endeavour

Our programmes are among the largest and most complex coordinated by the government. These require the DNE to bring together partners from across government, industry, and civil society to deliver a National Endeavour to sustain the deterrent for as long as it is needed.

The DNE's National Endeavour has been strengthened by the SDR, which recognised its importance in driving resilience across critical enablers for the nuclear deterrent. It recommended that the government took action to remove barriers to industry productivity, including to build on our work to boost our skills base and to transform the places that support the UK's nuclear deterrent.

The National Endeavour delivers economic benefit and technological development and innovation across the UK. As well as enhancing industry productivity and boosting our skills base, we are streamlining our regulatory frameworks to enable us to deliver quicker. We are also investing in Barrow-in-Furness, the home of UK submarine building, and we have established Team Plymouth in recognition of the city's essential contribution to the UK's nuclear deterrent and national security.

The DNE relies on sites across the country. From shipbuilding in Barrow to maintenance in Plymouth to deployment for operations from Clyde, the National Endeavour is critical for the UK's national security whilst driving investment in the people and places who uphold it.

Skills

The Nuclear Skills Plan, published by the Nuclear Skills Taskforce in May 2024, recognises that a collaborative approach, bringing together government, industry and academia from across the civil and defence nuclear sectors, is essential to deliver against their future skills needs. MOD and the Department for Energy Security and Net Zero (DESNZ) lead on delivery of the plan, backed by significant government and industry investment (including BAE Systems, Rolls-Royce Submarines Ltd, Babcock and EDF).

Early indications from the latest Nuclear Workforce Assessment are that the combined civil and defence nuclear sector grew from 83,000 in 2023 to over 100,000 in 2025. Skills Plan member organisations have recruited over 2,000 graduates and over 4,000 apprentices in the first two years of operation. Of these, c. 1,300 graduates and c. 3,100 apprentices were in defence nuclear. The joint DESNZ – MOD PhD investment over 8 years will create over 500 PhD positions starting from Autumn this year, helping to develop a new generation of UK experts to push the boundaries of nuclear science. Eight indirect intervention contracts are now being mobilised to support mid-career switchers, improve cross-sector mobility, address regional challenges and work with training providers to ensure supply matches employer demand.

Barrow-in-Furness

Barrow-in-Furness has a long history of shipbuilding dating back to the nineteenth century. BAE Systems' Barrow shipyard remains of critical importance to our national security. It is the only facility in the UK with the infrastructure, site licence, and resources to design and build the UK's nuclear submarines. Recognising its importance to our national security and way of life, His Majesty the King visited Barrow in September 2025 to bestow Royal Charter status upon the Port of Barrow.

BAE Systems, the DNO, Babcock, and Rolls-Royce Submarines Ltd maintain teams in Barrow, contributing to the delivery of the Dreadnought and Astute build programmes, and the future SSN-AUKUS build programme. These programmes contribute to significant jobs growth in Barrow. Under this government, the Barrow workforce has grown by over 1,800.

2025/26 has seen significant developments in the Plan for Barrow, including:

- the launch of the 10-year transformation plan;
- a £2.8m fund for the town's voluntary and community sector; and
- a £400,000 grant scheme to help those who want to overcome health challenges back into work.

The work facilitated by these funds is overseen by the Barrow Delivery Board, chaired by former Cabinet Secretary Lord Case.

The Plan for Barrow is delivering coordinated action across government, industry, and academia. In partnership with BAE Systems and the University of Cumbria, the government has opened Barrow's first ever university campus, which began enrolling students in 2025/26.

Investment in Barrow-in-Furness is bringing sustainable growth, strengthening the local economy and encouraging more people to come to live and work in the area, whilst providing greater opportunity for those already living there. Through the work of Team Barrow and the Barrow Delivery Board, the DNE is ensuring that the town's full potential is realised.

Plymouth

As part of the DNE's commitment to boosting regional growth and recognising its importance to the UK's defence and security, we are significantly increasing investment into Plymouth.

Plymouth plays a vital role in the maintenance, modernisation, and disposal of our nuclear submarine fleet. In September 2025, the department announced Plymouth as one of the first five Defence Growth Areas as part of the Defence Industrial Strategy. This unlocks access to a portion of a £250m government fund focused on defence, industry and driving innovation. This sits alongside an investment of £7.1bn over ten years into HMNB Devonport.

Team Plymouth, which brings together Babcock, the Royal Navy, and Plymouth City Council, will oversee the use of this funding for targeted interventions in support of strengthening and growing the workforce, improving local infrastructure, transport and connectivity, and delivering thousands of new homes in support of a growing workforce alongside wider government investment.

Nuclear Regulatory Review

In November 2025, the Nuclear Regulatory Taskforce, led by John Fingleton CBE, published an independent nuclear regulatory review.[4] The aim of the review was to overhaul and simplify civil and defence nuclear regulations and cut down project delays and costs. The government accepted the report's recommendations and published a formal response on 13 March 2026, setting out the approach to implementing the recommendations.

The response commits the government to full implementation within two years. This is an important milestone in cutting regulatory barriers to DNE programme delivery. It will enable us to support the delivery of the deterrent by saving time and money.

The DNE is now in the implementation phase, working with government and industry partners to address the areas of regulatory simplification, risk management and proportionality, environment and planning, and capability and capacity.

The DNE will continue to work closely with wider government to implement the review, which represents a key pillar of the National Endeavour and demonstrates the benefits of cross-government working to deliver growth across the country.

Industry Productivity

Defence nuclear is a key pillar of the government's mission to build a resilient, high growth UK defence sector as part of its drive to reindustrialisation.

The government's commitments send a clear demand signal to industry, and the long-term nature of DNE programmes incentivises and stimulates investment and development right through the supply chain. UK firms of all sizes are seizing the opportunities presented by defence nuclear to modernise and expand their machinery, processes and workforce – boosting economic growth and creating jobs. Our Submarine Enterprise Supplier Development Programme is supporting several companies to improve performance and cost-effectiveness, and to upskill their workforce.

On 14 May 2026, the government laid a Statutory Instrument before Parliament reforming SSCR. This means, for example, that maximum incentive payments for suppliers increase from 2% to 10% of costs – but only when suppliers take greater delivery responsibility, agree performance incentives and hit agreed performance targets – giving the DNE (and wider MOD) the ability to reward suppliers who get equipment into service faster.

These reforms deliver on commitments made in both the SDR and the Defence Industrial Strategy, which said that with the promise to invest more comes a responsibility to invest better.

[4] Nuclear Regulatory Review 2025

Civil-Defence Collaboration

MOD and DESNZ are working together to invest in the critical capabilities and technologies needed to deliver the UK's civil and defence nuclear requirements. Through the Industrial Strategy, published in June 2025, we committed to reasserting and revolutionising the UK's role as a leading, responsible, and innovative nuclear nation.[5] This work brings together civil and defence experts to strengthen the foundation of the UK's shared nuclear capabilities, as we both renew our defence nuclear industry and make Britain a Clean Energy Superpower.

MOD and DESNZ will continue to increase collaboration and alignment to maximise the benefits: driving economic growth, boosting the role of nuclear energy, and developing innovative nuclear technologies – all while continuing to lead the way for global standards in nuclear security, safety, and non-proliferation. This work will be a multi-decade national effort, bringing together government, industry, and academia to realise the benefits of an advanced nuclear nation.

[5] 2025 The UK's Modern Industrial Strategy

Economic Growth

The DNE plays a crucial role in supporting sustained growth across the country. In addition to jobs directly supported by DNE programmes, there are currently over 47,000 jobs supported by the enterprise, with the demand expected to rise to 65,000 by 2030. To meet this demand, we are driving growth in jobs further through our Nuclear Skills Plan, which in the past two years has delivered c.1,300 graduates and c.3,100 apprentices into the defence nuclear sector.

DNE investment is driving long-term economic growth in the wider defence nuclear sector. This investment drives innovation and supports a supply chain that extends across over 6,000 UK-based companies. The DNE supply chain is helping to meet the government's ambition for a resilient, high growth defence industry, supporting the development of new capabilities and infrastructure which can be deployed across civil and defence industry.

Investment in Sheffield Forgemasters will increase its efficiency, capacity and productivity, including a new machine hall and forge featuring some of the world's most advanced heavy manufacturing technologies. The 2025 Spending Review saw over £420m allocated for this purpose, bringing total government investment to £1.3bn, a commitment which will secure 700 skilled jobs and support the growth of Sheffield Forgemasters' apprentice programme.[6]

The DNE is ensuring that the UK remains at the forefront of emerging and advanced technologies, including through investment in seven 'Catapult Centres' across the nation to enable industry, scientists and engineers to work together on late-stage R&D. With an emphasis on emerging technologies, these catapult centres will help to ensure that commercial opportunities arising from DNE R&D are fully realised.

AWE has recently committed to the creation of five new 'Centres of Excellence', to enable strategic and collaborative R&D across scientific computing, future systems materials technology, quantum computing and sensing, actinides research, and nuclear data.

The benefits of these initiatives will be felt across every region and nation of Britain, from Plymouth to Clyde. Already the DNE directly supports 4,000 jobs in the Midlands, 5,000 in Scotland and Northern Ireland and 15,000 in the North of England.

[6] Spending Review 2025

Our Submarines

The UK's submarine fleet is comprised of the four Vanguard Class submarines, and five in-service Astute Class attack submarines. A further two Astute Class submarines will be delivered to bring the total class size to seven. The DNE oversees the full lifecycle management of this fleet from design to disposal, as well as looking ahead to our future requirements.

All UK submarines are manufactured by BAE Systems in Barrow-in-Furness. The nuclear reactor plant and its in-service support are provided by Rolls-Royce Submarines Ltd at its Raynesway facility and through-life support is delivered by Babcock. We are establishing a Submarine Production Alliance which will bring these three industry primes together with MOD to deliver our future programmes, and through the AUKUS partnership with Australia and the US we are developing a new class of attack submarine to replace Astute: the SSN-AUKUS.

Dreadnought

The Dreadnought Programme will deliver the four Dreadnought Class submarines to replace the current Vanguard Class. These will be the most technologically advanced submarines the Royal Navy has ever operated. They will carry Trident II D5 missiles armed with sovereign UK nuclear warheads. In line with the recommendation of the SDR, the government has committed to start to define the requirement for the post-Dreadnought nuclear deterrent within this Parliament.

In September 2025, the Secretary of State attended the first steel-cut for the fourth boat, HMS King George VI, at a ceremony in Barrow-in-Furness, marking the beginning of construction.

The programme is bringing substantial investment into British industry and represents an important contribution to defence's role in driving growth across the nation.

In July 2026, the Prime Minister and the Secretary of State for Defence announced Delivery Phase 4 for the Dreadnought build programme. This £8.4bn investment will support a supply chain encompassing hundreds of companies and tens of thousands of jobs across the country, from Barrow to Bristol. It will see HMS Dreadnought, the first of the class, complete its sea trials and be ready to enter service with the Royal Navy in the early 2030s.

The previous government estimate was the Dreadnought build programme would likely cost £41bn (£31bn plus £10bn contingency). The current forecast to completion remains within this envelope. Spend in the year to March 2026 was £3bn, bringing the total spend to £23.2bn. The programme continues to face significant pressures and associated risks given the complexity of this mega project and the wider economic environment.

Astute

First introduced in 2014, the Navy's Astute Class submarines, equipped with Tomahawk missiles and Spearfish torpedoes, are at the forefront of underwater warfare and reflect the UK's investments in conventional forces. They are capable of detecting, tracking, and destroying enemy forces at sea, as well as covertly striking land targets.

Alongside their role supporting CASD, they are also involved in protecting maritime task groups, supporting special forces providing

global strategic intelligence and support to UK, NATO and coalition operations.

In September 2025, the sixth Astute Class submarine, HMS Agamemnon, was commissioned at Barrow, with His Majesty the King reading the commissioning warrant in the presence of a wide range of dignitaries, including those from the US and Australia. Following this, HMS Agamemnon conducted her latest stage of testing, the first trim dive, marking a further step towards joining the in-service fleet. Construction on Boat 7 continues.

HMS Astute, the lead boat of the class, has completed her first 15-year commission and is commencing preparations for her Mid Life Re-Validation Period at Babcock's Devonport site.

SSN-AUKUS

SSN-AUKUS is being developed through the AUKUS partnership with the US and Australia. Based on a British design, SSN-AUKUS will be a new class of nuclear-powered, conventionally-armed attack submarine to replace the Astute Class.

The SSN-AUKUS programme is currently progressing through the Detailed Design and Long Lead (D2L2) phase. Decisions on the total number of submarines to be procured are expected to be taken before the end of the D2L2 phase in 2028. The programme has already placed contracts worth c. £4bn, supporting the development of the capability and the industrial infrastructure needed to deliver the next generation of attack submarines.

On current plans, steel will be cut on the first UK SSN-AUKUS submarine in 2027, marking the start of production. The programme remains focused on delivering the first Royal Navy SSN-AUKUS submarine into service in the late 2030s. Through commitments made under the DIP, the government is investing in the shipbuilding and industrial capacity required to support an expanded SSN fleet, with the objective of achieving a drumbeat of one submarine every 18 months.

The Royal Australian Navy will also operate their own fleet of SSN-AUKUS submarines. Construction of the UK's submarines will take place at BAE Systems' Barrow shipyard, while Australia will build their submarines at Osborne Naval Shipyard in South Australia.

The next generation of nuclear reactors for all SSN-AUKUS submarines – including Australia's – will be built at Rolls-Royce Submarines Ltd's Raynesway site. The UK will also supply key components to Australia's programme whilst they develop their industrial capacity to create a resilient supply chain across both nations. Recognising the importance of British industry to the development of this capability, Australia has invested £2.4bn over ten years to boost Rolls-Royce infrastructure and to share costs on SSN-AUKUS submarine design.

Submarine Build Modernisation

In line with the SDR, the government has committed to a transformative enhancement of capacity, capability, and productivity at Rolls-Royce Submarines Ltd's Raynesway facility, BAE Systems' Barrow shipyard and the supporting supply chain. This strategic investment is pivotal to establishing a continuous production cadence of one SSN-AUKUS submarine every 18 months, doubling the current build rate, and enabling the parallel construction of both SSN and SSBN classes. Over the Spending Review period, this modernisation will entail an investment of approximately £6bn.

To achieve this ambition, expansion of engineering capacity at Raynesway, the hub for design and manufacture of nuclear reactors powering the UK's entire submarine fleet, is already well underway. This includes the recent groundbreaking of the major Primary Components and Operations Facility alongside improved site access and advanced prototyping facilities to enable a growing and highly skilled workforce to remain at the cutting edge of manufacturing technology.

Concurrently, substantial progress is being made at Barrow, the historic centre of British nuclear submarine construction. In early 2026, the concept design for SMITE2, the new submarine propulsion testing facility, was completed. This will deliver modernised and expanded engine and machinery assessment essential to sustaining the accelerated production tempo. Remediation at Ramsden Dock has also advanced, with critical site preparation for future major manufacturing infrastructure development. These efforts are complemented by investments in digital design systems, cutting-edge manufacturing technologies, and multiple training centres for a growing and better equipped workforce.

Recognising that the success of the submarine build programme hinges on a resilient and capable supply chain, targeted investments are being directed at key specialist suppliers. This includes boosting capacity, capability, and technological innovation in critical areas such as propulsor design and manufacture, electrical switchgear, and precision engineering. The government is working closely with these suppliers to ensure they meet the heightened demand and stringent quality standards of the SSN-AUKUS programme. Strengthening the supply chain not only mitigates risk but also drives broader industrial growth and regional skills development, thereby securing the long-term sustainability of the UK's submarine enterprise.

Nuclear Fuels Programme

As part of investment commitments to sustain the nuclear deterrent for as long as required, the UK is exploring options to re-establish a nuclear fuel cycle for reactor fuel for defence purposes.[7]

The Nuclear Fuels Programme is in its early development phase, and we are engaging industry to develop and refine options. This includes exploring the technologies and facilities required to support each stage of the fuel cycle. The ongoing options analysis will inform our timescales.

The UK takes its nuclear responsibilities and obligations seriously and a re-established fuel production cycle will be fully consistent with the UK's international obligations, including the NPT. The UK will continue to maintain the highest standards of safeguarding of civil nuclear materials and will be in compliance with our obligations under the UK's Voluntary Offer Agreement with the International Atomic Energy Agency. It will also be fully consistent with the UK's voluntary moratorium on the production of fissile material for use in nuclear weapons or other nuclear explosive devices.

We will provide further updates to Parliament as the programme progresses.

Warhead

The DNE ensures that UK maintains a safe, secure and reliable stockpile of sovereign warheads sufficient to meet our requirement for a minimum credible deterrent. AWE, which was brought back into government ownership in 2021 and celebrated its 75th anniversary in 2025, designs, manufactures and maintains the UK's nuclear warheads. It is undergoing a transformation, including major recapitalisation of its infrastructure and nationwide investment across its supply chain and science, engineering and technology (SET) base, to ensure that the UK has the sovereign capabilities to maintain its current warheads and develop any future systems the nation may require.

The government has committed £15bn from 2025/26 to 2029/30 to the warhead programme, including the development of the UK's replacement warhead, Astraea. This will be the first new UK warhead since the Mk4 warhead (subsequently upgraded to Mk4A) entered service in the early 1990s, and the first to be designed in the Comprehensive Test Ban Treaty (CTBT) era without explosive nuclear testing. Delivery depends on the UK's core warhead SET capabilities, including products and technology, advanced manufacturing, warhead physics, materials, mission effectiveness, hardness & vulnerability, scientific computing, radiation protection and regulatory science, and criticality safety and non-destructive assay. AWE will publish an updated UK CTBT-compliant warhead SET strategy this year.

[7] The Nuclear Fuels Programme was announced in November 2024 via a Written Ministerial Statement.

In the past year, several major milestones have been achieved in the development of the Astraea warhead. The System Design Review for Astraea was completed in August 2025, a significant step for the design, safety and performance assessments, and manufacturability of the replacement warhead. The following month saw the successful completion of hydrodynamic trials at Los Alamos National Laboratory in the US. This work is supported by a broader programme of laboratory experimentation, including high energy density physics.

In 2025, the DNE has strengthened the infrastructure, manufacturing capability, and scientific base required to sustain Mk4A and deliver Astraea safely, securely, and at pace. The Future Materials Campus (FMC) programme will provide facilities for the manufacture of nuclear components and storage of nuclear materials, enhance fissile science and analysis capabilities, and invest in new approaches to nuclear material recovery.

Delivery of Astraea is a national endeavour, drawing on expertise across government, industry, academia and international partners. The UK's sovereign capability is also enhanced by our partnerships with the US, under the US-UK Mutual Defence Agreement and Polaris Sales Agreement, and with France, under the Lancaster House Treaty and Northwood Declaration, signed in July 2025. The Astraea programme is aligned to the equivalent US W93/Mk7 and utilises advanced CTBT-compliant test, trial and evaluation capabilities, including a joint hydrodynamic testing facility at EPURE in France. In December 2025, the programme achieved a landmark milestone with the world's first 3-axis hydrodynamic test.

Together, these investments ensure the UK maintains the scientific, engineering and manufacturing base required to deliver a safe, secure, and effective nuclear deterrent in the CTBT era.

Missile

The Trident missile system is designed and manufactured in the US.
The procurement of the Trident system by the UK is enabled through the 1963 Polaris Sales Agreement, as amended in 1982 for Trident.

The UK buys title to an agreed number of a shared stock of Trident missiles which are maintained at the Kings Bay Submarine Base, Georgia, where they are loaded into UK SSBNs.

The UK-manufactured warheads are fitted to the missiles at HMNB Clyde in Scotland. These arrangements will continue for the Dreadnought Class when they enter service.

International Collaboration

Our international partnerships are fundamental to supporting the UK's nuclear deterrence.

United States

We maintain a close partnership with the US on all nuclear matters, including nuclear policy, operations and technology. Nuclear cooperation between the UK and US is underpinned by the 1958 Mutual Defense Agreement (MDA) and the 1963 Polaris Sales Agreement (PSA), enhancing transatlantic security and bringing benefit to both countries. No other nations work so closely, and co-ordinate as effectively, as we do in this area.

The MDA, extended indefinitely in 2024, continues to enable close cooperation between the US and UK on atomic energy for mutual defence purposes, including the exchange of nuclear materials, technology, the transfer of non-nuclear components as well as collaborative scientific exchanges on technology and nuclear threat reduction.

France

The signing of the Northwood Declaration in July 2025 represents a historic deepening of Franco-British co-operation across policy, capability and operations. The declaration reaffirms that we do not see situations arising in which the vital interests of either France or the UK are threatened without those of the other also being threatened. It states that there is no extreme threat to Europe that would not prompt a response by our two nations, and that our respective nuclear deterrents, while independent, can be coordinated. Under the Declaration, a UK-France Nuclear Steering Group has been established to provide political direction for this closer collaboration, with the inaugural meeting taking place in December 2025.

The Northwood Declaration builds upon the existing TEUTATES Treaty, signed as part of the Lancaster House Agreements, which facilitated the construction of a shared hydrodynamic facility – EPURE – near Dijon. Whilst the UK and France maintain operational independence, the facility is jointly managed, with both nations performing sophisticated experiments to inform their modelling of the performance, safety and reliability of their nuclear weapons to enable assurance of the warhead without underground testing.

AUKUS

AUKUS is the UK's flagship defence and security partnership with two of our closest partners, the US and Australia. Pillar I of the AUKUS partnership concerns SSN-AUKUS, a next-generation, state-of-the-art, conventionally-armed nuclear-powered submarine that will be operated and built by both the UK and Australia.

The AUKUS partnership was further strengthened in July 2025 by the signing of the Geelong Treaty between the UK and Australia. The Treaty is an historic agreement that represents a commitment for the next 50 years of UK-Australian bilateral defence co-operation under AUKUS Pillar I, the delivery of Australia's conventionally armed, nuclear-powered submarine capability. It primarily enables comprehensive co-operation on the design, build, operations, sustainment and disposal of our respective SSN-AUKUS submarines.

This was followed in March 2026 by the visit of an Astute Class SSN, HMS Anson, to HMAS Stirling in Perth for a Submarine Maintenance Period (SMP). The visit was a

major milestone in delivering the Pillar 1 Optimal Pathway and saw Australian personnel engage in maintenance and operations activity, giving them essential experience with conventionally armed, nuclear-powered submarines.

Building a resilient trilateral submarine supply chain is a central objective of AUKUS Pillar 1, and the SMP has helped progress this. Over the course of HMS Anson's visit, we calculate that over 2,500 person hours of Australian industry work was completed. Further to this, 17 Australian businesses supported the maintenance activity, with 34 necessary components manufactured locally.

Infrastructure

The DNE is investing in infrastructure across the breadth of the country. Project Royal Oak will see £26bn into our naval bases over the next decade, the biggest upgrade for over 45 years. This includes DNE projects in Faslane and Devonport which will support thousands of jobs, requiring specialist skills across construction, engineering, science and supporting services.

To do this, we are investing in our industry partners, providing them with the certainty and the resources necessary to deliver the next generation of capabilities to sustain the nuclear deterrent and support the wider submarine enterprise.

HMNB Clyde

HMNB Clyde is the largest military base in Scotland, employing some 6,000 people in military and civilian roles. Sitting across two main sites, (Faslane and Royal Naval Armaments Depot Coulport), it is home to the UK's Submarine Service.

In the past year, submariner training has moved into the new state-of-the-art Royal Navy Submarine Training Centre, and construction has begun on four additional accommodation blocks, which will be ready for occupancy in 2026 and 2027.

We are investing in our Submarine Engineering infrastructure; in July 2025, a long-term lease was signed to commence construction of a new offsite Submarine Engineering Capability. Looking forward, the multi-decade, highly complex Clyde Transformation Programme (CTP) will deliver a naval base that can operate current and future DNE capabilities in a safe, efficient and sustainable manner. The CTP will incorporate the Clyde Infrastructure Programme and EUSTON, which will deliver out of water submarine engineering capability, as well as new programmes relating to berthing, ammunitioning, logistics and engineering.

HMNB Devonport

The largest naval base in Western Europe, HMNB Devonport employs close to 12,000 people in support of a wide range of outputs for ships and submarines. The base is the Royal Navy's centre of specialisation for submarine deep maintenance for in-service submarines, as well as a critical site within our submarine defueling and dismantling project.

Devonport is undergoing a major programme of recapitalisation, with the modernisation of docks, equipment and supporting infrastructure and new construction projects, such as the non-tidal

maintenance berth, preparing the base for the arrival of Dreadnought Class SSBNs and SSN-AUKUS Class SSNs throughout the 2030s and 2040s. MOD is working with Babcock to deliver this long-term portfolio of work at the same time as continuing dockyard operations.

In parallel, we are re-establishing a nuclear defuel capability for retired PWR1 submarines to contribute to our submarine recycling programme and dealing with our nuclear legacy.

Rosyth Royal Dockyard

Rosyth Dockyard plays a vital role in supporting our submarine recycling programme. We are increasing investment in submarine dismantling to manage the backlog of submarines currently laid up awaiting disposal. Further infrastructure enhancements at Rosyth are being considered to enhance its capacity to support the submarine flotilla more effectively.

Submarine Recycling and Nuclear Liabilities

The DNE works with regulatory bodies to ensure a safe, secure and environmentally responsible approach for the disposal of the UK's decommissioned submarines and nuclear liabilities.

Since 1980, 23 nuclear powered submarines have left service. 16 boats (four of which have been defueled) are stored at Devonport Dockyard, while the remaining seven (all defueled) are at Rosyth Dockyard.

The Submarine Dismantling Project's (SDP) demonstrator, Swiftsure, achieved a major milestone in June 2025, with the cutting and removal of her fin. The next key milestone involves removing the Intermediate Level Waste (ILW), including the Reactor Pressure Vessel.

Following the removal of Swiftsure's radioactive and hazardous materials, the department estimates 90% of the platform's weight can be recycled through existing disposal routes within the UK. The demonstrator remains on track to be dismantled by the end of 2026 and as of June 2026, a total of 2,445 tonnes has been removed from Swiftsure, equalling over 62% of the platform's total weight.

We are re-establishing a safe and secure defueling capability at Devonport Dockyard. In June 2025, Babcock were awarded a £114m contract to prepare for the defueling of four decommissioned Trafalgar Class submarines. This is taking place in parallel with ongoing infrastructure investment into Devonport to develop facilities to recommence defueling activities. This approach will help to free up valuable dockyard space as submarines are defueled and decrease costs associated with storage of decommissioned submarines.

The MOD is also developing plans for an enduring Submarine Disposal Capability (SDC) within the UK to ensure the safe and secure disposal of the UK's current Vanguard and Astute Classes (and beyond) submarines. The SDC project is in concept phase and is assessing all options for a future submarine disposal capability within the UK.

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