The Nuclear State

Policy Exchange

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About the Policy Exchange Nuclear Enterprise Commission

As the UK enters a decisive decade for its energy and economic future, the Policy Exchange Nuclear Enterprise Commission will continue to set out the bold, practical reforms required to rebuild a world-class nuclear enterprise, cut through the inertia of the past two decades, and deliver the nuclear renaissance Britain urgently needs.

The Commission will produce a series of discussion papers and research notes over the coming six months addressing the most pressing questions facing the UK's nuclear enterprise. Drawing together expertise from across government, industry and academia, its research and events will span subjects from the nuclear deterrent and the nuclear threat landscape to regulation, the nuclear industrial base and dual-use technologies. This breadth will enable the Commission to propose in a final publication a wide array of answers to the considerable challenges at the heart of energy and national security policy. It should be noted that all research papers produced under the banner of the Policy Exchange Nuclear Enterprise Commission are intended for discussion and do not necessarily represent the views of every member of the Commission, or the Commission as a whole.

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Foreword

By Rt Hon Lord Case CVO PC

In recent years, much attention has been given to the British state's institutional capacity and the renewal of an effective, resilient civil service. That same focus must now be extended to nuclear governance. After decades of institutional drift, stop-start policymaking and chronic underinvestment, political and popular support for nuclear energy and the deterrent has returned with renewed force. A Government that has pledged reform, committed substantial capital to new build and placed nuclear at the heart of its defence and energy agenda represents a rare opportunity. The question is no longer whether Britain wants a nuclear future. It is whether the British state can deliver one.

This report addresses that question directly, although the answers offered are as uncomfortable as they are necessary. Its central argument is simple: political will, however sincere, cannot by itself convert commitment into capability. Nuclear programmes operate across timescales that span multiple parliaments, spending reviews, and generations of ministers. Their success depends on institutions capable of sustaining focus, resolving trade-offs and maintaining strategic direction through political and fiscal pressure. Without appropriate institutional architecture, ambition will not be enough.

The diagnosis set out in this report is precise and persuasive. Britain's nuclear enterprise was not always organised as it is today. Over time, responsibility has been dispersed, strategic coherence has been weakened, and accountability has become more opaque. The result is that the system is less able to maintain momentum, take difficult decisions, and protect long-term priorities. When no single actor has both the authority and the incentive to hold a strategic line across the enterprise, sustained focus becomes difficult to execute. Indeed, responsibility is now shared so widely that it effectively belongs to no one. The natural consequence of this is that when decisions become difficult – when programmes require sequencing, trade-offs need forcing, or commitments need defending against other financial pressures – the system defers rather than decides.

Yet deferral is not a neutral act. Each postponed decision allows nuclear to slip further down the agenda, making the next round of prioritisation harder and the case for investment progressively more difficult to sustain. From the accumulated weight of these decisions not taken flows underinvestment across civil and defence nuclear, undermining the

capabilities on which they depend. By the time the consequences manifest themselves, the system has locked itself into the chronic underperformance that renewed political ambition was supposed to overcome.

This is why this report matters. It is not simply a set of administrative recommendations, but an argument about the state's ability to act strategically in pursuit of vital national and energy security objectives. Nuclear is uniquely unforgiving of inconsistency. It depends on decisions being sustained over long periods, specialist capabilities being preserved from one decade to the next and government maintaining focus through political change and competing priorities. Where that coherence is absent, delay is only the most visible consequence.

On this basis, the stakes are national rather than sectoral. Civil and defence nuclear both bear directly on Britain's future security, resilience and prosperity in a world increasingly defined by their absence. In both cases, the issue is not simply whether the Government is willing to commit money or announce ambition. It is whether the state can organise itself to actually deliver. That is the central challenge identified in this report, and the reason its recommendations merit close attention across Whitehall and Westminster.

Executive Summary

- **The UK no longer has a nuclear ambition problem; it has a nuclear governance problem**. Political support for civil nuclear and the deterrent has returned, but the nuclear state lacks the institutions and processes to sustain focus or force prioritisation necessary to convert political backing into delivery over decades.

- **The nuclear enterprise is the national system through which the UK develops, sustains and applies nuclear capability. It is best understood as a single enterprise**, with civil, defence and research-industrial pillars (despite important distinctions) rely on many of the same underlying national capabilities.

- The enterprise began as a relatively unified system but has become fragmented over time. **What was once a more state-directed strategic system has been broken up by successive institutional changes, leaving a national capability that is still deeply interconnected in practice but poorly governed in structure** – driving weak coordination and poor performance.
  - This is especially true in the civil nuclear space, where overall policy responsibility for nuclear matters is set by the Department for Energy Security and Net Zero (DESNZ), while delivery and programme development is headed by Great British Nuclear (GBN), albeit with responsibility shared with the Nuclear Decommissioning Authority and the Office for Nuclear Regulation.
  - More broadly, the Cabinet Office, the Department for Work and Pensions, the Department for Education and the Department for Science, Innovation and Technology are also responsible for various parts of civil nuclear, supported by numerous arm's-length bodies, regulators, government-owned companies, research organisations, and contractors operate with distinct statutory duties and governance arrangements.

- **This fragmentation prevents the state from sustaining focus or imposing priorities**. In civil nuclear, no single actor consistently integrates policy and delivery, facilitating drift and deprioritisation. DEZNZ lacks coherent control over the entire civil nuclear enterprise Defence nuclear is more coherent as it operates through an enterprise model but still carries notable coordination

problems between long-term capability planning and day-to-day operation.

- **The consequence is an absence of sustained focus, and subsequent drift and deprioritisation, culminating in underinvestment and underperformance**. For instance, of the more than twenty new UK reactors proposed since 1980, only one, Sizewell B, has been completed. In addition, the UK's inability to standardise construction programs or sustain a regular drumbeat of building and investment has meant both civil and defence nuclear projects have faced significant challenges to their skills and supply chains.

- Without a central actor with the authority to force trade-offs across the whole enterprise, the system defaults to the lowest common denominator outcome, forcing nuclear to the back of an already stretched capital stack. Over time this has weakened skills pipelines, eroded industrial capacity, undermined investor confidence and locked the enterprise into chronic underperformance.

- **A further problem is the misalignment between civil and defence nuclear.** Civil and defence nuclear are two distinct yet related aspects of the UK state and draw on many of the same national assets. Yet they rarely interact unless forced to by circumstance. This is reflected in the lack of strategic investment that the UK has provided to British companies developing SMRs. Despite the UK being one of the world-leaders in SMRs, in large part due to the defence applications of these reactors for its nuclear submarine fleets, civilian SMRS have not treated as strategic assets in the same way as in France, primarily due to a lack in joined-up enterprise thinking. Moreover, the internal fragmentation of the civil enterprise and its lack of an overarching coordinating body make structural engagement with the defence nuclear almost impossible.

- However, **a dedicated Ministry for Nuclear is not the preferred answer** to these challenges**.** Nuclear policy is too deeply embedded in wider defence strategy and energy-system planning for a departmental carve-out to solve the core problem. A new ministry could create fresh seams while leaving the underlying coordination failure unresolved.

- What is needed goes beyond a mere reduction in arms-length bodies or greater departmental coherence. It is a coherent framework for the civil nuclear enterprise, which can then interact with the DNE in a more formal, structured, long-term manner, enabling the core features required for the delivery of nuclear capabilities.

- These can be summed up by the following principles:
  a. **Sustain government commitment** across electoral cycles: create a governance architecture that preserves focus and momentum while forcing prioritisation even as immediate circumstances change.
  b. **Force prioritisation and trade-offs**: design governance so that delays, sequencing conflicts and funding choices are resolved explicitly rather than deferred.
  c. **Create coherence within civil nuclear governance**: reduce system fragmentation, strengthen strategic direction and give the civil system a stronger integrating centre that links policy to delivery.
  d. **Manage integration within the defence nuclear enterprise**: preserve the distinction between current operations and long-term capability planning, but govern the boundary more deliberately.
  e. **Align civil and defence nuclear at the enterprise level**: Move beyond ad hoc cooperation by creating formal cross-enterprise mechanisms to coordinate areas of shared concern.

- These will require rewiring the state, addressing these issues through specific governance mechanisms.

Recommendations

The following alterations would provide a strong foundation for improving the nuclear state:

1. **Hardwire anti-drift tools into the system**. Deferral should no longer be the default response to complexity. Programme slippage should trigger automatic escalation to progressively higher levels of authority, and ministers should have to sign off explicitly on "do nothing" outcomes such as deferral or cancellation. The point is not to force approval, but to force (accountable) decisions.

2. **Create an empowered Nuclear Regulatory Implementation Panel**. The NRIP should function as an implementation mechanism rather than a strategic governing body: a taskforce with formal authority to direct regulatory reform, require delivery plans and joint timetables, oversee a live implementation plan, and work day-to-day with developers, regulators and local authorities to remove practical blockages before they become programme delays.

3. **Establish a Civil Nuclear Enterprise as the civil counterpart to the Defence Nuclear Enterprise.** Led by a Civil Enterprise Board and Chief Civil Nuclear Officer within DESNZ, it would give government end-to-end ownership of civil nuclear strategy and delivery. In effect, it would act as the system integrator that civil

nuclear currently lacks.

4. **Defence Nuclear reform should focus on managing internal boundaries more deliberately, not abolishing them.** The distinction between current operations and future capability planning should remain, but it needs stronger joint planning between the DNO and Royal Navy.

5. On the defence side, the Government should also **make fuller use of the Military Strategic Headquarters**, deepen engagement with U.S. Strategic Command, and entrench nuclear education for senior military leaders.

6. **Following this, a formal civil-defence alignment framework should follow.** Shared areas of concern should be managed through standing cross-enterprise mechanisms with joint planning obligations, shared data and governance boards that can actually resolve trade-offs.

The UK needs a more disciplined nuclear state. Taken together, the above reforms could help deliver it. Amongst these reforms, the **immediate priorities are anti-drift mechanisms, followed by a Civil Enterprise Board and empowered NRIP, then a formal civil-defence alignment framework**, all supported by a broader cultural shift toward long-term thinking, clearer accountability and greater tolerance for measured risk. Without this, political support and regulatory streamlining is unlikely to translate into durable nuclear capability for the long term, and the UK will continue to lag significantly behind peer nations such as France.

Introduction

The UK's nuclear enterprise is experiencing renewed political support as the Government prioritises it for energy security, economic growth and net-zero objectives. Nuclear energy has reemerged as a central component of energy strategy, while the deterrent remains a (if not the) core element of defence policy, both buoyed by growing public interest and enthusiasm. Despite this, the risk remains that without institutional mechanisms to preserve long-term commitments and enforce prioritisation, renewed enthusiasm will dissipate, returning the enterprise to postponement and underinvestment.

The primary constraint on the UK's nuclear enterprise is institutional, rather than in Government policy. Nuclear projects require sustained cross-government coordination, yet responsibility for policy and delivery is dispersed across organisations with different mandates and incentives. As a result of this governance landscape, decisions are frequently deferred and nuclear projects are deprioritised – leading to undercapitalisation and diminished capabilities.

The problem of miscoordination within civil and defence enterprises is exacerbated by the lack of alignment between the two. Although both depend on many of the same national capabilities, they are largely planned independently. Civil and defence nuclear are not identical sectors; they operate under different missions, workforce requirements and fuel demands. However, where both rely on shared inputs, the current division limits coordination across workforce planning, industrial strategy and fuel supply, preventing the state from optimising shared capabilities, providing consistent demand signals and avoiding competition for constrained resources. The absence of deliberate cross-enterprise coordination and prioritisation risks weakening the resilience and effectiveness of the nuclear enterprise as a whole.

Capitalising on current enthusiasm to realise improved nuclear outcomes depends on governance reform that strengthens prioritisation and coordination across the enterprise. Institutional arrangements must sustain attention over long project timelines, resolve trade-offs between competing programmes and align civil and defence nuclear planning where capabilities overlap. Without these reforms, the current support for nuclear will not translate into reliable delivery or the sustained development of the capabilities on which the nuclear enterprise depends.

The Enterprise

Defining the Enterprise

The UK's nuclear 'enterprise' refers to the complete national system which enables the UK to generate nuclear energy, sustain the nuclear deterrent and other associated nuclear-related activities. The term is used because these activities do not operate in isolation. Instead, they rely on a shared ecosystem of infrastructure, industrial capacity, specialist skills, regulatory frameworks and research institutions. It is not a single organisation; rather, it is a system of mutually interdependent institutions which, despite formal separation, act as a single ecosystem.

Treating these capabilities as a single enterprise is vital because civil nuclear energy, because while civil nuclear energy and the deterrent remain distinct in purpose and operation, they depend on parts of the same national system. Treating them separately obscures system-level dependencies and encourages policy to focus narrowly on individual programmes. Historic separation has produced inconsistent policymaking that ignores these interdependencies, weakening capabilities underpinning both energy security and deterrence credibility.

The UK nuclear enterprise can be understood across three interacting pillars: the defence nuclear enterprise, the civil nuclear system and the research-industrial base. At the centre of the defence side of the nuclear enterprise sits the UK's deterrent delivery system, managed through the Defence Nuclear Enterprise (DNE). It is not a single organisation, but a "partnership of organisations that operate, maintain, renew and sustain the UK's nuclear deterrent" including the Defence Nuclear Organisation, Royal Navy, Submarine Delivery Agency and the Atomic Weapons Establishment.[1] The DNE acts as a coordinating architecture between the organisations responsible for policy, capability development, procurement and operational delivery to ensure that people, infrastructure and scientific-industrial capabilities, amongst other constituent parts, are aligned under a shared strategic mission.[2]

On the civil side, the enterprise is necessarily broader and more institutionally dispersed because civil nuclear delivery depends on a chain of functions that runs from design through regulation to operations and end-of-life stewardship. The Department for Energy Security and Net Zero (DESNZ) sets overall civil nuclear policy, establishes the market and financing frameworks and sponsors key arms-length bodies. Delivery and programme development are led by Great British Nuclear (GBN), which is responsible for building and managing the government's new-build

1. The Defence Nuclear Organisation, 'About us', link
2. The Ministry of Defence and The Defence Nuclear Organisation, 'The UK's nuclear deterrent: the National Endeavour explained', 6th October 2025, link

pipeline, shaping project development activity and acting as the central delivery body. DESNZ retains responsibility for the overarching policy and financing model and for ministerial decisions on major commitments. Project developers and operators in industry are then responsible for design, commissioning and operation of plants, delivering against the contractual and regulatory requirements set by government and the statutory regulators.

The enterprise also includes the industrial and research base that supports it. This base develops the technologies while providing the expertise and specialist services that sustain both civil and defence programmes. On the public side, UKAEA anchors national nuclear science and engineering capability, most notably in fusion R&D, while applied nuclear research, testing and technical support functions are provided through organisations such as the UK National Nuclear Laboratory and the wider research system funded via UK Research and Innovation and universities. Alongside these core research institutions, the enterprise includes the private and semi-private industrial ecosystem without which neither civil nuclear construction nor the deterrent can be sustained, particularly those firms providing nuclear-grade manufacturing, propulsion systems, specialist maintenance and engineering services.

The key point here is that the UK's nuclear capabilities do not operate as discrete domains, but an interlocking system. Decisions taken in one part of the system can, therefore, constrain or enable outcomes elsewhere. Viewing the UK's nuclear capabilities as an enterprise is thus not a matter of conceptual neatness but an accurate description of how the system functions and should enable more effective nuclear governance in the pursuit of crucial energy and national security objectives.

How Did We Get Here?

The UK's nuclear enterprise did not begin as the present system of fragmented governance. It emerged from a far more unified national programme in which civil and defence nuclear capabilities were treated as elements of a single strategic undertaking directed by the state. It began as a relatively unified national programme, constructed around the premise that nuclear capability (civil and defence) required central state direction of science and industrial infrastructure. The first important institutional step was the creation of the United Kingdom Atomic Energy Authority (UKAEA) under the Atomic Energy Authority Act 1954, which established a single statutory body with responsibility to produce, use and dispose of atomic energy alongside undertaking nuclear-related research.[3] This initial model concentrated expertise and direction within a small number of national institutions, with the state acting as the organiser of long-term capability.

Early civil nuclear development was also intertwined with the defence nuclear programme. Reactor designs, fuel-cycle facilities and materials production were shaped by dual-use objectives, with electricity generation and plutonium production often integrated within the same

3. UK Government, 'Atomic Energy Authority Act 1954', 4th June 1954, link

national system. The early Magnox reactors exemplified this arrangement, producing both power and plutonium suitable for weapons use, while sites such as Windscale and later Sellafield supported both civil fue-cycle operations and defence material requirements.[4] Rather than functioning as distinct civil and defence sectors, the nuclear enterprise operated as a unified national capability to meet both strategic aims.

Over subsequent decades, the governance of the nuclear enterprise gradually separated into different institutional functions, with each increasingly anchored in distinct governing systems. A key early inflexion point was the Nuclear Installations Act 1965, which entrenched nuclear site licensing as the basic mechanism through which civil nuclear activity would be controlled. Licensing necessarily privileges regulator independence and formalised safety governance, and over time, it ensured that delivery could never be a purely departmental choice. The heightened role of a distinct regulatory pillar with its own statutory functions had the institutional effect of disempowering central governmental control and dispersing the responsibility for delivering nuclear construction.

Institutional concentration was gradually dismantled as operational functions were separated from UKAEA and transferred into new corporatised entities. The creation of British Nuclear Fuels in 1971 moved fuel cycle and reprocessing activities into a state-owned company operating on commercial lines, while subsequent restructuring placed reactor operations and electricity generation into Nuclear Electric and later British Energy. Consequently, civil nuclear activities increasingly came to be treated as part of the national electricity system rather than as elements of a single strategic nuclear programme. While defence nuclear capabilities continued to be governed through national security structures, civil nuclear generation and fuel cycle activities were progressively embedded within industrial and energy policy frameworks that emphasised commercial operation rather than their relationship with nuclear defence. The Electricity Act 1989, which established the legislative framework for electricity privatisation and the broader restructuring of the sector,[5] is a useful marker of that shift as civil nuclear was progressively treated less as a single strategic capability programme and more as part of energy policy and market regulation. These changes dispersed responsibilities and shifted large parts of the nuclear enterprise into organisational forms that were structurally separate from central government programme management while also occluding the relationship between civil and defence governance.

A further layer was added through the Energy Act 2004, which created the Nuclear Decommissioning Authority (NDA) to assume responsibility for the UK's historic civil nuclear estate and its long-term clean-up liabilities.[6] While the NDA provided a dedicated mechanism for managing legacy risk, it also formalised the separation between legacy management and future nuclear development, embedding another major institutional pillar within the governance of civil nuclear activities.

More recently, the government has sought partial counterweights to

4. World Nuclear Association, 'Nuclear Development in the United Kingdom', 12th June 2025, link
5. UK Government, 'Electricity Act 1989', 27th July 1989, link
6. UK Government, 'Energy Act 2004', 22nd July 2004, link

fragmentation through new delivery institutions, but in a manner that also adds to institutional complexity. Great British Nuclear (GBN) was constituted as an arms-length body of DESNZ, with statutory powers designated under the Energy Act 2023 to facilitate nuclear project design, construction and operation.[7] Yet even here, the governance implication is double-edged: bolstering delivery capacity can be valuable, but if the system lacks a strong integrator across policy, regulation, legacy liabilities and shared inputs, additional bodies can still leave the enterprise operating as a set of adjacent structures rather than a single programme. Moreover, its status as an arms-length body of DESNZ illustrates the deep-set institutional aversion to treating civil and defence nuclear co-dependent elements within a shared mission with joint needs.

The consequence of these changes is a nuclear enterprise that remains materially unified at the level of inputs but is institutionally disunified in how it is governed. Simultaneously, the split between civil and defence governance stacks persists despite their reliance on common national capabilities, producing a strategically critical enterprise whose coordination is considerably weaker than when the nuclear programme began. The policy challenge that follows is, therefore, how the state can govern the nuclear enterprise as a coherent national capability capable of delivery despite the inter- and intra-sector institutional separation that has accumulated over time. This fragmentation, and the state's resulting difficulty in sustaining focus, imposing priorities and coordinating delivery across the enterprise, is the central problem of the British nuclear state.

7. Great British Nuclear, 'About us', link

The Problems of the Nuclear State

Despite renewed support for nuclear energy and the deterrent, the UK's nuclear enterprise remains vulnerable to shifting political attention. Maintaining focus requires coordinated institutions and a culture of long-term planning. Yet government structures disperse responsibility across departments, arm's-length bodies and regulators, making such continuity difficult. As a result, government struggles to compel trade-offs or coordinate action, leading to deferred decisions and the recurring cycle of delay and underinvestment. The problems of the nuclear enterprise do not, therefore, stem not so much from policy intent, but from a governance architecture that allows nuclear policy to slip down the agenda.

Maintaining Focus and Preventing Drift

Enthusiasm for nuclear energy and the deterrent appears to be rising within government and the public, but this momentum may fade. Since coming to power, the Government has consistently framed nuclear energy as being central to interlocking economic, environmental and security objectives.[8] It has pledged to "rip up the rules to fire-up nuclear power",[9] taken the first steps in adopting the recommendations of the Nuclear Regulatory Taskforce review[10] as well as making significant financial commitments to nuclear new build made in the Budget.[11] Regarding the deterrent, the Government has continued the previous Government's work in modernising the CASD[12] and associated warheads,[13] while framing it as a central element of rejuvenating the defence industrial base.[14] There appears to be a growing consensus among other parties on nuclear-related issues, with the notable exception of the Green Party.

Without sustained attention, civil and defence nuclear policy will revert to the familiar pattern of deprioritisation, weak coordination and underinvestment, already evident in the acute undercapitalisation of defence and civil nuclear programmes.[15] A fiscally constrained Ministry of Defence has deferred infrastructure renewal and dockyard modernisation. On the civil side, stop-start policymaking has deterred private investment, slowed final investment decisions and left the UK reliant on a shrinking fleet of ageing reactors rather than a predictable cadence of new build.[16]

Nuclear governance should create mechanisms that force prioritisation and decision-making, consequently maintaining momentum and sound coordination, foreclosing the possibility of a return to deleterious institutional inertia. While the machinery of government remains a central

8. The Department for Energy Security and Net Zero and the Ministry of Defence, 'Nuclear Regulatory Review 2025: summary', 24th November 2025, link
9. The Prime Minister's Office and The Department for Energy Security and Net Zero, 'Government rips up rules to fire-up nuclear power', 6 February 2025, link
10. The Prime Minister's Office and The Department for Energy Security and Net Zero, 'Prime Minister's strategic steer to the nuclear sector following the 2025 Nuclear Regulatory Taskforce's Review', 26th November 2025, link
11. HM Treasury, 'Budget 2025', 28th November 2025, link
12. Claire Mills, 'Replacing the UK's nuclear deterrent: Progress of the Dreadnought class', House of Commons Library, 5th August 2025, link
13. Lisa West, 'UK confirms new Astraea nuclear warhead progressing', UK Defence Journal, 21st October 2025, link
14. Sky News, 'Rolls-Royce wins £9bn UK submarine contract in "boost to jobs and nuclear deterrent"', 24th January 2025, link
15. David Cullen, 'Trouble Ahead, Risks and Rising Costs in the UK Nuclear Weapons Programme', Nuclear Information Service, April 2019, link, and Committee of Public Accounts, House of Commons, 'Hinkley Point C', 20th November 2017, link; Mitchell Palmer 'How 21 Failed Nuclear Projects Left UK Households Paying 40% More For Electricity Than France' Adam Smith Institute link
16. World Nuclear Association, 'Nuclear Power in the United Kingdom', 14th January 2026, link

element of ensuring sustained focus, governance reform should be equally concerned with changing the culture of the nuclear state. Institutional reorganisation is an important tool, but it must be accompanied by altering the underlying behaviour which determines outcomes. The priority is to cultivate long-term thinking, institutional memory and tolerance for measured risk. Without a culture capable of supporting sustained focus and continuity in planning, even well-designed machinery of government will underperform. Excessive focus on formal structures obscures key drivers of delivery such as incentives, culture and political leadership. Ultimately, how ministers prioritise trade-offs, how officials interpret risk and how departmental underperformance is corrected are as important as the formal location of responsibilities.

That having been said, the cultural shortcomings are further compounded by the disjointed institutional landscape. Within civil nuclear, the Department for Energy Security and Net Zero is responsible for policy. However, delivery and implementation responsibilities are distributed across several organisations, including the Nuclear Decommissioning Authority, Great British Nuclear and the Office for Nuclear Regulation. In parallel, companies such as Urenco[17] and Nuclear Transport Solutions perform specific operational roles within the fuel cycle and logistics system. While DESNZ provides overall policy direction, it does not exercise direct operational control over these organisations, each with its own distinct remits and delivery priorities.

The defence nuclear enterprise demonstrates somewhat greater integration, but responsibilities remain distributed across several organisations. The MOD holds overall responsibility for defence nuclear policy and capability, within which the Defence Nuclear Organisation provides strategic direction and governance for the nuclear enterprise. Delivery responsibilities are then divided among several major bodies: the Submarine Delivery Agency manages procurement and support for the CASD, the Atomic Weapons Establishment is responsible for the design, manufacture and support of the UK's nuclear warheads, while the Royal Navy operates the fleet. These organisations operate within a more unified defence governance framework than in civil nuclear, but responsibilities are still distributed across organisational boundaries, requiring continuous coordination.

This is not to say it is without problems. One challenge is found in the division between the DNO, responsible for future capabilities, and the Navy, responsible for present operational delivery. The DNO acts as the strategic authority for long-term capability, renewal and enterprise governance, while the Navy is responsible for current operations. While there is considerable sense to this distinction, separating long-term planning from day-to-day operation, it risks creating persistent coordination problems. Divergent priorities between immediate operational pressures and designing and sequencing future capability are a fertile ground for costly misalignment as long-term spending priorities become insufficiently grounded in operational realities and operational

17. 33 per cent of which is own by the UK Government.

demands crowd out strategic aims. This internal boundary between future capability and current operation requires active management if the defence nuclear enterprise is to function as a coherent whole.

Beyond the civil and defence nuclear enterprises themselves, additional departments hold important but partial responsibilities that further diffuse accountability. The Cabinet Office plays a coordinating role in national resilience, emergency planning and nuclear-related contingencies, but does not set nuclear strategy or direct delivery. The Department for Work and Pensions (DWP) sponsors the Office for Nuclear Regulation as a statutory corporate body. Meanwhile, the Department for Education and the Department for Science, Innovation and Technology shape the nuclear skills pipeline and research funding through education and innovation policy. Below the departmental level, numerous arm's-length bodies, regulators, government-owned companies, research organisations, and contractors operate with distinct statutory duties and governance arrangements.

The principal characteristic of these diffused responsibilities is an inability to determine priorities. That is, when responsibility is divided among so many stakeholders, no single actor possesses either the authority or the incentive to impose sequencing or trade-offs across the whole enterprise. In the place of deliberate direction emerges a lowest-common-denominator consensus, in which the most urgent tasks are rarely addressed first. This leads to stalled funding decisions and second-order consequences in the form of eroded specialist skills, a weakened industrial base and an uncertain investment environment. What begins as a lack of overall coherence between responsible departments and bodies, alongside an avoidant, risk-averse culture, leads to an absence of strategic sequencing. In turn, this leads to stop-start funding and postponed decisions – with each delay compounding the next, until the system settles into chronic underperformance.

Political and popular support exists, but without clear responsibility and coordinated departmental responsibility, enforcing sequencing and sustained ministerial focus, the system defaults to caution, drift and underinvestment. Diffuse governance structures defer decision-making, weakening momentum and allowing nuclear priorities to slip down the agenda. Breaking that cycle requires the Government to embed prioritisation and accountability at the centre of decision-making through structural institutional reforms and a change of culture – ensuring that nuclear policy is treated not as one bidder among many for scarce capital, but as a strategic programme whose continuity is bolstered across electoral and fiscal cycles.

The Role of the Treasury

On this basis, it is not productive to attribute underinvestment or 'blame' to the Treasury, for it is often less the originator of constraint than the residual decision-maker to which unresolved trade-offs are deferred. Inertia elsewhere means that the difficult decisions about sequencing, scope and

affordability are postponed until they reach the Treasury, where spending teams assess proposals alongside the wider portfolio of projects, assessing affordability, value for money and competing capital priorities.[18] Without the political will or momentum to force nuclear up the expenditure stack, nuclear appears as yet another pressure in an already fiscally constrained environment.

This is not to say that HMT is intrinsically hostile to nuclear investment. On the contrary, many of its officials recognise the strategic logic of civil and defence nuclear programmes, and the long-standing case for them has commanded support within government for well over a decade. The issue is not ideological opposition, rather it is procedural scepticism: whether proposals are sufficiently specified, affordable and deliverable to justify the scale of capital committed. In the absence of convincing answers, caution prevails.

This dynamic is exacerbated by the political element of spending decisions. Prime Ministers frequently announce ambitious commitments or headline figures that outpace the machinery required to deliver them, leaving HMT to reconcile aspiration with fiscal reality. When spending plans prove unaffordable or poorly sequenced, it falls to the Treasury to impose discipline through delay, deprioritisation or rejection. The political cost of restraint is thereby concentrated in one department, creating the impression that it is obstructive when it is in fact performing its role as providing coherence across the whole capital programme.

Experience has further reinforced this caution as large, capital-intensive (nuclear or otherwise) projects have repeatedly overrun on cost and schedule.[19] Each such episode hardens institutional scepticism and raises the evidentiary bar for future approvals. The result is not a fundamental hostility to nuclear projects, but risk aversion and a subsequent preference for fully scoped and often over-engineered business cases before funds are released. While rational from HMT's perspective, this 'gold-plated' threshold slows decision-making and can itself contribute to the very delays it seeks to avoid.

The result is that HMT becomes the de facto prioritiser of the nuclear enterprise because it is the arbiter of last resort, since strategy has not been settled elsewhere. Under such conditions, nuclear programmes must compete within an already crowded capital stack, and absent clear, sustained political direction, they are liable to be pushed back in favour of more immediate or less risky claims on funding. What appears to be HMT's reluctance is more accurately understood as the downstream effect of fragmentation upstream.

Intra- and Inter-Sector Misalignment

Furthermore, even if civil nuclear had a system integrating function (in the style of the DNE), it may still suffer from the same misalignment, on a larger scale, between civil and defence sectors. The failure to operate in concert should be understood as first an intra-sector problem and then as an inter-sector one. In effect, the UK operates two distinct nuclear states,

18. HM Treasury, 'Assessing Business Cases a "Short Plain English Guide"', link, and HM Treasury, 'The Green Book', 5th February 2026, link

19. The Office for Value for Money, 'Value for money study: governance and budgeting arrangements for mega projects', 19th June 2025, link, and The Department for Transport, 'Stewart Review Major Transport Projects Governance and Assurance Review: The HS2 Experience', 18th June 2025, link

resting atop a single, shared system of suppliers, infrastructure, workforce and fuels.

Considering their shared foundation, the civil and defence nuclear enterprises appear to be somewhat arbitrarily separated.[20] In practice, these are not wholly separate ecosystems but distinct sectors drawing on many of the same national capabilities. Treating them as discrete policy domains fragments planning for skills pipelines,[21] obscures long-term industrial needs while damaging the ability to meet them, complicates regulatory coordination and prevents a coherent national approach to fuels and decommissioning. This treatment of civil and defence nuclear as separate policy silos reduces alignment to episodic or ad hoc coordination rather than unified action. Departments and delivery bodies may collaborate where immediate overlap is unavoidable, but such cooperation tends to be reactive rather than structurally embedded in the machinery of government – missing the significant opportunities presented by a more closely aligned system.

This failure to operate in concert reflects problems at several levels of governance. Civil nuclear struggles to act as a coherent system in its own right, which, due to internal fragmentation, then makes meaningful alignment with defence nuclear structurally difficult. Where no single actor can coordinate priorities within civil nuclear, none can credibly coordinate across the enterprise as a whole.

The problem, therefore, is not just one of institutional proliferation or reducing the number of arm's length bodies. Minimising the number of organisations without addressing intra- and inter-sector coordination would do little to address the underlying problem. Instead, the nuclear enterprise requires greater coherence across its civil institutions, with clearer strategic direction, accountability and integration. Simultaneously, it needs stronger alignment between civil and defence nuclear communities, ensuring that shared capabilities in skills, infrastructure, fuel cycles, research and supply chains are developed in ways that advance common national objectives. Moving beyond a system of artificial separation toward one of deliberate strategic integration at intra- and inter-sector levels would enable the state to set unified priorities and optimise overlapping interests across the civil and defence domains.

This requires deliberate institutional change. It will only emerge when governance structures are designed to force prioritisation, trade-offs and optimisation. Without such mechanisms, civil and defence programmes will continue to plan against separate timelines and assumptions despite relying on a common pool of capabilities. As a result, inter-sector alignment depends on institutions capable of setting priorities across civil and defence nuclear simultaneously, allowing the state to treat areas of shared concern as interlinked capabilities, rather than sector-specific assets.

20. Cogent Skills, 'Nuclear Workforce Assessment', March 2025, link

21. Delphine Strauss, 'UK lacks skilled workers for new defence and nuclear projects, says union leader', The Financial Times, 16th February 2026, link

An Alternative Nuclear State

The central challenge facing the nuclear enterprise is not the absence of policy ambition, but the absence of institutions and processes capable of sustaining momentum and prioritisation. A reformed system of nuclear governance should, therefore, embed these concerns within the machinery and culture of government itself by designing governance structures, decision pathways and accountability mechanisms that force trade-offs to be resolved, align delivery across departments and prevent suspension being the default outcome.

Anti-Drift Tools

To sustain focus on nuclear-related issues, governance reforms should hardwire momentum into decision-making through mechanisms that compel decision-making and prevent delay from becoming the default response to difficulty. The extended timeframes of nuclear projects and involvement of multiple departments and delivery bodies mean that without formal procedures which force resolution, responsibility can diffuse across the system and difficult trade-offs can be deferred indefinitely. Anti-drift mechanisms should be designed to ensure that delay is actively managed rather than passively accepted as the default outcome of a complex system. The aim is not to force approval, but rather to force decisions.

A potent example of where this has not occurred is through the long development cycle of Sizewell C. First identified as a suitable site in 2010,[22] the project experienced more than a decade of policy uncertainty over financing models and the role of foreign involvement before a final investment decision was reached in 2025.[23] During this period, repeated delays to funding decisions slowed supply-chain mobilisation and weakened investment confidence in the UK nuclear pipeline. Rather than resolving financing and sequencing questions early, decisions were repeatedly deferred, illustrating how even strategically supported nuclear projects can drift when governance mechanisms do not compel timely trade-offs.

The central mechanism in resolving this should be the mandatory escalation of programme delays beyond defined thresholds. Major nuclear projects already operate against milestones and delivery schedules, where these milestones are missed (at any point in the delivery pipeline), escalation procedures should automatically require immediate review at progressively higher levels of authority, culminating in ministerial consideration if delays persist. Escalation ensures that unresolved problems cannot remain indefinitely within delivery bodies or departments, and that

22. Alice Cunningham, 'What is Sizewell C and what does it mean for Suffolk?', BBC News, 10th June 2025, link

23. The Department for Energy Security and Net Zero, 'Sizewell C gets green light with final investment decision', 22nd July 2025, link

trade-offs are addressed at the level where they can actually be decided.

Alongside escalation should be explicit ministerial sign-off for 'do-nothing' outcomes. Requiring ministers to formally approve deferral or cancellation would ensure that inaction becomes a conscious and accountable policy choice rather than an emergent consequence of fragmentation or a culture of risk aversion. This would both strengthen the political accountability and ownership of decisions, carrying the cultural effect of reinforcing the expectation that delays must be justified against strategic objectives.

Anti-drift tools would embed the cultural and institutional changes needed to introduce the procedural discipline and subsequent focus on nuclear issues. These mechanisms would ensure that delivery obstacles cannot be indefinitely deferred, while ministerial sign-off requirements would make the consequences of delay visible and politically accountable. By converting inertia into decision, such tools would help maintain continuity and momentum across political vicissitudes, ensuring that nuclear policy remains a sustained strategic programme rather than one vulnerable to gradual deprioritisation.

Risk Governance and Regulatory Rebalancing

To sustain focus on nuclear, governance reform must also address the way risk is interpreted and managed, the Government should introduce an empowered form of the Nuclear Regulatory Implementation Panel (NRIP) recommended by the Nuclear Regulatory Taskforce Review. The Review proposes the NRIP to "drive reform, remove blockages, and deliver an implementation plan within three months."[24] An empowered Panel should function as the central delivery mechanism for regulatory reform rather than as a coordinating or advisory body. Its design should be explicitly execution-oriented, possessing the authority necessary to overcome the institutional patchwork that has historically undermined nuclear delivery.

The Government's response to the Fingleton Review addressed the NRIP, committing to its creation as a primarily advisory and coordinative rather than directive body. Its role, as envisioned by the Government, would be as a dedicated mechanism for oversight of the reform programme without formal authority to direct departments, mandate integrated delivery timetables or resolve cross-government conflicts. For the NRIP to function as a genuine delivery mechanism, it must be given formal, statutory authority rather than depending upon informal influence. The Panel should be authorised to direct (not just recommend) via the Prime Minister or the Cabinet Office, cementing it as the central authority responsible for directing the implementation of nuclear regulatory reform across government. The NRIP should be understood primarily as an implementation mechanism rather than a governing body for the nuclear enterprise. Its purpose would be to remove regulatory barriers impeding deployment, ensuring that the processes surrounding nuclear delivery operate in a coordinated and timely manner. It should not attempt to provide strategic oversight of the civil nuclear programme as a whole.

24. Nuclear Regulatory Taskforce, 'Nuclear Regulatory Review 2025', 24 November 2025, p.129-130, link

Such authority is not intended to interfere with individual regulatory judgements, nor the statutory independence of regulators. Rather, these powers are intended to ensure that the processes surrounding those judgments are aligned, sequenced and resolved at pace. This means that the Panel must be able to require departments and regulators to produce delivery plans against agreed objectives, in addition to mandating joint timetables where responsibilities overlap and insisting on integrated decision pathways where siloed processes would otherwise generate delay or duplication.

Beyond the authority to direct, the NRIP should have control of the nuclear implementation plan itself, rather than acting as a passive observer. This includes controlling updates to the plan, such as changes to scope or sequencing. This should facilitate a clear oversight against agreed milestones while treating an implementation plan as a live delivery instrument, rather than as a static statement of intent. Static ambitions without mechanisms to facilitate changes are unlikely to be capable of responding to the challenges that arise throughout the process. In turn, departments and regulators should be required to explain deviations from agreed milestones or outcomes directly to the Panel. Cumulatively, these measures should ensure a balance of accountability and political focus, creating the credible investment environment needed for nuclear expansion.

Policy clarity alone is insufficient without the institutional capacity to act. Strategic planning must therefore be a permanent, delivery-focused function within government, operating under the authority of the NRIP, rather than a periodic policy exercise. The Panel should work day-to-day with developers, regulators and local authorities to align planning and regulatory processes and resolve blockages before they become delays. This is essential given the complexity of nuclear delivery, which spans multiple regulatory, planning and local consent regimes that do not align automatically.[25] Without a strategic planning function anchored in the NRIP, accountability will fragment and momentum will be lost; with it, national strategy can be translated into timely, on-the-ground delivery. In effect, the NRIP would function as an implementation taskforce, responsible for aligning regulatory processes and resolving delivery barriers rather than determining the strategic direction of the civil nuclear programme.

A Civil Counterpart to the Defence Nuclear Enterprise

The NRIP and the Civil Enterprise Board perform distinct roles. The NRIP is designed to unblock delivery by coordinating regulatory and planning reform, while the Civil Enterprise Board would provide strategic governance of the civil nuclear sector as a whole. Establishing the Civil Nuclear Enterprise as the civil counterpart to the Defence Nuclear Enterprise would introduce a coordinating authority capable of aligning elements around shared objectives. Creating a system-level coordination function capable of enforcing prioritisation and delivering continuity of

25. Energy Security and Net Zero Committee, 'Gridlock or growth? Avoiding energy planning chaos', 7 July 2025, link

direction across decades-long civil nuclear programmes should provide a greater degree of coherence to civil nuclear governance.

At the centre of this model would be a Civil Nuclear Enterprise board, supported by a Chief Civil Nuclear Officer, responsible for the coordination and oversight of delivery. Located within DESNZ, the CNE would provide clear end-to-end ownership of civil nuclear outcomes and coordination between its respective bodies, including the sequencing and balancing of objectives, by consolidating key delivery and sponsorship functions within an enterprise framework. The CNE should maintain a single civil nuclear delivery plan setting out programme sequencing across new build, fuel-cycle capabilities, waste and decommissioning, workforce development and industrial capacity. Additionally, it should coordinate spending profiles with HMT, align regulatory and planning timelines with delivery milestones, and provide consistent long-term demand signals to industry and the system of skills and education. This would allow the CNE to act, as the DNE does, as a system integrator for civil nuclear, capable of drawing together the currently fragmented system of institutional remits and objectives into a coherent pipeline, mitigating the weak prioritisation that currently characterises the civil nuclear system. Existing delivery organisations, most notably Great British Nuclear, could operate within this enterprise structure as programme delivery bodies, while the CNE would focus on strategic coordination, sequencing and cross-government alignment. Even where existing arm's-length bodies and institutional arrangements remain in place, an enterprise structure would strengthen alignment and clarify responsibility for outcomes.

Establishing a Civil Nuclear Enterprise would, however, likely require substantial departmental adjustment and the reconfiguration of responsibilities across government. The principal risk in creating an overarching structure is that it would add a further coordinating layer without sufficient authority to direct departments and delivery bodies. For CNE to succeed, its coordinating mandate would have to be clearly defined, and changes to responsibilities and the structure of departments themselves kept to a minimum. It cannot become an additional forum for consultation instead of a proper system integrator. Some functions currently distributed across departments would need to be more closely aligned with the enterprise structure. As part of the CNE's coordinating mandate, it should be empowered to pursue some internal rationalisation, including recommending the transfer of responsibilities between departments where this improves delivery coherence. For example, the ONR, as the UK's main nuclear regulator, should be transferred from being a corporate body sponsored by the DWP to a subsidiary of DESNZ.

Issues identified through the NRIP's work could be escalated to the Civil Enterprise Board where they require strategic prioritisation or cross-programme trade-offs. In this way, the NRIP would address specific regulatory problems, while the Civil Enterprise Board would ensure that the overall direction of the civil nuclear programme remains coherent.

Improving the Defence Nuclear Enterprise

Although the defence nuclear enterprise is more integrated than the civil system, it is not free from coordination problems. The central task of reform should not be to remove the distinction between current operations and future capability, but to manage it more deliberately. This requires stronger mechanisms for alignment within the enterprise, clearer strategic coordination with the United States and a more robust intellectual foundation for senior military leadership.

The present settlement between the DNO and the Royal Navy on future capabilities and current operations is in many respects understandable, and to some degree necessary. The requirements of operational command are distinct from those of long-term capability planning, and as such should be separated to some degree, even though it risks weakening alignment between present realities and future programme decisions. An alternative construction should, therefore, not seek to fully integrate the two into a single body or incorporate the element of the Navy responsible into the DNO. Instead, the Government should seek stronger mechanisms linking the two so that capability choices are made with sufficient grounding in operational priorities.

Reform should therefore aim not at abolishing the distinction between future capability and current operations, but at governing it more deliberately. The first option would be a more formalised alignment regime between the DNO and the Royal Navy, utilising a joint DNO-Navy nuclear plan integrating fleet operations, maintenance cycles, infrastructure renewal and future capability planning within a single planning framework. A joint DNO-Navy nuclear plan would make explicit where operational demands and recapitalisation requirements compete, allowing those conflicts to be surfaced early, rather than being informally absorbed within existing structures.

A further option would be to formalise decision rights across that boundary. Rather than leaving coordination to custom, bilateral relationships, the Government could establish a standing DNO-Navy board with authority over areas of clear shared decision, such as maintenance deferral decisions with strategic implications or changes to programme sequencing that affect operational readiness. This would not amount to joint command, but a structured arena in which disagreements must be resolved at the level where the relevant information is held, before they are allowed either to stagnate or to escalate in an unstructured manner. The value of such an arrangement would lie less in bureaucratic tidiness than in forcing explicit choices between competing priorities that are currently too easily deferred.

A third reform would be to shift from periodic coordination to shared enterprise accountability. Currently, the Defence Nuclear Organisation sits within a common enterprise but remains primarily accountable through their own organisational remits. One way of tightening alignment is to supplement existing structures with a small set of enterprise-level performance obligations, including alignment of operational planning

with long-term recapitalisation. While complex problems cannot be reduced to simplistic targets, a limited number of common obligations that discourage each institution from optimising only within its own remit could be created.

Improved alignment extends beyond the central DNO-Navy relationship. Pursuit of this aim should also address the insufficiently developed strategic interface between the UK's military nuclear leadership and its principal ally, the US. If engagement with the US is to be coherent and effective, the Military Strategic Headquarters (MSHQ) should be fully established and brought into proper operation. While the MSHQ was launched in October 2024,[26] and became operational in April 2025,[27] it does not appear to be operating to its fullest extent. Its purpose is to provide a clearer centre of military strategic thinking within the defence nuclear system. In particular, it should provide the National Armaments Director (NAD) a firmer institutional basis and clearer strategic direction for conversations with the US. Without a fully operational MSHQ, the NAD's engagement with the US risks being insufficiently grounded in a single strategic understanding of the enterprise.

This should be reinforced by more deliberate senior military engagement with the US. The Chief and/or Vice of the Defence Staff should visit U.S. Strategic Command in order to deepen military-to-military relations and deepen ties with the UK's foremost nuclear ally at a time of pronounced Government-to-Government volatility.[28] At a moment when influence in Washington may depend as much on trusted relationships, these channels are becoming increasingly important. As such, the institutional mechanisms to embed trusted relationships across the entire alliance and nuclear relationship should adjust to this reality. Stronger direct engagement between senior British and American military leadership would provide an additional means of shaping the terms in which the UK-US nuclear relationship is discussed and prioritised within the present Administration.

Perhaps most fundamentally, the DNE requires a firmer intellectual footing. Currently, education on nuclear issues is not compulsory in senior military training, and until recently, the Higher Command and Staff Course did not cover nuclear weapons at all.[29] That is a striking mismatch for a state which frames the nuclear deterrent as the "foundational component" of national security.[30] Nuclear issues cannot continue to be treated as the preserve of a narrow cadre of specialists, but should be treated as a core responsibility of senior military leadership. This should be remedied through the revival of a classified senior course on nuclear matters for those moving into positions of high command and leadership. Such a course should be designed not as a narrow technical programme, but as a means of developing a cadre of senior leaders able to think with greater clarity about deterrence, escalation, alliance management, force posture and the relationship between political purpose and military capability. Unless the UK rebuilds that intellectual base, it will continue to produce senior leaders with nuclear responsibilities but without an adequately

26. The Ministry of Defence, 'Major defence reforms launched, with new National Armaments Director to tackle waste and boost industry', 25th October 2024, link
27. Luke Pollard, 'Armed Forces, Question for the Ministry of Defence', UIN 79253, 10th October 2025, Hansard, link
28. Jennifer McKiernan, 'Trump says Starmer is "no Winston Churchill" over Iran strikes, BBC News, 3rd March 2026, link
29. Air Marshal Edward Stringer (Ret'd) CB CBE, 'The United Kingdom – A Strangely Reluctant Nuclear Power', Policy Exchange, 4 March 2022, link
30. HM Government, 'Integrated Review Refresh 2023', CP 811, March 2023, link

developed nuclear frame of reference – weakening the deterrent itself.

While the DNE is in a position of strength compared to its civil counterpart, there is scope for improved coordination. Rather than collapsing the distinction between long-term capability and current operations, reform should govern that boundary more deliberately through stronger planning, clearer shared decision-making and limited enterprise-wide accountability. Stronger alignment is also needed beyond the DNO–Royal Navy relationship, particularly through a fully functioning MSHQ and more consistent senior engagement with the US. This should be underpinned by a firmer intellectual foundation, with nuclear issues treated as a core responsibility of senior military leadership rather than a specialist niche.

A Formal Civil-Defence Alignment Framework

Improving coordination within the civil nuclear system is a necessary first step, but it does not by itself resolve the wider challenge of aligning civil and defence programmes. Once the civil side possesses a clearer centre of strategic direction, attention can shift to how the two parts of the national capability interact. Only after strengthening internal coherence on the civil side does it become possible to address the relationship between the two strands of the enterprise in a systematic way. The two nuclear states, running parallel to one another, draw on an overlapping pool of workers, resources and supply chains. Despite this, in many areas, the two are artificially divided, creating duplication of effort, competition for scarce skills, inconsistent long-term planning assumptions, and ultimately, undermining opportunities to strengthen national nuclear capability through coordinated action.

This separation is clearest in four areas of overlap: workforce and skills, research and development, supply chains and nuclear waste management and decommissioning. In each case, civil and defence programmes generate demand for the same scarce national capabilities but plan largely independently. Different departmental priorities shape workforce pipelines for engineers, technicians and nuclear specialists. Research programmes in advanced fuels, materials science and reactor technologies are funded through separate institutional channels. Supply chains must respond to fluctuating demand signals, while waste and decommissioning remain divided despite shared technical challenges. The result is duplication in some areas, gaps in others and ultimately a failure to realise short-term optimisation and capitalise on the benefits of long-term coordination. Addressing this misalignment requires a formal mechanism capable of coordinating planning in these shared domains without collapsing the distinct governance structures of civil and defence nuclear programmes.

A formal civil–defence alignment framework would address these weaknesses by coordinating planning in shared capability domains while leaving core civil and defence governance structures intact. This would operate as a standing cross-enterprise governance mechanism bringing together the principal civil and defence nuclear authorities to coordinate

long-term planning in areas of shared dependency. The objective would be to align objectives, timelines and demand signals, rather than to merge institutions or programmes. This is not to erase the distinct missions of the civil and defence sectors, but to ensure that areas of shared dependency are treated as national capabilities requiring joint stewardship.

In workforce planning, both strands should develop shared long-term demand forecasts and skills strategies (in tandem with the DfE), ensuring that training pipelines reflect the combined requirements of civil new build, defence programmes and decommissioning activity. In research and development, alignment could involve joint priority-setting and coordinated funding strategies in areas where technological and potential benefits intersect, while retaining the distinct functions of institutions such as AWE and UKAEA. In industrial strategy, government could provide integrated demand signals to suppliers, allowing firms to invest with greater confidence in capacity and capability. Regarding waste and decommissioning, closer coordination would support long-term planning for infrastructure and technical capability, recognising that both civil and defence programmes rely on similar scientific and engineering expertise.

Delivering this alignment would require governance mechanisms stronger than coordination groups or strategy documents alone. Departments responsible for civil and defence nuclear programmes should be placed under a statutory requirement to produce joint cooperation plans in defined shared domains, establishing capability and investment requirements in areas of mutual interest. These plans should be overseen by joint civil–defence governance boards with decision-making authority, supported by shared data and modelling analysis across the enterprise. Such arrangements would allow trade-offs to be resolved deliberately and ensure that shared capabilities are developed as part of an overarching national strategic plan.

An example of effective cross-enterprise management can be found in the French nuclear system, where the state, research bodies and industrial actors operate under a unified framework to manage both civil and defence nuclear requirements. The Nuclear Policy Council, a top-level governing body chaired by the President, sets the strategic direction to ensure civil energy and deterrent requirements are aligned.[31] Within this framework, the Alternative Energies and Atomic Energy Commission CEA serves as the central hub for innovation, bridging the gap between fundamental research and industrial application by developing reactor technologies for Électricité de France (EdF) while simultaneously designing the nuclear warheads and propulsion systems used by the French Armed Forces.[32] EdF is supported by Orano, managing uranium enrichment and the recycling of spent fuel – maximising resource efficiency for the civil fleet while maintaining the sovereign capabilities necessary to the defence mission.[33] By synchronising these organisations, France can sustain industrial capacity, skills pipelines and strategic continuity between organisations embedded within long-term strategic planning.

The principal benefit of creating a formal civil-defence framework

31. General Secretariat for Defence and National Security, 'To provide secretariat services for the nuclear policy council', 7th February 2024, link

32. The CEA, 'Research areas', 28th June 2016, link

33. World Nuclear Association, 'Nuclear Power in France', 14th January 2026, link

would be the ability for the government to treat these vital areas of intersecting concern as cross-enterprise-level assets, rather than as sector-specific concerns. Coordinating these shared foundations would strengthen long-term capability planning, provide clearer demand signals to industry and the skills system, and reduce the duplication and misalignment that currently weaken both civil and defence programmes. Moreover, it would embed decision discipline and continuity across the nuclear enterprise, helping to sustain momentum and foreclose the drift and incoherence that have undermined successful nuclear governance.

A Ministry for Nuclear?

One possible response to the fragmentation of nuclear governance would be the creation of a dedicated Department or Ministry for Nuclear. A single department could, in principle, consolidate civil nuclear policy and elements of defence nuclear policy, creating a clearer locus of ownership across government. Equally, separating nuclear programmes from the Ministry of Defence could help address concerns that long-term nuclear recapitalisation may increasingly absorb a large share of the defence budget, potentially crowding out investment in conventional capabilities.[34] A nuclear ministry might therefore appear to offer both stronger strategic focus and clearer fiscal transparency for nuclear programmes.

Creating a nuclear ministry, however, is unlikely to solve many of the core governance problems identified in this paper and could introduce new coordination challenges. As the point regarding the enterprise demonstrates, nuclear policy does not operate as a self-contained domain of government policy. Both the civil and defence nuclear programmes are structurally embedded within larger policy systems whose integration is essential to successful delivery. On the defence side, the nuclear deterrent is not simply a procurement or industrial programme but a central component of military strategy, alliance commitments and long-term defence capability planning. Decisions concerning submarine renewal, for example, are closely linked to wider defence planning cycles, force-structure decisions and budgetary trade-offs. Moving the deterrent from the MOD to a new Ministry may, therefore, weaken the integration between nuclear capability development and broader defence strategy, even if it improves coordination within the nuclear domain itself.

A similar challenge arises on the civil side, as nuclear policy must be considered within the context of the energy system as a whole. Decisions about new build, financing models and deployment timelines must be coordinated with wider energy-system planning. Locating civil nuclear policy outside of DESNZ's core energy portfolio, again, would sharpen focus on nuclear development, but it might also create new coordination challenges between nuclear programmes and the wider energy system within which they operate.

More importantly, a new department would represent a major machinery-of-government change while doing little to address the underlying challenge of cross-government coordination. Fragmentation

34. Institute for Fiscal Studies, 'UK defence spending: composition, commitments and challenges', 26th September 2025, link, and The Ministry of Defence, 'MOD Departmental Resources: 2024', 28th November 2024, link, and The National Audit Office, 'The Equipment Plan 2023 to 2033', 4th December 2023, link

in the nuclear enterprise arises less from the absence of a dedicated department than from weak mechanisms for aligning priorities across existing institutions. For this reason, the priority should not be the creation of a new nuclear ministry. Reform should instead focus on strengthening cross-government governance while preserving the integration of nuclear policy within the energy and defence systems on which it depends.

If the Government is going to succeed in its mission to expand Britain's nuclear capabilities, it must act urgently. On this basis, we propose the following timeline:

Immediate – Implement anti-drift mechanisms, fully operationalise the MSHQ and reintroduce nuclear education.

Spring 2026 – Further engagement between the Chief and/or Vice of the Defence Staff (CDS/VCDS) and U.S. Strategic Command (STRATCOM)

Summer 2026 – Create the Civil Enterprise Board alongside an empowered Nuclear Regulatory Implementation Panel

Winter 2026-27 – Establish a formal civil-defence alignment framework

Throughout – Sustained cultural change within government

Conclusion

The UK's nuclear enterprise faces a persistent governance problem, rather than any lack of political ambition. Nuclear programmes require sustained coordination over decades, yet responsibility for shaping policy and delivering outcomes remains institutionally fragmented and undermined by a culture of risk aversion. This encourages delay by weakening prioritisation, facilitating its diminished importance and making it more difficult to maintain investment and capability over time, ultimately weakening the enterprise. The separation between civil and defence nuclear policymaking further limits the state's ability to manage shared national capabilities as part of a single strategic endeavour. Together, these institutional conditions risk condemning Britian's nuclear enterprise to further dereliction.

Strengthening the enterprise, therefore, depends on governance arrangements that embed continuity, prioritisation and coordination in decision-making. The reforms proposed here are intended to address these structural weaknesses by strengthening coordination within civil nuclear governance, aligning civil and defence nuclear capability planning, and embedding implementation capacity within government. While some of these recommendations are more difficult than others to implement, they should better enable the nuclear state to connect political commitment to institutional capability, enabling nuclear policy to be managed as a sustained national endeavour and supporting the long-term resilience of the UK nuclear enterprise.

Recommendations

- **Hardwire anti-drift tools into the system**. Deferral should no longer be the default response to complexity. Programme slippage should trigger automatic escalation to progressively higher levels of authority, and ministers should have to sign off explicitly on "do nothing" outcomes such as deferral or cancellation. The point is not to force approval, but to force (accountable) decisions.

- **Create an empowered Nuclear Regulatory Implementation Panel**. The NRIP should function as an implementation mechanism rather than a strategic governing body: a taskforce with formal authority to direct regulatory reform, require delivery plans and joint timetables, oversee a live implementation plan, and work day-to-day with developers, regulators and local authorities to remove

practical blockages before they become programme delays.

- **Establish a Civil Nuclear Enterprise as the civil counterpart to the Defence Nuclear Enterprise.** Led by a Civil Enterprise Board and Chief Civil Nuclear Officer within DESNZ, it would give government end-to-end ownership of civil nuclear strategy and delivery. In effect, it would act as the system integrator that civil nuclear currently lacks.

- **Defence Nuclear reform should focus on managing internal boundaries more deliberately, not abolishing them.** The distinction between current operations and future capability planning should remain, but it needs stronger joint planning between the DNO and Royal Navy.

- The Government should also make fuller use of the Military Strategic Headquarters, deepen engagement with U.S. Strategic Command and entrench nuclear education for senior military leaders.

- **Following this, a formal civil-defence alignment framework should follow.** Shared areas of concern should be managed through standing cross-enterprise mechanisms with joint planning obligations, shared data and governance boards that can actually resolve trade-offs.

- **A dedicated Ministry for Nuclear is not the preferred answer.** Nuclear policy is too deeply embedded in wider defence strategy and energy-system planning for a departmental carve-out to solve the core problem. A new ministry could create fresh seams while leaving the underlying coordination failure unresolved.

- The conclusion is straightforward: the UK needs a more disciplined nuclear state. The immediate priorities are anti-drift mechanisms, followed by a Civil Enterprise Board and empowered NRIP, then a formal civil-defence alignment framework, all supported by a broader cultural shift toward long-term thinking, clearer accountability and greater tolerance for measured risk. Without that institutional reform, political support is unlikely to translate into durable nuclear capability.

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