Unlocking strategic advantage in the dynamic UK defence landscape

A joint University of Sheffield AMRC and EY research initiative

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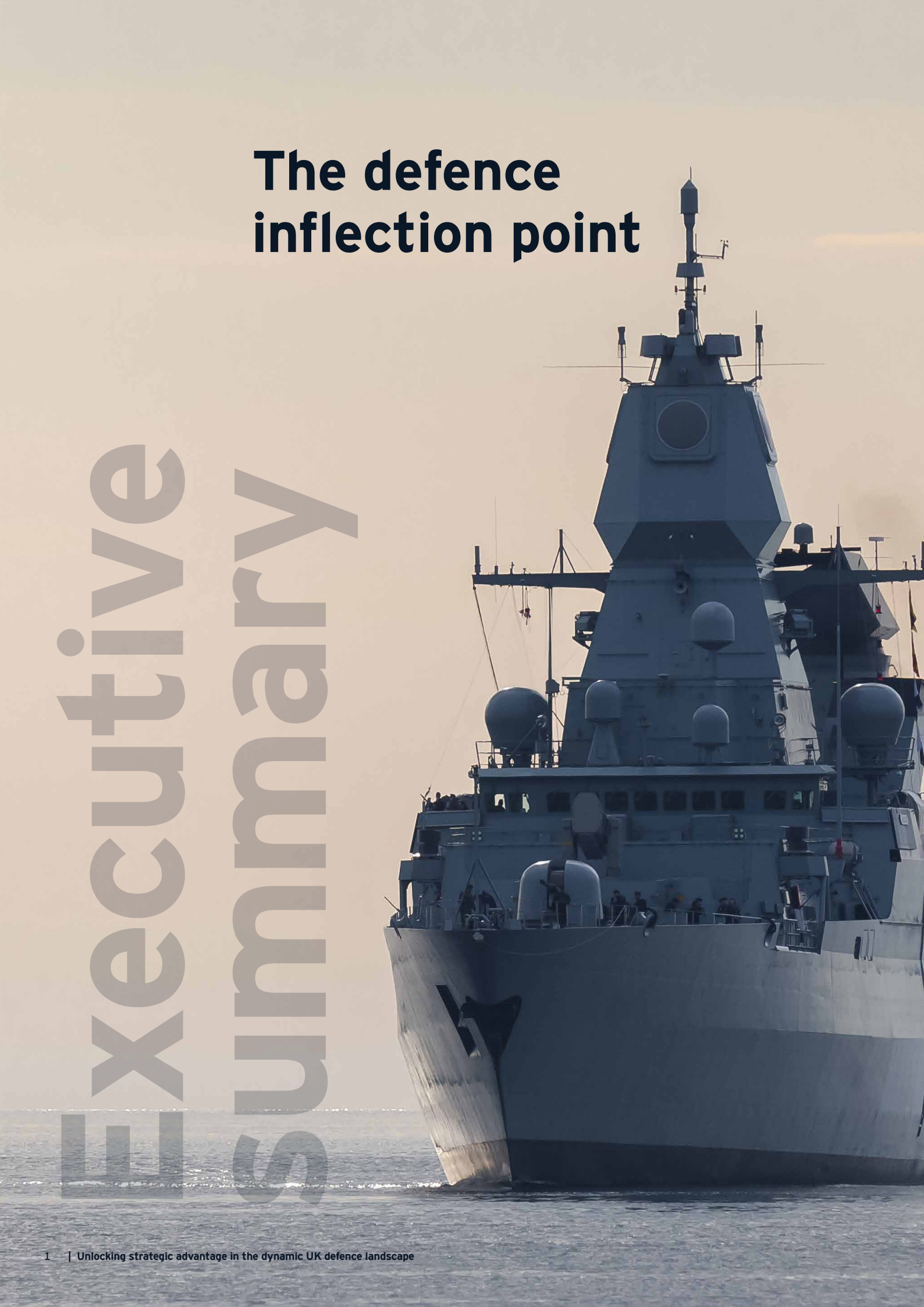
The defence inflection point

Executive summary



Coordination, innovation and funding can unlock national resilience and growth

The UK is at a strategic crossroads. At a time when the global defence landscape is shifting rapidly — with rising geopolitical tensions, evolving threats across domains, and a renewed emphasis on sovereign capability — there's a pivotal opportunity to enhance industrial scale and responsiveness. Both will be key to supporting long-term operational readiness, growing local economies and reducing exposure to future risks.

With UK defence spending set to rise to 2.5% of GDP by 2027 (and 3% by 2030),[1] the UK has a real opportunity to convert investment into scaled industrial capability. This is key. While the UK remains a net defence exporter, its global share still lags peers like the US, France, and Germany — signalling significant headroom for growth. Initiatives such as Team UK, DSIS, and regional clusters have laid solid foundations. But these now need to be joined up into a coherent system that can deliver at scale.

This paper, by University of Sheffield Advanced Manufacturing Research Centre (AMRC)[2] and EY, [3] examines why scaling UK defence capacity and capability remains challenging. It draws on interviews, data and case studies to identify the systemic shifts now needed to unlock resilience and growth across the entire defence value chain.

Four core enablers for the future of UK defence

Our research identified four core enablers — **capability, capacity, innovation and funding** — as critical to scaling the UK defence industry. These surfaced consistently as themes across interviews with OEMs (original equipment manufacturers), primes, SMEs (small and medium-sized enterprises), government and academia, and apply across the defence industry lifecycle — from concept and development to production and sustainment.

Together, they reflect what's required to build the right technologies in the right places, deliver at scale with a resilient supply base, move ideas into operational impact, and align incentives to de-risk and accelerate delivery.

The summary framework shown on the next page distils insights from across the ecosystem to connect core challenges to their underlying causes, mapping them to the four critical enablers: capability, capacity, innovation, and funding. It offers a pragmatic solution-set comprising both longer-term system-level calls to action and shorter-term, practical levers that SMEs, OEMs and primes can start using today. We explore each element in detail in the main body of this paper.

1. Plans set out at the end of the parliament
2. amrc.co.uk
3. ey.com

Bridging the gap

Linking challenges to strategic and practical solutions

Call to action	Challenges	Practical levers
1. Define and embed a sovereign capability roadmap The UK could consider setting out a clear, enduring view of which capabilities must be retained or developed domestically	**1. Fragmented demand signals and planning cycles** Businesses across the ecosystem require long-term vision and work with limited demand visibility, reducing the confidence needed to invest in capacity or capability	**1. Improve end-to-end supply chain visibility to invest and scale with confidence** Increase transparency to identify scaling bottlenecks and financial challenges across the supply chain (including use of planning tools)
2. Align industrial planning with capacity needs Planning to shift from reactive procurement to proactive coordination. That means integrating industrial planning (demand/supply) across domains into a single, coordinated approach	**2. Structural barriers to scaling** While companies have ambition, this is often constrained by, e.g., planning delays, raw material access challenges, talent shortages, and a lack of joined-up delivery frameworks	**2. Accelerate setup – plan investment smarter** Use joined-up location-planning across operational, financial and people aspects to fast-track scaling
3. Establish a unified innovation and qualification pathway Streamlining qualification, expanding access to prototyping infrastructure, and embedding user feedback earlier in the lifecycle to bridge the adoption gap	**3. Qualification delays and duplication** Moving from prototype to certified solution is fragmented and bottlenecked in the UK, and often perceived as cumbersome	**3. Scale faster – open up prototyping infrastructure** Co-invest with government-funded R&D centres in test-beds. Make SME access simple and target future platform gaps
	4. Innovation stuck mid-pipeline Programmes like DASA and Innovate UK support early-stage success; however, various businesses face challenges moving towards adoption without a unified path to procurement	**4. Reduce delays and frustration – digitalise innovation and qualification** Pilot modular, digital-first qualification with end-user input upfront to accelerate ideas into deployment
4. Create a 'single-window' defence funding architecture Grants, export support and innovation finance to be integrated into a single-entry platform – drawing together programmes like DASA, UKDI and regional schemes to provide easier access to funding	**5. Disjointed funding landscape** A patchwork of grants, co-investment and financing is difficult to navigate, often misaligned with defence timelines and, in some cases, excludes defence due to ESG-driven constraints	**5. Unlock funding – do more with the same system** Map the grant/incentive landscape early, align to your roadmap, and build internal capability to navigate funding landscape effectively

Introduction

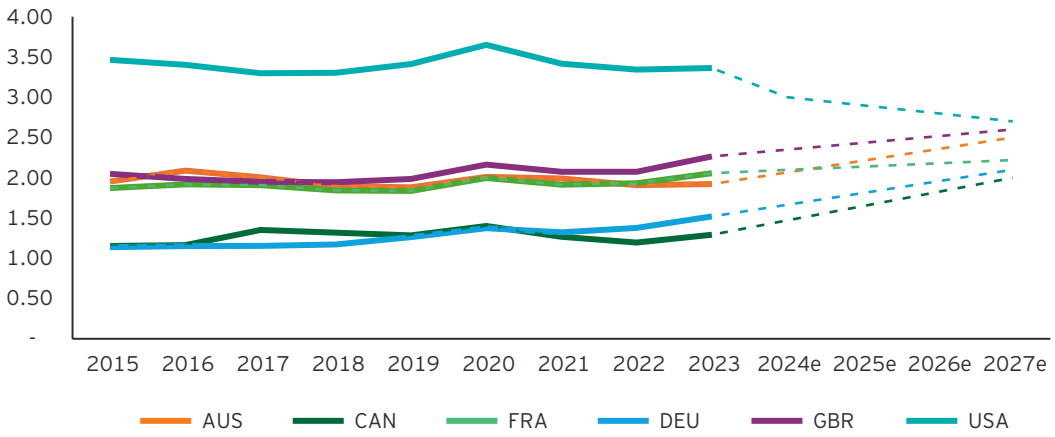
The scale-up challenge confronting UK defence

The UK defence sector has reached a strategic inflection point. With rising geopolitical instability, growing budgets, and renewed emphasis on sovereign capability, expectations on UK industry are higher than they've been in decades. Against this backdrop looms a critical question: how can the system scale and deliver?

> “We do not lack ingenuity – we lack a system that can scale it.

While efforts like Team UK, the Defence and Security Industrial Strategy (DSIS), and regional manufacturing clusters have aimed to boost coordination, much of the system remains reactive. Industrial momentum is still shaped by short-term programme cycles — not long-term sovereign needs. Even with the UK's commitment to raise defence spending to 2.5% of GDP by 2027 (and 3% by 2030 given NATO commitments),[4] scaling capability at pace remains difficult; the political promise has not yet translated to bankable purchase orders.

Military expenditure as % of GDP (2015 to 2027e)



Source: EY analysis, government databases

Global defence trade trends (see table) further underscore the urgent need for UK industrial scale-up. While the UK remains a net exporter of defence equipment, with imports rising, its position is modest compared with its peers. The bottom line? The UK had a relative global net exports position of 1.1% (2020–2024 average), down from 1.8% between 2015–2019. In contrast, the US, France and Germany each maintain significantly higher net exports.

UK defence trade in global context (net export trends — 15–24)

	Share of global arms imports (%) (1)		Share of global arms exports (%) (2)		Net import/export (2) – (1)			
Nation	2015 to 2019	2020 to 2024	2015 to 2019	2020 to 2024	2015 to 2019	2020 to 2024	Trend	
USA	1.9%	3.1%	35.0%	43.0%	33.1%	39.9%	6.8%	▲
AUS	4.8%	3.5%	0.3%	0.5%	-4.5%	-3.0%	1.5%	▲
FRA	0.3%	0.5%	8.6%	9.6%	8.3%	9.1%	0.8%	▲
CAN	1.0%	0.7%	0.6%	0.6%	-0.4%	-0.1%	0.3%	▲
GER	0.2%	0.7%	5.7%	5.6%	5.5%	4.9%	-0.6%	▼
UK	1.8%	2.5%	3.6%	3.6%	1.8%	1.1%	-0.7%	▼

Source: SIPRI, Arms Transfer Database

4. Plans set out at the end of the parliament

Turning around the UK's declining net export position could drive more revenue streams while, critically, also ensuring domestic capability is maintained. This will be as much about scaling output of current products/ systems, as developing new products, systems and technologies.

Developed by the University of Sheffield Advanced Manufacturing Research Centre (AMRC)[5] together with EY[6], this paper explores the challenges involved in scaling UK defence, now that spending and demand are increasing. Drawing on interviews, data, and case studies, it unpacks why scaling capability and capacity remains difficult — and what needs to shift to unlock growth (and resilience).

Next, we introduce the four ecosystem enablers that emerged as key themes across our interviews: **capability, capacity, innovation, and funding**. This paper will go on to unpack the specific challenges associated with each enabler, before presenting solutions in two forms: a strategic call to action outlining structural changes required across the system, and a set of practical steps that companies and ecosystem players can take today.

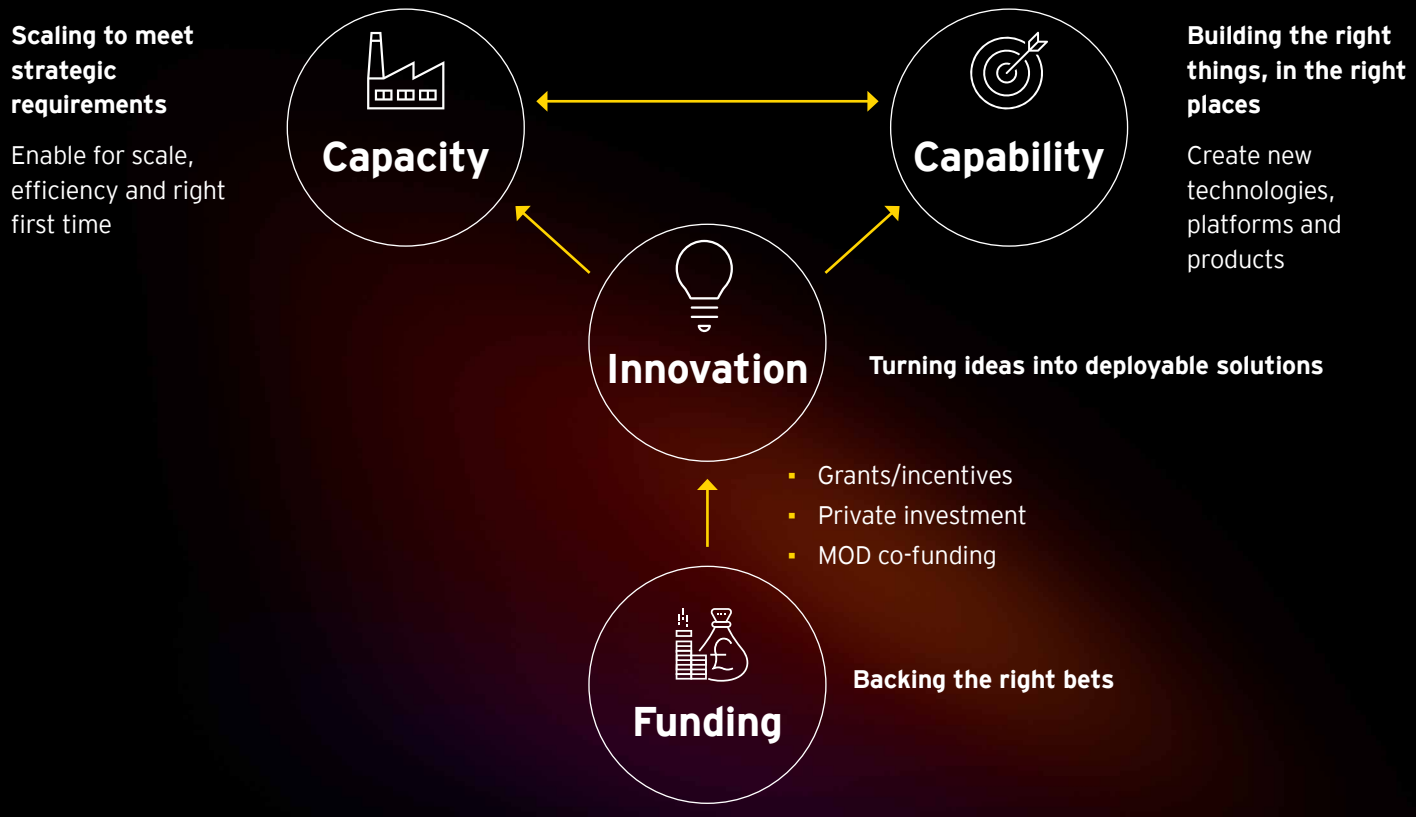
5. amrc.co.uk
6. ey.com

Four interlinked ecosystem enablers

A more resilient, agile and scalable defence industrial base will not emerge through more spending alone. It requires coordination and a focus on four critical levers: **capability, capacity, innovation and funding.** These reflect the recurrent themes in our interviews with OEMs, primes, SMEs, funders, government stakeholders and research institutions, and underpin the challenges holding back industrial performance today.

- **Capability** is about building the right things, in the right places – from sovereign platforms to the subsystems and components that enable them.
- **Capacity** is the ability to produce at scale – having the skilled workforce, infrastructure and supply resilience to meet demand and surge requirements.
- **Innovation** enables the transition from idea to impact – driving efficiency for more capacity or unlocking new capability and operational advantage.
- **Funding** includes incentives (grants, co-investment and/or targeted support that derisk investment and accelerate delivery) and mature businesses unlocking funding to drive innovation, capacity and capability.

UK defence ecosystem enablers



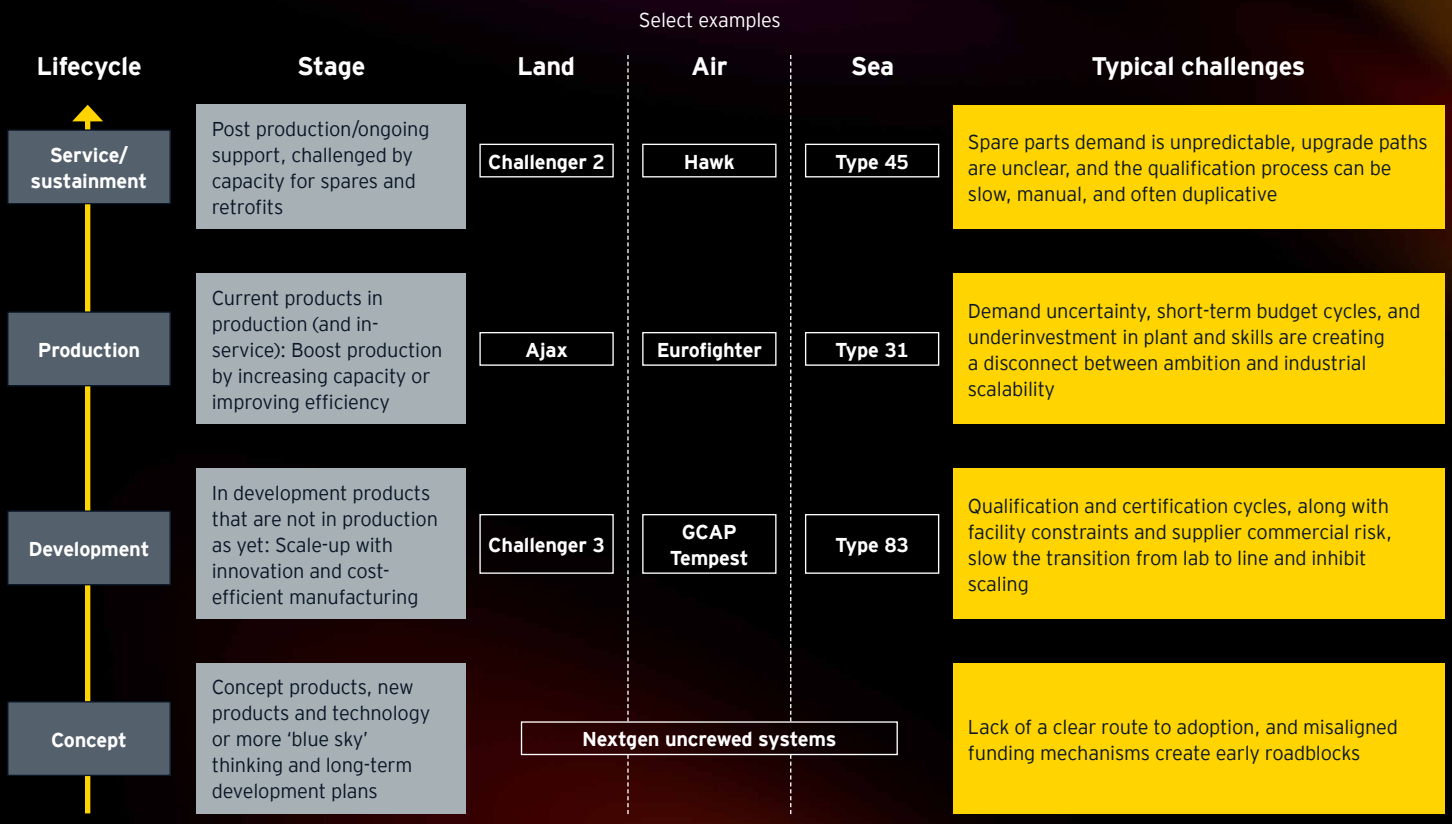
The enablers are interconnected. Weakness in one can drag down the others, while strength in one can propel them forward. For example, a promising SME with cutting-edge technology might struggle to scale due to capacity challenges in qualification, whereas a company with stronger capacity and capability will likely have more funding options to drive its business forward.

Together, the four enablers constitute the lens through which we will explore the UK's current readiness to scale the defence sector, the challenges it faces, and what needs to change to convert ambition to globally leading delivery.

How pressures vary across the defence product lifecycle

It's important to recognise that each stage of the defence product lifecycle – from sustainment to concept – places distinct pressures on the system and its ability to scale, as well as exposing friction across the four enablers of capability, capacity, innovation and funding.

Systematic enablers must shift across life-cycle



The type of platform also impacts how it migrates through the stages. For low volumes and long lifecycle/high-complexity assets (e.g., ships), scaling challenges can resemble those of a product still in development until critical demand mass is reached. Similarly, land platforms tend to involve shorter lifecycles and higher volumes, creating the need for rapid scaling and responsive supply chains.

While the focus of this paper is on land, air and sea defence assets, it's important to point out that emerging domains like space and cyber face similar systemic pressures.

1 Capacity

Scaling at the speed of demand

Rising budgets will drive demand, but the UK industrial base faces challenges that limit scaling at pace and volume. Limited demand visibility creates a Catch-22 dynamic: Suppliers hesitate to invest, and even when they do, they face structural hurdles before capacity can be realised.

A. Demand visibility and impact on investment confidence

Unclear demand signals – both domestic and export – often make suppliers reluctant to invest in equipment, people or facilities with longer paybacks. Procurement cycles typically do not extend visibility beyond 12 to 18 months. By contrast, countries like Germany and Australia issue multiyear outlooks, enabling suppliers to align and invest with confidence. The UK for instance provided nuclear and civil infrastructure with much longer-term planning visibility in the past, enabling suppliers and innovators to align and scale effectively.

The Risk of Going Idle – Eurofighter UK Line at a Crossroads

Context: The UK's Eurofighter Typhoon final assembly line faces an uncertain future. Without new orders, it could be wound down by 2026 – putting decades of sovereign fighter jet production capability at risk.

Implication: Although the facility remains operational today, lack of forward demand signals from government and limited export clarity means OEMs are reluctant to invest in long-lead tooling, talent, or supplier capacity.

Source: Aviation news, "UK finalizes its last Britain-Built Eurofighter Typhoon[7]"

7. https://aviationnews.eu/news/2025/07/uk-finalizes-its-last-britain-built-eurofighter-typhoon/

Lack of forward demand signals impacting confidence to invest, July 2025

Export programmes can stabilise demand but often lack a coordinated push. In Europe, the CV90 infantry fighting vehicle programme secured long-term commitments from six nations through joint procurement.[8] The UK's Combat Air Strategy gained international investment through a clear government framework and demand signal. More programmes could benefit from similar cumulative signalling and synchronised export strategies — but this demands stronger industry-government coordination.

Without demand clarity, capital investments and talent growth are repeatedly deferred, leaving a fragile supply chain which takes significant time to ramp-up when needed.

B. Infrastructure and structural constraints

Gaps in infrastructure and talent further inhibit scaling. As suppliers noted, Britain is **"not structurally set up to enable private investment for scale."** In the UK, suppliers often need to deal with multiple agencies to navigate incentives, planning, and approvals — compared with a 'single door' approach in for instance the US that accelerates decisions from years or months to weeks.

Separating production from sustainment contracts can drive further structural challenges resulting in limited visibility into spares demand, upgrade requirements and lower-volume programme tail demand, all of which impacts willingness to scale.

Even with clear demand, scaling can be held back by two supply chain constraints. Firstly, limited visibility into SMEs' scaling capacity: many face funding constraints for working capital or capex demands, while others prefer not to scale to avoid these risks. Secondly, shortage of critical raw materials like titanium and high-grade steels, coupled with an inability to predict or mitigate bottlenecks due to inadequate digital transparency tools. As one OEM put it:

"We know what to build — but we don't know, day to day, which part of the supply chain will struggle next."

Workforce shortages — especially in dual-skilled trades — are intensified by competing major programmes across defence and other sectors. Certain facilities are already at or near capacity, with efficiency gains focused on existing commitments. Unlocking scale will require targeted investment in enabling infrastructure, for instance shared digital testbeds and integrated spares warehousing.

> "The UK has many large-scale projects happening at once (defence and non-defence). We lack the necessary workforce and materials to complete all of them, which creates a significant imbalance between what's needed and what can be supplied.
>
> UK Prime

8. https://defence-industry.eu/six-european-countries-sign-statement-on-possible-joint-procurement-of-cv90-fighting-vehicles/

2 Capability

Converting strategy into industrial momentum

Delivering defence capability is not just about what the UK makes — it's about what it chooses to make and retain as a sovereign capability. Here, the UK faces a dual challenge: defining strategic priorities clearly enough to guide investment and enabling the broader ecosystem to mobilise around them.

A. Lack of clear, coordinated sovereign direction

A recurring concern is the lack of a unified, enduring definition of sovereign capability. This creates uncertainty across the value chain — what should be UK-held? What can be allied or globally sourced? Without clear guidance, businesses may also look at establishing production in other locations globally, given challenges raised in the previous section.

Even when initial signals are given, these often shift with changes in geopolitical posture or ministerial leadership. As one executive said:

"We don't just need a roadmap. We need a roadmap that outlasts the next Strategic Defence Review (SDR)."

While strategies like DSIS have aimed to address this, delivery at local level can lack coordination. According to one interviewee, the experience of regional defence clusters illustrates this point:

"We have pockets of strength across the UK, but unless someone at the national level pulls these threads together, we're solving different problems in parallel."

This fragmentation extends into procurement acquisition structures, which frequently prioritise short-term tactical buys over sustained capability building. SMEs and mid-tier suppliers often feel excluded from planning cycles, receiving limited future visibility from primes and/or the MOD. Without this information, confidence in investing in targeted capabilities, workforce and tooling remains low.

B. Barriers to execution: standards, testing and skills

Qualification and certification remain major chokepoints, often slow, manual and costly. While rigour is essential, especially in a safety-critical sector, the proliferation of proprietary standards across primes — creates duplication and rework.

Quality control mechanisms are at times applied inconsistently, with some manageable issues given safety classifications that drive unnecessary additional steps.

This can have a significant impact on SMEs attempting to develop and launch new products — as one UK SME put it:

"We passed three major innovation pilots, but when it came to actual procurement, given length of time passed, the standards had reset. We had to restart."

The UK also lacks sufficient domestic testing and prototyping infrastructure leading to many companies to go abroad for certification — adding both delay and uncertainty, particularly as other countries may prioritise domestic industries.

Talent and workforce compound the problem. The UK defence workforce profile is U-shaped: with experienced veterans and new starters, but fewer mid-career specialists. Shorter apprenticeships and targeted retraining could improve agility.

Like capacity, capability is also caught in a Catch-22. Industry is expected to prepare for future needs, but it lacks stable, credible signals on what those needs will be. Roadmaps — where they exist — are often fluid, shifting with changes in government priorities. The result is hesitation, with companies more likely to wait and see, instead of misaligning scarce resources.

A more resilient system would clarify what sovereign capability means today, and set a stable direction for tomorrow. It would align acquisition structures to reinforce that vision, create accessible routes for suppliers to meet future standards, and expand prototyping and test infrastructure to match ambition — turning strategy into momentum.

3

Innovation

Transform the ‘valley of death’ into a ‘valley of promise’

Innovation in defence serves two critical purposes: 1) driving efficiency in capacity delivery; and 2) introducing new capabilities for operational advantage. The UK’s defence innovation pipeline is certainly active, yet less strong in adoption. Fragmentation and structural barriers prevent strong ideas from reaching deployment.

A. Fragmentation across the innovation lifecycle

Many describe a ‘broken’ pipeline – innovation not leading to procurement. While government agencies (like Defence and Security Accelerator (DASA) and UK Defence Innovation (UKDI)) support experimentation, defence businesses, especially SMEs, struggle to transition from pilot to platform.

> “There’s no single path from pilot to platform.
> UK Prime

This “valley of death”: strong R&D initiation followed by a steep drop-off in adoption funding leaves SMEs uncertain even after successful trials.

The lack of clear demand signals compounds the issue making it hard to position technology for end-users. In contrast, Interviewees highlighted how this differs from civil sectors, as one prime told us:

“In civil aerospace, businesses know what’s coming five to 10 years out. They can focus their tech investments accordingly.”

A stronger model would link innovation efforts to real platform needs and ensure qualification and procurement routes are more transparent across the MOD, primes and SMEs. As noted in the capability section, when qualification frameworks lag behind technology cycles, promising solutions are left idle or forced into costly rework – eroding confidence and slowing delivery. This would also enable SMEs to invest in R&D with confidence, strengthening innovation to a core pillar of the UK’s defence industrial strategy.

While UKDI aims to resolve this, it is still early in its development and impact remains unproven.

B. Cultural and structural barriers to fast-track adoption

Risk aversion adds to the challenge. Primes and the MOD are often hesitant to adopt unproven SME technologies, especially where risk transfer, qualification or integration responsibilities are still unclear. This creates a paradox: new ideas are celebrated, but they're not always scaled.

There are significant structural challenges behind all this:

- Strong R&D initiation (via bodies like DASA, academia and ATI) but weak pull-through to production with most activity concentrated in the mid Technology Readiness Levels ('TRL') stages.
- Missed opportunities to adapt technology already proven in adjacent sectors due to poor cross-industry connections.
- Defence is still viewed as an unattractive or 'taboo' domain in the UK for mainstream tech innovators, limiting cross-sector collaboration potential in areas like digital and AI.
- Disconnect between technology developers and end-users, leading to solutions that are not optimised for adoption.

Digital tools could help bridge this gap. But they are underused, with limited incentives across the ecosystem to encourage their adoption. While organisations like Made Smarter, Innovate UK, and the High Value Manufacturing Catapult have made strong progress, particularly in the civil sector, their adoption in defence could be could be stronger, with headroom to bring HVMC capability into MOD programmes for example.

With broader uptake of proven tools, stronger alignment between innovation and qualification, and better support for SMEs, the UK has an outstanding opportunity to turn isolated success stories into scalable capability.

4 Funding

Backing the right bets

Funding is the connective tissue that links innovation to capability and capacity. Without coherent, sustained financing, even the most promising technologies or capable suppliers are unable to scale. Across the sector, the message was clear; the UK defence funding landscape remains fragmented, short-term, and risk averse. Unlocking this will be essential to meet scaling and resilience ambitions.

A. Too many doors to knock on, and often with a short-term focus

Securing long-term liquidity is a persistent challenge:

- Scaling the ecosystem and innovation will require more funding — from both the market and from government.
- EY working capital research shows that A&D (Aerospace & Defence) Tier 2 and Tier 3 businesses typically have higher working capital burdens than Tier 1s and OEMs — additional volumes will increase this pressure.

Defence funding flows through a patchwork of grants, incentives and co-investment schemes. SMEs, in particular, must navigate a maze of uncoordinated bodies — from DASA and Innovate UK to regional growth funds with limited alignment to defence timelines or risk profiles.

Short-term grant cycles deepen the challenges. A 12-month award might support prototyping but cannot fund the multiyear commitments needed to scale production, mature quality systems, or secure materials. Large primes can sometimes absorb that risk; most SMEs cannot. This limits defence businesses' ability to move from project to programme and become enduring capability providers.

> "Too many initiatives focus on R&D or experimentation, but few help us industrialise and scale. That gap is where businesses fail.
>
> SME

B. Link between capital and capability to attract investors

Even when funding exists, it often fails to align with real platform needs or industrial outcomes. As also highlighted in the *Rewiring UK Defence Financing* report[9], many schemes are disconnected from programme roadmaps. Without tying capital investment to demand signals, investor confidence erodes.

Part of the challenge lies in perception. As noted in the innovation section, defence can still be seen as a 'taboo' sector by the UK mainstream finance community unlike peer nations – such as France, Germany, or the US – where defence is framed as a strategic industrial pillar.

Several UK SMEs also reported struggling to secure finance due to ESG-related stigmatisation. One example: the 2023 ADS ESG and Finance Survey highlighted how UK defence SMEs experienced resistance from banks or investors based solely on the nature of their customer base.

"We're not asking for handouts. We're asking for a level playing-field – where defence isn't treated as a dirty word."

C. Missed opportunity to mobilise co-investment

Government-industry co-funding remains fragmented also. While there are successes, such as the MOD-BAE co-investment in Typhoon radar, most SMEs must engage with multiple departments each with different criteria and timelines. This slows funding deployment, misaligned priorities, and created inconsistent support.

Other countries provide clearer models. The US's Foreign Military Sales (FMS) and Defence Production Act (DPA), for instance, connect policy, demand, and finance. Similarly, public banking institutions in France and Germany offer defence-specific financial tools to de-risk investment and enable long-term capital deployment.

The result is a fundamental misalignment: the UK seeks scaled industrial capability but does not create the funding environment to deliver it. This gap disproportionately affects SMEs but also influences where larger businesses place their investment bets.

9. Rewiring UK Defence Financing

Turning intent into impact

The UK's defence sector has a clear vision (outlined in papers like the SDR).[10] To unlock the sector and scale its capacity and capability, alignment is required across planning, qualification, innovation, and funding to enable industrial delivery.

The UK already has a strong foundation for this in the DSIS, regional clusters, innovation funding programmes, and sovereign ambition. To achieve further impact, it's now essential to stitch these together into a connected system that works for primes and SMEs – both new entrants and incumbents.

The call to action and levers set out below outline what needs to be done to convert capability ambition into scaled, deployable industrial outcomes.

10. The Strategic Defence Review 2025 - Making Britain Safer: secure at home, strong abroad

Unlocking UK defence industrial resilience

Delivering a scalable, resilient UK defence industrial base requires more than localised reforms. It will require alignment – across private sector and government – to convert ambition into capability. Based on insights we gathered across OEMs, SMEs, MOD stakeholders, funders and cluster leads, four systemic priorities stand out:

1. Define and embed a sovereign capability needs

The UK needs to clearly set out the capabilities it needs to retain and/or grow domestically. This roadmap should:

- Be enduring, cross-government, and regularly updated.
- Encompass and be aligned across all key domains – air, land, sea, space, and cyber.
- Reflect a clear make vs. buy position – including where UK capability is essential to export competitiveness.

2. Align industrial planning with capacity roadmaps

Planning must shift from reactive procurement to proactive coordination. This means unifying demand, supply, and industrial planning across domains into a single, coordinated approach – providing a clear foundation for investment planning and confidence with suppliers to scale. This would include:

- Linking production planning to sustainment and aftermarket support to stabilise workloads and enable long-term supply chain visibility.
- Providing the end-to-end supply chain with a common view of future capacity and talent needs – enabling earlier recruitment, training, and capital investment.
- Supporting capacity and workforce expansion with shared insights.
- Increased export opportunities across allied and UK programmes will allow for greater scale and more joint investment, for instance Norway's selection of Type 26 frigate.[11]
- Anchoring procurement timelines to allow early industry alignment.
- Coordinating with the broader UK manufacturing sector on key supply areas such as raw materials, testing infrastructure and talent.

11. https://edition.cnn.com/2025/08/31/europe/norway-british-frigates-deal-latam-intl

3. Establish a unified innovation and qualification pathway

Increasing the amount of innovation progressing from pilot to platform is key. The UK already has strong innovation programmes, regional test facilities, and innovation centres (like Catapult). These will need to be unified into a practical pathway stretching all the way from pilot to adoption and industrial scale. Themes to address include:

- Expand UK-wide, open-access prototyping and test infrastructure — building on existing centres and mirroring best-in-class global examples.
- Define specific opportunities for SME and mid-tier suppliers aligned to platform priorities and timelines — enabling targeted investment and partnerships.
- Adopt digitally tracked lifecycle tools that follow technology from TRL 3 through to deployment.
- Enable an environment to encourage dual-use technologies (e.g., Civil Aerospace) that could apply to defence — and reduce entry barriers around funding, reputation and qualification.

4. Create a 'single-window' defence funding architecture

Funding will need to be easier to access and better aligned to strategic goals. The UK currently has a range of programmes — including DASA, Innovate UK, regional growth funds, EU-level mechanisms like (Defence Innovation Accelerator for the North Atlantic — DIANA) and defence innovation schemes (enabled through new mechanisms like UKDI). To scale industrial impact, these should be structurally integrated into a coherent national architecture. Topics to address include:

- Consolidate public funding — grants (national, regional, local), co-investment, export finance — into a single-entry platform.
- Introduce a government-backed mandate to update ESG investment guidance and enable defence access to capital without sector-based penalties.
- Match funding processes to project scale and complexity — enabling faster SME access and strategic co-investment for larger programmes.
- Digitalise application and claims processes with proportional compliance and reduced friction for trusted suppliers.
- Simplify access for dual-use and adjacent sector firms through clearer defence-linked funding routes.

Practical levers for companies and ecosystem players

While strategic redesign is essential, many of the ambitions can begin with tangible action now. The levers, highlighted below, reflect the four enablers referred to throughout this paper – **capability, capacity, innovation, and funding** – and frame what companies and ecosystem players can implement today. We have highlighted with case studies where businesses have successfully made similar changes.

1. Improve end-to-end supply chain visibility to invest and scale

Scaling capability starts with sharper, transparent demand signals – not just internal forecasts. Most large businesses already run Integrated Business Planning (IBP) or Sales and Operations Planning (S&OP), but these often stop at the enterprise boundary. Extending them across programmes and the ecosystem links forecasts to supply chain realities which can help identify scaling bottlenecks and potential critical failure points early; End-to-end supply chain resilience reviews will need to factor in end-to-end scaling requirements beyond current volumes to identify operational and financial challenges. This approach turns planning into an enabler for investment and faster industrial readiness.

- Share medium-term demand forecasts across OEMs and suppliers to improve visibility and investment confidence.
- Extend internal planning tools (such as IBP and S&OP) beyond enterprise boundaries to map critical bottlenecks, fragile suppliers, and hard-to-resource inputs.
- Embed forecasting insights, including multi-tier visibility into procurement decisions to reduce over-ordering and bottlenecks.
- Utilise digital tools to enhance visibility across the value chain and pre-emptively identify (and address) operational and financial risks.
- Run joint planning pilots to test and refine processes, cut waste, boost service levels and remove scaling bottlenecks before impact deployment.

Case study

Accelerating platform ramp-up with digital control tower

Facing earlier than anticipated sunset of a legacy platform, a global A&D OEM needed to rapidly scale production of a new platform. To manage the transition, the business built a digital control tower, mapping the supply chain up to Tier 6+ and covering 80% of BOM volume. The control tower integrated engineering, manufacturing, and financial data to flag early-warning signals of challenges holding back scaling of the supply chain. When risks were detected, dedicated task forces were deployed – if need be on-site with suppliers – to resolve issues and keep production scaling on track.

The approach enabled the OEM to maintain production speed under tight timelines, improve risk visibility across a complex multi-tier supply chain, and as a side effect reduce required inventory while improving supplier performance. It also embedded sustainability tracking into day-to-day operations, creating a foundation for faster, more resilient scale-up in future programmes.

2. Accelerate setup — plan investment smarter

Location and infrastructure choices made now will shape industrial readiness for decades. Smarter, less bureaucratic planning, in an integrated way, could cut lead times, align skills, and get sites future-fit faster.

- Identify optimal UK locations using a structured approach across operations, workforce, infrastructure and incentives.
- Integrated planning to execution across operations, workforce, incentives and future platform needs.
- Build location planning around future skills, capability and platform needs — collaborating early with AMRC and Catapult Centres to align training, talent and technology partnerships.
- Balance financial, operational, tax and ROI considerations.

Case study

Aligning foreign investment with UK incentive strategy

A global adjacent sector business was considering options to establish a new centre of excellence (CoE). EY supported the company in assessing optimal UK locations by balancing operational, workforce, infrastructure, and ROI considerations. The team worked closely with a regional economic agency to articulate the project's strategic value, align skills and training needs, and navigate complex grant processes.

This approach secured a 20% funding package, enabling the company to commit to a UK campus.

3. Scale faster — open up prototyping infrastructure

Access to testing and prototyping at industrial scale remains a constraint for many suppliers. Shared facilities, co-investment, and simpler access models can dramatically shorten time to market.

- Move from episodic use to expansion of shared test and prototyping infrastructure to enable industrial scale.
- Partner with Catapult Centres and AMRC to co-invest in regional open-access defence prototyping and testing facilities.
- Establish a simplified access model to support SMEs and mid-tier firms with affordable use and guided onboarding with sponsorship from OEMs and/or primes if possible.
- Coordinate across OEMs and clusters to identify high-impact facility gaps and align use to future platform needs.

Case study

National Ventilator Challenge — scaling emergency production through shared infrastructure and rapid reconfiguration

In response to the COVID-19 crisis, the High Value Manufacturing Catapult (HVM Catapult) led the Ventilator Challenge UK, uniting 33 engineering and tech firms to rapidly scale the production of over 13,000 ventilators for the NHS.

The programme established seven new large-scale manufacturing sites from scratch, including production lines at AMRC Cymru, demonstrating how regional shared infrastructure can enable industrial surge capacity at speed.

The AMRC reconfigured digital and physical assets — such as repurposing augmented reality headsets to retrain aerospace and automotive workers for ventilator assembly. It also mobilised its machining staff to produce critical test components based on legacy medical designs, accelerating the path from prototype to scaled production.

4. Reduce delays and frustration – digitalise innovation and qualification

Qualification bottlenecks can slow adoption even after successful trials. Digital-first approaches can synchronise innovation and qualification, reducing duplication and wasted effort.

- Partner with government-funded R&D centres like Catapult to pilot modular, digital-first qualification frameworks aligned to system/product scale and criticality.
- Establish innovation gateways within regional centres, offering step-by-step guidance from prototype to procurement.
- Use simulation and digital twins to streamline early-stage testing and reduce physical test bottlenecks.
- Use of modularity in qualification where possible (tailoring qualification depth to risk/criticality).

Case study

Digital casting innovation to streamline qualification and scale sustainable aerospace production

The AMRC, working with ATI, Brunel University and industry partners, set out to modernise aluminium casting, traditionally viewed as outdated, with Foundry 2030 and prove its viability for prominent aerospace platforms like the Airbus A350.

The team used simulation and digital twins to redesign a complex, nine-part component and optimise it for casting. These digital tools enabled accurate testing and validation before physical trials, significantly reducing early-stage waste and bottlenecks. They then demonstrated repeatability and qualification readiness, successfully running 10 full-melt cycles, all of which met specifications. The real-time digital monitoring of moulding processes further reduced variability and quality risks.

5. Unlock funding – do more with the same system

Navigating the funding landscape is complex and time-consuming. With the right advisor or coach to cut through bureaucracy, early mapping and alignment to capability needs can unlock capital faster – and make funding a repeatable, predictable process.

- Create a single point of unification (internally or via an advisor) to consolidate all funding sources and criteria, making it easier to navigate and act quickly.
- Map the full grant and incentive landscape early and align it to the investment roadmap and capability pipeline.
- Prepare robust, evidence-backed applications and digitise compliance, as well as pushing for funders to integrate systems that automate checks and speed up fund release.
- Build repeatable internal processes for incentive management.
- Use of modularity in qualification where possible (tailoring qualification depth to risk or criticality).

Case study

Aligning investment strategy with incentives and capability needs

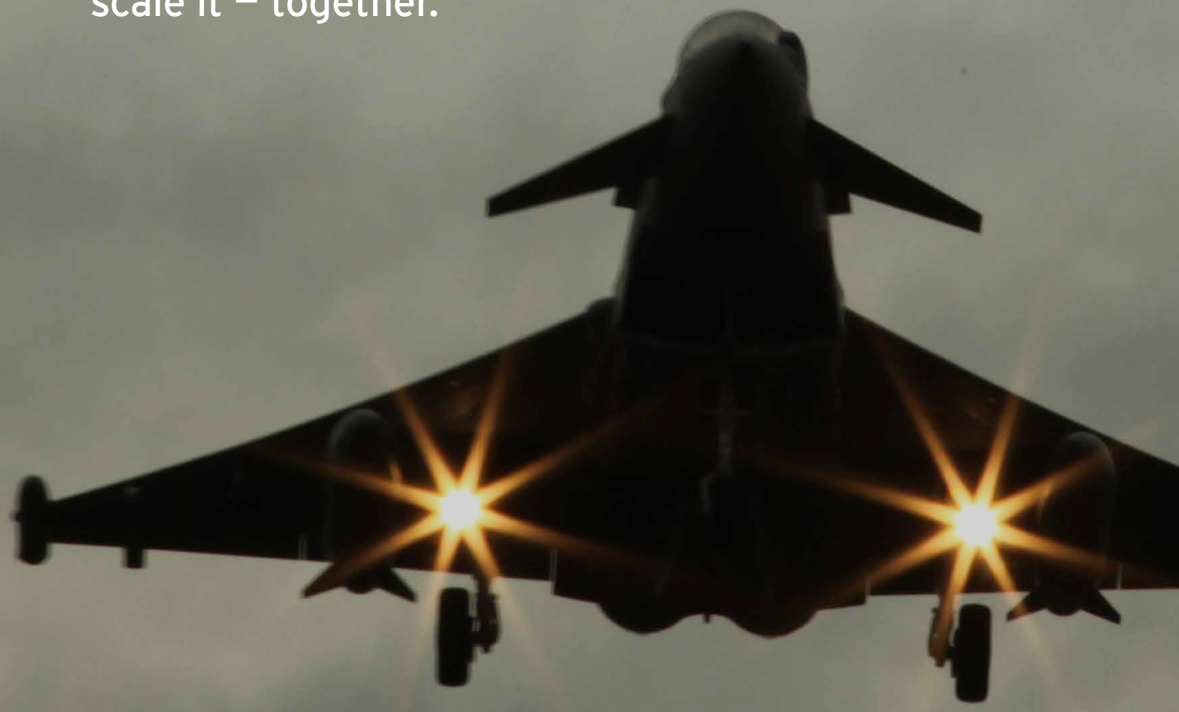
EY supported a major UK automotive business targeting carbon neutrality by 2030. Through structured analysis of operations, workforce, infrastructure and incentives, two projects were identified for UK IETF (Industrial Energy Transformation Fund) funding: one to electrify manufacturing and the other to replace a gas-fired steam system. Both initiatives were framed around future platform requirements and technology readiness, enabling the business to secure substantial funding. The case highlights how aligning investment plans with available incentives early can help accelerate industrial transformation.

Conclusion

From strategy to delivery

The UK's defence ambition is clear. But without delivery, ambition becomes frustration. This paper has set out a twin path — a strategic call to action and a practical set of levers — to help industry and government move forward together. Each track can drive progress on its own, but aligning both unlocks the full potential. Strategic clarity needs to be matched by delivery support. Today's tactical actions must evolve into structural reform tomorrow.

Momentum is building — across OEMs, integrators, SMEs and research institutions. The challenge now is to connect the dots, unlock capital, and scale what works. The UK has the ingenuity. The opportunity now is to scale it — together.



How EY can support defence businesses across the practical levers highlighted in the paper

1. Improve visibility: plan ahead, invest with confidence	2. Accelerate setup: plan investment smarter	3. Scale faster: open up prototyping infrastructure	4. Reduce delays and frustration: digitalise innovation and qualification	5. Unlock funding: do more with the same system
Implement sales and operations planning (S&OP) and integrated business planning (IBP)	Support site selection and global location strategy	Identify and map gaps in test and prototyping infrastructure based on platform roadmaps	Support design of modular, digital-first qualification frameworks	Map the UK and international funding landscape (grants, R&D credits, export support)
Deploy control towers and supply chain visibility tools to track bottlenecks, operational and financial risks across the E2E supply chain	Coordinate and build investment cases across workforce, infrastructure, and incentive access	Advise on co-investment structuring with govt.-backed facilities	Conduct process reengineering to eliminate duplication in testing	Build and deliver an integrated funding strategy tied to business and innovation roadmaps
Conduct demand-supply harmonisation across programmes/ ecosystems	Advise on planning risk mitigation and regulatory impact for new site setups	Setup governance and access models to share infrastructure	Link digital twins and simulation tech into early-stage validation and qualification cycles	Provide coaching and tooling to scale internal funding application capability
Use AI and scenario modelling to stress-test industrial plans/ forecasts	Advise on optimising improvement and investment plans as well as M&A options	Build business cases for multiparty testbed investments		Advise on capitalisation requirements including business plan reviews

How the AMRC can support defence businesses across the practical levers highlighted in the paper

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