

DESIDER AN INSIDE LOOK AT DEFENCE EQUIPMENT & SUPPORT



PROTECTING OUR NATION, OUR TERRITORIES AND OUR ALLIES TODAY, TOMORROW, TOGETHER

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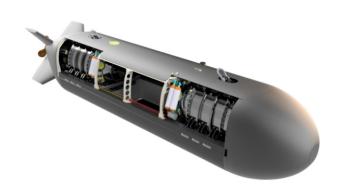


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The Editor's Lens

Welcome to the November edition of Desider.

The sounds and silence of Armistice Day services, held throughout the UK on 11 November, are still fresh in many of our ears. This solemn act of remembrance is our way of honouring all those who served and sacrificed – from many nations – so we can be living today in freedom and security. They are the ultimate reminder of what it is we fight for, what everyone across UK Defence works each day to protect and deter.

Editing Desider each month gives me an opportunity to see that work up-close and across a broad spectrum. It's a privilege to work with so many dedicated civil servants and serving personnel. And this edition is no exception.

If I had to summarise the edition in one word, I'd say it's 'partnership'. The powerful results that true partnerships can deliver, and the real risks we face, as the UK and a member of NATO, if we fail to act in unity.

This month, we mark two of the UK's most crucial major projects reaching important milestones in their delivery journeys. The Ajax armoured fighting vehicle programme reached initial operating capability and the Fleet Solid Support programme passed its critical design review.

Both have faced well-documented hurdles along the way, with technical, logistical and commercial challenges, but thanks to collaborative, open partnerships and an enterprise approach, they are moving forward at a rate of knots or perhaps a high mph (depending on the platform).

This edition also celebrates partnerships across teams, borders and continents through many of its stories.

First is the announcement that our most south-easternly NATO ally Türkiye will buy 20 Typhoon jets from the UK. Colleagues from the MOD's Commercial Exports and Sales and Trade and Strategic Exports teams, as well as embassy staff and many others, worked tirelessly to get this agreement over the line. Then there's the news that the UK will source 36 bridging vehicles from Germany,

which will be operated as part of a joint UK-German Amphibious Engineer Battalion. And a news-in-brief story about an enhanced partnership between Ukraine and the Joint Expeditionary Force, a 10-nation alliance, led by the UK, focused on security in the High North and Baltic Sea.

Plus a recap of the joint MOD and Department for Business and Trade 'Made in the UK, Sold to the World' roadshow, which brought over 200 representatives from British companies to explore future defence export opportunities. Two government departments working together, with UK defence trade associations and plenty of future partners, to find new ways to collaborate.

What these stories, which stretch from London to Liverpool to Belfast, and across Europe, have in common is the amplifying power that's released when we work towards a common goal and a common good.

This is equally at the heart of the Defence Industrial Strategy, as Oliver Wyman's Lisa Quest and the UK National Armaments Director Rupert Pearce both make clear in their opening columns. It is imperative that the MOD builds a new partnership with the UK's industrial base. Rupert puts it well at the end of his first Desider senior leader column, saying that realising the vision of the Strategy "will require every part of our defence community to act together."

I'll finish the Editor's Lens this month with a welcome to Jeremy Pocklington, the MOD's new Permanent Secretary. Jeremy joins the MOD as the first new Permanent Secretary since we introduced a simplified structure at the highest level of Defence. He now runs the Department of State as part of a quad alongside the National Armaments Director, the Chief of the Defence Staff and the Chief of Defence Nuclear. A partnership that ensures UK Defence is led into the future with the efficiency, focus and dynamism that our more troubled, complex defence landscape demands.

SENIOR LEADER COMMENT

"Not only secure and safe, but competitive and thriving"

UK National Armaments Director Rupert Pearce sets out his ambitions for the new role and the crucial importance of working with industry partners to deliver them.



As the new National Armaments Director, I'm pleased to have this opportunity to speak to Desider's readers across the UK defence enterprise.

This is such an important moment to join the MOD and our defence community. We face a new era of threat. The world we operate in becomes more contested, more conflicted, with each passing month. And the extraordinary pace of technological advancement, particularly in Al and autonomy, is aggressively reshaping the nature of those threats, and the landscape of warfare and deterrence.

This requires us to modernise our defence and security capabilities at a pace we have never before had to envisage outside wartime. The stark reality is that if we don't act now, and act together, our children and grandchildren will grow up in a world that is far more dangerous and unstable than any we've known.

In my near 40-year career in business, I've seen how a thriving industrial sector can drive opportunities and spread prosperity and resilience throughout the supply chain. I've seen national industrial strategy done well and done poorly.

This is why we are fortunate that the vision laid out in the Strategic Defence Review and Defence Industrial Strategy, and soon to be brought to life in the Defence Investment Plan, is truly game-changing. It represents a radical shift in the way we approach defence resilience and growth.

The Defence Industrial Strategy, which I will take the lead on delivering, has many specific objectives, but there are three overarching directives.

Firstly, we need to modernise and re-equip our armed forces to deliver war-fighting readiness as quickly as possible, learning the lessons from the Ukraine conflict and recommitting to fight alongside our NATO allies.

Secondly, we need to recognise the paramount importance of a strong, resilient, scalable UK defence ecosystem. We need an industrial base that ensures we can achieve operational advantage, innovate at a wartime pace and drive economic growth. For that, we must move from a transactional relationship with our suppliers to a strategic partnership where we prioritise the long-term health of the whole enterprise.

Thirdly, we need to recognise the part UK Defence and the MOD can play in driving growth in the UK economy. This will require a focus on innovation, especially with the UK SME community, closer working with private capital to crowd-in further investment, and greater support for exports of defence, security and dual use canabilities

We are focused on opening up Defence for business and investment. We want UK-based companies of all sizes, from scrappy start-up to established prime, to tell us that Defence is becoming an easier, more open, more collaborative partner. One they can rely on and that can rely on them.

Opportunities for British business are set to grow further with the new 'Back British' offset approach. This will ensure that when the UK buys from international partners, the winning contractor is required to create jobs, know-how and investment opportunities here in the UK – strengthening the economy, particularly in the regions where jobs would be created, factories built or subcontracts awarded.

If we deliver on those three ambitions, we will both transform UK Defence, keep the nation safe, and deliver long-term growth, jobs, skills and prosperity. As I step into the role of NAD, I can see how far we've already come and the energy there is to go even further.

If we want a UK that is not only secure and safe but competitive and thriving, we must have the strongest, most innovative, most dynamic defence enterprise. One that contributes to national security, drives economic growth to every region of the UK and makes us competitive on the global stage.

Realising that vision will require every part of our defence community to act together. This is my priority, and I look forward to working with you all to achieve it.

FEATURE

Mobilising private investment in a changing defence landscape

Lisa Quest, Partner, Head of UK and Ireland and Co-Head of the Government and Public Institutions Practice, Europe at Oliver Wyman, proposes an ambitious plan for UK Defence.

As the geopolitical climate evolves, the UK is faced with a pivotal opportunity to transform its defence strategy.

With the threat landscape increasing in severity and sophistication, there is an urgent necessity to adapt the underlying economics and supply chains that support defence infrastructure. Within this, mobilising private investment has emerged as an essential strategy to ensure the UK's defence capabilities are both robust and innovative.

A shift in defence dynamics

The recent DSEI Defence Investment Summit, hosted by Oliver Wyman, illuminated the need for a comprehensive approach to integrating private investment into the UK defence sector. Building relationships with industry, innovators and investors is essential. A nation's military strength is intrinsically linked to the industry behind it.

Addressing the challenges

Over the past few years there has been some positive momentum, yet significant challenges remain. The lack of clear procurement processes or consistent demand signals can undermine investor confidence due to uncertainty over potential returns. The Defence Secretary has previously (and rightly) pointed out that past difficulties have often stemmed more from complex procurement systems than external threats.

There is a critical financing gap for Small and Medium-sized Enterprises (SMEs), which face difficulties in securing stable demand and the supporting finance required to scale up. This gap represents a significant barrier for innovative SMEs and world-class primes to thrive within a strong mid-tier ecosystem. Addressing this requires collaborative efforts from investors and policymakers.

Strategic recommendations for growth

A recent report from the Defence & Economic Growth Taskforce confirms that a thriving defence sector is not merely a safeguard but a pivotal engine for growth and innovation. Economic growth is intertwined with Defence.

To maximise the potential of defence investment, the report makes two foundational recommendations:

1. Strengthened Demand Signal

 Provide investors and industry with confidence about returns on investment through a reliable, consistent demand signal, such as a long-term Defence Investment Plan, which outlines purchasing intentions, timelines and funding.

2. Reset National Public Dialogue

 Reimagine Defence as a pivotal component of the UK's economic strategy, emphasising its role in job creation, exports and innovation.

Additionally, it identifies four actions to bolster a more productive defence economy:

- Deploy defence spending as an economic force multiplier – Ensure procurement decisions consider the beneficial economic impact of job creation and intellectual property retention, particularly for SMEs.
- 2. Improve the attractiveness and international competitiveness of defence companies A coordinated approach to exports, including the new Defence Exports Office.
- 3. Mobilise trusted private sector investment Through clearer guidelines and stronger government-investor dialogue.
- 4. Attract finance to build a resilient and aligned defence supply chain

 Particularly in regional clusters, to foster rapid, decentralised innovation benefiting regions across the UK.



A vision for the future

The urgent need for a robust, reformative strategy has never been clearer. By combining the strengths of the defence sector and the financial community, the UK can cultivate an environment ripe for innovation, investment and resilience.

The Defence Secretary's call for defence spending to act as a powerful force multiplier for the economy is welcome. The UK has a unique opportunity to strengthen its security and be a leader in defence innovation.

The UK Government's commitment to increasing defence investment must be matched by equally rigorous efforts to ensure that every pound spent contributes to national security and stimulates UK economic growth.

The real challenge lies in executing these ambitious plans with agility and foresight, ensuring that we not only meet today's threats but also secure a prosperous future for all.



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Ajax armoured fighting vehicle reaches delivery milestone

By declaring Initial Operating Capability, Ajax becomes the first armoured fighting vehicle to enter British Army service in nearly 30 years.



The Ajax programme has declared Initial Operating Capability (IOC), a key delivery milestone, which means a squadron of the world's most advanced medium weight armoured fighting vehicle (AFV) can now deploy on operations.

A collaborative endeavour between the British Army, DE&S and General Dynamics, the six variants of Ajax are built in Merthyr Tydfil supporting a UK-wide supply chain of more than 230 companies and over 4,100 jobs.

The Ajax armoured vehicle provides a next-generation digital platform, armed with a range of weapons and state-of-the-art sensors, and built on an iterative upgrade approach that ensures it will retain the operational advantage. It provides reconnaissance capabilities to identify enemy targets on the battlefield, and gives the British Army the fighting edge. It will be at the heart of both Armoured and Deep Recce Strike Brigades.

Lieutenant General Anna-Lee Reilly, DE&S Director Core Delivery, said, "Reaching Initial Operating Capability for Ajax is a milestone achievement that delivers cutting-edge reconnaissance capabilities to our soldiers while supporting over 4,100 jobs nationwide. This UK-designed and built capability demonstrates how defence investment strengthens both our national security and our economy."

As the first armoured fighting vehicle to enter service with the British Army in nearly 30 years, Ajax has undergone extensive testing over several years, including more than 20,000 rounds fired from the 40mm cannon and over 42,000 kilometres driven in simulated battlefield missions – the equivalent of driving the circumference of the Earth.

Minister for Defence Readiness and Industry, Luke Pollard, said, "Ajax boasts world-class capabilities, and it is a hugely important milestone that the UK-wide suppliers have delivered a vehicle that is safe, effective and truly cutting-edge, which will be recognised by allies and adversaries alike."

The Ajax platform contributes to the Chief of the General Staff's vision of having a mix of highly capable platforms and rapidly developed or off-the-shelf capabilities. Its digital architecture allows for seamless integration with other capabilities, helping to significantly increase the British Army's lethality.

Underlining the world class capability this platform provides, there are already active conversations with multiple NATO allies for export variants.

The new fleet was put through its paces to meet IOC by the Household Cavalry Regiment. Captain John Hutton, Household Cavalry Regiment, described driving Ajax as "a really noticeable step change from the previous generation of AFVs."

He continued, "The control mechanism, the responsiveness of the vehicle and the situational awareness granted to a driver is unlike anything I have driven before. This gives the driver unparalleled awareness of their surroundings and far greater ease in controlling the vehicle across ground; 360 vision, previously the monopoly of the commander in the turret, is now granted to all crew positions."

UK National Armaments Director, Rupert Pearce, said, "Ajax represents a transformational capability for UK Defence, delivered by thousands of skilled workers across the UK. This world-class armoured fighting vehicle strengthens our armed forces and drives economic growth through our defence industrial base from South Wales to the wider supply chain."

The milestone helps deliver on the Strategic Defence Review by supporting the British Army's tenfold increase in lethality by harnessing precision firepower, surveillance technology, autonomy, digital connectivity and data. It is part of a £41 billion investment in Army equipment and support over the next decade.

New MOD Permanent Secretary announced

The Defence Secretary has announced the appointment of Jeremy Pocklington as the new Permanent Secretary for MOD.



As Permanent Secretary, Jeremy Pocklington will be the most senior civil servant in the MOD, responsible for leading the Department of State and its day-to-day operations.

He will support Defence Secretary John Healey in delivering the Government's priorities, providing clear policy and strategic direction to ensure the defence enterprise is focused on outcomes and delivery. This includes driving forward the implementation of the Strategic Defence Review, embedding Defence Reform across the department and maintaining the UK's position on the global stage.

Jeremy brings extensive Whitehall leadership experience to Defence. He has served as Permanent Secretary at the Department for Energy Security and Net Zero (DESNZ) since 2023. His track record of leading large, complex departments through periods of significant change makes him well-placed to guide the MOD.

Before joining DESNZ, Jeremy served as Permanent Secretary at the Department for Levelling Up, Housing and Communities from 2020 (when it was the Ministry of Housing, Communities and Local Government (MHCLG)) until 2023. He was formerly Director for Housing at the MHCLG, from 2018 until his appointment as Permanent Secretary.

Jeremy will replace outgoing Permanent Secretary David Williams who is leaving the Civil Service. A handover period will begin later in November.

John Healey said, "I am very pleased to welcome Jeremy to the department. In this new era for Defence, his leadership will help drive the delivery of our Strategic Defence Review, make Defence an engine for growth, and ensure the UK is secure at home and strong abroad. I am deeply grateful to David for his dedication in leading Defence over the last four and a half years, and for the support he has given to me and my ministerial team over the past year. I have huge respect for his commitment to public service, which I know is widely shared."

The announcement of the new permanent secretary follows an external recruitment exercise chaired by the independent First Civil Service Commissioner. The Cabinet Secretary appointed Jeremy with the approval of the Prime Minister.

Cabinet Secretary Sir Chris Wormald said, "I would like to congratulate Jeremy Pocklington on his appointment as Permanent Secretary of the MOD. His leadership and delivery experience make him excellently suited to lead the MOD at this critical time. I would also like to take this opportunity to thank David Williams for his excellent leadership of the department over the last four and a half years and his exceptional public service over the last 35 years."

Jeremy described his appointment as a "huge privilege". He said, "I look forward to working with the Defence Secretary, the ministerial team, and our outstanding military and civilian teams across Defence to drive forward Defence Reform. This is a pivotal time for Defence as we transform to deliver the Strategic Defence Review and ensure we protect the UK and our interests. I would like to thank everyone at the Department for Energy Security and Net Zero for their brilliant work over the last three years. I am proud of how much we collectively achieved."

DragonFire laser downs highspeed drones in UK first

DragonFire has achieved a new milestone, successfully downing drones at 650km/h during recent trials. The ground-breaking laser will equip the UK Armed Forces with advanced defence capabilities at home and abroad.

DragonFire, which uses an intense light beam to destroy targets including drones and other threats, has successfully demonstrated its effectiveness as an advanced laser defence system.

During its most recent trials at the MOD's Hebrides range, DragonFire achieved a UK-first in above-the-horizon detection by tracking, engaging and taking down drones flying at 650km/h- twice the speed of a Formula 1 car. These trials demonstrated the laser system's remarkable precision. The cutting-edge weapon was able to fire at a target with an accuracy equivalent to hitting a £1 coin from a kilometre away. The trials have also shown that the DragonFire light beam can take down drones at a distance of more than three miles.

These impressive trial results were achieved alongside a recent £316 million contract award by DE&S to MBDA to further develop DragonFire for the Royal Navy. Prime contractor MBDA will collaborate with UK-based sub-contractors QinetiQ and Leonardo to develop the first two laser weapons for the Royal Navy's Type 45 destroyers. On current plans, the first DragonFire laser will be fitted to a Type 45 by 2027 – five years faster than originally projected.

The development of DragonFire is part of the Strategic Defence Review's (SDR) commitment to bring innovative Directed Energy Weapons (DEWs) into service. These weapons are a major area of investment for the UK to gain a strategic advantage and improve force protection. The SDR has backed UK DEW work with an investment of nearly £1 billion, and a focus on integration into military platforms. DragonFire is the first high-power laser capability entering service from a European nation, representing one of the most advanced



DEWs programmes in NATO.

The DragonFire laser will help to create and sustain 590 jobs across the UK. This includes 200 highly skilled jobs in Scotland, 185 in south-west England and 75 in east England, delivering on the Government's Plan for Change.

Minister for Defence Readiness and Industry Luke Pollard said, "This high-power laser will see our Royal Navy at the leading edge of innovation in NATO, delivering a cutting-edge capability to help defend the UK and our allies in this new era of threat. We are delivering on our Strategic Defence Review by backing British Industry and creating hundreds more jobs, making defence an engine for growth across the IIK"

Another advantage of DragonFire is that it delivers real value for money. DragonFire uses a high-power laser that costs just £10 per shot, a remarkably cost-effective

method in comparison to traditional missile systems that can cost upwards of hundreds of thousands of pounds per shot.

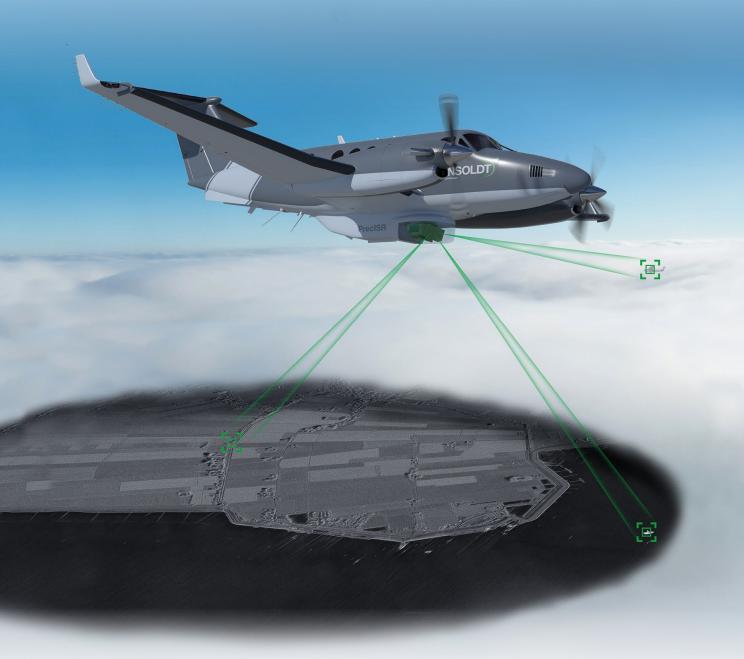
The recent contract awarded to MBDA and DragonFire's productive trials represent a significant step towards cost-effective DEWs for the UK Armed Forces.

Richard Murray, DE&S Director Lethality and Protect, said, "This contract with MBDA, off the back of hugely successful trials of the DragonFire demonstrator at MOD Hebrides, is a historic milestone on our journey to delivering the first ever operational laser weapon for the UK Armed Forces. DragonFire's ongoing development is an excellent example of how, by working together, we can harness the innovation and skills of our industry partners into what will be a world-leading capability for the Royal Navy."

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20,000 UK jobs secured as Türkiye agrees to buy 20 Typhoon jets

Following extended negotiations, the MOD's Commercial Exports and Sales and Trade and Strategic Exports teams have delivered a multibillion deal between UK and Türkiye, boosting UK Defence and NATO.

Following extended negotiations, the MOD's Commercial Exports and Sales and Trade and Strategic Exports teams have delivered a multibillion pound deal between UK and Türkiye, boosting UK Defence and NATO.

Thousands of skilled UK jobs have been secured following the signing of a new agreement, worth up to £8 billion, by the UK and Türkiye for 20 UK Typhoon fighter jets.

MOD teams worked hard to develop and finalise the contracts that will help to sustain a 20,000 strong UK-wide workforce. With production lines in Edinburgh, Warton, Samlesbury and Bristol, it represents the largest fighter jet deal in almost 20 years. It will also strengthen Türkiye's advanced combat capabilities, bolstering NATO's strength in a key region and enhancing interoperability between both air forces.

Following months of intensive negotiations, the deal was concluded in Türkiye, with Prime Minister Sir Keir Starmer and President Recep Tayyip Erdoğan formalising a strategic partnership agreement. As part of a back-to-back arrangement, the UK signed a commercial contract with BAE Systems for the procurement of the Typhoon jets.

The teams spent extended periods

in Ankara, working closely with the Turkish delegation. Collaborating across government, with specialists including pilots, project managers, policy advisors and translators, the teams navigated complex commercial, legal and diplomatic challenges to support the successful delivery of the agreement.

James Griffiths, MOD Head of Commercial, Exports and Sales, said, "When I signed the contract, it was a proud moment. It marked the culmination of extensive work by many commercial, policy and military colleagues, drafting and negotiating terms, dependencies and liabilities to reach a position where all parties were willing and able to sign. This achievement reflects the professionalism and expertise within MOD. The Typhoon deal is their success, and a reminder of the calibre of professionals serving in Defence."

The Typhoon agreement will see more than a third of each aircraft manufactured in the UK, with the remainder produced by Eurofighter Partner Nations. The first delivery to Türkiye is expected to take place in 2030.

This was the Prime Minister's first visit to Ankara, during which he met with Turkish military representatives and RAF Typhoon pilots to hear first-hand how the jets will contribute to European security.

After the signing he said, "This landmark agreement with Türkiye is a win for British workers, a win for our defence industry and a win for NATO security. At either ends of Europe, the UK and Türkiye are vital to tackling the challenges of our time, and this will allow our armed forces to work even closer together as we deter threats and protect our national interests."

Defence Secretary John Healey, who also travelled to Ankara to finalise the deal, said, "This is another major export deal for the UK and is the biggest jet exports deal in a generation. It will pump billions of pounds into our economy and keep British Typhoon production lines turning long into the future. This deal goes far beyond the procurement of aircraft. It is the leading edge of the growing defence and industrial partnership between our two nations."

Charles Woodburn, Chief Executive at BAE Systems, said, "Typhoon is an export success story and demonstrates how investment in Defence can fuel significant economic growth and returns across the UK. This announcement extends Typhoon production and preserves crucial sovereign skills, which underpin the UK's defence and security."

FEATURE

Crossing the innovation 'valley of death' with the Exploitation Engine

UK Defence Innovation's Futures Lab has brought together a team of experts to develop a framework for accelerating and reducing the risk of transitioning promising new projects to the front line.

The ongoing conflict in Ukraine has underscored both the immediacy of the threats facing the UK and Europe and the transformative role of innovation in modern warfare.

This was reflected in the Strategic Defence Review (SDR), which emphasised that "the UK must pivot to a new way of war" and "continually harness new technology" to remain at the "forefront of warfare". This vision was reflected in the establishment of UK Defence Innovation (UKDI). Its mission is to accelerate the delivery of innovative defence capabilities.

A persistent challenge, however, has been the difficulty in getting promising technologies to transition from Research & Development (R&D) into the hands of warfighters – a phenomenon often referred to as an inability to 'cross the valley of death'.

In 2023, the MOD Defence Innovation Unit and Futures Lab began exploring the concept of an Exploitation Engine as a mechanism to identify and accelerate promising R&D projects, helping to inform and reduce the risks for future defence investment decisions. The goal was to help innovative technologies successfully cross the 'valley' and deliver operational impact by providing funding and support to mitigate blockers to progress. For example, help develop a pre-production prototype, or undertake testing and evaluation of a prototype to help transition it into a minimal viable capability.

Working in collaboration with the MOD

Defence Innovation Unit and later UKDI, Futures Lab assembled a bespoke industry team to design, deliver and refine the Exploitation Engine. The Engine is designed around four interrelated areas:

1. Governance and project controls

- Establishing robust governance structures and tracking mechanisms for investment.
- 2. Processes, artefacts and tools Developing and implementing the necessary frameworks and tools to support exploitation.
- Assessment and prioritisation –
 Creating a systematic approach to
 evaluate, prioritise, and invest in the
 most promising R&D projects.
- **4.** Learning and adaptation Capturing lessons learned and dynamically applying them to improve future outcomes.

In its inaugural year, the Exploitation Engine received 27 submissions seeking support and funding from across the UK Armed Forces. Each submission underwent impartial and independent evaluation, with a focus on whether the submission had senior sponsorship and a clear operational imperative that could deliver a fielded capability within two years.

Ten projects were selected to receive support from the Exploitation Engine Fund, resourcing them to meaningfully progress towards reaching front-line personnel. Since then, awareness of the Exploitation Engine has grown significantly, with the number of submissions more than doubling in its second year.

One example of an Exploitation Engine funded task was Project Inaros. This project supports the development of a minimum viable prototype that aims to exploit new sensing technology, and which could evolve into a core defence capability.

In addition to its core mission, the Futures Lab team demonstrated its agility by delivering four rapid-turnaround projects that accelerated the Exploitation Engine's development. These tasks developed the Engine's governance and internal processes, plus capturing and exploiting learning from experience including from other R&D activity.

In the future, the intention, as part of UKDI, is to leverage and develop the Exploitation Engine team and its ways for working. They will become the 'brain' of UKDI to focus funding on innovation exploitation, to reduce risks, and accelerate innovative capabilities which can be delivered at scale.



A landmark contract between the UK and Germany will deliver amphibious bridging vehicles to the British Army, enhancing battlefield mobility and strengthening the partnership between the two nations.

The UK and Germany have signed a contract for new hightech military bridging equipment in a deal worth £200 million.

The agreement will deliver 36 M3 EVO amphibious bridging vehicles, produced by General Dynamics European Land Systems in Germany, to the British Army. Under the joint contract, Germany will also purchase several units.

The M3 EVO system will be operated by the British Army's Royal Engineers as part of the joint UK-German Amphibious Engineer Battalion based in Minden, Germany, further enhancing the partnership between the two nations. The M3 EVO will be capable of carrying all current and future British Army vehicles, including the Challenger 3 tank, across rivers and large bodies of water.

A 100-metre-long floating bridge can be assembled in less than 10 minutes, allowing personnel to quickly cross water obstacles. This makes the M3 EVO the world's fastest floating bridge and ferry system in terms of operational readiness.

Colonel Adam Foley, British Army Lead for Military Engineering Capability, said, "Military bridging is the bedrock of successful operations. These new systems will enable the UK to maintain operational advantage by allowing commanders the manoeuvring freedom they require on the battlefield."

The M3 EVO contract will strengthen the relationship between the UK and Germany. It builds upon the Trinity House Agreement signed in October last year; a first-of-its-kind commitment to deepen defence cooperation across the two nations.

The UK's Minister for Defence Readiness and Industry Luke Pollard said, "This world-leading new system will better equip the British Army, helping our troops to be more effective on the battlefield. We are delivering on the Strategic Defence Review's ambition to transform our armed forces as we face this new era of threat. One year on from our landmark Trinity House defence agreement with Germany, we are working hand in hand to reinforce Europe and NATO's collective security."

The contract also opens export opportunities for UK industry. Germany plans to purchase the British-made General Support Bridge (GSB). The GSB system allows troops to build a 46-metre sturdy bridge – the length of five buses – in less than 90 minutes, and is usable by all NATO tanks. The GSB is produced by KNDS UK in Stockport and supports 300 jobs.

The Organisation for Joint Armament Cooperation (known by its French acronym OCCAR) signed the agreement on behalf of both governments. OCCAR is a European intergovernmental organisation that facilitates and manages collaborative armament programmes.

UK National Armaments Director Rupert Pearce said, "The NAD Group exists to make global partnerships move faster and more effectively, superbly demonstrating what modern warfighting readiness looks like: British and German forces using top-quality NATO-standard equipment, UK industry exporting innovation, and our two nations standing together against the threats we face."

DE&S Director Land Equipment Major General Lizzie Faithfull-Davies said that the contract will deliver "enhanced military manoeuvre support capability to our armed forces". She said, "This new system will provide our Royal Engineers with advanced bridging and ferrying capabilities that can support even our future Challenger 3 tanks, ensuring we maintain our operational edge."

The equipment is expected to be rolled out in the early 2030s.

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Government roadshow heads to Liverpool to boost defence SME exports

Liverpool is a defence innovation hub with a strong industrial heritage and thriving future, making it the perfect location for a joint MOD and DBT defence sector SME roadshow.

The MOD International Collaboration and Exports (IC&E) team were out in force at Everton Football Club's Hill Dickinson Stadium at the end of October, championing defence and dualuse Small and Medium-sized Enterprises (SMEs), and helping them achieve their next export success.

Joining up with colleagues from the Department for Business and Trade's (DBT) Industrial Strategy team, IC&E's support and expertise turned this into a resounding success with over 200 attendees.

The MOD is seeking to increase spending with UK SMEs, investing in innovation and technology while supporting high-skilled jobs. The National Armaments Director (NAD) Group has been tasked with making the defence market more accessible and simpler to navigate for them, and with providing a more attractive offer to industry. The Liverpool Roadshow, and events like it, are helping to bring start-ups and SMEs into the market as key players, opening up what can seem like an opaque system and facilitating export opportunities.

DBT has been running a series of 'Made in the UK, Sold to the World' roadshows, themed around UK Industrial Strategy growth sectors. The roadshows have taken place across all nations and regions of the UK, directly connecting international buyers with SME exporters.

Andrew Kinniburgh, Director-General, Make UK Defence, started the day speaking on behalf of various trade associations to lend their support to the MOD's Defence Industrial Strategy, with the public and private sector united in their efforts to unlock the potential of SMEs.

Attendees were then able to make the most of a programme tailored to their interests by IC&E's dedicated SME Engagement Team. This included workshops and panel sessions, with topics ranging from how defence and dual-sector SMEs can scale up for international success, to how to navigate different export licensing frameworks. Peer networking was on offer and companies were able to learn from defence export champions about how they achieved their success.

There is a wide array of cross-government support available for defence sector SMEs, but it can sometimes be difficult to navigate. Events like the Liverpool Roadshow can be instrumental in signposting that support and identifying opportunities for ambitious SMEs.



SMEs could get their questions answered by UK Export Finance representatives and DBT's international trade advisors. SMEs were also able to sign up to the Defence Export Faculty for ongoing support.

Attendees were keen to speak to IC&E's military advisors and desk officers, with regional leads present from a variety of markets, from Ukraine to Saudi Arabia, Romania and India. Customers in the defence sector are exclusively other governments, so engaging with desk officers is an essential step in accessing support for successful export campaigns.

Willian Santos, from SME ABI Electronics, praised the roadshow and the wider government support which has "helped us tremendously, introducing us to high-level contacts in Ministries of Defence across the world... contacts that wouldn't normally be available to us as an SME."

The final joint defence roadshow was the most successful by far, with a record number of SMEs attending, attesting to the vibrancy of the sector. IC&E's SME Engagement Team will continue this momentum with a 2026 SME Surgeries regional tour.

Fleet Solid Support programme achieves major design milestone

The Fleet Solid Support programme has passed its Critical Design Review, marking significant progress towards the delivery of next-generation vessels that will strengthen the Royal Fleet Auxiliary's global capability.



The Royal Fleet Auxiliary (RFA) is a step closer to receiving new and advanced support ships following successful completion of the Fleet Solid Support (FSS) programme's Critical Design Review (CDR).

The FSS programme promises to deliver three solid stores vessels for the RFA which will provide munitions, stores and provisions to support the Royal Navy at sea. As a successor to the Fort Class vessels, FSS will form an essential supporting element to the delivery of the Carrier Strike Group.

The CDR was completed by prime contractor Navantia UK and the DE&S project team, with support from maritime engineering consulting firm BMT Ltd. This achievement means there is confidence in the design of the RFA vessels, and allows preparations for production to begin.

The thorough review assessed the complete, detailed design of the vessels, from hull structure to equipment fit. Overall structural integrity, safety standards, environmental sustainability, risk minimisation and military systems

integration were covered in the review process.

lan Randles, FSS Chief Engineer at DE&S, said, "Completing the CDR represents a significant achievement for the FSS programme and demonstrates the strong partnership between DE&S, Navantia UK, and BMT. This milestone gives us confidence that we're on track to deliver these vital support ships that will enhance the Royal Fleet Auxiliary's global reach and ensure our naval forces have the logistical support they need wherever they operate. We're now ready to move forward with cutting steel and beginning construction of these advanced vessels."

The ships will be built at multiple locations, with construction taking place in the UK at the Harland & Wolff shipyards in Belfast and Appledore. Part of the construction will also take place in Spain at Navantia's shipyard in Cádiz. Navantia UK is working with multiple Northern Irish Small and Medium-sized Enterprises to support essential upgrades to Harland & Wolff's Belfast facility as the FSS programme advances.

Keith Bethell, DE&S Director, Maritime Environment, visited the Harland & Wolff shipyard to mark the CDR milestone and witness the ongoing transformation of the Belfast facility.

He said, "I was impressed by the scale of transformation underway in Belfast, seeing first-hand how we will deliver this world-class capability and meeting individuals central to the programme. This important CDR milestone brings us closer to ensuring the RFA can support our naval operations worldwide, whilst strengthening sovereign shipbuilding for years to come."

The MOD worked closely with industry partners to reach this critical milestone. The collaborative approach between the MOD, Navantia UK, and BMT has ensured the programme maintains momentum towards delivery.

CEO of Navantia UK, Donato Martinez, said, "CDR confirms the hard work and collaboration between MOD, BMT and Navantia UK. This milestone demonstrates that the programme is ready to meet its operational, logistical and efficiency needs as it gears up to deliver for the Royal Navy and RFA."

The successful CDR follows October 2024's Preliminary Design Review and was marked in both Belfast and Cádiz, where UK technical teams have been participating in a knowledge transfer programme. This programme enables British teams to work alongside their Spanish counterparts, learning advanced shipbuilding techniques and processes that will be implemented in the UK yards.

The FSS programme now moves towards cutting the first steel and beginning ship building later this year.



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FEATURE

The naval testbeds transforming defence innovation

The Royal Navy's Anti-Submarine Warfare Spearhead programme rapidly developed three autonomous testbed platforms – Cetus, Proteus and Scylla – to enhance ASW capabilities.

The Anti-Submarine Warfare (ASW)
Spearhead programme – a collaboration
between the Royal Navy, industry
partners, UK Defence Innovation (UKDI)
and the Defence Science Technology
Laboratory (Dstl) – has rapidly delivered
three autonomous platforms that will
strengthen UK naval capabilities and
support AUKUS partnerships.

Streamlined innovation process

The programme's success stems from a seven-step governance framework that prioritised speed without compromising safety. This approach, championed by UKDI, enabled rapid development while maintaining rigorous operational standards.

Multi-year funding provided industry partners with the confidence to innovate and covered all development activities, ensuring that demonstrators could progress without traditional handover delays. Dstl provided technical support throughout the programme, acting as an enabler and participating in panels to assess capability proposals.

Securing the UK's future

These three platforms demonstrate how collaborative innovation accelerates capability development while reducing costs and risks. The ASW Spearhead programme positions the Royal Navy at the forefront of autonomous naval warfare innovation, while reducing operational risks and lifecycle costs, and supporting broader AUKUS partnership objectives.

Cetus: The UK's largest autonomous submarine

Developed through a partnership between the Royal Navy and Plymouth-based MSubs Ltd, Cetus represents a shift in naval autonomous operations. Originally funded through a Dstl and Defence and Security Accelerator (DASA) project, MSubs delivered the £15.4 million, 12-metre autonomous underwater vehicle in November 2022 through the Submarine Delivery Agency (SDA). At 25 tonnes with

a full payload, Cetus is one of the most complex uncrewed submersibles used by any navy to date.

The platform's substantial payload bay enables diverse mission configurations including anti-submarine warfare, seabed operations and intelligence gathering. Cetus will help the Royal Navy develop operational concepts for autonomous systems while addressing critical objectives including autonomous decision-making, advanced sensor miniaturisation, launch-recovery procedures and system security protocols. The platform began sea trials in February 2025 and was formally named XV Excalibur in May.

Proteus: Revolutionary autonomous

The Proteus demonstrator showcases the benefit of the Spearhead programme's innovative agile approach, accelerating from initial requirements to hardware delivery within three years. This threetonne autonomous rotary platform, delivered by Leonardo, serves as a testbed for autonomy and mission modularity, initially focusing on deployment of sonobuoys (small sonar buoys) and communications relay missions that are both critical to anti-submarine warfare operations.

Proteus reduces reliance on crewed helicopter operations, delivering significant cost savings and risk reduction. Future capabilities will expand beyond sonobuoy operations to include logistics support, search and rescue coordination, and maritime surveillance.

Scylla: Torpedo tube launch and recovery system

Project Scylla is an autonomous torpedo tube launch and recovery system developed through the Spearhead programme. The vehicle is designed to be launched, then autonomously conduct missions and recover itself back into a submarine torpedo tube, enhancing submarine capabilities without requiring platform modifications.







Scylla features a modular mid-section, which allows mission-specific payload configurations for diverse operational requirements. Trials on Astute-class submarines began in 2024-25, with Initial Operating Capability planned for 2026-27. The platform supports AUKUS Pillar 2 objectives by providing submarines with deployable autonomous vehicles capable of seabed warfare, intelligence operations, and covert surveillance missions.

Launch plans for new Al Model Arena announced

The Defence AI Centre is working with industry partners to develop a new tool that will help redefine how Defence evaluates and procures AI-powered technology.

The MOD's Defence AI Centre (DAIC) has announced plans to launch the new AI Model Arena tool in early 2026.

The tool, developed in partnership with UK AI company Advai, will pilot a secure, standardised platform for suppliers to rapidly test and demonstrate their models against defence requirements. In doing so it will help to redefine how Defence evaluates and procures AI technology.

As part of the MOD's Digital Function, the DAIC enables and accelerates Al across Defence. The Digital Function is part of the newly formed National Armaments Director Group, which brings acquisition, science, innovation and support functions under a single unified structure.

The AI Model Arena will communicate priority defence usecases and initial key requirements. It will be a vendor-neutral evaluation platform that can objectively assess models across four categories – performance, reliability, robustness and security – to help the MOD to identify the best AI solutions.

It will enable significantly reduced timelines by assessing up to 100 models simultaneously and providing constructive feedback to suppliers, helping them to quickly iterate their solutions and ensuring the best solutions progress.

This approach will support more confident procurement decisions while mitigating risks. It will also help with earlier identification of the most promising models and suppliers, reducing procurement bottlenecks, accelerating innovation, and ensuring AI solutions are triaged for procurement teams to investigate further. The tool will provide an objective 'demonstration by doing' mechanism for triaging into the Defence Tech Scaler and Innovation pathways.

The Arena builds on work previously undertaken by the Royal Navy in partnership with Advai and the Accelerated Capability Environment (ACE). ACE is a Home Office unit solving public sector data challenges where the MOD first conducted independent side-by-side testing of different AI models.

Head of DAIC, Commodore Rachel Singleton, said, "This initiative is central to our ambition to adopt AI responsibly and at pace, ensuring we maintain a strategic advantage in an increasingly competitive landscape. I encourage all AI suppliers to engage with the AI Model Arena. This is your opportunity to showcase your capabilities, drive innovation and help shape the future of Defence AI."

The Al Model Arena pilot provides a scalable solution to procurement challenges, improving performance, boosting confidence and delivering cutting-edge Al capabilities in a shorter timeframe. The tool can automate the evaluation of Al models against Defence benchmarks, delivering the same insight as more intensive review techniques, but with significantly shorter timelines.

The AI Model Arena's vendor-neutral processes support a level playing field for industry and enable the growth of UK small and medium-sized enterprises by identifying where they have an edge, helping to advance a stronger sovereign AI ecosystem.

It will make the procurement of secure, compliant and operationally ready AI systems more efficient, while helping to reduce barriers to innovation, strengthen defence industrial partnerships, and ensure UK Defence has access to the most advanced AI solutions.

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A digest of DE&S news from the past month.

Joint Expeditionary Force launches enhanced Ukraine partnership

Euro-Atlantic security will be significantly strengthened in the High North and Baltic Sea as the UK and allies from across the region ramp up military cooperation and agree an enhanced partnership with Ukraine.

The partnership between the Joint Expeditionary Force (JEF) and Ukraine is expected to see JEF deliver training for the Armed Forces of Ukraine, alongside closer collaboration on the protection of critical underwater infrastructure, drones, battlefield medicine and methods for countering disinformation. This will help JEF nations to learn vital lessons from the Ukrainian battlefield.

Defence ministers from the 10-nation strong JEF, of which the UK is the lead nation, met in Bodø, Norway, to discuss strengthening Euro-Atlantic security. Ukrainian Defence Minister Denys Shmyhal joined the meeting for the first time.

The meeting followed the conclusion last week of Exercise Tarassis, which ran throughout September and October 2025, and saw more than 1,700 British personnel from all three Services conduct exercises alongside JEF allies. The activity stretched across Norway, Sweden, Finland, Estonia, Latvia and the wider Baltic Sea, and was the largest military activity in JEF's 11-year history.

Ajax wins Global Project Controls Award

The Ajax armoured fighting vehicle programme has been recognised for excellence in project delivery at the Global Project Controls Expo Awards, where it won Megaproject of the Year.

The programme is delivering 589 advanced armoured fighting vehicles as part of the British Army's modernisation over the next decade. This award recognises the team's management of this vital defence capability.

DE&S Combat Vehicles Portfolio Leader, Simon Pearson, said, "I am so proud that the team have been recognised for the hard work, dedication and effort they have put in over so many months and years."

The award judges praised Ajax for uniting multiple organisations through a single source of data, driving collaboration, transparency and efficiency. Its strong governance and culture of innovation set a new benchmark for managing complex, high-stakes defence projects.

DE&S Ajax Delivery Team Leader, Shona Bates, said, "Winning Megaproject of the Year is testament to the dedication, expertise and collaboration of everyone working on Ajax. This award recognises how, after difficulties earlier in the life of the programme, we've brought together multiple organisations through innovative project controls, creating transparency and efficiency across this complex programme."

Royal Navy deploys to support disaster relief efforts for hurricane-hit Jamaica

Communities in Jamaica affected by Hurricane Melissa will receive support from HMS Trent, which sailed to storm-damaged Falmouth with specialist personnel and equipment.

HMS Trent, a Royal Navy Offshore Patrol Vessel, carries a 75-strong crew, including specialist engineers who will provide technical expertise to support recovery efforts. Their work will focus on infrastructure assessments and emergency repairs, in coordination with Jamaican authorities.

Offshore Patrol Vessels like HMS Trent carry two top-of-theline rigid inflatable Zodiac boats to rapidly move support teams and quadbikes ashore. HMS Trent is also equipped with drones that can assist the Jamaican authorities with reconnaissance of damaged areas by providing aerial assessments and imagery.

The deployment comes after the UK announced a wider package of support to Jamaica. This includes £7.5 million in emergency funding, as well as over 3,000 shelter kits and over 1,500 solar powered lanterns to help those whose homes have been damaged or are without power.

PEOPLE

Ariane Cory

Job title: SERPENS Project Manager for Close Find Radar (CFR)

What does your role involve?

My current role is to lead the procurement of a new CFR to replace the Light Weight Counter Mortar Radar. As a project manager I have worked on a variety of interesting projects, including the Challenger 3 main battle tank. Being a project manager gives me the opportunity to take big ideas and turn them into tangible outcomes. It's about so much more than spreadsheets and schedules; it's always about the people.

What do you most enjoy about your job?

Working in Defence is very fast paced, complex and interesting. I enjoy the challenge that each project brings and the huge range of different people that come with it.

What makes my role really rewarding is its impact. Every milestone achieved contributes to strengthening capability, supporting those on the front-line and delivering innovation that enhances our national security.

What is your greatest accomplishment to date?

During my first year as a Level 2 MOD Project Manager I was trusted to run a £20 million Qualifying Defence Contract for the delivery of crucial components, after completing the DE&S Project Delivery Apprenticeship Scheme.

What keeps you energised about working at DE&S?

The endless options and opportunities of various projects in DE&S. There are always new challenges and new areas to learn about. I am also very passionate about Defence and the importance of the work we do.

Who or what has shaped who you are?

I have had the opportunity to work with some very inspirational women within DE&S. They have really supported my development and empowered me to navigate the difficulties that women can face in my field of work. Early in my career, it was female mentors who taught me that strong leadership isn't about authority – it's about authenticity.

What do you enjoy doing in your spare time?

I've been fortunate to enjoy some incredible travel opportunities. One of the most memorable experiences was visiting Singapore for New Year's Eve. Another highlight was swimming with whale sharks in Mexico. I also enjoy spending time walking with my dog. Would you like to see a picture?

What might surprise people about you?

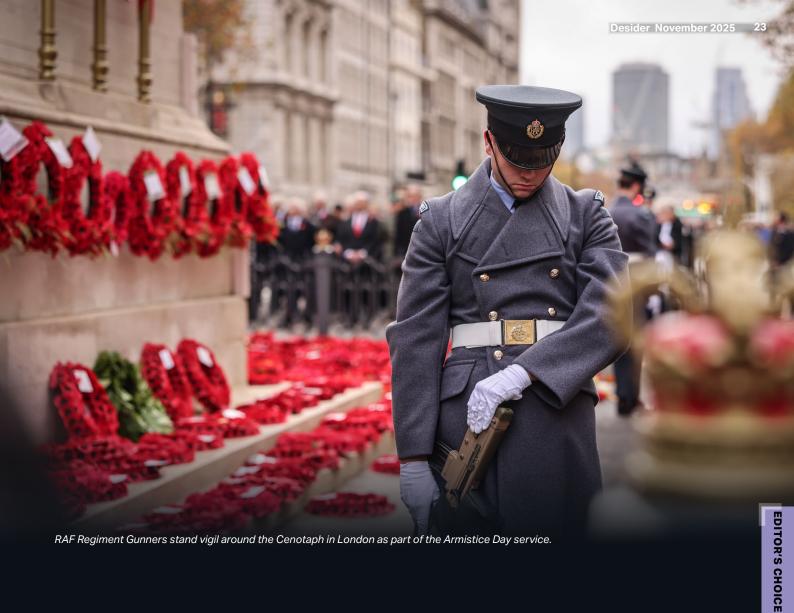
My competitive streak, along with an endless variety of 'really good' jokes.

Here's one: "Did you hear about the engineer who invented the escalator? They were mechanically inclined."

What's the best advice you've ever been given?

There's two quotes. "If you do not believe in what you are saying, why would anyone else believe it?" And "Insanity is doing the same thing over and over again, and expecting different results."





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The Ajax armoured fighting vehicle being tested at the Armoured Trials and Development Unit facility in Bovington.

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