WRITTEN EVIDENCE SUBMITTED BY THE MINISTRY OF DEFENCE - DEFENCE INDUSTRIAL POLICY: PROCUREMENT AND PROSPERITY

Updated evidence – May 2020

We welcome the opportunity to provide updated evidence to reflect the launch of the Government's review into its defence and security industrial strategy which was announced in March.

Executive Summary

The UK industrial and technology base, working alongside the Ministry of Defence (MOD) and UK Armed Forces, plays a crucial role in delivering the Government's national security objectives. It is vitally important in helping to protect our people, project our influence around the world and promote our national prosperity.

The Government's commitment to the UK Defence sector is demonstrated by the MOD's Defence Industrial Policy Refresh of 2017. The Policy's aim is to reinforce the core objectives of procuring the right capability for our Armed Forces and ensuring value for money for the taxpayer, in tandem with encouraging a thriving and globally competitive UK industrial and technology base. To support this, we are pursuing a range of initiatives to strengthen our relationship with the Defence industry, drive innovation and competitiveness, and support responsible exports.

The MOD is committed to spending over £186 billion on equipment and equipment support between 2018 and 2028. The Department is fully aware that its procurement policies and investment decisions have significant implications for the UK industrial and technology base.

The Department keeps its approach to the UK Defence industry under review to ensure that it keeps pace with the changing international, technological and industrial landscape and remains effective. The Government is particularly conscious that UK companies face significant challenges in the near future given the pace of change in these areas and the fact that, as a high skilled technology driven sector, businesses must compete to attract and retain skilled people who can work in growth areas like artificial intelligence, cyber and space. Given these challenges, we recently launched a full cross-Government review of the UK's defence and security sectors. We informed Parliament of the launch of this review through a Written Ministerial Statement in March.

The review will identify how we can enhance our strategic approach to ensure we have competitive, innovative and world-class defence and security industries that drive investment and prosperity across the Union, which can then underpin national security now and in the future.

At the same time, we are continuing to pursue a range of ongoing initiatives to strengthen our relationship with the Defence industry, drive innovation and competitiveness, and support responsible exports.

Questions

1. Is the current Defence Industrial Policy effective? Is a new Defence Industrial Strategy required?

The MOD Defence Industrial Policy Refresh of 2017 set out how the MOD procures technology, equipment and support to meet the UK's defence needs, with an emphasis on supporting growth and competitiveness. It added to the Government's 2012 White Paper 'National Security Through Technology' which remains the formal cross-Government policy on defence procurement and industrial strategy. The 2015 Strategic Defence and Security Review (SDSR 15) also importantly recognised the connection between our national security and economic security and introduced National Security Objective 3 to 'Promote Our Prosperity'. The 2017 policy refresh set out three strands to the MOD's approach: to improve the way in which Defence delivers wider economic and international value and national security objectives; to help UK industry in its plans to be internationally competitive, innovative and secure; and to make it easier to do business with Defence, particularly for innovators, small and medium-sized enterprises (SME) and non-traditional suppliers. This remains the most recent overarching policy document which outlines the MOD's industrial policy and the contribution Defence makes to UK prosperity.

The MOD has taken a number of steps to support these objectives, including launching the strategies for Shipbuilding (September 2017), Science and Technology (October 2017) and Future Combat Air (July 2018), and the launch of the Defence Innovation Initiative (September 2016), Defence Technology Framework and Defence Innovation Priorities (September 2019). Our SME Action Plan of March 2019 explains the measures which we will take to improve our procurement spend with SMEs by working with our major suppliers to remove barriers and improve access to opportunities for doing business with Defence. As part of this the MOD has set an ambitious target that 25% of our procurement spend will go to SMEs by 2022.

In July 2018 we welcomed Philip Dunne's independent report into growing the contribution of defence to UK prosperity which later informed the launch of our Defence Prosperity Programme. This programme aims to grow the Defence contribution to the UK economy and supports the delivery of the Government's 2017 Industrial Strategy. It is being undertaken jointly with other Government departments and industry. We updated Parliament on this programme in March 2019.

However, we recognise the changing nature of the industrial landscape, and that UK defence and security companies are facing challenges including greater global competition; securing access to skills; a changing international context; and growing areas such as Cyber, Artificial Intelligence, Autonomy and Space which demand new industrial capabilities and skillsets.

It is against this ever-evolving context and with the various challenges being faced by the UK industrial base in mind, even before the onset of the COVID-19 crisis, that we decided to launch a full review of our industrial strategy towards the UK's defence and security sectors. This review will not just consider our approach from a defence perspective as was the focus of the 2017 refresh, but also take a broader security focus. The review is therefore being led by the MOD but is being carried out with expertise and input from other Government Departments. The review is considering the defence & security industry on a capability by capability basis as well as looking at whether we should adapt our existing policies, taking into account our national security requirements and future opportunities to maximise our prosperity and global influence. The review's findings will be fed into the Government's broader Integrated Review of Security, Defence, Development and Foreign Policy as it is important that any decisions made as part of that broader review take into account the impacts of those decisions on our industrial base. No decisions on the outcomes of either review have yet been made and the 2017 refresh remains the extant document which sets out the MOD's industrial policy.

2. What are the national skills and competencies needed for a successful UK defence industrial sector? How can the UK ensure, and assure, that these are maintained in the right place at the right time for the right cost?

The national skills and competencies required for a successful defence industrial sector in the UK are broad, with the MOD paying particular attention to those deemed to be critical for ensuring effective acquisition and support of capability for the Armed Forces, such as skills in the fields of Science, Technology, Engineering and Mathematics (STEM).

There is a skills challenge across the whole economy to build STEM skills, which are of vital importance to the defence sector and are in high demand across the economy. Strong relationships between Government, industry, academia and professional bodies are key to addressing this by ensuring the right skills are developed and maintained in the sector. Key initiatives to that end include:

- The Enterprise Approach project is encouraging collaboration with industry and across Defence to tackle the critical skills challenge. We are exploring ways to access the skilled people we need across the world of Defence by: looking at demand across the public and private sector; finding ways to share skills; and making it easier for people to move around different parts of the Defence sector;

- Through strategic partnering and jointly setting standards with Higher Education Institutions (HEIs) and Professional Engineering Institutions (PEIs) we are working to influence curricula, support professional development and improve the broader awareness of careers in Defence. This includes setting a coherent demand signal with industry and academia on the future skills that we judge to be important for the future workforce;

- The Defence Suppliers Forum (DSF) sub-group for Skills and People is supporting the Defence Growth Partnership (DGP) – a partnership between Government and the Defence Industry – in addressing digital skills. The present focus is on the digitisation of the existing workforce to meet the needs of 'Industry 4.0' and the fourth industrial revolution;

- The Defence Academy-led development of the MOD STEM Graduate Inflow Scheme is intended to future-proof the number of STEM graduates brought into Defence. Youth engagement is also important to inspire and encourage young people to undertake STEM subjects at school and then pursue a STEM career. The MOD sits on the Department for Education-led senior cross-Government STEM oversight board to support development of the pan-Government approach to increasing STEM skills;

- On 10 September 2019, the then Minister for Defence Procurement signed the Women in Defence Charter on behalf of the MOD alongside senior representatives from the Front Line Commands and industry. The Charter notes that a balanced workforce is good for 'promoting prosperity and stability.' Our commitment to a more gender balanced workforce will ensure we access and make the most of the widest possible pool of skills and talent;

- The MOD is one of the largest providers of apprenticeships in the UK, with around 20,000 on a programme at any one time, within which over 5,000 engineers complete their apprenticeship every year. For the latter, these predominantly 'in-house' apprenticeships are accredited externally and have internal review processes to ensure they are aligned with emerging new technologies, drawing from industry accordingly; and

- Both the Combat Air and National Shipbuilding Strategies recognise the importance of growing skills. The significant investment in the Future Combat Air System Technology Initiative (FCAS TI) will develop key stills across both Government and industry. Team Tempest – a co-funded partnership between Government and our industry partners and the central pillar of FCAS TI – has established a dedicated STEM engagement team to inspire young people to be involved in the Combat Air sector. Working closely with officials from the Department for Business, Energy and Industrial Strategy (BEIS), the MOD has also launched a skills index to monitor the health of industrial and Government skills critical to the delivery of our national objectives. On Shipbuilding, the Maritime Enterprise Working Group with the support of BEIS, the MOD and the Society of Maritime Industries coordinate a long-term programme of improvement to improve the industry's productivity and competitiveness, including assessing the underpinning skills base and roles. This work follows First Marine International's analysis in 2016 on UK shipyards' workforce skills and capacity for the upcoming build of the Type 31 class frigate, ensuring we have the right skills over the course of the Royal Navy's 30-year plan. In the nuclear area, the MOD is actively engaged in the Nuclear Skills Strategy Group which leads the 'People' strand of the Nuclear Sector Deal under the Government's 2017 Industrial Strategy. On 6 December 2018 the then Defence Secretary formally opened BAE Systems' new Submarine Academy for Skills and Knowledge at its Barrow site.

– Underpinning all of this is the importance of working with industry on understanding the pipeline of projects that will ensure that we develop and maintain the right skills. This is one of the issues being assessed as part of our industrial review into the UK's defence and security sectors.

Across all these strands of work, we recognise that ensuring the right skills are in place in both industry and Government is critical to the successful delivery of Defence capability: we continue to work closely with Industry and other bodies to that end. This includes through the DSF Skills and People sub-group where the MOD and industry are now working together to explore the development of a form of Defence 'kitemarking' system for education and engineering institutions with a view to enabling the MOD and the Defence sector to shape and influence future skills development.

3. Does the market for Defence systems, products and services have any specific characteristics, which differentiates it from other markets? Does international collaboration limit the potential for defence exports?

The MOD procures a wide range of systems, products and services, including military equipment, information and communications technology (ICT), infrastructure and commodities. Defence projects are often, necessarily, very complex and costly as the MOD requires highly specialised products, sometimes at a large scale, to ensure that our Armed Forces have the capability it needs. Some of these requirements can be procured readily from 'normal' functioning and open markets. However, we recognise that much military equipment and associated support originates from markets which do have different characteristics and do not always function like a 'normal' market for a variety of reasons:

– In many instances, the Government is the only legitimate buyer for certain Defence related items. In these situations, MOD procurement decisions have a significant market shaping effect as there is insufficient demand for a truly competitive market. The current baseline Government policy is to procure military capability via open competition globally wherever possible. However, in certain cases we may have to take steps to maintain the UK's Operational Advantage (the ability to find and maintain an edge over our potential adversaries) and Freedom of Action (the assurance that we can use or continue to use our capabilities effectively when required), which can limit the markets from which we can procure. Where there is only a single supplier for defence capability, the MOD can procure in accordance with the Single Source Contract Regulations;

- Export sales are regulated to ensure that rival nations do not have access to state-funded complex Defence technology and expertise without UK Government consent. The UK Government takes arms export responsibilities very seriously and operates one of the most robust arms export control regimes in the world. The MOD remains committed to responsible Defence exports which can boost UK prosperity and improve value for money for our own programmes;

- Defence markets often have high barriers to entry. These include monetary barriers (for example, high research and development spending) and non-monetary barriers (for example, security clearances and the need to hold highly classified material). The scale and breadth of contracts can also limit the ability of smaller firms to take a prime contractor role; however, this is not a unique characteristic, and does not prevent SMEs' participation via a consortium and/or within the supply chain. Our 2019 SME Action Plan aims to boost the involvement of SMEs in Defence programmes.

- Because the market for defence systems, products and services is so different it sometimes requires different approaches from Government. As the sole buyer of certain products, it is important to maximise the benefits that come from our procurement decisions such as the wider impact of defence expenditure on our prosperity. Examples of how we have adapted our approach for certain segments of the market can be seen in our strategies for Combat Air and Shipbuilding.

International collaborations have provided some of the most successful UK defence exports over the past three decades, for example Tornado and Typhoon. Collaborative programmes can provide unique opportunities, including cost-effective development of capabilities, sharing of best practice between partners, and enhancing Defence engagement opportunities with key allies more broadly. International research collaboration, for example, strengthens bilateral and multilateral relationships, gives mutual access to critical capabilities and shared funding. It also creates opportunities for UK companies, as can be seen in the UK's role in the F-35 supply chain, with British companies building approximately 15% by value of all F-35s.

4. Is tension between competition and strategic choice inevitable?

International competition and maintaining strategic choice have been at the heart of our approach, but we also recognise that Defence procurement can be fundamentally different due to the need to protect our Freedom of Action and Operational Advantage, and because Defence is often not a normally functioning global market.

As part of maintaining our strategic choice, this Government is committed to ensuring the industrial capabilities vital to ensuring our Operational Advantage and Freedom of Action are accessible to the UK Armed Forces, whether they be in the UK or overseas. As a result, in some cases, a deeper analysis has determined that our national security would be served by a specific capability-driven approach. We have shown our willingness to do this through the development and implementation of our 2017 National Ship Building Strategy and 2018 Combat Air Strategy. These focused strategies are part of a 'whole of Government approach', contributing to the Government's wider Industrial Strategy, which sets out an ambitious plan to put the UK at the forefront of the technologies of the future and drive improvements in productivity to grow the prosperity of the UK.

The balance between ensuring strategic choice and promoting competition in the sector is one of the things being looked at as part of the recently launched review into our defence and security industrial strategy. As we keep our overall approach under review, we consider the requirement to adopt alternative approaches in specific sectors for reasons including Operational Advantage and Freedom of Action. If we do choose to pursue further capability-driven sectoral strategies, they must be carefully developed and implemented to ensure we maintain the right incentives for long-term investment, drive competitiveness and ensure value for money on behalf of the taxpayer. It is also important that alternative approaches enhance the contribution that Defence makes to the UK's wider prosperity, as per the findings of Philip Dunne's report in 2018.

5. Should the UK adopt a formal Offset/Made in the UK policy? What impact would this have on the national and international defence markets?

The UK is the world's second largest Defence exporter, with a highly capable and mature defence sector able to win work on its own merits. The Government works closely with industry through initiatives like the Defence Growth Partnership (DGP) to ensure the sector maintains and grows this position by remaining internationally competitive.

We have a range of activities already underway to support the sector's competitiveness, some of which are part of the Government's wider Industrial Strategy. There are a number of different approaches to encourage greater UK content in our Defence programmes. We are working with our key allies to remove barriers that can sometimes make it harder for our companies to win business with international partners and we have established prosperity partnerships with two of the largest global Defence primes – Boeing and Lockheed Martin – to help create opportunities for the UK supply chain.

Formal contractual offsets run counter to our current EU treaty obligations and a number of other international agreements. Formal offsets tend to feature less prominently in countries, such as the UK, which have mature and successful defence industrial capabilities. They are most often used in countries seeking to establish or strengthen their indigenous industrial capabilities. However, such an approach risks an adverse impact on supply chains, potentially leading to increased costs, poorer capability and delivery problems. It may also affect a country's ability to collaborate internationally, shape the international market, and support domestic businesses to export NATO standard products.

Now that the UK has left the EU, there may be an opportunity to review these and related issues. Any changes we chose to implement would need to demonstrate value for money and compatibility with the terms of our future trade deals and international agreements. These issues that are being looked at as part of the review into our defence and security industrial strategy.

The Government's policy continues to place great importance on competition in public procurement, serving as a driver of innovation and improved productivity, which together ensure that we obtain the right capability for our Armed Forces, deliver value for money for the taxpayer, whilst encouraging a thriving and competitive UK defence sector. As part of this**,** the Government is committed to ensuring that Defence procurement contributes to a more dynamic and productive UK economy, in a way that strengthens our industry and bolsters long-term prosperity. We estimate that around 80% of our expenditure on goods and services is in the UK.

6. What is considered in assessments of "prosperity" and "value for money" in defence procurement? What consideration is given to the local economy, skills retention and balancing the positive financial impact across the regions and nations of the UK?

All our procurements comply with HM Treasury's 'Managing Public Money' instructions which requires Departmental Accounting Officers to 'carry out procurement and project appraisal objectively and fairly, seeking good value for the Exchequer as a whole'. Value for money from procurement is normally achieved through open and fair competition.

Prosperity is considered in Defence procurement through the application of appraisal principles as set out in the HM Treasury 'Green Book'. In accordance with the Green Book, the relevant costs and benefits that are considered when undertaking procurement and project appraisal are the totality of costs and benefits for UK society overall, not just to the MOD. Assessments therefore include all social, economic, environmental and financial impacts that could be relevant to society's prosperity, where there is applicable evidence. As impacts on UK society as a whole must be considered, the primary analysis is conducted at a national level. Where interventions may have significant regional effects, these can be analysed separately to allow these effects to be explicitly considered.

Where it can be demonstrated that skills retention is required (for instance for security of supply reasons), this should be captured as part of the business needs or constraints that shape the long-list of delivery options considered at the early stages of developing a business case.

Prosperity is defined in the Green Book as being an increase in social value, which is achieved by selecting investment options that maximise the gap between the benefits to UK society and the costs to UK society. As defence is a public good, it is more difficult to measure the benefits it provides. This means that the MOD uses cost effectiveness analysis in its appraisal decisions by selecting options that optimise cost and military effect.

Ensuring that we have better data to draw upon is key to determining the wider economic benefit that Defence activity creates in terms of prosperity. This was highlighted by Phillip Dunne in his report into growing Defence's contribution to UK prosperity. As part of our Defence Prosperity Programme, we are working with other Government departments, industry and academia on a proposal for a new Joint Economic Data Hub (JEDHub) within the UK Defence Solutions Centre (UKDSC). The output of this work will be overseen by an independent advisory board to ensure that both Government and industry have confidence in its quality and impartiality.

7. What progress has been made in implementing the recommendations from Philip Dunne's report?

The MOD welcomed Philip Dunne's report into 'Growing the contribution of defence to UK prosperity' in 2018. This report and our refreshed Defence Industrial Policy informed the initiation of our Defence Prosperity Programme, on which we updated Parliament in March 2019.

The programme aims to grow Defence's contribution to UK prosperity, and we continue to work with across Government, industry and academia to take it forward. Progress has been made in several areas, including:

- in June 2019, the launch of the Defence Technology Exploitation Programme pilot, in partnership with Invest Northern Ireland. The pilot aims to support collaboration between Northern Ireland SMEs and Defence primes to help develop and find routes to market for new technologies;

- the establishment of a cross-Government and industry delivery group to develop the proposal for a JEDHub within the UKDSC to collect and aggregate economic data from across the sector, in order to get better data to inform our decision-making processes;

- we are working closely with industry on a pilot programme to develop, test and validate the ways in which Defence can make better use of existing supply chain development initiatives, such as the UK Catapult Network. Supported by £500,000 from the Defence Innovation Fund, this aims to help create more resilient, efficient and competitive supply chains;

- we are working with academic institutions to look at how we can encourage greater debate and engagement in this area of public policy. This included working to deliver a Defence economics conference hosted by King’s College London in March;

- close engagement with stakeholders across the MOD and industry to develop a Defence Prosperity Guide, so that people across the Department understand our prosperity objectives and have access to the training and guidance needed to deliver these in a consistent and coherent way;

- we are also ensuring that the findings of the Dunne report are considered in the recently launched review of our defence and security industrial strategy.

The Dunne report also contained several innovation-themed recommendations. We have sought to make Defence an attractive innovation partner, and our Defence Innovation Unit has partnered with the UKDSC to develop and pilot a co-investment framework to share risks and reward.

We are also seeking to step up our efforts to integrate innovation into our procurement activities. This includes: developing different routes to market; how we manage, develop, lead, empower and career manage our people; and the better use of modern digital technology to support a wide variety of processes. Within the Defence and Security Accelerator, a cross-Government team which finds and funds exploitable innovation to support UK defence and security, we have also appointed staff with backgrounds in industry and extensive networks across the sector to enhance understanding between the MOD and Defence industry.

The Dunne Report called on the Department to encourage and accelerate experimentation. The Modernising Defence Programme subsequently announced a policy of ‘Technology-led Modernisation’ to embed this approach across Defence and accept higher levels of risk in order to develop new ideas. The Defence Technology Framework, published in September 2019, outlines the strategic technologies that Defence considers critical to future capability and collaboration with industry and our industrial partners.

8. Does the MoD understand the risks and opportunities in the Defence supply chain, and the procurement strategies of other buyers in the market?

The defence sector contributes directly to our prosperity, bringing world-leading capabilities, jobs and investment to the UK. The MOD spent £19.2 billion with UK industry and commerce in 2018-19, directly supporting 119,000 jobs across the country and indirectly supporting many thousands more. The sector has a wide regional footprint and supports high-value, high-skilled jobs contributing to the

Government's 'Levelling Up' agenda. We work closely with the Devolved Administrations in order to both benefit Defence and strengthen the Union. We are also a significant exporter of defence capability, with UK industry being the world's second largest defence exporter over a 10-year rolling period.

The Government, through the Department for International Trade Defence and Security Organisation, also helps UK Defence industry to make the most of opportunities overseas. Exports are supported by building relationships with overseas governments, raising awareness of UK industry capabilities, and co-ordinating HM Government support for export opportunities in established and developing markets, including deploying UK Export Finance to assist UK exports.

The MOD currently manages over 6,000 contracts. Management of supply chain risks and opportunities are embedded in the Department's polices and processes. The governing principles are:

- to identify commercial risks as early as possible in the procurement process to ensure they can be managed appropriately; and
- to allocate those risks to whichever party from the public or private sector is best placed to manage and mitigate them.

The MOD also either already operates, or is implementing, initiatives to better understand and manage overarching supply chain risks and opportunities:

- the Defence Board monitors supply chain fragility and receives regular updates on this topic. Building on this, the MOD is now implementing an end-to-end process for monitoring key risks related to our most critical suppliers to help deal with the impacts of supplier distress on Defence capability. The approach identifies critical programmes and a common approach to assessing suppliers linked to those programmes;

- our approach to supply chains and ensuring the security of our supply more generally is being considered as part of the review into our defence and security industrial strategy, with an increasing emphasis being placed on this based on the experiences of our response to COVID-19. Much activity is already underway to address the opportunities and risks of a globalised supply chain, but this review brings an opportunity to bring greater coherence to the various strands of activity across Defence in particular. It also brings an opportunity to amplify and enhance our policies and procedures related to security of supply, including greater focus on supply chain mapping and understanding;

- changes of control within the Defence sector are generally a matter for the companies concerned. However, the MOD can intervene where this is considered necessary on public interest grounds, for instance where there are potential risks of hostile foreign investment. This can be achieved through statutory means under the Enterprise Act 2002 (which was amended in 2018 to ensure the Government has sufficient powers to act when necessary in this area), or via private undertakings in the form of security deeds;

- emerging technologies and advanced manufacturing are two areas at particular risk. Many of the technologies targeted are 'dual-use', including for instance in the aerospace sector. These often have significant implications for Defence but are harder to identify, particularly with smaller companies. The new National Security and Investment legislation will provide greater flexibility to respond and strengthen our protections around areas such as asset sales and technology transfer. On these transactions, the MOD works closely with BEIS and stands ready to provide advice to BEIS where necessary in order to protect UK strategic assets from threats such as hostile foreign investment.

- we recognise the role of non-traditional suppliers and SMEs and the opportunities they bring in terms of innovation and continue to take steps to make it easier to do business with Defence. The MOD has agreed a target that 25% of our procurement spend will be with SMEs by 2022, recognising the role they play in a vibrant, sustainable and competitive UK Defence industrial base. In financial year 2017/18, the MOD's spend with SMEs accounted for 16.5% of procurement spend, up 3.4% from the previous year. To support the target, we published an SME Action Plan in March 2019, focused on achieving behavioural, policy and process change in the MOD and its major suppliers. The plan explains the measures we will take with major suppliers to improve procurement spend with SMEs, including a renewed focus on prompt payment. SME champions have also been appointed at a senior level at each of our 19 Strategic Suppliers to support us to improve access to opportunities to do business with Defence.

The MOD, working as part of a wider Government effort, also continues to engage with its suppliers on the UK's departure from the EU. This ongoing engagement includes publication of advice and guidance, presentation at supplier events and trade shows, and standing agenda items at existing bi-lateral and multi-lateral supplier meetings. In addition, we will continue to explore potential opportunities following the UK's departure from the EU that could benefit both Defence industry and the UK economy.

9. What has been the impact of reforms to defence procurement and acquisition? How should Head Office and DE&S acquisition reform be aligned to defence industrial policy and strategy?

Previous reforms of procurement and acquisition within Defence, including the delegation of equipment funding to the Commands, have had a positive impact on the delivery of capability. Empowered Commands are now shaping their equipment programmes to find the best balance of capability within their overall resource allocation. The formal agreements between the Commands and delivery agents have brought increased rigour and transparency, enabling each to hold the other to account for their part in capability delivery.

Our largest delivery agent, Defence Equipment and Support (DE&S), has also completed its transformation programme, and is now focussed on fully embedding these changes and establishing an environment of continuous improvement. One of the principal benefits of the DE&S Transformation Programme has been the realisation of efficiency savings which can be re-invested in capability. DE&S has since realised £4.5 billion of savings for Defence, against the original Transformation target of £3.4 billion for the period 2014-24.

However, to keep pace with the threats we face and evolving technology, we need an acquisition system that is more agile in moving from requirement through to delivery. Therefore, having reviewed our current approach as part of the Modernising Defence Programme, we are now embarked on a programme of broader Acquisition and Approvals Transformation that will drive greater pace by tailoring how we do things to take into account risk and complexity. We are shifting from our largely one size fits all approach to one where we are more proportionate and flexible in the application of process so that we can focus our effort.

A key step has been the introduction of the Strategic Outline Case into our approvals process, which brings the MOD into line with best practice as set out in the Treasury's Green Book. Strategic Outline Cases are enabling earlier strategic discussions which ensure clarity of programme scope and understanding of the key drivers and risks. By setting programmes up for success from the outset, we expect to improve overall delivery and drive greater pace when required.

Through this transformation and the work to review our defence and security industrial strategy, we will ensure that we sustain a capability edge by getting technology to the front line more quickly when required, reducing cost and achieving better value for money by reducing expensive delays. By simplifying and speeding up our acquisition timescales and providing new approaches for procuring emerging technologies, we also hope to encourage a wider range of suppliers to do business with us.

These reforms are consistent with the 2017 Defence Industrial Policy refresh, which made a number of commitments in relation to the Department's approach to acquisition. The commitments included strengthening the Department's relationship with industry, encouraging innovation, the importance of open competition and driving pace into acquisition, and better definition of programmes at their earliest stages in order to deliver capability that better meets the requirements of the Armed Forces. The review into our defence and security strategy will look again at our acquisition approaches to ensure these reforms align with our broader policy and strategy.

10. Given that major capability acquisition programmes are international by design—the Combat Air Strategy and Type 26 frigate for example—how does a modern national defence research and industrial policy successfully manage

cross-border long term partnerships and align with the industrial approach of allies and partners?

In SDSR 15 we said that we intended to make UK Defence more ‘international by design’. We have made significant progress in doing so and, following the Modernising Defence Programme, we are taking steps to mainstream international capability and industrial cooperation within Defence, with senior oversight of cooperative capability development programmes provided by an International Capability Steering Board.

International capability, research and industrial cooperation is vital to the delivery of military capability. We have an extensive network of global capability partnerships, including with the US, across Europe, the Middle East and Asia Pacific. Multilateral cooperation ranges from programme partnerships such as Type 26, Eurofighter Typhoon and F-35, to wide-ranging cooperation through NATO, the European Defence Agency and the Organisation for Joint Armament Cooperation.

We will continue to invest in these capability partnerships to deliver well-defined military capability and interoperability, international policy, industrial, prosperity and innovation objectives. In order to be successful, capability partnerships must maximise value to the UK, as well as delivering benefits for our allies and partners. To do this effectively, our partnerships should be underpinned by shared perspectives on the threat and the realistic military requirements. We continue to seek opportunities globally to enhance UK prosperity, deliver value for money, and drive the effectiveness of NATO through interoperability and capability development.

International research collaboration is a key enabler of the UK’s ability to achieve strategic influence, maintain critical capabilities, sustain and enhance an affordable competitive edge, and develop disruptive and affordable cutting-edge technologies. International collaboration is also a key mechanism for delivering the MOD's science and technology (S&T) programme and leveraging our financial investment through collaboration with partners. UK S&T capability is attractive to our allies and can be leveraged to secure access to partners’ strengths and deliver wider Government research, industrial, and diplomatic objectives.

We continuously monitor how other countries support Defence exports and have applied lessons learnt where we believe they will maximise our ability to support industry to win export campaigns. For example, the formation of the UKDSC, which aims to make the UK Defence industry more successful in exports through tailored market analysis and facilitating better alignment with wider Government.