

Permanent Secretary addresses DSEi

I am delighted to be here to speak to you today. Many of you will have heard the Defence Procurement Minister speak yesterday about her confidence in the strength of the UK industrial base. And the Defence Secretary explained earlier this afternoon that strengthening the relationship between government and industry was one of his top priorities. The Chief of Defence Staff has just set out the very demanding global security environment in which UK Defence is operating, while highlighting the opportunities presented by the 4th industrial revolution.

I'd like to talk to you now about how government and industry need to jointly respond to the context the CDS described and to our Ministers' vision for the relationship. I recognise there are many success stories about how the UK Defence and Security sector brings world-leading capabilities, jobs and revenue to the UK. But we cannot rest on our laurels. We need to renew and adapt our current approach if we are to keep pace with global trends. This is very much a global event, and while my views are largely based on my focus as the Permanent Secretary of the UK MOD, I think they are pertinent to colleagues in Ministries and industry around the world.

I started my career working up the road in the City as a corporate financier doing deals in the media sector. Not all of them proved far-sighted. I floated three European Yellow Pages businesses for example; in the UK, the Yellow Pages was printed for the last time earlier this year. Doing that job I saw the great changes in the media sector of the 1990s: as technology radically changed the landscape, mainly with the advent of satellite technology and the internet; as relationships with governments changed, principally through deregulation; and as very substantial new sources of capital became available to the market.

Entering government in the early 2000s, I worked at the public/private interface, of public goods being supplied by the public sector, and sometimes the other way round, again in a rapidly evolving technological environment. The Royal Mail, British Energy, the Ordnance Survey, the banking sector – all bear testimony to the fact that the relationship between the state and industry is not fixed, but is a dynamic interplay that must respond to the changing international political economy of the time and technological advances. Inflection points come along every now and again, which require a shift in mindset and approach.

Looking at the trends I see in Defence, and from discussion with colleagues in industry, I think we are at one of those inflection points. Space, hitherto quintessentially state business, is just one example of where the private sector is now upending the traditional order. Sometimes we need to step back and recognise the moment for what it is. Paradoxically, perhaps because of the inevitable focus on the delivery of major conventional equipment programmes, often over a period of many years, Defence hasn't always taken the long view.

Now, no country's Defence Acquisition Strategy escapes criticism, and the UK is certainly no exception. Our select committees are particularly trenchant observers of our procurement programmes, and of our industry relations and partners. And they are in a position to take a strategic perspective. Right now, for example the House of Commons Defence Committee also recognises that the sector is at an important moment of development – asking some very pertinent questions in its new inquiry into Defence industrial policy.

I am optimistic that there is a shared understanding between government and industry at least of the risks and opportunities we are facing. I think we both know we can collectively do better, through a new approach to the Defence and Security sectors.

So what are the trends in Defence and in industry which we need to respond to?

Well, I commend to you the Global Strategic Trends document, now in its sixth edition, which was published by MOD last year. It is a comprehensive foundation document which provides the strategic context for future planning, policy-making and capability development. It has been adopted by the wider UK National Security community and international partners.

Global Strategic Trends describes many of the features and possible consequences of the 4th Industrial Revolution, and the far-reaching impact that automation, artificial intelligence, climate change and changing demographics in particular are likely to have on Defence. This poses huge challenges for government and the industrial base, as well as offering some real opportunities. The pace of transition in the 4th industrial revolution is likely to be significantly faster than previous transitions. And technological advances are likely to make it harder for the UK and its allies to maintain a competitive advantage over our adversaries, whether they be state or non-state actors.

In the face of this, Global Strategic Trends suggests that states able to form successful partnerships with private industry – particularly technology firms, and not exclusively in the information area – will be at an advantage. Collaboration with industry, allies and other partners and the integration of Defence science and technology community with the industrial base will be essential to achieve technological transformation and maintain interoperability.

For me, this analysis chimes with the trends we have already been seeing and the key challenges we have already been addressing since the last Strategic Defence and Security Review in 2015. To briefly cover three:

First, we are at a moment when many of the key existing platforms we need – indeed, across NATO as a whole – are in the process of recapitalisation, most obviously maritime and air and for the UK, nuclear. At the same time we need to continue to invest more heavily in the non-traditional domains of cyber and space.

Secondly, in a number of cases, the military capability we need is highly

specialised, meaning it can only be provided at reasonable cost and in a reasonable timescale by a single supplier. We are implementing a Strategic Supplier Management programme, as well as mechanisms such as the Single Source Regulations, to help govern these long-term partnering arrangements.

Thirdly, as CDS touched upon, the requirement to work internationally continues to grow. Long-standing acquisition relations with partners around the world will remain the bedrock of this, but we need to become more adept at forming more dynamic, 'variable geometry' relationships with a range of partners, varying by capability requirement.

Turning to the industry challenge, the main issue here is that a number of factors are combining to create a re-alignment in the Defence sector. I would highlight five.

- One, the fusion of machine age technology and information age technology.
- Two, the fact that many of the most interesting technologies with a potential military application are now developed by the private sector – drones, lasers and synthetic biology are just three examples. Technologies like GPSS which were developed by defence and then found a wider civil application will be very much the exception. It also raises increasingly sharp questions about foreign direct investment in some of our companies.
- Third, constant competition with rivals in the so-called 'Grey Zone' is increasing the focus on military capabilities which are not designed to have a 'kinetic' or lethal impact in the way conventional capabilities tend to be.
- Fourth, the availability of a great deal of capital to fund research, and very long development cycles much of it from the US currently.
- And finally, rising defence budgets around the world are creating opportunity, but also churn. According to SIPRI, global defence spending in 2018 stood at over £1.8 trillion, an increase of 2.6% on 2017 and the highest real level since 1988. The peace dividend looks like it is being cut.

We need collectively to be alive to these trends and – crucially – to be as thoughtful as possible in our policy and commercial responses. If we get the responses right, we will allow our vibrant UK defence and security sector to continue to thrive. There is very strong mutual interest here. A thriving industry will be able to access markets and capital, both financial and intellectual, that ensure that it can compete globally. And a healthy industrial base will continue to be able to provide the UK Armed Forces with

what they need by way of cutting-edge military capability.

If we are to capitalise on the new epoch we are entering, we need a deeper, more strategic and more sophisticated relationship between government and the defence and security industry.

In my time in MOD we have worked hard to produce more collaborative relationships with industry, and I appreciate the efforts of many partners here today in doing likewise with us. But we need to now take this to the next level. Between government, industry and academia:

- We need to realise that simple market forces won't always work for us – and be prepared to say it.
- We need to be clearer with each other on where sovereign capability is required, and where we are content to procure through open competition in the international market.
- Similarly, we need to recognise where, given the widening capability spectrum and ever-increasing complexity, it is not feasible for there to be more than one supplier.
- We ought to be more comfortable about investing in skills in the public sector, and seeing them move to the private sector, as long as flows are reciprocated. This is best demonstrated in the nuclear realm, where we need to think and act in terms of a national requirement rather than separate Defence and civil ones.
- We need joint efforts not only to identify areas where the UK must retain its future freedom of action and operational advantage, but also areas where we as a nation want to be in the lead in the future from a wider Defence and Security perspective. There are a number of areas where Britain can build on its strengths and generate economic opportunities in the future.

The need to move to this deeper, more sophisticated and strategic relationship is brought into sharp relief by a number of current key UK capability programmes, most notably the Future Combat Air System, or Tempest. It provides a prime opportunity to demonstrate how we can make this new relationship work.

To make this new relationship work in combat air and more broadly, there must be commitments on both sides.

As the MOD we need to continue to press ahead with our acquisition transformation programme. At the centre of our transformation agenda is the aim of making the acquisition system cheaper, better and faster. We also

recognise the need for the MOD to be easier to do business with – especially for our Small and Medium Enterprise suppliers, and we are working hard in this area to make contracting and access to opportunities proportionate to market capacity and risk.

The transformation programme is also predicated on the kind of strong strategic relationships, based on trust and openness, that I have already described. We have established the Strategic Supplier Programme to enable this, though it will take time and hard work on both sides to reap the benefits in full.

At a higher level, though, we need to pursue a more strategic approach to the Defence and Security industry, one that recognises both the opportunities the changing environment brings, but also the challenges, with ever larger competitors emerging in marketplaces with government customers, pursuing different industrial strategies to our own. The new approach should:

- Strike the right balance between value for money and affordability considerations, capability requirements and wider, sometimes longer-term ambitions emerging from our industrial capabilities, international influence and economic prosperity.
- Strengthen our cross-government approach, especially with our sister economic departments, and ensure that our current range of defence industrial policy initiatives have an impact greater than the sum of their parts.
- Establish a clear set of priorities for international cooperation and export opportunities. We will be doing this as we leave the EU, but co-operation with our many and long-standing European partners will remain as important as ever.
- Fully exploit our science and technology activity in order to develop the future skills and industrial capabilities the country needs and generate spill-over benefits.
- Respond to the demands of Information Age technologies in the same way as we have already considered traditional military capabilities, for example through the Combat Air and Shipbuilding strategies.

Providing greater long-term certainty of funding for major programmes – something I know industry has a keen interest in – is also one of our ambitions for any future Strategic Defence and Security Review.

In return, we ask that industry works collaboratively and closely with us on this agenda, with a relationship based on transparency and candour. We are not just a big customer, and the capabilities we require are those that keep

our nation and our allies safe. And we also expect industry to work better together to tackle shared challenges such as investment in research and development and skills, and supply chain resilience and competitiveness.

In addition, it is essential that industry is clear with the government about potential overseas opportunities, so that we can develop a joined-up approach to exports. Finally, industry – like the MOD and UK Armed Forces – must strive to innovate, and do more to understand and exploit new technologies being developed outside of the Defence and Security sectors.

The defence industry is an industry like no other, it is structured like no other, and has accesses and responsibilities like no other. Equally, as government, we are aware of our own role in maintaining vital capabilities in the UK and developing those new ones that will help us win the battles of the future, the shape of which we can discern today and the presence of which we can already feel. Both will be the foundation of our prosperity and our security. I am confident that industry and government share that vision, and can work to make it a reality.

Thank you.