

The text of the First Sea Lord's speech given 10 September 2013 at DSEI:

Ladies and Gentlemen,

It is a professional pleasure to be here today. There is a genuine buzz around the ExCel Centre. New relationships being forged. Existing partnerships deepening. Business being done. This is a really dynamic environment, and so it should be.

So thank you for inviting me to speak to you this morning.

You will know that the UK Government champions a defence industry which is dynamic, inventive and cost-effective.

Some of our relationship is tied to single-source suppliers, such as in nuclear propulsion. And some is linked to critical national industrial capabilities or sovereign control of intellectual property.

In total, this closed relationship accounts for nearly half of what UK Defence spends on equipment and support.

The other half is open to competition, and of course represents an excellent and continuing opportunity. But, whichever category you sit in, I have a particular message for you. And that is that I want to forge a closer partnership with you - with your technologists - with your engineers - your project managers - in order to get a better, and more agile, product for the Royal Navy.

And I'd like to take some of your time to spell that out.

Let me lay out some context. The British Prime Minister, in his recent speech before the recent G8 summit in Northern Ireland said:

"Even at a time of extremely tight finances, we are maintaining the fourth largest defence budget anywhere in the world. And, most importantly, we're using that money not to equip our armed forces for the conflicts of the past – with battle tanks sort of ranged across mainland Europe – but for the challenges of today, with state-of-the-art destroyers and aircraft carriers, fighter jets and transport aircraft ... special forces and, of course, cyber capability too. And all the while, we are maintaining our nuclear deterrent, which patrols these islands silent and secure, our country's ultimate insurance policy."

That, I think, says it all in a single quote. That is my strategic landscape. And it is the same for my fellow Service Chiefs. But it is more than that still. It is also the strategic landscape which we share with the defence industry. And our shared use of this space is my theme.

But first. The Prime Minister talks of equipping our armed forces not for the conflicts of the past but for the challenges of today.

By 2022 the Naval Equipment Programme is planned to be 46% of the overall defence equipment budget. That is a very sizeable wedge. And why? Because the Naval Equipment Programme is fundamental to meeting the challenges of today and tomorrow.

As the Prime Minister put it recently, the UK is "the small island with the big footprint in the world." So the Royal Navy is out there, deployed around the globe, meeting those challenges. Making sure our trade and energy supplies continue to flow. Making sure our 5.5 million citizens living permanently abroad - and our overseas territories - are reassured and protected. Making sure that terrorism and other threats to national security are dealt with over the horizon before they reach our shores. Making sure that the flexibility and choice offered by navies, including the Royal Navy, are ready for use.

Because, around the world, offering military and political choice, we are not acting alone. We are operating hand in glove with our many international partners – in the Gulf, East and West Africa, the Caribbean, and the Indian Ocean. The list goes on. And those partnerships are powerfully reflected by the

physical presence here at DSEI of naval vessels from South Korea, the Netherlands and Sweden – alongside those of the Royal Navy.

So how would I characterise the future UK Naval Equipment Programme?

Well, my answer is that it amounts to nothing less than a maritime renaissance. Far from being stopped in the water at a time of austerity and fiscal pressure, the UK is experiencing an extraordinary renewal of its maritime capability. And the scale of the UK's investment in this programme matches the scale of the UK's ambition to be a genuine international player with real influence and authority in the world.

What is being created is an extraordinary potential, but one which carries - equally extraordinarily - a responsibility of delivery that is eye-watering.

Why do I say that? Well, let's just dwell for a moment on this amazing array of acquisition projects, and the supporting investments that are necessary to bring it together.

This year the last Type 45 destroyer is commissioned. These 6 ships are a leading capability in their field, on operations in the Gulf and elsewhere, and already highly respected by our key US ally for what they bring to high-end operational capability. But beyond being a highly respected air defence destroyer, the type is on trials in the Pacific to explore the Ballistic Missile Defence capabilities that in due course may bring strategic opportunities to the vessel.

Meanwhile, the Astute class delivery programme is at full throttle – the first two submarines of this class have now been accepted into operational service, and will deploy operationally in the near future. This is an extraordinary reflection of the resilience of the UK's strategic submarine building capability and, in particular, the performance of BAe Submarines Systems and their hundreds of dedicated contractors. Stealthy, and packing a powerful punch, ASTUTE will deliver a step change in the UK's attack submarine capability. And she will be joined by 6 more.

The Type 23 frigates are getting old. Let's remember that they were designed as towed array frigates for the North Atlantic in the Cold War. They will be replaced by the Type 26 Global Combat Ship. And spiral development – transferring proven technology from the Type 23s to the Type 26 - will allow these new ships to rise quickly out of the Type 23 starting blocks, and move swiftly and at less risk into their operational stride.

And, of course, the SSBN Successor programme will represent a major responsibility for the Royal Navy to deliver under the Defence umbrella. Please do not underestimate this responsibility. I will not try to quantify it in strategic terms - that is a political matter. But, in professional delivery terms we aim to seamlessly replace one undetectable strategic asset with another. Keeping the right people in to see that happen - the right skills, attitude, resilience - is absolutely no small feat, and currently, despite the attention on carriers, my main effort.

And if we raise our eyes to the skies – the programme of rejuvenation is no less dramatic there. On the rotary side of the house, we are replacing our entire helicopter fleet. And, on the fixed wing side too, we are now welcoming the first arrivals of the UK's new fifth generation fighter jets, the Lightning II.

And what of the amphibious domain? We are restoring the protected mobility for our Royal Marine maritime based high readiness force - to regenerate our littoral capability. And taking that capability back to sea in the UK Joint Expeditionary Force. Welcome back 'Royal'!

And let's not forget our future tankers, so important in sustaining a Navy that is forward deployed around the globe. These new vessels will provide 21st century support to a 21st century fleet.

And - last but certainly by no means least – we await expectantly the rebirth of the United Kingdom's carrier capability. We look forward to the launch event for HMS QUEEN ELIZABETH next summer, which will be a real moment of national awakening. Why? Because she will be the first of two 'big deck'

aircraft carriers capable of delivering a full spectrum of diplomatic, political and military options. Instruments of national power - symbols of national authority on the world stage - national icons. The Navy 'back in business'.

So, all in all, this Naval Equipment Programme amounts to a very welcome and strategic investment by Defence, by the Government, by the nation. By very many of you.

And this strategic national investment is linked intrinsically to the Government's growth and prosperity agendas in a very significant way. In fact, taken as a whole, these core programmes are one of the largest engineering projects in the UK. Just in the carrier project alone, there are over 100 companies in the UK supply chain. They deliver world class, high-end military capability and the UK defence industry has a tradition of manufacturing excellence in this field. Don't stop that performance please - we need you.

And so - to pick up where I left off earlier with my aim for greater partnership - my ambition is that this genuinely strategic investment is matched by an equally strategic maritime defence-industrial relationship. Why? Let me spell out how you can help.

Well, there is a powerful link to be made between defence, engineering and industrial growth. And nowhere is that link more exciting than in the maritime domain.

The maritime domain reaches into the aspects of engineering that other domains do not reach – a sort of defence-industrial 'Heineken moment'.

From nuclear propulsion - the Royal Navy runs more nuclear power stations below the sea than the rest of the UK does on land - , strategic missile systems, high voltage electrical ship's propulsion systems and electricity generation, to top-end weapon sensors and missile systems, space-based systems, and everything in between. Leading sonar systems, active and passive, leading software, leading off-board systems above , on and below the sea surface.

And as maritime forces deploy forward in support of national ambition, so we want industry to be deployable and agile too. The landscape is changing and we, in defence and industry, must both change with it. And so I see a partnership that is closer, much closer, to the front line. Putting the front line on the front foot.

And my ambition is for a partnership that is rich and multi-layered. At the top, there is a need for grown-up, strategic, relationships between 'big countries' and 'big industries' - and that includes international partnerships.

However, in this multi-layered approach, there is also a need for Defence to work with small, innovative, niche manufacturers and researchers. It is these small and medium-sized enterprises which help to provide the oxygen, the imagination and innovative courage of our future opportunity.

There is a mutual interest in pursuing these goals, and getting more from who we are. Where there is unacceptable cost growth in defence programmes, the authority of both Defence and its industrial partners will suffer. We just don't need that.

So we - I - have a responsibility to secure Value for Money – because, whilst the scale of investment is a decision for Government, it is Defence and the Navy's job to make the most of what it has. What then do the Government and taxpayers get for their money out of this Naval Equipment Programme?

The headline figures are, of course, eye-catching. But that is only when viewed through a short term lens. The reality is that the naval platforms which are being built today will have long life spans – very long life spans. So this longevity delivers real 'bang for buck'. Don't buy me a frigate that lasts only half as long. The incorporation of future-proofing and spiral development into design solutions is also helping to relieve the pressure on the taxpayer's pocket. As does the ability to deliver joint utility too. In effect, these naval platforms are 'universal sockets' into which the Army, Air Force and Special Forces can plug

themselves. Take for example the flight deck on the Type 26 which will be large enough for an RAF Chinook to land on. And we have already seen Army Apache helicopters operate successfully from HMS Ocean off the Libyan coast back in 2011. An obvious blueprint for the future. Aboard Queen Elizabeth, they will be tiny. Unless, of course, a couple of squadrons embark. And why not? I challenge the Army to think that way.

And these platforms are universal adaptors. Because our international partners can plug in as well. An obvious example would be the US Marine Corps operating their Joint Strike Fighters off our new carriers. So, just as the Strategic Defence and Security Review talks about UK forces having an adaptable posture, these platforms are the very model of adaptability.

And they need to be. Because technology moves on. In July we saw pictures in the press of the first unmanned aircraft landing on a US aircraft carrier, USS George HW Bush, off the coast of Virginia. I am sometimes asked whether the absence of cats and traps precludes such options for us? I really think not, and I challenge industry to find ways to offer the Royal Navy better options from the Queen Elizabeth Class in the near future. Because the future will bring all sorts of surprises, including unmanned dogfights in the skies, and not necessarily with hardkill weapons, but with cyber and jamming. And this unmanned air control or sea denial will extend to space, the sea surface and below. The concept of unmanned underwater sea denial already exists with mines.

And that brings me to my key point. We all bear a responsibility to think ahead and innovate.

The Royal Navy has an amazing legacy of maritime military technical innovation. But, to stay ahead of developing threats, we need to maintain this innovative edge - through you - in close partnership with industry. Think about the recent impact of cyber warfare and the technologies associated with it. It is now the new domain in defence – alongside the land, air and the maritime.

And we see technologies being exploited before our eyes – sometimes, it seems, in the blink of an eye. At the turn of this century there was no such thing as a smartphone – now they are ubiquitous.

So how can we use technology smartly in the maritime defence domain? What, for example, can we do to deliver off the shelf, at range and almost disposable environmental exploitation?

The reality is that we are already in that world but we may not have opened our eyes to what it means for future maritime operations. In the hydrographic and oceanographic fields cutting-edge technology is already being used. Remote - very remote – underwater operating vehicles. Unmanned oceanographic gliders are already out there building oceanographic pictures and delivering almost real time information. And the discrimination in underwater imagery which is already being provided by commercial sonar is astonishing. So the technology is already there to allow us to harvest information - to understand the underwater world, our operating environment, our battlespace.

So my point is this. The march of technology is remorseless, its options expanding exponentially. The drumbeat gets ever louder. In the maritime domain we need to be ready for it. We need to embrace it. And we need to exploit it – because it generates opportunities.

So what message would I like to leave with you today?

My ambition is maritime defence and industry working ever more closely to innovate together, to deliver value for money and to generate opportunities.

Both because we should and because we have to.

And I believe that a joining of positive ambition, not negative competition, is the key to a strong, stable and successful future - one of authority - for both Defence and industry.

And what does this exciting and strategic future maritime equipment programme offer to the Government and to the taxpayer?

It offers premier league maritime capability.

It offers future adaptability.

And, in an age of austerity, it offers Value for Money too.

And what does it offer to our international partners?

It offers the opportunity for increased interoperability.

It offers high-end, state-of-the-art military hardware.

And it offers continuing UK value around the world – politically, operationally, commercially.