# Speech: Defence Secretary Keynote Speech at DSEI 2017 - 13 September

INTRO: PERIOD OF CHANGE

It's a huge pleasure to be back at the world leading DSEI.

Apart from the fact this exhibition has grown in size and scale, with some 141 international delegates here from 60 countries, it has remained a remarkably stable landmark in an otherwise turbulent world.

Since last time we were here the UK has had two elections and a referendum in which the British people decided to leave Europe.

Meanwhile, on the international front we've seen North Korea threatening nuclear Armageddon, Russia maintaining its aggressive posture, waves of cyber crime like the Wannacry virus hit our hospitals and businesses and, touching on our theme today, terror, which has spread across the globe hitting us here in the UK in London and Manchester and recently devastating innocents in Barcelona.

At the start of the year the Doomsday Clock moved thirty seconds closer to midnight it seems they weren't exaggerating. As the danger proliferates defence's stock rises and the demand for the best kit goes through the roof. And today you'll find us making maximum use of our capability; whether it's sending HMS Ocean, C-17 and Puma Mk2 helicopters to the Caribbean to support humanitarian efforts in the wake of devastating Hurricane Irma, dispatching our Typhoons to bomb Daesh and protect Black Sea skies or deploying Challenger and Warrior to Estonia to provide critical reassurance to our Eastern European allies.

In an age of technological marvels and transnational threats this level of activity appears to be the new normal, which is why our response is evolving to meet new challenges.

It's based around three key elements:

### 1. CHOICE

The first is choice.

We've chosen to grow our defence budget by 0.5 per cent each year.

In 2015 our forces received some £34bn. In 2016 £35bn. This year it will be £36bn. And next year it will be £37bn. We're using that money to invest in the full array of high end kit across all domains.

In the past year you'll have seen a flood of announcements, from sailing new carriers to naming Dreadnought submarines, from buying Apache attacks helicopters to testing Ajax armoured vehicles and from the arrival of more

F35s, to last week's announcement about future frigates.

And our new fifth generation kit offers much more than firepower and protection. These are flying, driving and floating sensors able to soak up information and instantly relay it from the battlefield to the battle station.

More than that, capabilities like dreadnoughts and carriers give us both a strategic nuclear and a strategic conventional deterrent, ensuring that whatever the future holds in the 2040s, 2050s, 2060s, the next generation will have the tools to cope.

Innovative choices

But we're not just choosing to spend but choosing to invest in innovation, putting aside £800m so that by working with industry and academia we have the disruptive capability to keep ahead of the curve.

Take big data.

We've given 30 firms a share of £3 million pound to develop machine learning algorithms and artificial intelligence so it can crunch all the big data collected by our vehicles and translate it into a four dimensional picture of the battle space.

Or there's the sort of ship's brain we tested last year. It's able to root through information and recognise threats in much the same way as a human being recognises fear, allowing the crew to predict where system failure might occur next.

Inevitably, such technology triggers dire warnings about the march of machines. But software isn't a substitute for soldiers, sailors or pilot, it's there to optimise our time. Computers are simply better at rifling through data and doing mundane tasks.

ANNOUNCEMENT: ROBOTIC BOMB DISPOSAL

Just as robots are better suited to picking their way through bomb strewn battlefields.

That's why today I can announce we've signed a contract worth up to £55m with Harris Corporation for 56 bomb disposal robots. Equipped with high-definition cameras, lightning-fast datalinks, an adjustable manipulation arm and tough all-terrain treads, these sophisticated systems use advanced haptic feedback that allows operators to 'feel' their way through the intricate process of disarming potentially the terrorist's favourite weapon the Improvised Explosive Device from a safe distance.

Robots will never replace humans.

It takes a soldier to search a house, calm a villager, win hearts and minds in a war zone.

But we're letting the machines take the load so people can get on with hard

work of saving lives.

## ANNOUNCEMENT: ACTIVE PROTECTION SYSTEM

At the same time, we're making sure our troops have the tech to protect themselves in difficult and dangerous situations.

So today I can announce Defence Science and Technology Laboratory (Dstl) has placed a £10m contract with Leonardo to improve the survivability and protection of Land Armoured Vehicles, by fitting them with an Active Protection System.

This can detect and defeat threat missiles within 100 milliseconds less than half the time it takes a human to react to a visual cue.

Providing a shield against Rocket Propelled Grenades and Anti-Tank Guided Weapons.

# ANNOUNCEMENT: DRAGONFIRE

When it comes to weapons we're also devising some of our own.

If you haven't seen it already allow me to point you in the direction of the naval stand where you'll find a prototype of Dragonfire a directed energy weapon or laser to the layman.

Science fiction has become science fact.

Even more remarkable we've come up with a bit of kit that will appeal as much to the accountant as the warrior because, instead of spending hundreds of thousands on missiles the energy in a high-intensity laser costs pennies.

I know you like to try out new capability but I'm afraid this one isn't a working model.

Its state-of-the-art precision targeting system that can knock out a target up to six kilometres away.

I'm afraid we couldn't take the risk of over eager guests pressing the wrong button.

But don't worry Dragonfire will soon be tested on a British warship.

You come to DSEI to be wowed and I hope we've whetted your appetite.

But I don't want to overdo it so I won't mention our hover bike that's being tested on the water outside this building.

I've talked so far about innovative Defence decisions we've made that you can actually see here at DSEI.

But I haven't mentioned the way innovation is now influencing Defence below the surface, the way it's now woven into our tactics, honing our pioneering cyber techniques against Daesh in Iraq and Syria. Nor have mentioned how innovation is transforming our approach in the boardroom.

Since the 2015 SDSR international threats have intensified.

So, rather than resting on our laurels, we're currently conducting a National Security Capability Review.

Defence will be a critical part of this cross-government refresh led by the National Security Adviser.

Our aim, across Government, is to ensure that we are implementing the 2015 Strategic Defence and Security Review in the most effective and efficient way possible.

The fact is, though our budget might be rising, so too are demands.

That's why we must keep asking searching questions, re-examining whether we are making the right choices, so we can prioritise the right things.

Critically, the UK isn't alone in going through this process. So too are our closest allies — the United States and France.

### 1. COLLABORATE

Choice is key to addressing the threat we face.

The second aspect of our approach is collaboration.

If we're going to make the most of all our resources we need to do more to work together across the Defence Enterprise.

Carrier is a case in point. Built in blocks by over 10,000 people across the UK, before being shipped to Rosyth for assembly, it is a truly co-operative nationwide enterprise.

Or consider F35, an innovative partnership between BAE Systems and Northrop Grumman working alongside our Defence Electronics and Components Agency in Sealand. So successful in its bid that it wasn't just chosen as the European repair hub for F-35 avionic and aircraft components, but as the global support provider, sustaining hundreds of jobs directly and thousands more high value jobs across the supply chain.

From the start the F-35 programme itself has been not simply an exemplar of domestic collaboration, but of international collaboration, where we're proud to be a Tier One partner with the US, and to build 15 per cent of each and every aircraft.

And as Britain's looks to go global we see our equipment as a platform for stronger partnership.

Consider P8 maritime patrol aircraft.

A few months ago we struck an agreement with our fellow P8 nations Norway and

the US, to pursue closer co-operation on training, logistics, and support and address the changing security environment in the North Atlantic.

## 1. COMPETITION

International success brings me to the third element of our new approach to defence competition.

I'm a big believer in competition.

I know it's power not just to strengthen our industry and bring in the wealth that benefits the UK, but to bring down prices as well meaning we can afford to buy even more kit.

And as we look to life post Brexit and seek to spread our wings across the world, it's high time we do more to compete for a share of this international export market.

We've already got an enviable reputation in advanced manufacturing, we're leaders in intelligent systems, we already build wings for half the world.

And the UK continues to perform strongly in the international market, securing defence orders of £5.9bn in 2016, retaining its position as the second largest defence exporter globally over the last ten years

But now it's time to build exportability into our thinking from the off, aligning it with the requirements of international clients, allowing for the open architecture that can plug and play with different bits of capability.

In other words, the sort of pioneering approach we've adopted with Type 31e.

Government has laid out a clear challenge to the sector to design and build five new lighter, General Purpose Frigate to replace the General Purpose variants of our ageing Type 23 Frigates with a clear in-service — of 2023.

Type 31e will be flexible and adaptable.

The aim is in the name. E...stands for exports

Above all we've set the price we want each frigates to cost.

At no more than £250m.

That's the maximum price.

This is a competition.

And I want to see great companies competing to lower the cost

But it's also a pathfinder

We haven't built frigates for another country since the 70s

We're changing all that

This frigate will rock the exports boat and it's a model for the way we will approach shipbuilding in future

Yet we're not just focusing our export drive on ships but planes.

The UK and its European partners are fully focused on working with industry to maximise Typhoon's export potential in the worldwide combat air jet market.

And the MOD, in particular, are pleased to now be supporting and leading some of those campaigns in Europe, the Middle East and South East Asia, where we believe Typhoon meets the requirements of our international partners.

We've already seen the first plane delivered to Oman earlier in the year and more orders for Kuwait.

And today you'll see for the first time our Land Ceptor missile able to blast high speed, evasive, low signature and complex airborne targets out the sky

It's already in high demand with the Italian Army

Even as we look to sell more platforms, we'll continue banging the drum for British systems, from Scotland to Southampton, whether it's defensive aid suites, digital jammers or laser target designators, whether small satellites or secure communications.

So we've got high hopes for UK companies.

And what better place to bring the message home than DSEI, where the kit is the star of the show and where the globe's investors gather in one place.

All those looking to become exporters will find help at hand.

Not only is our Defence Growth Partnership now working with industry to anticipate future market opportunities, but we're now adopting a Team UK approach, packaging up the vast array of expertise our nation has to offer so that international customers looking for solutions into anything from subsurface systems and synthetic environments to persistent surveillance or information systems, needn't hunt around for the right contact, but can simply go to our Team UK representatives and get the details they requires.

There's a UK team stall in the hall here today waiting to work with you to face up to the challenges to come.

## CONCLUSION

So two years down the line Britain's transforming its approach.

And if you needed convincing that MOD really has changed its style look at the experts who make up our new innovation advisory panel.

The former owner of a racing car company and an astronaut.

The message is clear.

The UK's moving at pace.

And we're about to hit the heights.