Chris Skidmore sets out the first steps to establish the Robotics Growth Partnership

Thank you. It’s a pleasure to be here.

When Greg Clark launched our Industrial Strategy in the winter of 2017, he said:

> We are at one of the most important, exciting and challenging times in the history of global enterprise. Powered by new technologies, the way we live our lives as workers, citizens and consumers is being transformed across the world.
>
> He was right. And smart robotics are a major part of this transformation. A transformation driven by people like you.

We’re seeing robots teem out of factories into services and consumer markets. With the potential to help care for our sick and educate our young. To revolutionise our farms, warehouses and emergency services.

Firefighters at Notre Dame were directed by drone-mounted cameras. Which, last year, helped to save a semi-conscious man from an Exmouth cliff face.

Thousands of robots at one of Ocado’s fulfilment centres can assemble well over 200,000 orders a week. Passing each other at nearly 20mph just a centimetre apart. All controlled by a machine-learning air-traffic control system.

Such things were the stuff of science fiction when I was a child.

Advances in AI, materials, and sensing have driven extraordinary changes in Robotics and Autonomous Systems – or RAS – in the past 5 years. And things will only accelerate.

We’re now seeing improvements in technology and capability. As machines get cheaper, smaller and more collaborative – particularly as they come together with AI – we’ll see more and more areas transformed. And new sectors created.

This transformation will be lucrative. The RAS market is forecast to grow at an extraordinary rate – almost 40% a year. With non-industrial uses making up 90% of the market.

There are huge business opportunities domestically and internationally. Ocado, for example, has deals in place to build 25 cutting-edge warehouses around the world. This is not just world-leading technology. It is a real British export success story.

So what I want to talk to you about today, is how we can make the most of the transformation before us?

How can we realise the enormous potential benefits for the economy and society?

Navigating the challenges it brings, as any revolution does. Placing the UK at the forefront of these new technologies. And giving our businesses access to huge global markets.

Firstly, we need to encourage uptake. Which we are doing across sectors. For example, our Made Smarter programme aims to increase the uptake of digital technologies across manufacturing. Boosting the sector's productivity.

We have a £20 million pilot already in operation in the North West, providing support to manufacturing SMEs to adopt digital technologies.

And we're funding the development of technological solutions to the sector's problems to the tune of more than £120 million.

Secondly, we need to create a modern, effective regulatory framework.

The public can be wary of robotics. For some, they conjure up a sci-fi, job-thieving dystopia.

Government has a crucial role here in building and maintaining trust. And such trust is critical. Both in ensuring robots work for the benefit of all and in developing the public confidence required to encourage uptake.

That's why, just last month, during London Tech Week, the Business Secretary published our white paper on Regulation for the Fourth Industrial Revolution.

This sets out plans to transform the UK's regulatory system – supporting innovation and investment, ensuring regulators keep pace with technology. While protecting citizens and the environment.

Thirdly, we need to innovate. Building on the expertise of our world class universities, the talents of our researchers, and the energy of our businesses.

This means government investing and providing leadership. Helping to drive innovation, steering it towards our most pressing challenges. And de-risking private sector investment.

This is crucial in unleashing the economic and societal benefits new technologies can bring. Because RAS will be central to addressing the challenges facing the world today.

Four of which we have placed at the heart of our Industrial Strategy. Namely:

- tackling climate change while growing our economy
- meeting the needs of an Ageing Society
- harnessing the power of AI and data

- and the future of mobility – how we move goods and people about

We call these our Grand Challenges. And RAS will be key to meeting them, with its potential to, say, revolutionise healthcare, or make self-driving cars a reality – amongst many, many other things.

By putting these challenges at the centre of our Industrial Strategy, and backing them with funding, we're encouraging the market to come up with the solutions that we need.

So that as the world moves towards green living, and industrial societies age, the UK has the technologies it needs to succeed.

As part of this approach, since Autumn 2017, we have invested over £94 million to develop RAS technologies that can be used in extreme environments. Placing the UK at the lead of robotics in nuclear and offshore energy applications.

And fuelling private sector investment in innovation. That £94 million pot now stands at a total of £165 million thanks to co-investment.

This is part of a broader pattern we have seen in the past. Our robotics investment since 2014 – worth £360 million – has been more than exceeded by private sector investment across the sector. Not just from business but also financiers.

Just last year, for example, CMR Surgical, based in Cambridge, raised $100 million for their surgical robot.

Of course, innovation requires infrastructure too. So I am very pleased to announce today that we will be funding a £3 million extension to Remote Applications in Challenging Environments, or RACE – a remote handling and robotics test facility.

Not only will this create over 100 highly skilled jobs and improve collaboration. But it moves the UK closer to a globally significant robotics cluster in Oxfordshire.

The fourth thing we need to do is collaborate internationally. Because, as today's event shows, this is a global industry. And by working together with our partners overseas, we all benefit.

Just look at Astroscale's operation in Harwell. A Japanese firm investing in the UK and collaborating with our Satellite Applications Catapult.

They're leading a £4 million grant from the UK government to help establish a state-of-the-art national control facility. This will support advanced robotics in space, enabling a commercial service for tackling space debris.

It is because collaboration like this is so important, that I'm delighted to tell you that London has won its bid to host the International Conference on Robotics and Automation in 2023.

As you will know, this is one of the most prestigious robotics conferences in the world. And it will bring over 4000 global leaders in automation and robotics to London.

This underlines our desire to work across borders, and our position as a global player in this important field.

Finally, to help unlock the potential of the robotics revolution, the government can use its convening power. Bringing this diverse sector together to determine what it needs to flourish.

With this in mind, in March, I announced that I would convene a robotics leadership group.

And today I am pleased to set out the first steps in establishing this group – the Robotics Growth Partnership.

This will bring together representatives from across industry, academia, and government. To develop an action plan to strengthen and develop the partnership. To bring the sector together. And to help push UK RAS forward.

I'm very pleased to be able to tell you that two outstanding leaders in the field of robotics have accepted my invitation to co-chair the partnership:

Paul Clarke, Chief Technology Officer at Ocado; and Professor David Lane, Director of the Edinburgh Centre for Robotics and lead for the ORCA robotics hub.

Their proven track records in this area, as well as their broad networks across business and academia, make them ideal for the role. Enabling them to tap into the wide-ranging expertise and insights that the partnership needs to succeed.

I want this partnership to help put the UK at the cutting edge of the global smart robotics revolution. Turbo-charging economic productivity and unlocking benefits across society.

But we need your help. Please spread the word about the partnership and get involved yourselves.

Because collectively we can realise the benefits – both economic and social – of the transformation before us. With your energy, expertise and enterprise. And a supportive, enabling government.

The rewards are there for the taking. So let all of us – industry and academia, government and consumer – seize this moment together. Thank you.