

aerospace
defence
security
space



2018 INDUSTRY FACTS & FIGURES

A GUIDE TO THE UK'S AEROSPACE, DEFENCE, SECURITY & SPACE SECTORS

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FOREWORD

The 2018 ADS Industry Facts and Figures show the strength of the UK's Aerospace, Defence, Security and Space industries. They are a powerful indicator of the skills, innovation and collaboration that makes these important UK sectors so competitive in markets around the world.

Each of our four industries has made a substantial contribution to UK prosperity, created high-value jobs for thousands of people in every part of the country, and pioneered ground-breaking technologies.

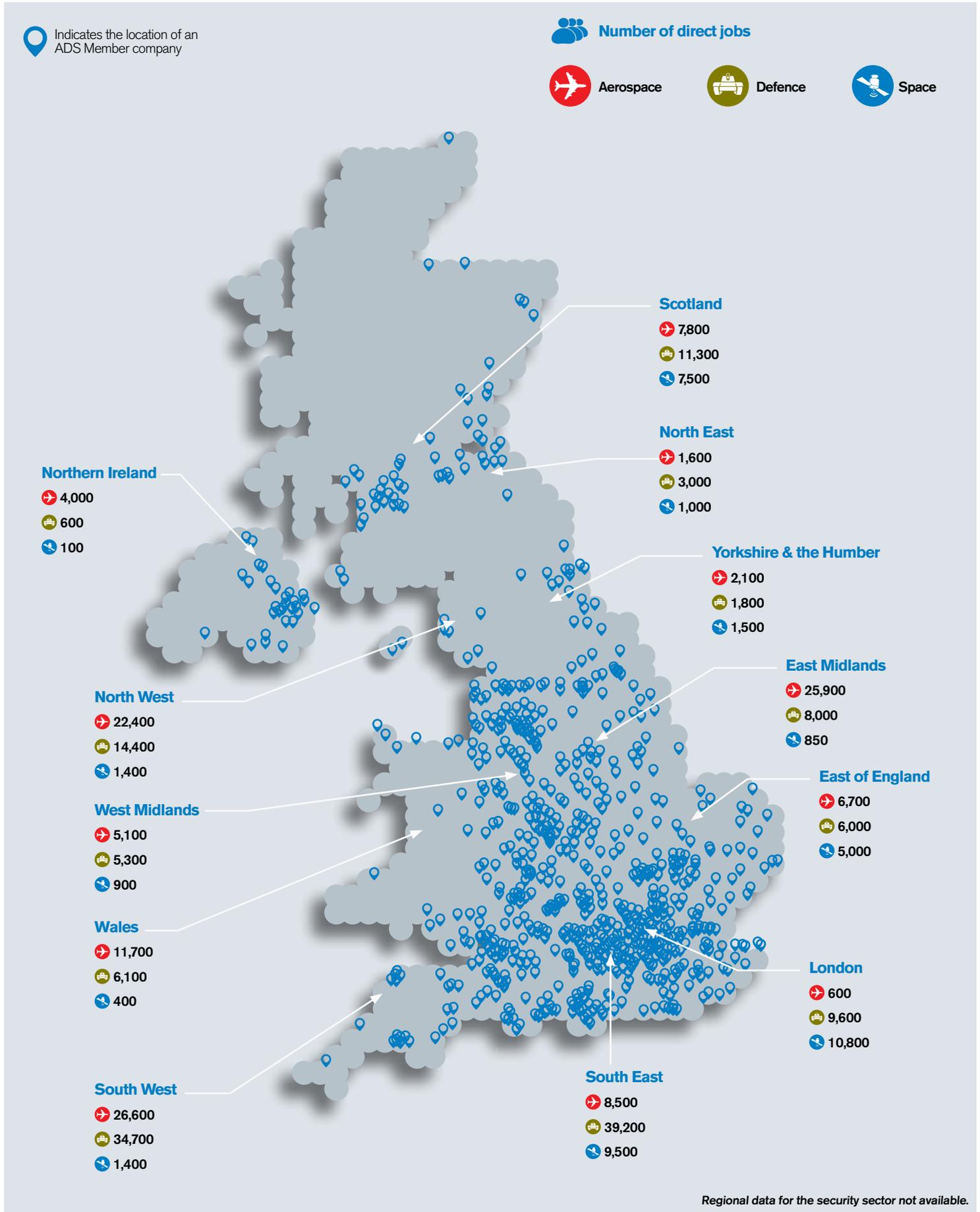
As the national trade association for these sectors, ADS is working to support them in domestic and overseas markets, to build successful industrial strategies in partnership with Government, and deliver a Brexit deal that ensures a stable transition and retains the UK's leading position in these industries.

We will continue to strive to support and promote our industries, working with UK Government to ensure their future prosperity and enabling them to unleash their full creative potential.

Paul Everitt
Chief Executive, ADS Group
Chairman, Farnborough International Ltd

THE STRENGTH OF OUR SECTORS

SPANNING THE LENGTH AND BREADTH OF THE UK, ADS 1000 MEMBER COMPANIES INCLUDE OVER 950 SMEs.



Together the UK's Aerospace, Defence, Security and Space companies generate well-paid jobs, high-tech exports and sustainable growth in every region and nation of the country.

MAJOR CONTRIBUTION TO UK JOBS, SKILLS, EXPORTS & GROWTH

Supporting 1,000,000 jobs across the country, our sectors offer global growth opportunities and are vital to the UK's future as a high-tech, high-skill, high-wage economy.

In 2017, the UK Aerospace, Defence, Security and Space sectors' contribution to the UK was:



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GOVERNMENT AND INDUSTRY

INVEST IN UK'S GLOBAL GROWTH AND COMPETITIVENESS

ADS priorities for UK Government to support growth, secure investment and enhance competitiveness:

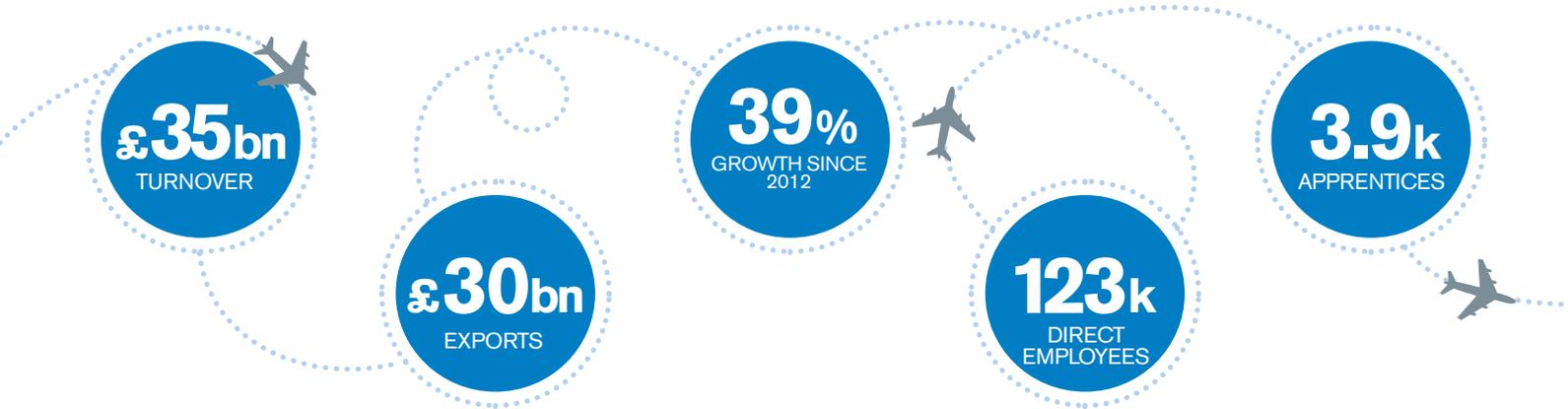
- 1** Build on successful industrial strategies across our sectors to enhance competitiveness and attract global investment
- 2** Focus on supply chain competitiveness to improve productivity and equip the industry to take advantage of future technology opportunities
- 3** Position the UK as a world-leader in innovation to foster growth and create export opportunities
- 4** Ensure public procurement drives innovation, delivers wider industrial benefit for the UK and enhances our national security
- 5** Deliver a Brexit deal that supports our integrated European industry, sustains our global competitiveness and plans for the long-term

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UK AEROSPACE SECTOR

The UK's Aerospace Sector is world-leading, generating well-paid jobs, high-tech exports and sustainable growth across the country.



AEROSPACE GROWTH PARTNERSHIP (AGP)

The AGP is the UK's Aerospace Industrial Strategy, with industry and government working in partnership to attract global investment to the UK

Purpose 	Delivered 	Impact 	What next 
<ul style="list-style-type: none"> • Maintain UK Aerospace's global position as number two in the world • Attract long-term global investment to the UK • Improve the UK's global competitiveness through technology, skills and supply chains 	<ul style="list-style-type: none"> • £3.9bn investment in R&D secured for the Aerospace Technology Institute (ATI) • Supporting SMEs and new technologies with a £14m programme from NATEP to deliver up to 40 collaborative research and technology projects involving over 100 supply chain companies • Secured more than 70 signatories to the 'UK Aerospace Supply Chain Competitiveness Charter' 	<ul style="list-style-type: none"> • Changed global perceptions of UK as a place to invest • ATI invested £1.8b in R&D to date, involving over 215 companies • Funded more than 200 collaborative technology projects, with grant to over 110 SMEs Sharing in Growth continuing supporting over 60 supply chain companies, securing 10,000 jobs by 2022 • Funded 500 future engineers to study Aerospace MSCs 	<p>With Government agree an Aerospace Sector deal including:</p> <ul style="list-style-type: none"> • A new UK aerospace Supply Chain Competitiveness Programme • A High Value Design Centre • The Aerospace Research Consortium (ARC) to lead and co-ordinate research across UK universities • A national electrification & autonomous aircraft technology strategy and R&D programme

UK AEROSPACE: DELIVERING GLOBAL OPPORTUNITIES

Pioneering UK growth & innovation

Investing in home grown innovation:

- Bombardier's CSeries composite wings in Belfast
- Hybrid Air Vehicles' lighter-than-air Airlander

Delivering on key grand challenges: artificial intelligence & data driven economy, future mobility and clean growth

50% higher than average annual earnings demonstrating the thousands of high value manufacturing jobs

20% higher productivity growth than France & Germany - demonstrating an internationally competitive industry in a globally productive sector

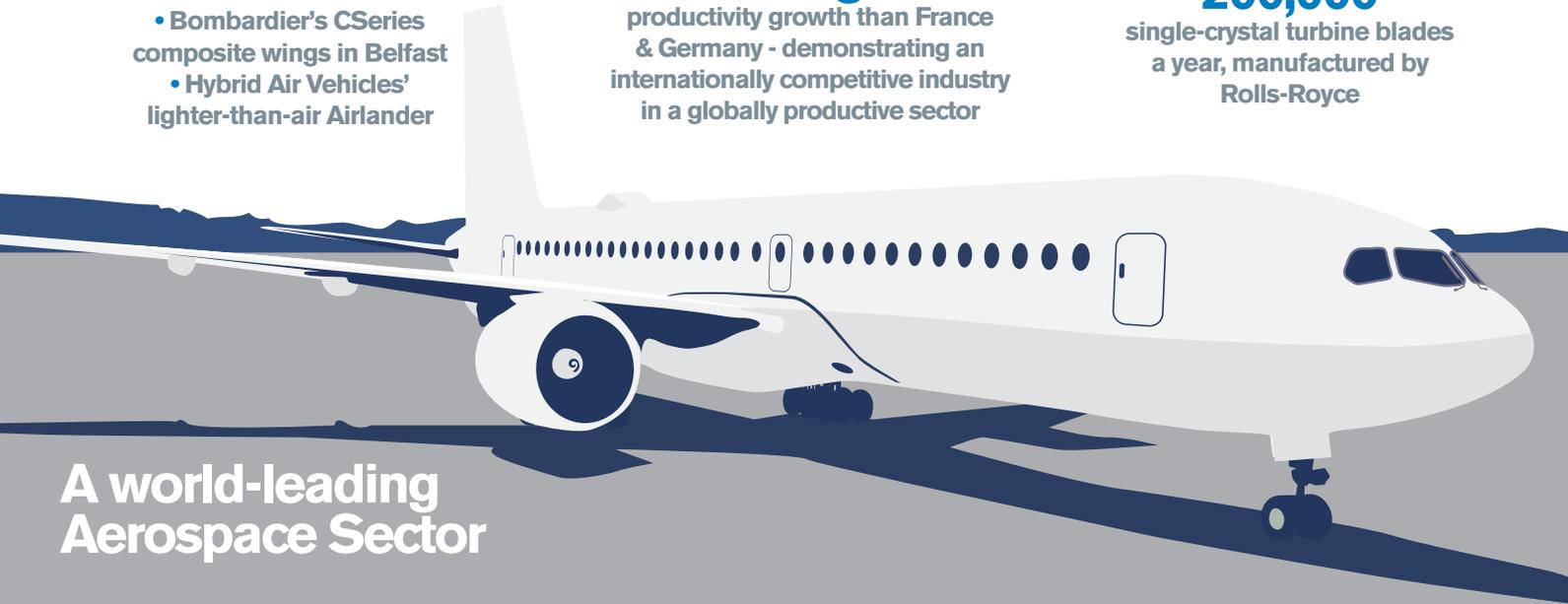
200,000 single-crystal turbine blades a year, manufactured by Rolls-Royce

A world-leading Aerospace Sector

An ambition to become a **world leader in electric and autonomous aircraft**

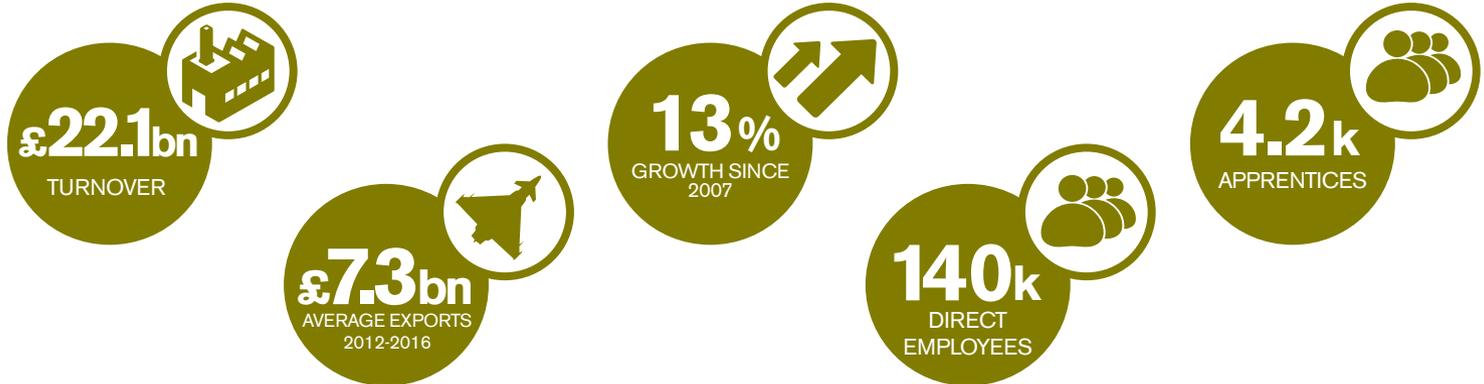
Nearly **90% of Aerospace turnover** is generated by exports - strengthening key partnerships through trade

World leader in aerospace technology, delivering wings for Airbus' A380, the world's largest commercial aircraft



UK DEFENCE SECTOR

The UK is the second largest defence exporter in the world, which helps deliver the equipment and services our armed forces and security services need to safeguard national security.



DEFENCE GROWTH PARTNERSHIP (DGP)

Industry and government are working in partnership, through the DGP, to help the UK establish long-term relationships in competitive global markets, delivering security, growth, and prosperity for our nation.

Purpose



- Grow the UK's global market share through exports
- Greater collaboration and innovation across defence industry to attract and focus investment
- Improve productivity and competitiveness throughout the whole sector

Delivered



- UK Defence Solutions Centre has established innovation and security partnerships with key allies
- The UK's first cross industry and Government Defence market analysis
- Team UK launched at DSEI 2017

Impact



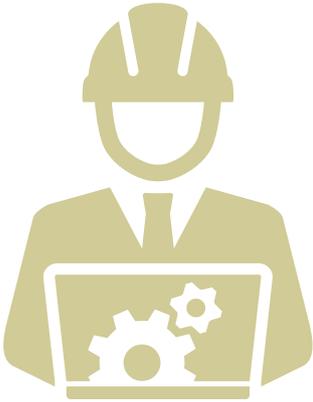
- Longer-term and strategic assessment of defence exports opportunities
- Maximising the UK's global competitiveness, ensuring the right skills, capability, supply chains and technology are in place to win export orders

What next



- Launch of the Defence Enterprise Export Programme (DEEP) to help develop export skills
- SME workshops and support to strengthen the value chain and boost competitiveness
- Develop a Defence Sector Deal in partnership with government

AT HOME The UK's vibrant Defence industry plays a vital role in helping to safeguard our national security and contributing to the UK's economic prosperity.



Powerful results



Delivering awe-inspiring technologies, such as the two Rolls-Royce marine gas turbines fitted to the Queen Elizabeth class aircraft carrier, which can create enough electricity to power a town the size of Swindon.

Investing in ideas



Over **7,500** SMEs work into UK defence supply chains all around the UK producing unique intellectual property.

UK prosperity



The Defence industry provides high-skill, high-wages jobs to the UK with the average salary being

42% more than the national average.

AND ABROAD Across the world our armed forces deploy equipment and services provided by UK industry, projecting UK influence and values internationally.



Global benefits



From anti-piracy operations to the humanitarian efforts in the Caribbean, the armed forces are globally enabled by British business.

Enduring presence



24 hours a day, all around the globe UK industry work alongside our armed forces to keep the nation safe and prosperous.

Strategic influence



Export orders of **£8.7bn** over the last five years have strengthened UK security relationships with allies and provide capabilities to address common threats.

UK SECURITY & RESILIENCE SECTOR

The UK's Security and Resilience sector provides solutions to the challenges we all face today, from cyber security to products and services which addresses the threats of terrorism and all other aspects of national security.



PUBLIC-PRIVATE COOPERATION IN SECURITY

The Security and Resilience Growth Partnership (SRGP) brings together industry, academia and government to demonstrate the UK's security expertise and capabilities, especially our ability to respond to new and emerging threats.

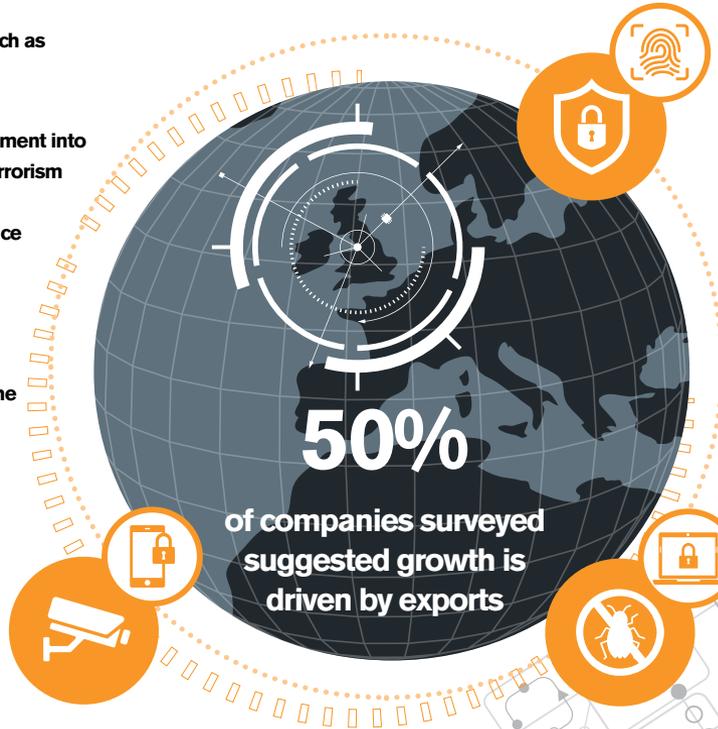
Purpose 	Delivered 	Impact 	What next 
<ul style="list-style-type: none"> Delivering on national security objectives through close partnership Ensure the prosperity of the UK Security and Resilience industry through cooperation with Government Play an instrumental role in a 'whole of Government' approach to security exports 	<ul style="list-style-type: none"> Established the Joint Security and Resilience Centre (JSaRC) for private-public cooperation on security matters Significant policy contributions through UK Security and Resilience Industry Suppliers Community (RISC) Ensured publication of new UK Cyber Export Strategy 	<ul style="list-style-type: none"> Established the Security Sector as a hub of innovation A range of initiatives to test and demonstrate innovative products in operational settings Greater transparency of pre-procurement process and HMG programmes 	<ul style="list-style-type: none"> Deep, comprehensive public-private engagement from pre-procurement stage Joined-up approach to accessing both domestic and export markets Coordinated approach to R&D

THE GLOBAL REACH OF THE UK'S SECURITY & RESILIENCE SECTOR

The UK's Security & Resilience sector touches many aspects of our daily lives...

1. AT HOME

- Technological support to policing such as body worn video cameras
- **£25m** Government investment into innovative approaches to counter terrorism
- Towards a future of e-visas to enhance security and improve the customer experience
- **80%** of UK Critical National Infrastructure is owned and run by the private sector



3. ONLINE

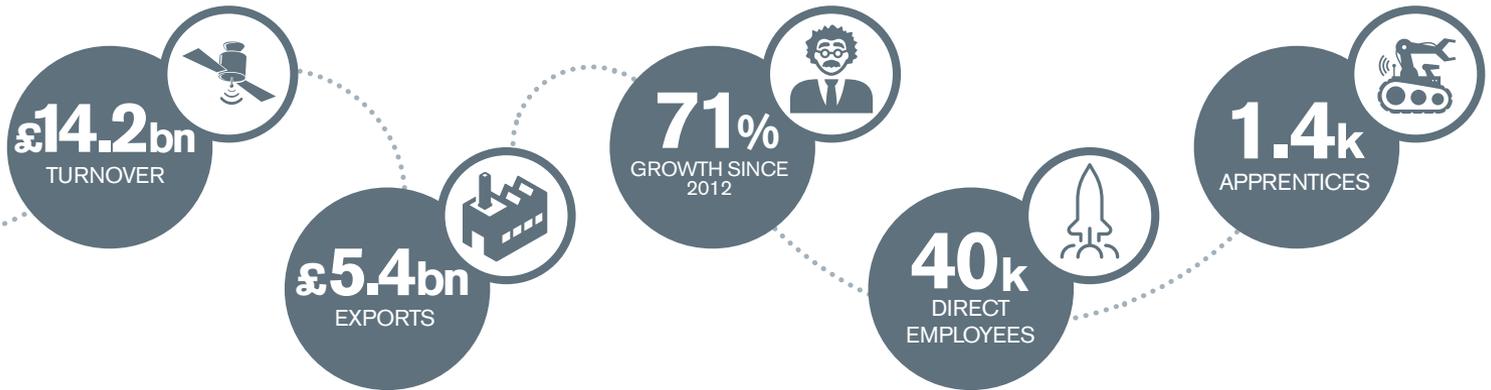
- Online fraud is the most common crime in the UK – almost 1 in 10 people are victims
- HMG investing **£1.9bn** to enhance cyber defences
- More than **£5.5 million** cyber offences a year - nearly half of all crime in the UK
- The sector protects public services including threats to national infrastructure such as rail and nuclear facilities

2. ABROAD

- Data sharing to ensure global law enforcement and to keep the UK safe
- Collaboration with the EU and NATO to tackle the evolving challenges of the global security environment
- Supporting Tokyo 2020 with security measures and equipment
- Transatlantic exercises to tackle the cyber threat and enhance cooperation across the sector

UK SPACE SECTOR

The UK's Space sector is at the cutting edge of exploring the universe and connecting people to the world around them.



THE SPACE INNOVATION AND GROWTH STRATEGY

brings together a partnership of industry, government and academia to identify opportunities and remove barriers to growth for the UK Space sector.

Purpose



- Putting the UK at the forefront of an expanding and high-tech sector
- Make the UK the best place to start and develop a Space business
- Grow the UK's share of the global space economy to 10%

Delivered



- Space Industry Bill bringing the first legal framework for the UK Space Industry
- Satellites and space technology listed as priority for the Industrial Strategy Challenger Fund
- Major Tim Peake becoming the first British astronaut in Space for more than 20 years

Impact



- The UK is one of the worlds largest suppliers of global nano and small satellites currently in orbit
- The UK Space Sector has one of the highest average productivity rates at over 2.7 times the national average
- Investment in R&D has generated new knowledge, product and processes

What next



- The UK Space sector is expected to grow to £40bn annual turnover by 2030
- Double the value of GDP from industries supported by space data to £500bn
- To create 100,000 new jobs in the Space sector by 2030

UK SPACE SECTOR - A GROWING INDUSTRY

Growing at 8% a year the UK's Space Sector has the strong foundations to continue to support other industries whilst continually looking to the future.

1. STRONG FOUNDATIONS

- Space Industry Act 2018 - supporting the UK's space launch capabilities
- **40%** of all small satellites currently in orbit are UK built
- Airbus created an exact replica of Martian terrain in Stevenage to test robots which will be sent to Mars in 2020



2. ENABLING OTHER INDUSTRIES

The UK Space Sector doesn't work in isolation, many projects work across sectors and help enable technological advancements worldwide.

UK built satellites support our everyday lives through:



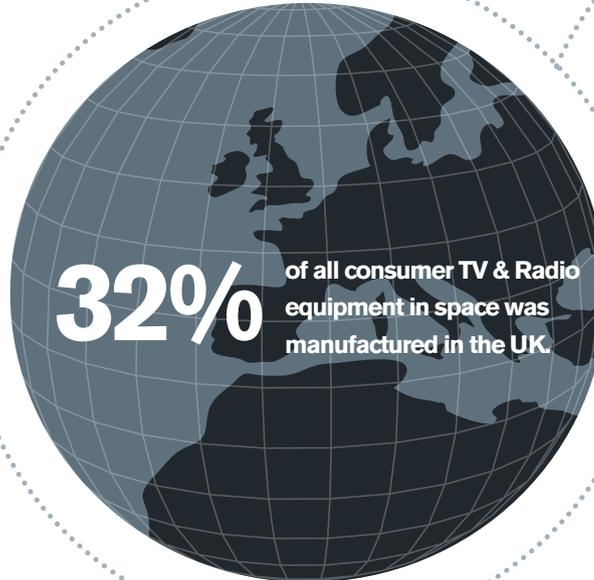
- Helping you move around the world with GPS navigation



- Weather reporting – helping predict global weather trends and disaster monitoring



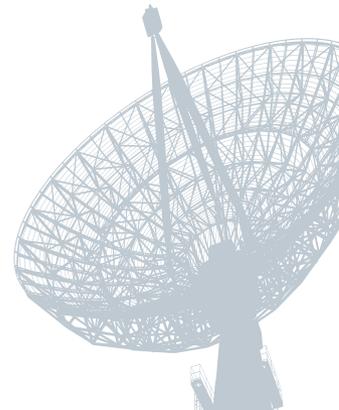
- Supporting resilience of Critical National Infrastructure and enabling access to ATMs and card services



3. INNOVATION AND THE FUTURE

An ambition for the UK to capture **10%** of the global space market by 2030

- Airbus' Zephyr offers advanced capability that fills the gap between satellites and Unmanned Aerial Vehicles, run exclusively on solar power, it gives the world internet and provides radar
- Industry and the Government involved in new Disruptive Innovation for Space Centre
- Home to innovative companies such as Reaction Engines Ltd, who are pioneering the next generation of hypersonic and space access propulsion



ADS Group is the UK trade organisation representing the Aerospace, Defence, Security and Space sectors. ADS is focused on representing the interests of these valuable wealth producing industries in the UK and overseas to key stakeholders, government and the media. Farnborough International Limited, which runs the Farnborough International Airshow, is a wholly owned subsidiary.

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