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ADS

The UK Aerospace, Defence, Security and Space Industry and the EU

An assessment of the interaction of the UK's Aerospace, Defence, Security and Space Industry with the European Union

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INTRODUCTION

PAUL EVERITT

The announcement of an EU referendum to take place before 2017 provides UK voters with a decision they have not faced since 1975.

The outcome of the referendum matters to ADS members. Their global competitiveness depends on the UK having unhindered access to customers, supply chains, people and investment from around the world and particularly from the EU.

Working with KPMG, ADS has undertaken an assessment of how membership of the EU impacts our sectors.

ADS represents more than 900 companies of all sizes across the aerospace, defence, security and space industries; four globally competitive, high-productivity sectors that provide nationally important high-skill, high-value employment.

We have canvassed their views on key aspects of EU membership and the overwhelming response from our industries is that it is good for business. In fact, only two per cent of those surveyed said it would be better for their business for the UK to leave the EU.

When asked to identify the benefits of remaining part of the union, the majority identified free trade within the EU followed by the simplification of regulations and tariffs. The importance of this is best illustrated by the value of the UK's export market and the deep integration of UK supply chains in the EU.

The vast majority of our members – almost 90% – export to the EU. There is no question that membership of the EU provides valuable access to a European customer base that is vital to sustaining Britain's industrial sector.

There is likely to be a long, and sometimes noisy, campaign ahead. The message from our members, however, is clear: EU membership benefits British businesses and their employees.

Paul Everitt, Chief Executive, ADS

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UK AEROSPACE, DEFENCE, SECURITY AND SPACE SECTOR SNAPSHOT

An important part of the UK economy

AEROSPACE

£29bn	91%	111k	3,300
TURNOVER	EXPORT REVENUE	EMPLOYMENT	APPRENCTICES

Aerospace & Defence Jobs typically pay

+50%

MORE

than the National Average

(& pay 20x more tax than a minimum wage job)

DEFENCE

£22bn	44%	146k	4,400
TURNOVER	EXPORT REVENUE	EMPLOYMENT	APPRENCTICES

UK Defence & Security exports up

↑63%

SINCE 2010

SECURITY

£8bn	40%	71k	2,150
TURNOVER	EXPORT REVENUE	EMPLOYMENT	APPRENCTICES

The UK Security Industry has grown

5x

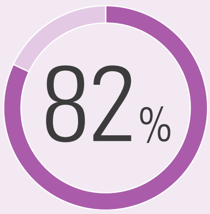
FASTER

than the UK economy

Note: 2010-2013

SPACE

£11bn	35%	34k	1,150
TURNOVER	EXPORT REVENUE	EMPLOYMENT	APPRENCTICES



UK Space companies investing in high-tech skills

Source: CEBR & ADS

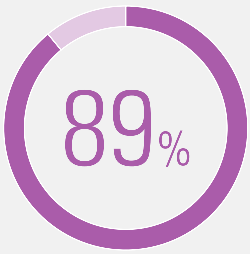
An export driven industry

49%

INTERMEDIATES ACCOUNTED FOR BY DIRECT IMPORTS (AIR AND SPACECRAFT)

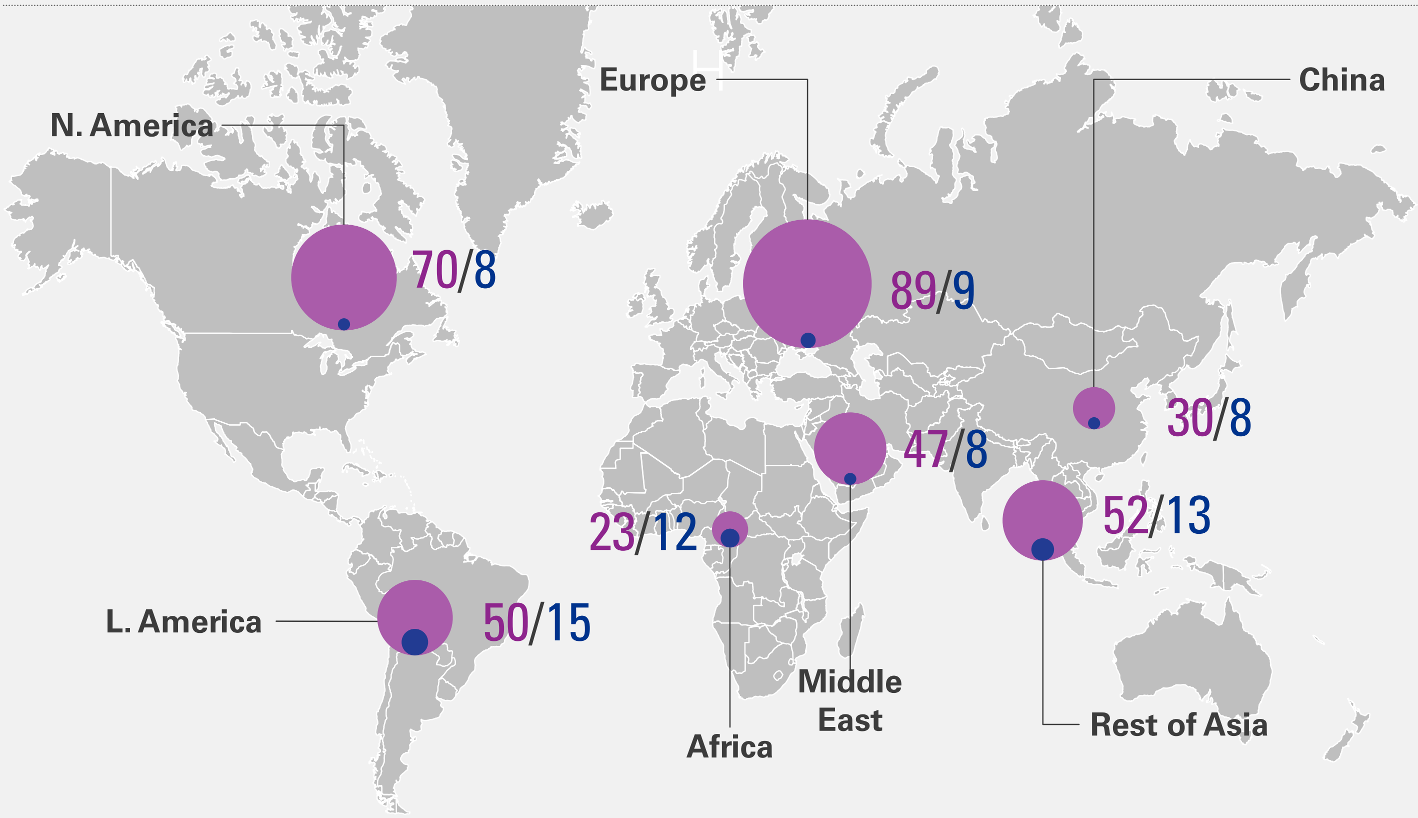
91%

FINAL DEMAND FROM EXPORTS (AIR AND SPACECRAFT)



of members exporting to the EU

Source: ONS



Percentage of ADS members exporting to location/Percentage of ADS members entering new export market

Source: ADS/GfK NOP Industry Intelligence Survey

Attracting inward investment

Recent investment in UK aerospace, defence, security and space	
Airbus	Airbus invested £100m in research, development and training in a deal with UK and Welsh governments at Broughton and Filton factories
Bombardier	Bombardier invested more than £127 million in its Belfast operations during 2014, including R&D, plant and equipment.
GE Aviation	GE Aviation opened new composite facility in Hamble as part of a five-year, £30million-plus investment to support the company's manufacture of wing components for the Airbus A350 XWB jetliner family
GKN	New aerostructures factory worth £200 million and employing 450 people outside Bristol
Rolls-Royce	New £110m blade casting factory in Rotherham and new £100m disc factory in Washington, Tyne & Wear opened in last year
Spirit Aerosystems	New development centre for composites in Prestwick employing 50 workers
BAE Systems	Invested £300m in the Barrow-in-Furness site, in a major redevelopment that will transform its submarine building capabilities

Source: Multiple press and publically available information, retrieved in May 2015

"With initiatives such as the AGP, the UK has demonstrated a collaborative government and industry strategy for the sector. This has changed the 'Old Europe' perception of the UK in North America and shown that the UK has the ability to change and innovate."

North American manufacturer with UK operations

The UK has invested in innovation and built on its deep institutional knowledge to ensure that it is home to a highly developed aerospace sector, enabling it to attract investment both domestically and internationally on high value work packages.

In an increasingly global market there has to be a reason to use the UK. The increasing number of new entrants have a desire to attract flagship industries and develop their own high technology, high skilled capabilities in aerospace, defence, security and space.

For the UK to compete globally, continued investment in high-value design, skills, innovation and capacity is vital. Support from governments in the UK and the EU will be critical if investing in the UK is to remain a globally attractive business proposition. The UK competes because it has a skilled workforce and a strong research base ensuring its continued positioning on high value, design led work packages, that improve quality, cost and delivery. Having a government that listens to industry and is listened to in Europe, especially on regulation and standards, is also an advantage for the UK.

As the demand for aircraft shifts towards Asia-Pacific and South America, so will the source of investment in the sector.

This means that the UK will need to consider how best to position itself in the market to secure investment flows from global markets.

Unique partnership approach to growth

Through the Aerospace Growth Partnership (AGP), UK industry and Government have established a unique, collaborative partnership to increase investment in UK innovation, supply chains and engineering skills, with industry and government jointly committing £2 billion towards the Aerospace Technology Institute.

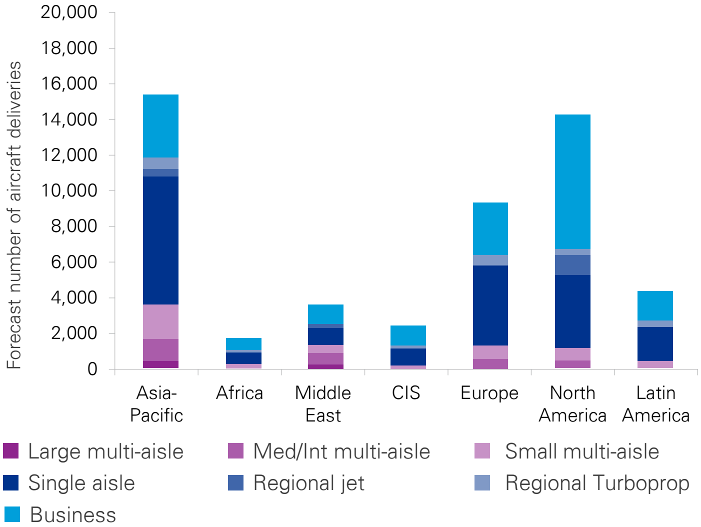
Strong and 'joined up' industrial strategy focused on Innovation and Training

A wide range of coordinated initiatives are underway to drive new investment and address barriers to growth – the UK is an increasingly attractive location for new investment in civil aerospace.

Expected to grow throughout this decade

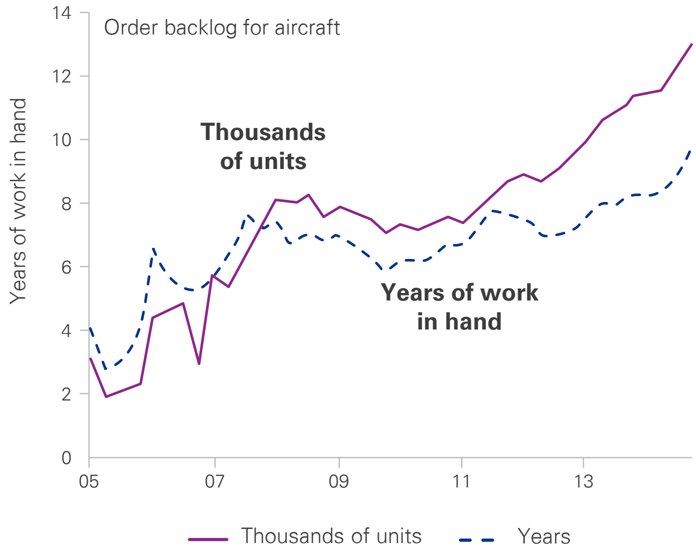
Industry forecasts predict that the value of the commercial aerospace market alone will be over $5 trillion during the next 20 years.

Forecast number of aircraft deliveries by region



Source: UK Trade & Investment Global Aerospace Outlook 2015

Record aircraft backlog

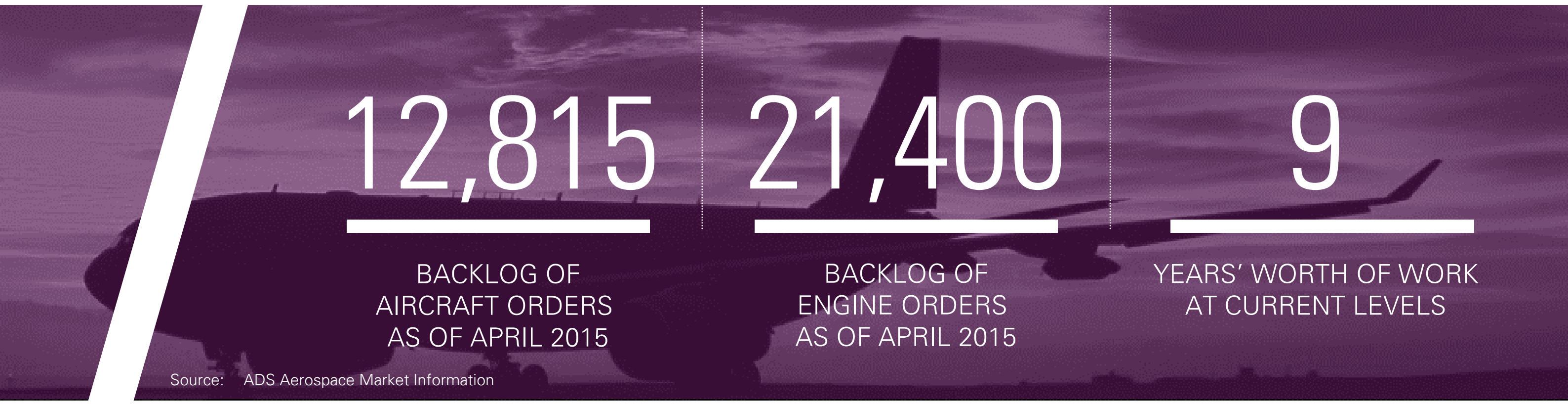


Source: ADS

The current backlog of orders in the commercial aerospace sector highlights the changing dynamic and increasing importance of the Asia-Pacific, Middle East and Latin American markets. Each of these regions is seeking to use its commercial influence to develop indigenous aerospace industries to compete with the established suppliers in Europe and North America.

Whilst the UK remains the second largest global aerospace economy, the increased number of new entrants is putting pressure on the established supply chains and manufacturing bases. In addition to China, new entrants include India, Mexico, South Korea and, in Europe, Poland and Turkey.

This report and survey considers EU membership but needs to be put in the context of the changing dynamic in the global aerospace market and how the UK best positions itself to maintain this status.

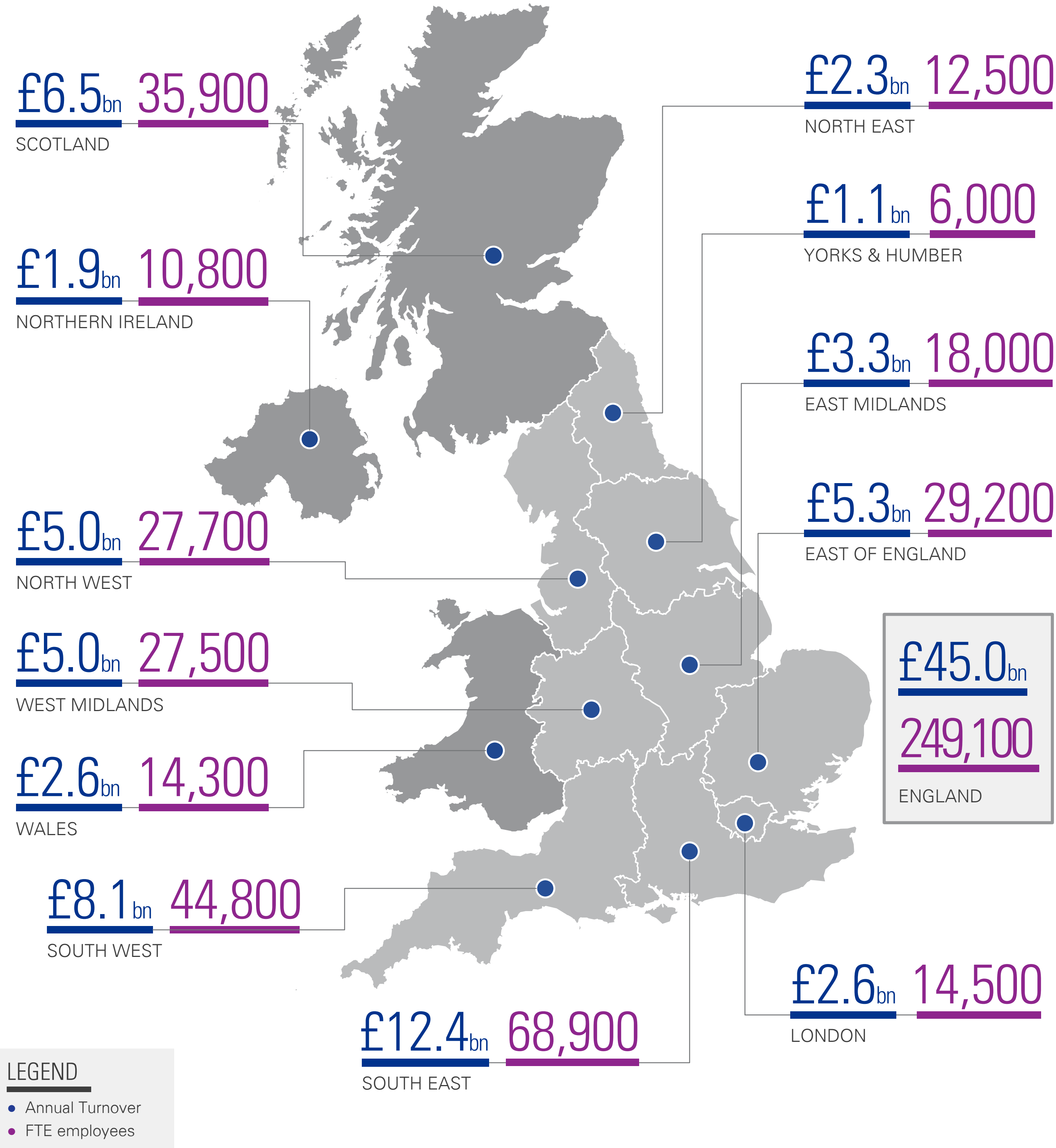


Source: ADS Aerospace Market Information

THE ADS MEMBERSHIP CONTRIBUTE TO WEALTH CREATION AND EMPLOYMENT ACROSS THE COUNTRY

A diverse mix of businesses across the UK

Turnover and employment by country and region



Source: ONS Interdepartmental Business Register, CEBR & ADS

ADS MEMBERS SURVEY RESULTS

The following represents the results of a survey of the ADS membership

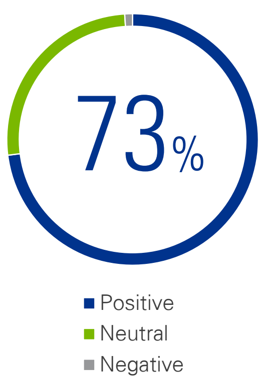
73% believe EU membership is positive for their business. Only **1%** said EU was negative for their business

86% of ADS members would vote for the UK to stay in the EU. Only **2%** would vote to leave

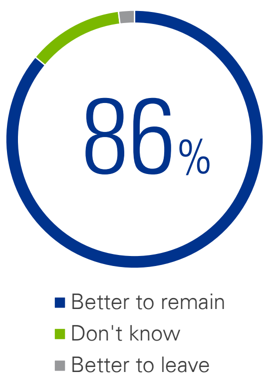
Top 3 priorities identified by ADS members for changing the UK government's relationship with the EU:

1. Increasing EU funding for UK firms
2. Greater UK engagement in EU decision making
3. Work within EU to make it more efficient

Does EU membership have a positive or negative impact on your company?

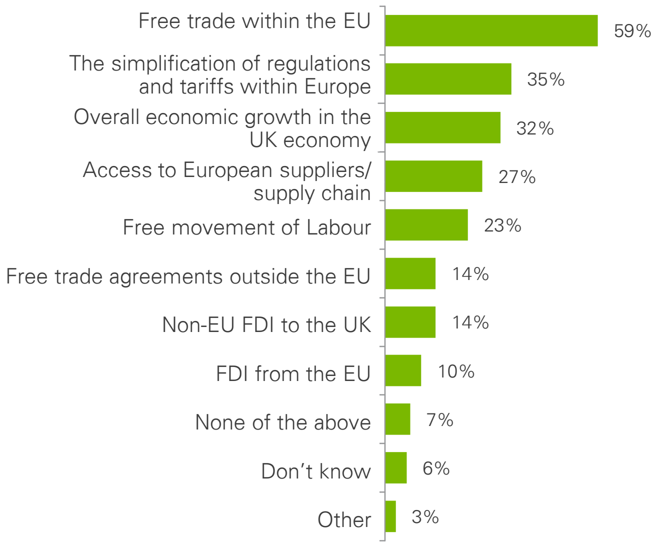


In the event of a referendum, would it be better to remain in or leave the EU?

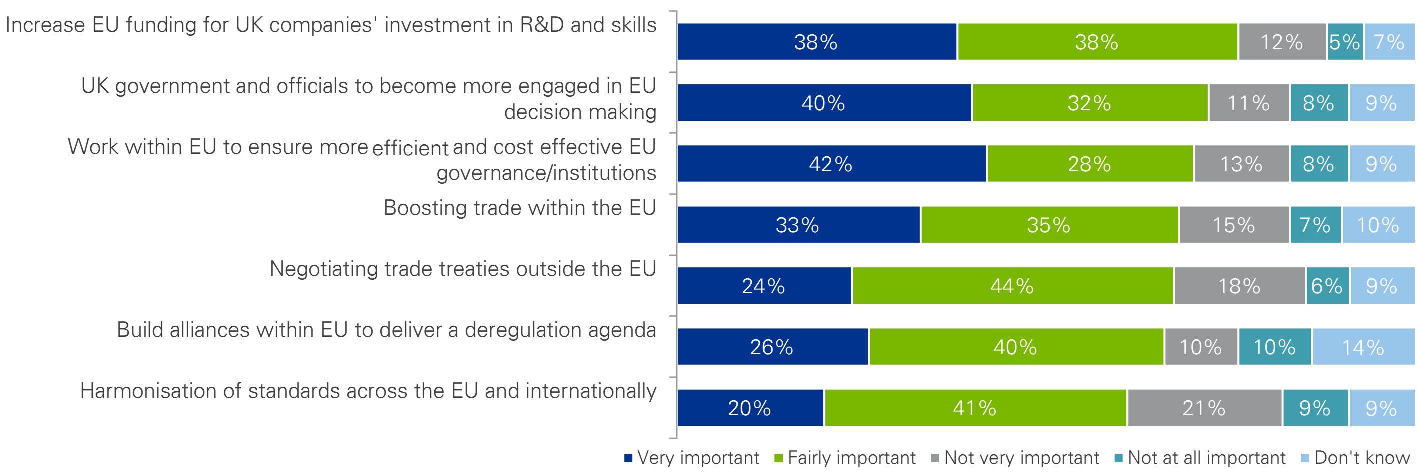


Free trade, cross-border simplification & growth are seen as benefits to the UK

Benefits to my business of the UK being in the EU



Increasing funding, greater UK engagement should be reform priorities



Source: ADS/GfK NOP Industry Intelligence Survey 2015

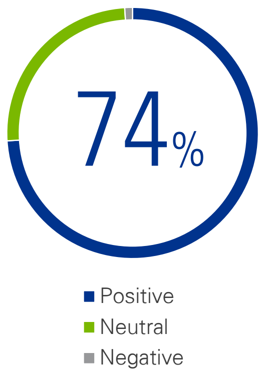
95% of foreign owned members believe it is better for the UK to remain in the EU. **None** would vote to leave.

82% of UK owned members believe it is better for the UK to remain in the EU. Only **3%** would vote to leave.

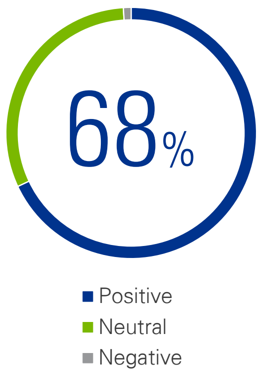
Aerospace, defence and security companies' top priority for changing our relationship with the EU is increasing EU funding for UK companies to invest in research, development and skills.

Space companies' top priority is for the UK government to become more engaged in EU decision making.

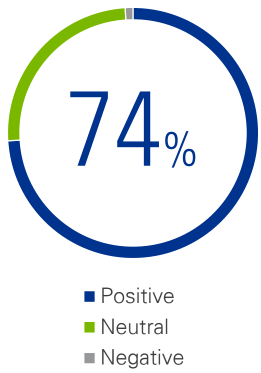
Aerospace



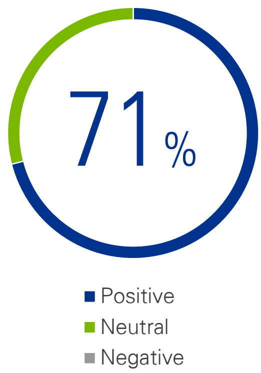
Defence



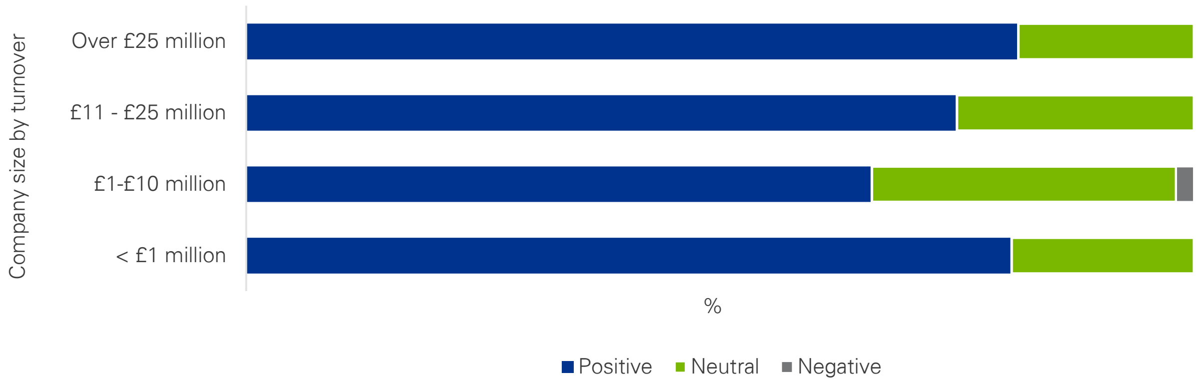
Space



Security



Positive and Negative views of the EU by Size



Source: ADS/GfK NOP Industry Intelligence Survey 2015

FOREIGN DIRECT INVESTMENT

Benefits for EU membership on FDI into the UK

Given the global supply chains and markets of the UK's aerospace, defence, security and space sectors, the UK has to compete with other nations for increasingly mobile investment. As a result of this the UK is in a positon of always having to compete with other nations for the awarding of work packages and overseas investment.

RECENT INVESTMENT IN UK AEROSPACE, DEFENCE, SECURITY AND SPACE

Investment criteria	Why the UK?	EU Influence
Innovation and skills	• Excellent research universities • Modern Industrial Strategies that identify and support investment in exports, next generation technology and productivity growth • Industry focus on design led and value add manufacturing	
Mobility	• Established engineering skills base, albeit with capacity constraints • Ability for companies to access a pan European skills base to complement shortages and to remove a limitation on growth • Mobility across the EU supply chain and manufacturing footprint	
Costs	• Investment in innovation and skills ensures that the UK is competitive on high value activity • Established manufacturing sector provides efficiency and quality • Favourable tax and investment regime	
Infrastructure	• Established infrastructure	
Regulations	• Compliant with global industry standards • Influential in setting and amending of global standards through EU membership	
Free trade	• Absence of tariffs and other tax/admin burdens with EU (89% of ADS members export to Europe) • Collective membership of EU and resulting trade arrangements with developing markets	
Currency risks	• Linkage to US Dollar rather than Euro key in industry	
Political and economic stability	• Well developed political, legal and financial system	

Key: ● Current EU membership has a favourable impact on this investment criteria
● Current EU membership has a neutral impact on this investment criteria

Source: Interviews conducted with a sample of ADS members in April and May 2015

Investment decision making

The aerospace, defence and space sectors are characterised by long lead-time investment decisions linked to large, complex platforms, systems and services with extended timeframes for return on investment. The security sector has a diverse and fragmented customer and supplier base, forcing companies to be more dynamic, responsive and agile. In either case, stability and certainty in the broader business environment is a key factor in investment decisions.

Paul Kahn, President of Airbus Group UK which employs over 16,000 people in the UK, has stated very clearly that:

> *"If after an exit from the European Union, economic conditions in Britain were less favourable for business than in other parts of Europe, or beyond, would Airbus reconsider future investment in the United Kingdom? Yes, absolutely."*

As part of this survey we interviewed a number of EU and non EU investors into the UK over the last decade. They unequivocally believed that membership of the EU was a positive rather than negative factor in their investment decision. Factors they highlighted in particular included: the importance of mobility of skilled workers across their European footprint (and that of their suppliers); the ability to access EU resource, including engineering graduates, in order to fill UK skills gaps; and the freedom of trade with customers, group companies and suppliers across the EU. At all levels this also included the ability of the UK to influence EU decisions around standards which impact the global aerospace industry, from certification to chemical regulations.

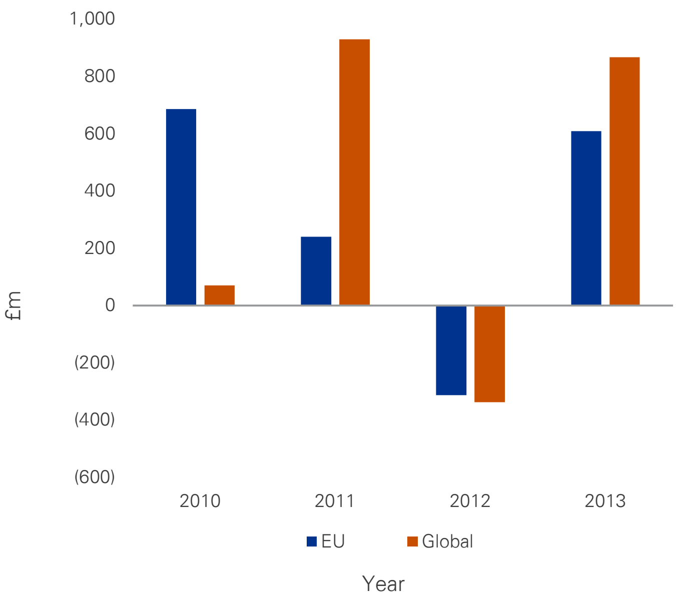
Whilst there were a number of other important factors which would be equally relevant whether the UK was a member of the EU or not, the majority of investors saw little obvious enhancement to their investment decision if the UK was not part of the EU. This reflected the view that the industry is a global one and the UK as an independent participant would still have to comply with the majority of regulations.

As set out on the previous page a number of major overseas investors to the UK cited during the course of this survey how they saw membership of the EU as a positive factor in their decision to invest in the UK. Non membership would introduce a risk due to uncertainty over the post-EU economic environment and how conditions may change over the course of an investment.

Given the long investment cycles, the impact of Brexit would most likely be felt over the long-run.

This was echoed in the recent interview with Tom Williams, COO, Airbus SAS and Mr Kahn who stressed that if Britain were to leave the EU, the company would not suddenly close its presence in Britain. The impact would potentially be felt in the next phase of investment decisions by global OEMs. This is particularly relevant when considered in the context of the number of new entrants seeking to increase their design and engineering presence in the aerospace defence, security and space industries.

Net FDI inflows to the UK



Note: FDI inflows taken from ONS, for Manufacture of Other Transport Equipment' – however, this will include the sub-sector of 'Manufacture of Aircraft and Spacecraft', as well as Marine (both civil and defence)

Source: ONS

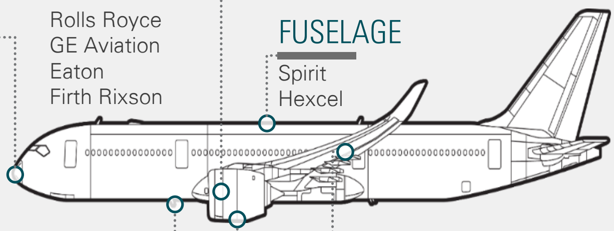
FREE TRADE WITH THE EU

UK is fully integrated in supply chains

Major UK Suppliers to the Airbus A350 XWB

The A350 XWB is an example of a fully integrated, global supply chain with a significant pan-European footprint, which is spread across the EU's largest aerospace industries with development, manufacturing and assembly in the UK, Germany, France and Spain.

The A350 XWB supply chain in the UK is not limited to those components developed, tested and assembled in this country. This highlights the importance of the EU to the UK aerospace industry – as the majority of parts manufactured in the UK are assembled in the EU, it is crucial for UK manufacturers to limit any barriers to trade.



AVIONICS
Cobham
HR Smith
GE Aviation

ENGINE AND PROPULSION SYSTEM
Rolls Royce
GE Aviation
Eaton
Firth Rixson

FUSELAGE
Spirit
Hexcel

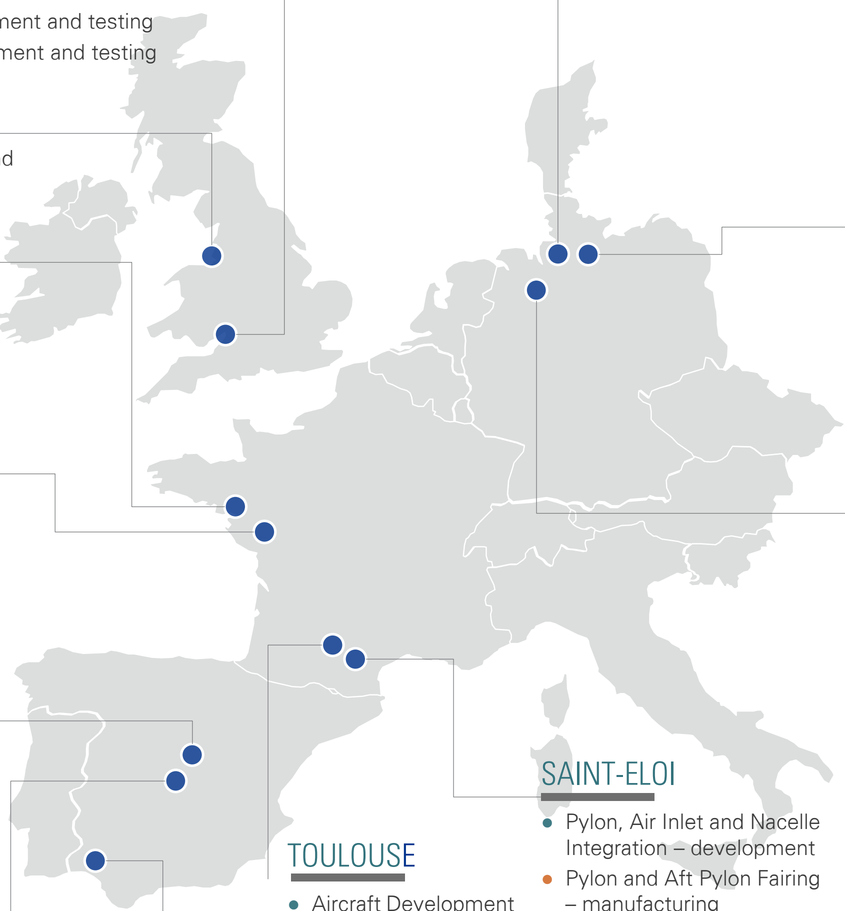
LANDING GEAR
Messier Bugatti Dowty
Ford Aerospace
Bromford Industries

NACELLES
UTC – Goodrich

WING ASSEMBLY COMPONENTS
GE Aviation
GKN
Spirit
Doncasters
Manufax
Teledyne SITEC group
Centrax
Firth Rixson
Centrax

Source: ADS, Publically available information

Airbus' European footprint



FILTON
- Wing – development
- Landing Gear – development and testing
- Fuel Systems – development and testing

BROUGHTON
- Wing Box – assembly and pre-equipping

SAINT-NAZAIRE
- Nose and Centre Fuselage –assembly and equipping
- Nose and Centre Fuselage – testing

NANTES
- Centre Wing Box, Keel Beam, Radome and Air Inlet – manufacturing
- Centre Wing Box, Keel Beam, Radome and Air Inlet – assembly

GETAFE
- Horizontal Tail Plane – assembly and equipping
- S19 – assembly

ILLESCAS
- Wing Lower Cover – manufacturing and sub-assembly
- S19 Full Barrel Skin – manufacturing

PUERTO REAL
- Horizontal Tail Plane Boxes – assembly

TOULOUSE
- Aircraft Development
- Structure and Systems – testing
- Final Assembly
- Flight Test
- Customer Delivery

SAINT-ELOI
- Pylon, Air Inlet and Nacelle Integration – development
- Pylon and Aft Pylon Fairing – manufacturing
- Pylon and Aft Pylon Fairing – assembly and integration

STADE
- Aft Fuselage Upper and Lower Shells – manufacturing
- Wing Upper Cover – manufacturing
- Vertical Tail Plane – assembly and equipping
- Vertical Tail Plane – testing

HAMBURG
- Cabin and Fuselage – development
- Aft Fuselage – assembly and equipping
- Forward Fuselage – equipping
- Cabin and Fuselage – testing
- Customer Definition Centre

BREMEN
- Cargo Loading Systems – development
- Wing Movable Surfaces – development and testing
- Flaps – assembly
- Wing – equipping

LEGEND
- Development/ Testing
- Manufacturing
- Assembly/ Equipping
- Customer Delivery

Source: Airbus UK

Importance of EU market to UK manufacturers

59% of survey respondents saw free trade within the EU as a benefit to their company with 89% of members exporting to Europe.

Paul Kahn, president of Airbus Group UK, aired his concerns to Welsh business leaders during a speech in London and echoed the opinions of other EU and non-EU companies we have interviewed as part of this survey.

"We look for a stable competitive economic environment to operate in, and we are a successful integrated European company. So we work with France, Germany, and Spain in particular and we want to work as efficiently as possible across those borders. So anything which disrupts that is a concern to us," he said.

The EU guarantees free trade across Europe and pushes for free trade across the globe. It has approximately 100 free trade agreements globally and is working towards a free trade agreement with the US that would remove tariffs for EU companies trading with the US.

The UK would need to get free trade agreements in place, which would have a time cost and create an added layer of bureaucracy, resulting in uncertainty for UK companies and inward investors alike.

This uncertainty was the key issue coming out of the interviews we have had, even if protectionist tariffs are unlikely to actually be applied if the UK were to leave the EU.

Because the UK is embedded in the EU supply chain for existing programmes, it is unlikely an EU exit would impact industry over the long run and could be impossible to reverse. If investment decisions on new programmes of work are made elsewhere, with EU OEMs allocating work within the EU, future generations will feel those impacts.

An EU exit would potentially impact the UK's leverage in the EU defence market.

The UK defence sector is the largest exporter of defence equipment and services in Europe and second globally to the US.

The Defence market continues to be heavily influenced by government policy and the ability of governments to work together to achieve a mutually advantageous outcome. Examples include the A400M Military Transporter and Eurofighter. These programmes arose from pan European co-operation and have benefited UK companies such as BAE Systems.

Case study: Gardner Aerospace

Gardner Aerospace is a UK privately owned business, focused on the Aerostructures market.

Its largest customer is Airbus and its expansion has been driven by its ability to leverage its relationships and success with Airbus sites in the UK, Germany and France.

I would think that life would be a lot more difficult for Gardner outside of the EU.

Our biggest customer is based in France and anything that made trade more difficult would be a negative for us.

Items such as customs documentation and potential import duties would add considerably to cost and bureaucracy."

Nick Sanders, Executive Chairman Gardner Aerospace

An EU exit can only bring potential barriers. It is already difficult to make investment decisions with regards to currency risk."

N. American manufacturer with UK presence

The people making long-term decisions see the risk. Uncertainty is not a positive word."

UK based tier 1 with European operations

The Swiss deal

For British Eurosceptics who thought Switzerland offered a template for prosperity outside the European Union, recent events make awkward viewing.

They like the idea that Switzerland, like Norway, exists outside the EU but still enjoys virtually the same access to the EU's Single Market via a package of bilateral treaties signed with Brussels.

The major issue for the Swiss is that this access is also dependent on freedom of movement – in other words, if Switzerland breaches one treaty then all others, including its Single Market agreement, are also breached.

So when the Swiss voted in a referendum to curb migration last February, they set themselves on a collision course with the European Commission.

Brussels is playing tough, fearing the message that giving ground would send to Britain.

The federal government is fast learning that it can't win an arm wrestle with such a powerful neighbour – the Swiss sell around 60%[1] of their exports to the EU – and it has promptly backed down.

A year after the referendum, the government's latest proposal in response to the immigration referendum removes any restriction on EU citizens – focusing instead on far smaller numbers of non-EU migrants.

Recent bilateral talks have focused on areas including the 'passporting' of Swiss banks to work across the EU (an area of critical importance to Britain's financial services sector). But the Commission is refusing to budge until Switzerland accepts an institutional treaty that would allow previous agreements between the two to be amended should EU legislation also change in that area.

Far from feeling independent, the Swiss would have to swallow not only new regulations but also the effective subjugation of its courts on commercial matters.

Within a couple of years, the Swiss are likely to be back at the ballot box – again voting on immigration. Switzerland is fundamentally a pragmatic nation and will preserve its long-term interests. We have already seen a sign of this when, last November, its people rejected further immigration restrictions.

Switzerland is finding it increasingly difficult to chart its own course tied to the world's largest economic bloc. Ultimately, it will have to decide between prosperity – so dependent on the Single Market – and its desire to limit migrant arrivals. A Britain outside the EU would face similar difficulties in trying to have its cake and eat it.

	UK	Norway	Switzerland
Population (Eurostat)	64,233,248	5,109,056	8,136,689
GDP (€billion) (Eurostat UK)	2,217.9	377.2	516.2
per capita (€000)	34,529	73,830	63,441
EU contribution (€million) (Eurostat)	10,800	296	450
per capita (€)	168	58	55
EU Member	✓	✗	✗
European Free Trade Agreement (Norway, Switzerland)	✓	✓	✓
European Economic Area	✓	✓	✗

Source: KPMG Brexit report 2015

(1) EUROPEAN COMMISSION: http://trade.ec.europa.eu/doclib/docs/2006/september/tradoc_113429.pdf

(2) http://www.etui.org/fr/Actualites/Swiss-immigration-referendum-challenges-EU-freedom-of-labour

PEOPLE AND SKILLS

The importance of mobility in a cross-border supply chain

There has been much debate thus far around the open borders aspects of the EU and the implications for migration. What is clear from the survey and interviews with a number of pan European businesses is that these open borders provide a competitive advantage in terms of creating a mobile workforce where skills can be accessed at a European level and deployed where the demand exists.

Additionally within the UK there is a well documented skills shortage when it comes to skilled engineering resource. Many UK companies have sought to address this skills shortage through accessing graduates and engineers from across the EU, thereby increasing the pool of skilled labour that mirrors the global nature of the industry. What is less well known is that many UK corporates have sent their UK staff abroad to work in their facilities in the EU. In 2014, ADS estimates that just over 16,000 employees in its four sectors were working for their companies in the EU. British workers are able to access such opportunities because of the freedom of mobility and limited administration attached to such recruitment within the EU. During the interviews, several companies noted that the time taken to transfer British staff to an EU office was a fraction of the time and administrative burden of bringing in non-EU staff. Accessing such labour is made more attractive through the freedom of mobility and limited administration attached to such recruitment. It also provides a diversity of resource which mirrors the global nature of the industry.

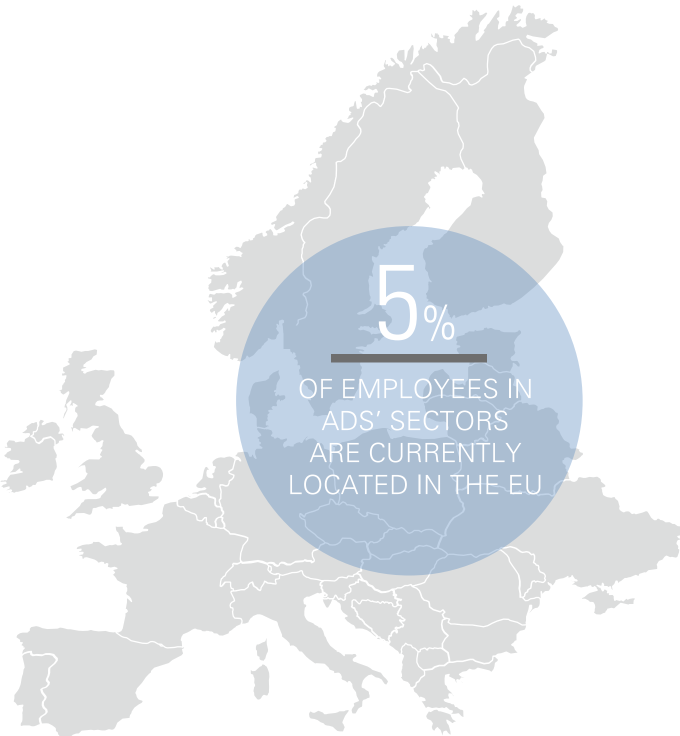
Airbus case study

Airbus employs 16,000 people in the UK and its £400 million investment in the wing assembly factory in Broughton reflects the importance of the UK to the company.

Airbus epitomises the integrated supply chain that exists within the aerospace industry and the benefits of close collaboration across borders. The EU has enabled Airbus to access skilled resource across its European footprint and to then deploy that resource where it is most required at any point in time. This mobility is instrumental to its operating model and demonstrates the benefit of an EU dominated supply chain. At any one time Airbus will have a large proportion of UK workers based in France and Germany and vice versa.

A UK exit from the EU would potentially adversely impact such mobility and put the UK sites at a disadvantage to EU located facilities.

When considering the question of open borders and mobility it is therefore important to consider the benefits this brings to the UK, both as an attractive place to invest and in relieving the skills shortage which would otherwise be a limiting factor in the industrial recovery.



Source: ADS member survey

"The nature of defence programmes requires a high proportion of employees to be UK nationals. The impact of an EU exit would reduce the pool of engineers and may lead to distribution across other sectors and increased costs. People believe that quotas are needed, industry does not."

Foreign owned UK defence company

Source: Ministry of Defence website Open Government Licence v3.0

INNOVATION IN SPACE

The UK's leading role in EU space R&D

UK space policy, as managed by the UK Space Agency, is closely interwoven with European and international initiatives taken forward in other forums such as the European Space Agency (ESA), which is a non-EU body. Although ESA and EU space funding are separate, they do coordinate, particularly to align EU research funding with ESA technology priorities.

In the area of space projects, the EU has responsibility for funding and delivering major programmes on satellite navigation (Galileo) and environmental monitoring (known as Copernicus). UK companies have won contracts worth more than €600 million since these programmes began in 2003.

Overall, the UK has been remarkably successful in winning EU Framework funding for space R&D in the UK. In the latest call for space projects under FP7 around 80% of successful bids include a UK partner and around 24% are led by one. The total investment secured by these partners is approximately €29 million, or 23% of the available budget for the call.

The total funding allocated to EU space activities by its 28 member countries is approximately €11 billion for the period 2014-2021. Based on the UK’s success in FP7, UK companies could receive over €2.5 billion in additional funding for space R&D in the UK – if we stay in the EU.

Membership of the EU ensures the UK has access to, and indeed can lead, some of the EU’s biggest space programmes, such as the Galileo GPD programme.

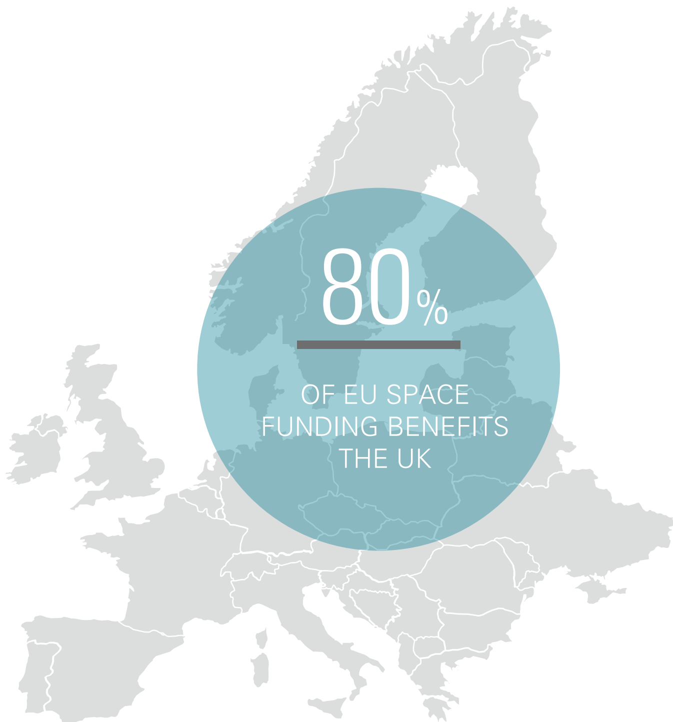
In addition, in 2014/15, the UK committed an extra £200 million for Europe’s space programmes. This contribution helped the UK gain overall leadership in developing the pan-European ExoMars rover. The additional commitment to the European programme ensured the complete design, final integration and testing would be in the UK instead of Italy.

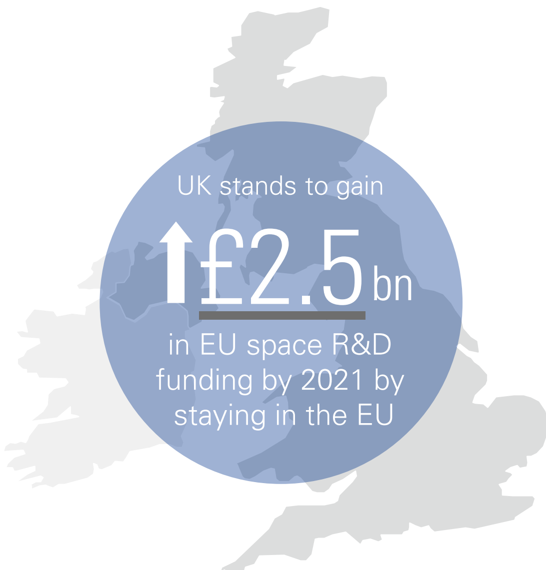
Similarly, the UK’s increased investment in EU space programmes directly helped Airbus Defence and Space win a £134 million contract to develop instruments for the next generation of weather satellites in 2013.

And although the UK only contributes about 9.9% of the total ESA budget, the Rosetta Mission had 10 UK industrial partners, which made up 20% of the total number of companies involved across Europe.

If the UK were to leave the EU, it is likely we would retain access to ESA programmes as an associate member, similar to the position Canada enjoys now.

The UK Space Agency, however, plays a critical role in ensuring that EU funding is used in line with UK objectives and that UK companies and institutions can compete fairly for opportunities. The Agency holds the Commission to account for the management of the EU space programmes and when discussing new European legislation, the Agency leads the negotiations on behalf of the UK.





FUNDING

Access to EU funding is benefiting UK businesses

The UK is home to Europe's largest Aerospace industry, but trails France and Germany when it comes to funding allocation from the EU.

Feedback from members surveyed and interviewed suggests that this anomaly is as much to do with the support provided in the UK to access such funding as to the availability of it and is one of the clear calls for reform identified by members.

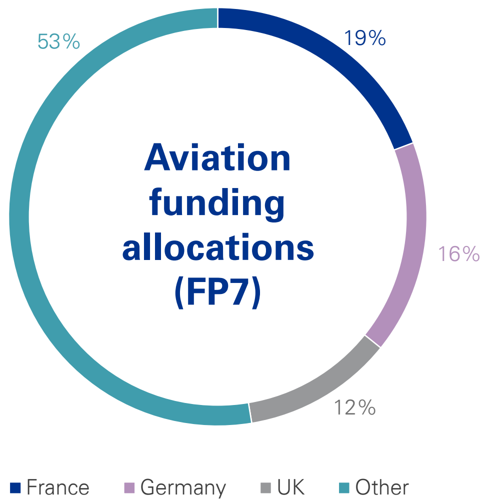
Punching our weight in R&D funding?

The EU is an important source of funding for Research & Development and innovation, particularly as individual government budgets decline. The EU uses funding competitions called Framework Programmes to provide research grants to projects in all sectors across Europe. The seventh Framework Programme (FP7) ran from 2007-2013 and awarded almost €50bn worth of R&D grants. In 2007-2012 (the most recent year we have comparable data for countries across the EU), the UK won around 14% (or €4.7bn) of the total €33bn funding available to all sectors of the UK economy, from aerospace and security to social sciences and health research. Over the same period, Germany won 17% (or €5.5bn) of funding, outperforming the UK by €0.8bn in additional R&D funding for their economy.

Looking at aerospace and security, there is further scope to gain additional R&D funding for the UK. In Germany received 19% (or €190m) of the Aviation R&D funding between 2007-2012, whereas the UK won just 11.6% (or €116m) in R&D funding, a gap of almost €75m. The French also do better than UK, securing 16.5% (or €165m) for their sector.

Similarly in the Security sector, the UK does well in terms of winning funding, but did second best (behind Germany) in both participation rates and funding received. On average the UK won 12.5% (or €95m) of the €760m in security funding on offer between 2011-2013. The benefit to the UK could be even higher if the UK received German levels of funding.

What is clear is that, while the UK is successful in winning R&D funding from the EU, we do not do as well as our continental cousins in gaining as much as we could. As the Space sector discussion shows, by engaging more with Europe on its R&D strategy, the UK could secure even greater levels of funding worth almost €3bn to the UK by the end of the decade.



Source: ADS; Aerospace Technology Institute

|Source: Ministry of Defence website Open Government Licence v3.0

EU REGULATORY DEVELOPMENTS

Influencing global and EU regulations

An EU exit would not give the UK freedom from EU regulations. Taking the example of Norway, as part of the European Economic Area it has had to systematically apply more than 10,000 EU legal acts without any ability to influence them.

Europe wants to hear the UK's voice on standards and regulations. It often brings a balance of perspective to discussions."

Large UK-based manufacturer

Influence on global standards

As a member of the European Union, the UK has significant influence in the setting of Aviation & Aerospace standards and regulations, at both a global and regional level.

Alongside the US Federal Aviation Administration (FAA), the European Aviation Safety Agency (EASA) is one of the main agencies which drives the new development of safety regulations. As an EU member, the UK has voting rights on EASA's decision making body, the EASA Management Board – ensuring it is able to help influence regulatory developments which protect and support the views of the UK government and industry. By leaving the EU, the UK would have to follow the same European safety regulations outlined by EASA, but would lose the ability to shape their development.

The UK also has a national seat on the governing Council of ICAO – the UN body which helps to set global standards and recommendations in the field of civil aviation. Whilst the UK would still retain its place on the ICAO Council in the event of an EU exit, its ability to influence global standards would also diminish – as it would lose its status as a powerful member of EASA, where these global recommendations are then adopted.

Engaging more in global regulatory development

The UK and the EU are in a strong position to continue to set global regulations and standards in Aerospace manufacturing, and partner with China to ensure their industry develops safely. However, the European Aviation Safety Agency has lost ground to the Federal Aviation Administration in partnering with COMAC – despite COMAC seeking EASA engagement. A greater UK strategic approach to ensure EASA is working with China to develop certification standards, alongside further engagement in setting global standards for potential new UK technology development, will be required in the medium-long term.

Gold plated regulations

Feedback from certain ADS members was that the UK needs to look at how it interprets and applies EU regulations. Many UK businesses had operations across the EU and experienced first hand that the interpretation of the same EU regulations varied significantly from country to country. In a number of cases the UK's interpretation was more onerous on industry than other countries: the gold plating effect.

There is a need for the UK to influence reform and therefore it is important for the UK to be in the EU. If the UK is out of the EU then they cannot help our business."

North American manufacturer with EU operations

The Norway model

Norway benefits from its close relationship with the European Union: companies sell into the Single Market even though they remain outside its borders.

Source: KPMG Brexit report 2015
(1) http://www.eu-norway.org/eu/Financial-contribution/#.VOxmYfmsVAA
(2) EUROPEAN COMMISSION: http://trade.ec.europa.eu/doclib/docs/2006/september/tradoc_113429.pdf

The Norwegian model has been raised by EU sceptics as evidence of the ability of the UK to successfully operate outside the EU without any adverse impact on trading (80% of exports being to the EU).

What is less publicised is that Norway has had to accept both financial costs and curbs on its sovereignty in order to maintain this trading relationship.

Whilst Norway has the right to oppose some regulations, in practice it is loath to upset its largest trading partner such that in reality Norwegian politicians have consented to almost all regulations arising from Brussels.

Norway has implemented thousands of EU regulations since it signed the latest trade agreement in 1994, despite the fact that Oslo has no direct influence over the content of this legislation as a non-member. This democratic deficit is the price of greater autonomy.

> *"It is one thing to have the legal right to impose tariffs, but quite another to exercise that right"*

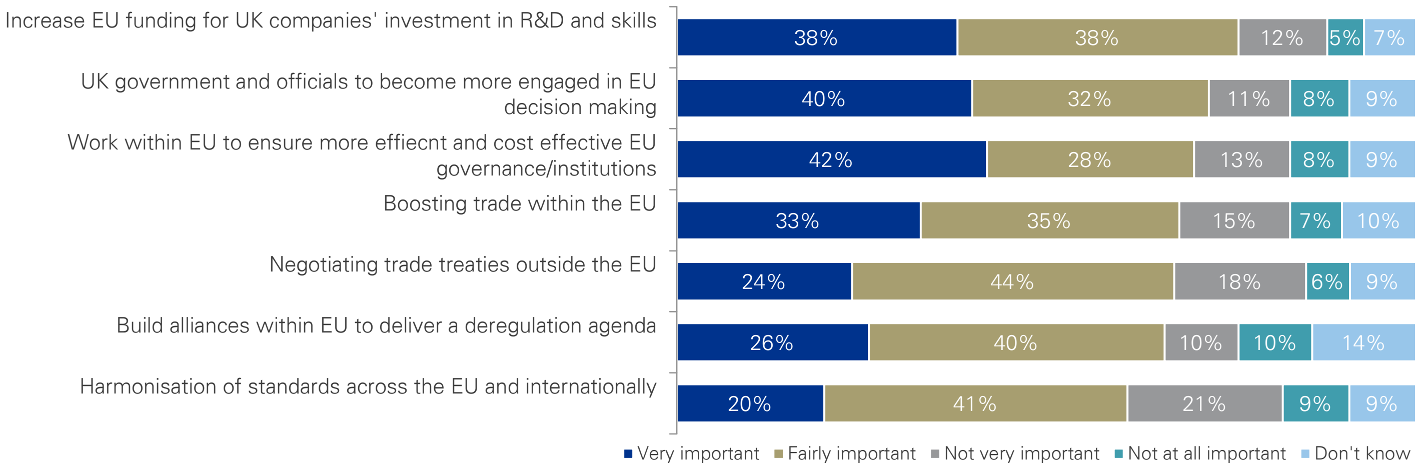
The latest negotiations over Norway's financial contribution to the EU highlight this point. Norway is the eighth largest contributor to the EU on a per capita basis – 1.8 billion[1] euros between 2009 and 2014. Norway has little choice but to accept EU demands to raise contributions again, given how vital the Single Market is for their exports, especially of oil and fish.

In many aspects Norway is virtually an EU member. Norway and the EU cooperate on police, defence and border issues and Norway takes part in all EU research programmes and most education projects. Norway is also part of the Schengen Area, so in that respect, even more integrated than the UK in terms of the free movement of people, and much of the UK debate over immigration has a resonance.

Opinion polls show Norwegians do not want to join the EU but are happy remaining tied to the EU – despite the democratic deficit that involves. Britain, with 12 times the population and a much larger economy, would likely have more influence in Brussels, but fundamentally it would face the same trade-off as Norway. The Aerospace, Defence, Space and Security industries would need to comply with the majority of EU regulations in order to trade with the EU, as per Norway. Under the Norwegian model however there would be no formal mechanism for influencing such regulations and the ability to create a European operating model that is competitive on the global stage. This is critical in the sectors represented by ADS as the success of these sectors is intrinsically linked to the overall success on the global stage of companies such as Airbus.

ADS MEMBERS CALL FOR CHANGE

Clear call for changing our relationship with the EU



Source: ADS/GfK NOP Industry Intelligence 2015

The results of the ADS membership survey support continued membership of the EU, but there is a clear call for a change in the relationship in a number of areas, the top 3 being:

1. Increasing EU funding for UK firms to invest in research, development and skills
2. Greater UK engagement in EU decision making; and
3. UK to work within the EU to make it more efficient.

Increased engagement and influence for positive change

These themes resonate strongly with the Norwegian experience noted on page 23. The majority of ADS members are operating in global markets with global regulation. In common with other export led industries such as automotive these regulations will continue to apply irrespective of the UK's continued membership of the EU.

The clear message from the ADS membership is therefore that the UK needs to use its positon within the EU to address matters which have a direct impact on UK industry and services. Within the aerospace and defence sectors the UK has a leading position along with France and Germany. Through its membership of the EU the UK therefore has the opportunity to proactively support UK industry and to provide an effective balance to French and German influence.

Whilst the previous page refers to specific examples where the UK has used its influence, there was clear feedback from members that, both through Westminster Government and MEPs in Brussels, the UK could do more to proactively support the industry. This includes seeking to simplify the interpretation of EU regulation and removing the UK's gold plated approach to implementing regulations.

"The aerospace industry in the UK is operating on a global stage and membership of the EU gives it the opportunity to participate in decision making, including the setting of regulation, which will impact the industry, irrespective of our EU membership."

Nigel Stein, CEO GKN plc.

Increased EU funding

An area of change advocated by the members surveyed was a need for increased access to EU funding. What became apparent with further investigation however is that the infrastructure put in place across the UK to support both the understanding and application for EU funding varied significantly. As part of the overall review of EU membership it is therefore important to ensure that UK government looks at the support put in place to maximise the ability of UK industry to access the EU funding available.

ADS priorities for change

1. Adopt an Industrial Strategy approach to support growth and competitiveness. The EU should develop a positive, proactive economic agenda that looks at how to work with Member States to enhance the global competitiveness of the Single Market. Immediate priorities could include:
    a. Completing key trade deals and opening up new trade opportunities for business.
    b. Increasing funding for Innovation, Skills and Infrastructure so that companies can be globally competitive innovators and exporters in their own right.
    c. Rethinking its approach to regulation to ensure it accounts for the principles of competitiveness, proportionality and subsidiarity in either creating or removing regulation.
2. ADS members want the UK to engage more in EU decision making. This could take the form of a detailed engagement strategy, that sets out how the machinery of Government in the UK can proactively engage on UK policy priorities in Brussels, and plans to slow the long decline in the number of UK nationals in the staff of the European Commission. It could also look at how the UK Parliament could engage with and debate on EU issues, which would allow the UK to improve links with other parliaments and ensure the UK can lead a coalition to push back against any concerning legislation.
3. The UK should ensure it engages early on future R&D funding decisions. In 2016, the EU will begin reviewing the effectiveness of current and future R&D funding streams. Other countries are already planning how they can boost funding for their companies. The UK should begin planning now to ensure more funding comes to British businesses and that there is greater funding for a pipeline of innovations, that funding is market driven, and that funding rules continue to protect IP.

[Source: Ministry of Defence website Open Government Licence v3.0

CLOSING REMARKS

GLYNN BELLAMY

73% of the ADS respondents to the survey believed that membership of the EU had a positive impact on their business. This is not unexpected given the global nature of the aerospace, defence, security and space industries – EU membership being seen as supportive of trade to a major sales region. There is also an acceptance that the UK will be subject to the majority of regulations, irrespective of EU membership.

The sectors represented by ADS play an integral part in the UK's focus on export driven, value-added engineering and services.

The EU provides a significant market for ADS members and will continue to do so for the long term. Whilst end demand may increasingly be driven by the Far East, Middle East and Latin America, the majority of UK businesses will access this through relationships that exist with their customers across Europe.

In the majority of cases UK companies are often key suppliers, providing a lot of the components, critical elements and sub-systems into Europe's supply chain.

They are not necessarily the big brand final producers – the likes of Airbus and Finmeccanica – and as they are not always the only potential supplier, they are vulnerable to substitution. As such it is important that the UK is seen as an attractive location to invest. The key message from those overseas investors interviewed is that the UK, through its membership of the EU and the work of government/industry bodies such as the Aerospace Growth Partnership, has made the UK an attractive proposition and one which has a lead on many of its overseas rivals. The benefits from EU membership include free trade, movement of skilled resource and ability to influence global regulations. Underpinning this is the stability and certainty required when making long term investment decisions.

Whilst an exit from the EU would not necessarily result in less favourable conditions, there is a risk that it introduces a degree of uncertainty which would negatively impact the UK position.

Based on the survey there is a concern that UK companies may miss out on the cream of European engineering talent because of restrictions on labour movement or suffer from a shortage of investment capital as Britain becomes a far less attractive destination for overseas investors. OEMs could perhaps favour the simplicity and flexibility of an EU-supply base rather than dealing with the potential complexities of a company based outside the EU.

In the long term, more EU-based alternatives would emerge. As buyers churned their suppliers, UK firms might become more marginalised. The integration of supply chains is a double-edged sword – our manufacturers are not indispensable.

The referendum does however bring the opportunity for the UK to more proactively engage with Europe. Within the aerospace industry the UK, France and Germany are key players not just across Europe but the globe. What is clear from respondents is that the UK could do more through its membership of the EU to support the industry, and ensure that the country plays a role in shaping regulation which would not be possible as a standalone nation.

KPMG encourages an open and informed debate on EU membership and we believe that surveys such as this facilitate such discussion.

“British companies might miss out on the cream of European engineering because of restrictions on labour movement.”

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