



Brexit Industry Insights

Aerospace and Defence

September 2019

With the UK's default to leave the EU without a deal, the Aerospace and Defence (A&D) sector is vulnerable to disruption. Established players are facing increased challenge from competitors in countries such as Russia and China, whilst simultaneously navigating and mitigating the impacts of Brexit – including on supply chains, regulation, research and development, and access to skilled labour. The winners in the sector will be those prepared for change and alive to the opportunities.



Brexit and the Aerospace and Defence sector

The UK has the world's second largest A&D industry, representing a strategic and politically important sector for the country. Consisting of overlapping subsectors, including maritime, space, cyber and security, it designs, manufactures and delivers in-service support for civil and defence aerospace. The sector also supports the countering of emerging and current UK national security threats. As the UK's top manufacturing subsector, in 2018 it employed 374,000 people directly with £78bn turnover¹. It also constitutes a quarter of the EU defence spending and contributes significantly in technical expertise to EU and NATO institutions and initiatives – civilian, space and military – investing in technology advancements and global growth strategies. The industry represents significant international business for the UK with £44bn net exports reported in 2018².

What does this mean for business?

Some of the key implications for businesses operating in the sector are:

Supply Chain

An Airbus A380 has around four million component parts and 200 Tier 1 immediate suppliers. It is a complex industry with many A&D companies relying on integrated global supply chains with components cross borders multiple times. This is also particularly acute for UK defence, with 15% of its supply chain located in Europe³.

Adoption of tariff and non-tariff barriers on trade with the EU would impact the transfer of component parts, delaying development and production times, as well as routine maintenance and repair. While the trade of civil aircraft and their components will continue tariff-free, due to the WTO Agreement on Civil Aircraft, there will likely be additional customs compliance obligations. In addition, this Agreement does not cover machinery or contributing products which are needed for the production of airplanes.

1. ADS Group, Facts & Figures 2019
2. Ibid.



Export controls and Sanctions

The overall framework of controls for military products and technology will not change post-Brexit. However, there will be new EU and UK licensing requirements to trade in dual use goods, software, and technology, all of which are pivotal for the A&D industry. Licences will be required for exports from the UK to the EU and vice versa, with both the EU and UK separately agreeing to issue General Export Authorisations (GEAs) to manage trade in these items. Whilst this will contribute to facilitating trade in dual-use items upon exit, compliance with licence obligations may prove challenging for organisations previously unfamiliar with the audit requirements and processes.

Additionally, the Sanctions and Anti-Money Laundering Act 2018 allows the UK to impose unilaterally its own sanctions regimes post-Brexit. Whilst it would appear the UK intends to align with the EU, it is possible UK sanctions may progressively diverge from the rest of the EU in future.



Research & Development

The A&D sector is driven by cutting-edge innovation. As such, research and development (R&D) is a major focus with the two sub-sectors spending £1.7bn and £1.8bn respectively in 2015, almost 17% of total UK business R&D³. Long timescales are often required for A&D R&D programmes, for example aircraft programmes can last over a decade. As a result longevity of supply chains is important when it comes to winning contracts and grants.

UK companies currently engage in cross-EU R&D initiatives, such as Horizon 2020 (which excludes defence), the Clean Skies initiative, the Galileo project and the European Defence Fund, which provides funding across two strands: in research and development. Future participation by UK companies in these initiatives has been called into question and will depend programme-by-programme.



People

Limitations on freedom of movement of people could adversely impact the A&D sector's ability to recruit the right people with the right skills. It will also impact those highly-skilled professionals such as aerospace engineers who hold professional qualifications. The ability of an engineer from the UK to, for instance, carry out a fly-in/fly-out assignment to an EU member state to repair an aircraft as part of the service provisions within the manufacturer's contract, could be limited because of Brexit due to their professional qualification no longer being recognised.



Regulatory

The UK is one of the main rule-making countries in the European Aviation Safety Agency (EASA). According to UK government calculations its domestic regulator, the Civil Aviation Authority (CAA), contributes 40% of the technical expertise in EASA⁴. However, the lack of an agreement to stay in EASA⁵ will have implications for commercial A&D companies that operate and sell products or have maintenance-repair-overhaul operations in EU and US markets, particularly around certification.

In focus: Defence policy

Political uncertainty in the UK and changes in the EU could pave the way for a shift in European and UK defence policy. Combined with an evolving geopolitical risk landscape, Brexit could be a catalyst for a change in approach for both the UK and EU. Much will depend on the leadership direction of the new UK Government and the refreshed European Commission, but early indications are pointing to a renewed focus to EU defence policy, without the UK as a cautious and moderating influence.

Historically, the UK has been a major player in European defence collaboration, with the Eurofighter Typhoon seen as an important product of this defence relationship. However, the recent agreement between Germany, France and Spain to develop its intended replacement, the Future Combat Air System (FCAS), a next generation stealth fighter, signals a defined shift with the UK excluded.

Nevertheless, even if the UK looks to adopt a bolder approach to defence policy and new projects post-Brexit, it is unlikely to do so without partners. One of its options could be to align more closely with the US. The F35 Joint Strike Fighter developed with the US has shown the value in international collaboration to share programme risk and costs. This will remain important in a post-Brexit world where the UK will look to capitalise on the acquired skills and knowledge from such projects. This could include the new concept fighter 'Tempest' announced by the UK Defence Secretary in July 2018, with suggestions the UK could approach Sweden or countries in Asia about partnering.

3. ADS Group, Industry Intelligence Survey 2016

4. London Economics (2019) Size and Health of the UK Space Industry 2018

In this scenario, the CAA would become the UK's umbrella regulatory authority and need to take on EASA responsibilities, such as certification of aircraft design and production. The CAA has said it will continue to recognise EASA certificates, approvals and licences for two years, but after this period new licences would need to be obtained from the CAA. From an EU perspective, UK components already on EU aircraft will continue to be recognised if certificates are issued prior to exit, however some certifications will have a time limit on validity. For example, for aircraft design organisations, UK design approvals would only be valid for nine months in the event of a no deal.

For other certification, UK-issued licences for engineers will no longer be valid for maintenance on EASA-registered aircraft. EASA third country approval would also be required for UK-registered organisations to maintain and repair EU-registered aircraft. The approval processes of EASA member firms for transferring licences and recognising licence validity during the transfer process varies. The CAA therefore advises applying for a licence transfer at least three months prior to the Brexit withdrawal date for those applicants who require continuity of validity during the transfer process⁷.

In addition, UK-licensed pilots flying EU-registered aircraft either need to transfer their licence to another EASA member state before Brexit, or seek a second licence from one. Companies who employ pilots for test flights for example, will need to ensure their pilots hold licences issued or validated in an EASA member state.



Barriers to data transfer

The A&D sector operating in a post-Brexit environment may face hurdles transferring data between its EU and UK operations, creating inefficiencies to business growth. Businesses in the sector often rely on the flow of data to deliver their services, some of which can fall under the category of 'personal data' - which are regulated by the EU. The European Commission (EC) has the power to determine whether a country outside of the EU offers an adequate level of data protection and assesses this either through its domestic legislation or international commitments into which it has entered. The EC will provide an adequacy decision it deems the non-EU country to have local data protection laws of the same or similar standard as the EU. The process of adoption of an adequacy decision involves a number of steps and can be a lengthy process.

The Commission is not expected to start this process in respect of the UK until after the UK leaves the EU. The UK's Information Commissioner's Office (ICO) has indicated that for a time limited period in a no-deal scenario it will recognise EEA states as providing an adequate level of protection for personal data. This statement has not been reflected by the EU. For business, the critical data flows to assess are those personal data flows originating from the EEA. Unless the UK and the EU enter into a separate legal agreement, businesses will need to ensure appropriate legal safeguards (e.g. standard contractual clauses and for intra-group transfers, binding corporate rules) are in place to facilitate cross-border flows of personal data.

Consideration will also need to be given to the arrangements the UK has in place with non-EU countries. The UK has said it will replicate the existing EU adequacy decisions with third countries for a transitional period. A number of these countries have also indicated they will continue to allow data to flow to the UK. Modified arrangements will need to apply in relation to the EU-US Privacy Shield for UK-US data flows.

In focus: Space

The EU is the largest export market for the UK's space industry, consuming 54% of a total of £5.5bn exports in 2018⁴. However, when the UK leaves the EU, UK companies could find themselves locked out of bidding for EU-funded space programmes. Both the European Space Agency's Galileo programme (the EU's Global Navigation Satellite System), worth €10bn, for which British companies have 15% of the contracts, and the Copernicus surveillance programme, worth €4.3bn between 2014 and 2020, are open only to companies from EU member states. The UK would need to negotiate a new security relationship with the EU to stay in these programmes, a proposed framework for which it has set out in its July 2018 Future Relationship White Paper.

In the event the UK leaves the EU without an agreement, there may be issues for UK-based businesses and individuals completing current contracts on Galileo and Copernicus. Future bidding will no longer be possible, but for Copernicus there will still be opportunities to tender for contracts on certain programmes. This includes the European Centre for Medium-Range Weather Forecasts (ECMWF) and Mercator, as procurement processes differ from that of the EU. As the UK will remain part of the European Space Agency, a non-EU organisation, UK entities will still be able to bid for contracts for the Copernicus Space Component Programme 4 and Earth Observation Envelope Programme 5.

The UK government has announced it will invest £92bn to develop its own Global Navigation Satellite System as an alternative to Galileo, which could be an opportunity for UK companies within the industry to participate. The UK has ambitions to scale up its civilian space industry.

5. ONS Business Enterprise Research and Development bulletin, 2015

6. <https://news.sky.com/story/govt-to-stay-in-eu-air-safety-body-in-blurring-of-brexit-red-line-11151049>

7. https://info.caa.co.uk/brexit/licensed-engineers?mc_cid=943d9d6852&mc_eid=c5ccf9b6f4

Chemicals

in the absence of a regulatory alignment between the UK and EU, UK-based firms subject to the EU's Registration, Evaluation, Authorisation & restriction of Chemicals (REACH) will face a regulatory trade barrier as their REACH registrations become invalid in a no-deal Brexit. In order to continue doing business in the EU post-Brexit, UK businesses will need to appoint an only representative or transfer registrations to an EU entity (although transfer of licenses could be a complex process as specific rules apply)⁸.

Intellectual property (IP)

The most commonly owned type of IP, copyright, will remain largely unaffected by Brexit, aside from specific cross-border exceptions. EU trade marks (EUTMs), Registered Community Designs (RCDs) and (unregistered) Community design rights will be impacted by Brexit and will need to be ported to become UK-specific. Under a no-deal scenario, businesses with EUTMs and RCDs pending on exit day will need to actively re-file for UK rights.

At present the questions remain over the UK's future participation in a system for the registration of a unitary patent (UP) covering multiple EU countries. If the Unitary Patent Court (UPC) comes into place before exit day, business will need to stay alert to government notices and potential transitional provisions.

Commercial Contracts

Contracts may need updating to manage some of the potential risks arising from Brexit or in response to Brexit-related restructuring. Areas of focus include: reviewing risk allocation between parties such as which counterparty bears the risk of border delays and tariff costs; definitions of key terms; changes to pricing structure or frequency of pricing reviews and changes to payment terms and contract enforcement.



What can businesses do to prepare?

- Continue to monitor key sources of information including:
 - Government advice from the UK government (Department for Business, Energy and Industrial Strategy, UK Space Agency, Ministry of Defence and the Department for Exiting the European Union), the EU, and other countries in which your business operates in.
 - Trade associations and industry bodies, including ADS Group and UKspace.
- Continue to engage with and encourage your existing workforce to certify their residency status while also reviewing recruitment strategy for critical roles. Concurrently, monitor information from countries in which you operate to ensure you understand local visa and work permit requirements.
- Make sure you know how to complete and submit the necessary customs declaration procedures and forms for imports and exports. Paying particular attention to new licensing requirements for dual-use products.
- Conduct a regulatory review to understand what the change in regulatory authority would mean around certification requirements for your people and products and, as applicable, apply for third-country approvals with EASA.
- Identify which suppliers the switch from the EU REACH regime to the UK regime will affect. If you are a UK company, investigate whether an only representative established in the EU27/EEA needs to be appointed.
- Review what personal data you hold, who you share data with, and whether you are sharing personal data cross-border

8. European Chemicals Agency, EU exit: <https://echa.europa.eu/uk-withdrawal-from-the-eu>

(and in particular, personal data of EEA nationals to the UK) including with any third party service providers. Ensure appropriate legal safeguards and mechanisms to allow personal data transfers to continue to flow from the EEA to the UK are in place.

- Identify where and how the national industrial strategy (including Aerospace Sector Deal) and local industrial strategies can support innovation planning and development. Register Horizon 2020 projects with the UK government.
- Perform a legal review to identify potential contractual risks as a result of Brexit. Identify impacted terms and plan a response, e.g. creation of a precedent bank of terms for future re-negotiation, immediate re-negotiation or re-papering.
- Ramp up your operational response capability and take steps to manage disruption as and when it occurs, including accelerating imports/shipments, identifying warehousing space as well as alternative suppliers and/or markets.
- Manage all key stakeholders to understand commitments and expectations. Engage with audit committees and liaise with trade bodies and regulators on preparations.

How can Deloitte help?

Deloitte has been supporting multiple businesses across a range of industries to understand the implications of, and prepare for, the UK's withdrawal from the EU. We have supported many clients with their Brexit planning. Our teams combine Brexit insights, industry knowledge and technical expertise to support our clients with their Brexit readiness planning – from risk assessment to applying the lessons learned to optimise for the future trading environment.

For further information please contact Deloitte Brexit Support at brexitsupport@deloitte.co.uk

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Further reading

UK No-deal Technical Notices:

- The defence sector and preparing for Brexit
- The aerospace sector and preparing for Brexit
- Prepare to work and operate in the European aviation sector after Brexit
- How to comply with REACH

UK Business Preparation Tool:

- Prepare your business or organisation for Brexit

European Commission Brexit Preparedness:

- EASA preparedness guidance

UK Civil Aviation Authority

- Advice to the aviation industry on a no-deal Brexit

This no-deal guidance is not exhaustive. Companies should routinely review the latest official updates and technical guidance as and when they are published by the UK, EU, and individual EU Member States.

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