

SMOOTH OPERATIONS

AN A-Z OF THE EU RULES THAT MATTER FOR
THE ECONOMY

APRIL 2018



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FOREWORD

As the UK and EU negotiate a new relationship, perhaps the most complicated and economically crucial task is agreeing the future of the rules that govern the UK economy. Rules are the foundation for trade. Every nation has its own framework for how goods and services can be sold within and across its borders. The EU's Single Market is one of the most sophisticated systems of economic rules in existence. Alongside securing the right customs arrangements, this is the key to keeping barriers between the UK's market and the EU Single Market as low as possible, and will establish the basis for the UK's competitiveness in the decades ahead.

But the job of untangling 40 years of economic and regulatory integration is a mammoth one and should not be underestimated. From the broad and revolutionary Services Directive on which all cross-border EU services trade is based, to the detailed and technical Plant Protection Product regulations, there are around 19,000 EU legislative acts in force. The challenge is heightened because of the land border that the UK shares with the EU on the island of Ireland and the fact that many of the rules will have consequences for policy set by the devolved nations as well as Westminster.

And the stakes are high. If negotiators get it wrong on rules, the consequences will be far-reaching. Firms voice concerns about court action, entire business models becoming illegal overnight, customer contracts in confusion, and a sudden drop off in access to our closest market for some of our leading industries. The UK Government has committed to ensuring regulatory certainty and continuity in the short-term, which is the right approach given the scale of this issue.

To support both sets of negotiators in the tough talks ahead, the CBI will continue to bring the facts to the table. This report, Smooth Operations, seeks to do just that. Compiled through consultation with hundreds of businesses of all sizes – from architectural firms to zoos – this report takes a sector-by-sector look at the EU rules that matter to business. The UK economy cannot be neatly packaged into sectors that want alignment and sectors that want divergence from EU rules, so this report looks into the different rules affecting each of 23 industries.

The views of business are clear. As the UK leaves the EU, there are opportunities for rules changes – for example in agriculture and tourism – and ways of regulating better within current frameworks – such as in procurement for defence and construction. However, these opportunities are limited and are vastly outweighed by the costs that will be incurred if the UK's rules change so much that it reduces smooth access to the EU's market. Where rules are fundamental to the trade or transport of goods, the UK and EU must negotiate not just alignment of rules, but ongoing convergence – where rules remain in lock-step over time and are recognised as so in order to allow the simple trade of goods and services. But the deal must not stop at goods trade, as so many free trade agreements do. To adequately match the depth of the relationship between the UK and the EU, negotiators should look to set a new international precedent in the trade of services and digital products with the Brexit deal.

To ensure the relationship can last for the long-term, and that the EU's concerns about trust and the UK's concerns about control are managed, alignment will need to come with mechanisms for influence and enforcement that benefit both sides. The UK cannot have the same voice as a Member State after Brexit, but clearly the second largest European economy cannot have no say over rules that even the non-EU nations of Albania, Montenegro, Turkey and more do through the EU's agencies. And the EU has already demonstrated a significant interest in the future of UK competition and environmental policy. If the referendum was about more control, this really matters.

Business is 100% committed to making a success of Brexit. Living standards and opportunity will only be protected if evidence is put ahead of ideology. The experience of companies across the country will be essential in the months ahead. A major acceleration in the partnership between business and the UK Government is needed to make a success of Brexit and ensure this experience is heard. Changes to rules for one sector will not just affect businesses in that sector, and divergence in rules in one part of the production process will have knock on consequences for market access throughout an entire supply chain. It is important that negotiators understand the complexity of rules and the effects even small changes can have.

This report comes from the heart of British business. It provides an unparalleled evidence base to inform good decisions that will protect jobs and living standards across the UK. We hope it proves useful. The CBI and our members look forward to continuing to work with government to secure the best possible outcome for our country in the vital months ahead.

Carolyn Fairbairn



CBI Director-General



EXECUTIVE SUMMARY

UK industry in the 21st century is both complicated and highly integrated, and individual businesses do not fit easily into sectors. Many firms offer both goods and services – such as technology companies where hardware doesn't function without software, or any business offering customer support, repairs or financial products like credit alongside their goods. The future of a professional services company will always rely more on how its customers fare than the fortunes of its fellow professional services firms. A textile firm may supply the same carpet product for both aerospace and construction firms.

When negotiators work on the future relationship between UK and EU rules, an understanding of this interconnectedness is essential. There are five areas where assumptions must be challenged and where the reality for businesses is more complex than it seems:

- 1. There are opportunities for rules to change as the UK leaves the EU, but these are limited and are vastly outweighed by the costs that will be incurred if the UK's rules change so much that it reduces smooth access to the EU's market.** In sectors such as shipping and waste, there are rule changes that could be made to boost industry's competitiveness without lowering standards. And in areas like how procurement is undertaken and state aid processes, there are opportunities for improvements that do not require divergence from EU rules. But overall, it is clear that in the vast majority of areas and sectors, deep alignment is sought between UK and EU rules going forwards.
- 2. The UK economy cannot be neatly packaged into sectors that want alignment and sectors that want divergence from EU rules.** The agri-food, hospitality and tourism sectors are good examples of this, where there are some areas where having alignment of rules across the UK and EU is essential, but there is potential for rule change domestically as well. As the UK Government develops its priorities for negotiation on the future UK-EU relationship, it will need to avoid the temptation of a simple sectoral approach and instead examine the UK and EU's ties rule by rule.
- 3. Changes to rules for one sector will not just affect businesses in that sector.** REACH – a regulation nominally for the chemicals industry but which matters to all manufacturing – is a good example of this, with even the higher education sector highlighting convergence here as a priority. However, so are rules for any of the UK's many enabling industries – the sectors which all other businesses rely on; every company needs a bank account, internet connection, water, heating, transport and legal support. And divergence in rules in one part of the production process is not possible without knock on consequences. For example, if the UK diverges from the Clinical Trials Regulation, multiple trials will be needed for the same product in the UK and the EU. That would immediately split medicines into separate products, even if every other relevant regulation is aligned.

- 4. While international rules are increasingly important to businesses, a close regulatory relationship with the EU will continue to be essential for decades to come.** For some sectors, such as the maritime industry and waste and environmental services, and as well as in certain specific rules for other sectors such as broadcasting and creative industries, international forums outside the EU set the rules. However, the EU often leads the world in setting the rules on the global stage, from rules for cosmetics to rules for data flows. And the EU is far and away the most important market for leading UK industries like aerospace, automotive, life sciences, haulage, food and drink, so convergence in regulation to ensure smooth trade with the EU remains a priority.
- 5. Businesses are not looking for a bonfire of regulation. Ensuring regulatory certainty and continuity is the right approach for the UK Government to take for as long as negotiations are ongoing.** Businesses do not have the capacity to manage significant legislative changes at this moment in time and generally perceive EU regulation to be good regulation. Even in sectors like the water and telecommunications industry, where deep convergence with the EU for trade is not a top priority, businesses are seeking stability for now to create an attractive environment for long-term investment. Firms would be very concerned to hear of the Withdrawal Bill being used to achieve anything but the certainty and continuity the Government has committed to.

To support negotiators as they attempt to navigate this complexity, the CBI has devised three principles from the consultation that formed the backbone of this report. These principles should guide negotiators on both sides:

- 1. Where rules are fundamental to the trade or transport of goods, the UK and EU must negotiate ongoing convergence.** The diversity of products on the market is only set to expand, and the complexity of and need for cross-border supply chains only set to increase. Though the UK has a large economy, for many businesses it is not a large enough market to make specific products for, particularly when compared to the rest of the EU. And perhaps most importantly, convergence is essential for frictionless trade in goods in almost every sector. Both sides must therefore devise a way for rules that keep goods trade frictionless in step over time.
- 2. In the negotiation of the new relationship, both sides should look to set a new international precedent in the trade of services and digital products.** The industries of the future will be cross-border, and alignment globally and regionally will be essential. And consumers on both sides are best served by greater choice in everything from content on Netflix to broadband providers. Both sides must therefore build on the progress of the Digital Single Market and negotiate enough continued alignment in those area to keep the European creative and technology eco-system thriving.

3. Alignment will need to come with mechanisms for influence and enforcement that benefit both sides. To achieve regulatory systems that match sufficiently to allow anything like frictionless trade, cooperation will be essential. This is a priority for a number of industries, particularly those where the EU's regulations are technical and detailed – such as in energy and financial services. There is precedent for this, and both sides must be flexible to meet the other's legitimate concerns about trust or sovereignty. And if substantive cross-cutting areas – like employment rules – are included, these mechanisms need to ensure that the law in the UK is always made with a strong UK voice at the table.

There are tough choices ahead for both sides, and compromises to be made. When those choices are made at the Cabinet and negotiating table, on the issue of EU rules perhaps more than any other, evidence rather than ideology must guide the way to secure the best deal for jobs and growth on both sides of the Channel, as well as on both sides of the Irish Sea.

As negotiations move forwards, businesses will continue to provide the facts that policymakers need to make those decisions. But a major acceleration in the partnership between business and the UK Government is needed so negotiators have access to the evidence they need. The process of negotiating a new relationship between the UK and the EU will get technical, and companies will be the ones delivering any changes agreed. The details that might seem minor – like the professional qualifications of auditors, aviation equipment lists or the EUPHEMIA algorithm which underpins the Integrated-Single Electricity Market day ahead markets – will matter. While a number of positive steps have been taken by Government departments, a formal architecture for business input into the process is necessary, and firms are keen to contribute thoughts on its design.

And these decisions must be made quickly. Businesses are making choices on where to make their next investments, how to structure their supply chains, where to hire staff, and where to apply for licences, trademarks and authorisations. With both evidence and urgency, the UK Government and business community can work together to make a success of Brexit in the months ahead.

INTRODUCTION

Why does regulation matter?

When done well, regulation acts as an enabler for business and consumers, ensuring high quality and safe products and goods. When regulation is set on a multinational scale, it works to keep costs down for businesses of all sectors and sizes by ensuring that firms only have to design factories and processes to a single set of rules. In an increasingly global world, this makes trade and supply chains less complex and more efficient. A single set of rules also makes marketplaces fairer by levelling the playing field, while protecting businesses and people from low quality and potentially faulty products, as well as unscrupulous services.

The EU has had a very significant role in setting high quality regulation for business that applies across its Member States, ensuring that every company works to the same standards and making trade across Europe simpler and lower cost.

How does it work at the moment?

There are three main institutions which design EU law: the European Commission, European Parliament, and Council of the European Union, normally called the Council. For most rules, the Commission makes an initial proposal, and undertakes an impact assessment and consultation. The European Parliament and Council then make their own changes to the proposal before coming together to agree on the final text of the legislation. Those rules can take one of two forms: a regulation or a directive. Regulations are legally-binding in full on Member States once they enter into force, while directives must be written into national law in each country, meaning that in practice they allow for flexibility in terms of how they are applied. For example, the General Product Safety Directive sets the minimum standards of most products for sale, and has been transposed in the UK in the General Product Safety Regulations. The UK can increase the obligations it sets as part of this legislation as it chooses.

At present, membership of the EU Single Market means that UK companies only have to comply with one set of rules to trade with 27 other Member States as well as the EEA countries of Iceland, Lichtenstein and Norway. This makes doing business across borders a lot simpler, but it also means a pooling of sovereignty. Instead of one country making decisions on the rules that apply to the business operating within its borders, countries decide collectively how businesses will operate in multiple nations.

Regulatory cooperation across borders is increasingly commonplace. Countries work together to design regulations on industries as diverse as financial services and shipping at an international level. Regional groups often cooperate because making rules at scale means companies can grow to that scale more easily. New Zealand and Australia, for example, have a broad and deep equivalence arrangement to build a single economic market between their islands. But the EU's Single Market is the most sophisticated rule-making entity in the world, and the one which has reduced the most barriers to trade internally.

Regulation is often complemented by voluntary standards, industry-led specifications which can support businesses in meeting the rules for everything from the making of a product to the managing of a process, from work place safety to the production of compost. The purpose of a standard is to provide a high-level baseline for businesses to use and share the same expectations about a product or service, often offering ways through which the obligations in regulations and directives can be achieved as well as increased harmonisation which helps to facilitate trade and enhance consumer confidence. Private-sector companies also reinforce the benefits of standards by using them in specifications for suppliers – home insurance companies will often insist that locks on outside doors meet a specific standard, for example.

How might it work in the future?

There are many different kinds of preferential trading relationships in existence across the globe. The EU Single Market is the deepest way of cooperating on rules, but the EU itself has a host of relationships with countries across the globe that are designed to make trade easier. The two relationships which are held up most often in the context of Brexit are the agreements that the EU has with Canada (CETA) and Norway.

The biggest difference between a CETA-style free trade agreement and Norway’s deal is how the partners in each deal manage their rules. In essence, in CETA there is a Canadian market with Canadian rules for products and an EU market with EU rules for products, separated from one another. While trade deals can lower the walls somewhat around those markets, they never vanish entirely. In contrast, with Norway’s deal both partners are inside one market which has only one set of rules. Being part of one market with one set of rules makes trading across countries in that market easier and extends protections for products across the countries in that market. However, it also limits choice: Norway is only one voice in the process for making joint rules, instead of more or less the only voice.

There are a number of ways in which cooperation on rules can make trading across borders easier. Free Trade Agreements like CETA offers much shallower cooperation than association agreements like Norway’s relationship with the EU, and in a limited number of areas, which leads to greater barriers to trade.



For businesses that trade with the EU, or sell to companies that do so, this difference between having the same rules (convergence) and having different rules (anything that is not convergence) is significant. Because the EU and Canada have different laws, to sell products both in the EU and Canada businesses on both sides must – in the main – comply with two sets of rules, get products cleared by two sets of regulators, pay for two sets of licences and in some instances, even pay for the authorities on the other side to randomly inspect their products before goods can cross the border. To achieve this, they may have to have separate product lines for Canadian goods and European ones. This makes the negotiation of a relationship on rules that goes well beyond CETA crucial for the UK-EU deal.

But there are a large number of political concerns and a small number of economic concerns about negotiating a deal that delivers as much convergence as the Norway-EU relationship. Key is control. Some argue that the UK should be ‘fully independent’ and able to legislate freely, outside of the EU’s Single Market, even if this means barriers to trade. However, this does not reflect the reality that the UK’s trading businesses and those in supply chains of trading businesses will have to obey EU rules even if no deal is agreed.

It is currently uncertain where the complicated balance that is needed on rules will be struck – whether the UK’s relationship with the EU will look more like CETA with limited access to the EU market but a greater amount of control of domestic laws, or more like Norway’s with maximum access to the EU market but a lower amount of control on domestic laws. Businesses believe that, in seeking the best final deal, negotiators should start with the rules we already share. A flexible solution is needed that meets the challenges of both CETA and Norway’s relationships, recognising the unprecedented level of convergence between the UK and the EU, and preserving the many benefits of easy access to the Single Market, while respecting the referendum call for greater control. This report looks at where businesses believe that the most gains are to be had for their sector’s future, where the priority is easy access or using greater control to create change.

Further analysis of the differences between CETA and Norway’s relationship with the EU can be found in the CBI’s 2018 publication [The Future UK-EU Relationship on the CBI’s website](#).

Maintaining the UK’s single market after this negotiation also matters for business

Businesses’ concerns about being able to operate across borders with the EU are mirrored in concerns about being able to operate across the four nations of the UK without barriers after Brexit – though to a lesser extent. After Brexit, there will be 111 regulatory frameworks that are relevant to the devolution settlement for Scotland, 64 that are relevant to Wales, and 141 that are relevant to the devolution settlement in Northern Ireland. These frameworks cover a diverse array of issues – from food labelling to passenger rights to data sharing. If, after Brexit, any one of the devolved governments chose to start creating diverging policies from the rest of the UK, doing business across the UK could get even more complicated.

The policymakers in the devolved administrations will have to work very closely together, as well as with the Government in Westminster, to ensure that no unnecessary barriers to trade are created within the UK internal market.

Northern Ireland is in a particularly complex situation, as the only part of the UK which shares a land border with an EU Member State. At the moment, many businesses on both sides of the border operate on an all-island basis, with all-Ireland management boards, entities and strategies. Individuals cross the border every day for meetings and commutes, as do goods and services. A significant amount of convergence with EU rules will be necessary for Northern Irish companies to continue operating seamlessly with businesses or branches in the Republic of Ireland. But at the same time, it is not in the interest of Northern Irish businesses to fall significantly out of step when it comes to UK regulation and by doing so set up barriers in the Irish sea.

There are some areas of EU rules which affect businesses across the economy

Businesses of all shapes and sizes will be affected by the UK's departure from the EU in different ways, depending on their exposure to the EU market and the rules that affect them. While many EU rules are sectoral, some of the most important rules are cross-cutting and affect all businesses.

One of the regulatory priorities for negotiation that all businesses agree on is on the rules that govern the mobility of employees both ways across the Channel. First and foremost, businesses hope that the deal which replaces free movement ensures an open approach to our key trading partners – one that does not echo the visa system currently used for non-EEA countries. Even then, a reciprocal agreement on intra-company transfers and posting of workers will be needed so companies can continue to easily move their staff between the UK and EU. Cross-Channel travel, not only for short business trips but often for longer secondments is vital to trade – particularly in services – and to foreign direct investment. For example, management consulting, architecture and legal services are regularly provided between the UK and the EU on a “fly in fly out” basis, allowing workers to travel overseas to service European clients on a temporary basis. This short-term provision could last a day, week or even months – enabling firms to expand their operations.

The future of UK employment rules is also an important priority. UK employment laws being made without UK influence would be unacceptable. Businesses are not seeking changes to EU-derived employment legislation after Brexit, but are instead primarily concerned about the changes to regulations that might be made in the future. UK influence has previously changed EU rules that when initially drafted would have been a bad fit for the UK's labour market. The UK must be able to continue to do this, or to diverge over time on this issue.

Securing the continued free flow of data will be significant for every sector of the economy. In an increasingly interconnected world, data underpins the modern economy and is integral to the relationship between business and consumers. It is crucial that an

'adequacy decision' is obtained for the UK's data regime to maintain uninhibited data flows between the UK and Europe. An adequacy decision also unlocks data flows for crucial trading partners such as the US and Canada. More detail on this can be found in the Technology section of this report.

For business to continue to trade goods and services across borders, the continued harmonisation of and involvement in European standards is essential. The increased harmonisation that European standards brings to business, especially for companies that make, import and export goods, enables trade to be simple and for consumers to have confidence in the products they buy. Through the British Standards Institute, the UK is an active member and policy influencer at the European standards bodies CEN & CENELEC, whose influence extends beyond Europe: through its membership of these groups. These organisations ensure one agreed product standard is adopted on any particular issue across their 34 member countries identically, and that any national standards which conflict with this European standard are withdrawn. This process reduces technical barriers to trade, enables international interoperability, and lowers production cost – around 160,000 different national standards have been withdrawn as a result of the creation of around 19,000 European standards. This process does not stop the UK having British standards, indeed there are 39,196 British standards in existence. Instead, it encourages the spread of these standards across borders.

Maintaining the UK's reputation as an open economy that encourages competitive markets and continues to enforce fair competition based on clear legal frameworks really matters. Competitive markets are an essential part of a successful economy: they drive lower prices, higher quality and more innovation. To provide companies with greater certainty on future legal frameworks, the UK should seek to maintain rules that match the EU's antitrust policy as it stands today. There are absolutely ways to improve how competition policy is managed in the UK after Brexit – whatever the deal. For example, the Government could develop a new process for state aid decisions that would allow the streamlining of the way approvals are granted – as the current way of doing things can often be lengthy, mired in commercial uncertainty and delays. However, this opportunity to improve the UK's state aid framework must not come at the expense of maintaining continued preferential access to EU markets, and the UK must take steps to assure European partners that future UK-EU markets will not be distorted by inadmissible subsidies.

And businesses from across different sectors agree that negotiating equivalence on public procurement rules is desirable to ensure mutual access to public contracts across the EU. Maintaining equivalence on public procurement rules is essential if UK firms want to continue to compete on a level-playing field for public contracts across the EU. With the European Commission estimating that (excluding utilities) public expenditure on goods, publicly-procured work and services in the EU amounted to £1.5 trillion in 2015, this market is significant to UK businesses. UK negotiators should seek to secure continued access to these opportunities.¹ Ensuring mutual access to public procurement markets is also key to driving competition and therefore delivering value for money for taxpayers in both the UK and the EU. For example, Siemens, a German company, won a £1.6 billion public contract for Thameslink trains over Bombardier, whose European operations are based in the UK. It

is therefore in the interests of both the UK and the EU to negotiate continued openness in public procurement markets.

Finally, the ability to secure frictionless trade with the EU – and with it, border-free trade on and between the island of Ireland – will depend on the UK’s customs relationship as well as on the UK’s relationship with the rules of the Single Market. Through consultation with its members, the CBI has concluded that a customs union between the UK and the EU is the best way of achieving this. By a long way, the EU is the most important market for British industry and will continue to be well into the future regardless of the deal that is struck with the EU. A hard-headed look at the economic evidence and the models both in existence and proposed by the UK Government shows that some form of customs union is necessary and must be on the negotiating table.

But there are also a huge number of EU rules that are targeted at specific sectors

The CBI has consulted with hundreds of businesses of all sizes, as well as its 150 sector specific trade associations covering industries from advertising to timber, to bring together the views of 23 parts of the economy on the future relationship between UK and EU rules.

To provide policy makers with companies’ detailed views, the CBI has worked to break down sectoral views on:

- **Where convergence between UK and EU rules is crucial, now and in the future, to maintain frictionless trade.** Convergence is when rules in two different places are the same, allowing unrestricted access across borders, where products and services that are clear for sale in one country are automatically clear for sale in another. This is the deepest level of regulatory alignment possible. However, it is not something that the EU has historically negotiated with third countries through free trade agreements to the level that UK businesses are looking for.
- **Where mutual recognition of rules between UK and EU rules is important for preferential mutual market access.** Mutual recognition is when rules might be different in different places, but both sides of the relationship recognises each other’s rules and agree they achieve the same outcomes and are therefore sufficient to allow preferential market access. A significant level of mutual recognition already exists within the EU. Mutual recognition within the EU Single Market is achieved because of deep trust, shared supervision and robust enforcement. All three will be necessary to achieve mutual recognition in the areas required by the UK business community.
- **Where equivalence between UK and EU rules is important for preferential mutual market access.** Equivalence can be interpreted differently across sectors, because in some sectors there is precedent for third-country equivalence and in others there is not. In the context of this report, equivalence is a narrower form of mutual recognition, where one side recognises the regulations of a third country achieve the same regulatory objectives and outcomes in a specific area, even if they do not follow the same rules to the letter. For example, under an equivalence agreement, a UK

product would not need to go through extra checks and certification for compliance in the EU, even if the UK does not follow the exact same specifications as EU law.

- **Where businesses are looking to unilaterally align with EU rules to reduce unhelpful contradictions and duplications in requirements.** This is a limited form of regulatory alignment where one side acts unilaterally to make its rules match the other's. It has benefits because UK producers and EU importers would not need to operate separate processes to trade. By aligning its rules with the EU, the UK can agree to let products into its market more easily. However, the EU would be under no obligation to reciprocate. For some rules, that is acceptable. But if the EU did not accept the rules and UK enforcement as equivalent in many but not all sectors, this would result in barriers to trade for UK products destined for the EU.
- **Where businesses are looking for stability, because EU regulation has been well written and implemented.** At this time of uncertainty, businesses put a premium on continuity when it comes to regulation. There are areas of EU rules that have little to do with trade because they regulate domestic activity that does not cross borders. These are not negotiation priorities for business. But in some of these areas, businesses are looking for the rules to stay broadly as they are, as firms have already adapted to the changes those rules require – which is sometimes a costly exercise – and do not want to spend money on adapting again unless there is a real proven benefit of doing so.
- **Where companies in the UK are seeking divergence from EU rules.** There are areas where businesses would like to see changes in rules as the UK leaves the EU. For the majority of rules, these changes are minor overall and the benefits of changes are outweighed by the costs of losing access to the EU market.

SECTORS IN SUMMARY

The CBI has had thousands of conversations with businesses of all sizes on the future of UK-EU rules. The table below breaks down the views of businesses across 23 industries on the sector-specific rules that matter, and places them into broad categories based on the balance of businesses' priorities across each sector.

This table only addresses views on sector-specific Single Market rules, and does not cover other cross-cutting Brexit-related issues that will affect businesses that may be high priorities – such as access to people or the customs union. For the business community's views on these issues, please see above.

1. Sectors where convergence or alignment is preferred for the majority of regulation that matters

Sector	Brexit views
Aerospace	<ul style="list-style-type: none"> • Convergence: Convergence with EU rules on airworthiness, which primarily sit under the safety regulatory framework of the European Safety Agency (EASA), is essential for aerospace manufacturers. Convergence on other important rules for manufacturing – such as REACH regulation on chemicals – also matters to the aerospace industry. • Additionally, continuing to play a role in EASA's regulatory-setting processes is the best option for delivering passenger safety across Europe and the world.
Automotive	<ul style="list-style-type: none"> • Convergence: Businesses are seeking convergence on a large number of rules on automotive. This should maintain the right of the UK's Vehicle Certification Agency to issue European approvals, ensuring manufacturers selling a type of vehicle in both markets will avoid having to undertake two tests which would lead to increased costs, delays and inefficiencies. And the best way to meet environmental aims is to work across borders, so the automotive sector is also looking for convergence with EU rules on CO₂ emissions and air pollutants.
Aviation	<ul style="list-style-type: none"> • Convergence: Convergence on rules in aviation will be necessary to maintain connectivity between the EU and the UK, ensuring the UK remains a global leader in aviation while keeping costs low for travellers. Convergence on EU wet leasing rules – which permit aircraft and their crews to be transferred between carriers – is also critical to maintain flexibility in how aeroplanes are used. • Additionally, UK membership of EASA is imperative – the UK should continue to play a key participatory and leadership role in the agency. • Unlike other sectors, aviation falls outside the remit of WTO rules, and provisions are needed for the UK's aviation links with other countries beyond the EU.

Broadcasting	<ul style="list-style-type: none"> • Convergence: Negotiating convergence with the EU's Audio Visual Media Services Directive will be necessary to ensure UK-licensed TV channels can continue broadcasting to EU consumers. The UK will most likely need to both continue to apply EU rules on broadcasting and secure the trust of EU Governments that will want to know that their citizens are not being exposed to content that breaks the rules, and to have recourse if the rules are broken. • Additionally, as well as affecting the ability to broadcast, divergence from international rules on broadcasting could potentially impact the competitiveness of UK content creators and should be avoided.
Chemicals	<ul style="list-style-type: none"> • Convergence: Continued convergence with REACH is essential for chemicals businesses, their supply chains and customers. Upheaval in the chemicals supply chain and regulatory framework would impact everything from automotive to aerospace production, driving up costs that would eventually be passed on to consumers. Convergence with other rules such as the Classification, Labelling and Packaging Regulation and Biocidal Products Regulation is also essential.
Construction	<ul style="list-style-type: none"> • Convergence: Regulatory convergence on rules for construction products and materials is vital to protect the competitiveness of manufacturers and avoid major barriers to trade. • Equivalence: Maintaining equivalence in procurement rules between the UK and EU is important, but there are still opportunities to improve how the UK does procurement for construction without diverging from EU rules.
Consumer Goods	<ul style="list-style-type: none"> • Convergence: Businesses are seeking convergence with New Approach Directives that set out pan-European standards and allow CE marking for particular kinds of consumer goods, as well as convergence on cosmetics regulation to ensure small cosmetics companies can continue to access the EU market. • Mutual recognition: Mutual recognition of notified bodies which undertake conformity assessments is essential to allow the smooth flow of consumer goods between the UK and the EU. • Unilateral alignment: A unilateral commitment to alignment of UK rules with EU rules on product safety would reassure consumers of continued commitment to quality in the UK. • Additionally, continued involvement in pan-European product safety processes would give authorities the best information to protect consumers on both sides.
Creative Industries	<ul style="list-style-type: none"> • Convergence: Negotiating convergence with Community Design Regulations is key to supporting the commercial success of the UK's fashion industry. And convergence on the rules around the cross-border portability of online content services will provide benefits for both UK and EU consumers travelling across the EU. • Stability: A stable and robust copyright regime should be maintained to protect investment and growth in the creative industries sector.

Defence	<ul style="list-style-type: none"> • Convergence: Maintaining convergence with EU rules to ensure easy trade in goods and services is vital given the advanced manufacturing and specialised cross-border supply chains that characterise the industry. Businesses seek convergence with European aviation safety regulations to maintain the UK defence industry's air force capabilities, and convergence on REACH chemicals regulations is important in key production processes where the handling of dangerous chemicals is a standard function. • Equivalence: There are opportunities to improve how UK businesses compete for European defence contracts without diverging from EU rules, and equivalence must be retained to ensure market access.
Energy	<ul style="list-style-type: none"> • Convergence: Barrier-free access and appropriate regulatory convergence with the Internal Energy Market will be important to ensure that the UK and the EU can continue to trade energy effectively. Bespoke regulatory cooperation to preserve the Integrated-Single Electricity Market is also critical to protect the interests of business and consumers in the Republic of Ireland, Northern Ireland and Great Britain. • The UK's ongoing influence in key EU agencies and bodies would allow both sides to manage regulatory alignment, as well as appropriate flexibilities around future rules. • Additionally, the benefits of the UK's membership of Euratom should be maintained to ensure nuclear can continue providing clean energy to the UK.
Financial Services	<ul style="list-style-type: none"> • Mutual Recognition: An agreement covering a range of financial services (from banking, insurance, asset management to market infrastructure and related services) based on mutual recognition of EU and UK rules is needed for businesses and consumers on both sides. Mutual recognition of UK and EU payments regulation will also be necessary to ensure consumers continue to benefit from fast and efficient cross-border payments. • Additionally, if the UK is to continue a form of regulatory alignment with the EU, it will be necessary to negotiate a way of cooperating on regulations and supervision over time. A strong role for the UK at the international level is also important to retain the UK's influence on both global and EU rules.
Haulage	<ul style="list-style-type: none"> • Equivalence: Businesses are looking for equivalence on UK and EU rules in haulage to maintain the benefits of the Community Licence, critical to keeping costs as low as possible for UK hauliers. Negotiating continued equivalence of UK and EU driving licencing rules will also help to keep the sector competitive.
Higher Education	<ul style="list-style-type: none"> • Convergence: EU regulation tends to intersect with the higher education sector, rather than impact it directly. But convergence on the rules for other sectors is important as, if there is divergence on chemicals and data regulation for example, UK universities are less likely to be included in collaborative research projects on these topics under the Framework Programmes. Falling out of the Framework Programmes would also diminish UK influence over a range of EU rules. • Mutual Recognition: Negotiating the mutual recognition of qualifications will help maintain the UK's standing as a popular destination to study.

Life Sciences	<ul style="list-style-type: none"> • Convergence: Continued convergence with every stage of the EU rules that govern the production and sale of medicine, and key regulation on medical devices that are in the process of being implemented, is critical to maintain patient safety. Convergence with EU rules that maintain co-operation in the authorisation of medicines and the updated Clinical Trial Regulations, are vitally important to make access to medicine quicker, cheaper and safer.
Professional and business services	<ul style="list-style-type: none"> • Mutual Recognition: The continued mutual recognition of UK and EU professional bodies, standards and professional qualifications, will be critical in enabling UK-qualified professionals to provide services to EU corporates across borders. Mutual recognition and continued alignment of regulatory frameworks and standards is also a priority for the industry.
Rail	<ul style="list-style-type: none"> • Convergence: Continued convergence with EU technical specifications for interoperability for the rail industry has real benefits in most areas. • Equivalence: Mutual market access for UK and EU rail companies to provide rail services will require continued equivalence with many EU rules on railways, and negotiating continued equivalence between UK and EU rules on the training of train drivers would allow the mutual recognition of qualifications and access to a wider pool of talent. • Additionally, securing continued involvement for the UK in the European Union Agency for Railways would allow UK rail to maintain influence over the rules it will continue having to apply after Brexit.
Technology	<ul style="list-style-type: none"> • Convergence: Convergence with the EU's Digital Single Market will be required to facilitate UK growth after Brexit, particularly in e-commerce. • Equivalence: An adequacy agreement and continued alignment with the rules that support it is critical to securing cross-border data flows which underpin modern economic activity. • Additionally, it is critical the UK continued to shape forthcoming EU rules for technology companies to reflect the needs of UK businesses and consumers.
Telecommunications	<ul style="list-style-type: none"> • Convergence: Businesses require continued convergence on rules on roaming to avoid costs rising for consumers. • Stability: EU regulation of the telecoms sector has been largely positive, and stability is the priority in order to continue achieving the good objectives of EU rules and preserve investment certainty.

2. Sectors where alignment is preferred but there are some limited opportunities for divergence

Sector	Brexit views
Agri-food and drink	<ul style="list-style-type: none"> • Equivalence: Continued equivalence between the UK and EU in many areas of agri-food and drink regulation would avoid major barriers to trade. UK equivalence with rules on food of animal origin in particular will be necessary to ensure UK products are able to enter the EU for sale. • Unilateral alignment: Divergence on rules for food labelling would negatively impact the competitiveness of food manufacturers. • Divergence: Providing changes do not impinge on consumer safety, there could be opportunities to improve the regulation of farming in the UK. • Additionally, involvement with the European Food Safety Authority would help protect consumers in the UK and EU.
Hospitality and tourism	<ul style="list-style-type: none"> • Convergence: It is vitally important that agreements facilitating travel between the UK and the EU – including liberal visa regimes, aviation rules and data protection – are largely maintained. Convergence on some aspects of rules covering consumer protection and safety will be required to keep the UK an attractive destination for overseas visitors. Convergence on EU rules that allow the movement of animals for breeding are also critical for UK zoos. • Mutual Recognition: Negotiating mutual recognition on the exchange of cultural objects between the EU and UK would benefit museums. • Divergence: In a limited number of specific areas – such as the revision of the Package Travel Regulations – divergence from EU rules could provide opportunities for the UK’s domestic tourism industry.

3. Sectors where alignment in some areas is valued but is not a top priority for negotiations

Sector	Brexit views
Maritime and shipping	<ul style="list-style-type: none"> • Convergence: Negotiating convergence with EU regulations providing cabotage would allow UK-flag ships to provide maritime services including domestic ferry services and short sea freight within any EU member state without discrimination. • Equivalence/Mutual Recognition: Negotiating ongoing mutual recognition of seafarers' certificates through the continued equivalence of rules is needed to protect the mobility of employees in the shipping sector. • Divergence: Divergence from some EU regulations that do not properly reflect how UK ports operate could benefit the industry. Brexit also creates other opportunities for the UK to boost the reputation and attractiveness of its ship register, but divergence from EU rules will come at a cost if the UK can no longer benefit from cabotage. • Additionally, the UK should continue to adhere to international regulations to preserve a liberalised shipping sector with minimal technical barriers to trade.
Waste and Environmental Services	<ul style="list-style-type: none"> • Alignment: Continued commitment to international agreements such as the Basel Convention and the OECD decision on waste movements will be necessary to ensure waste can continue to be traded with the EU. Businesses are also concerned that divergence from the Waste Framework Directive could have a sluggish effect on continued trade and increase prices to export waste. • Divergence: Providing changes to the rules do not impact the UK's ability to trade with the EU and diminishing the UK's high environmental protections, Brexit provides opportunities to look again at how the waste and environmental services industry is regulated – including recycling targets.
Water	<ul style="list-style-type: none"> • Stability: There are some benefits to the UK and EU's water regulation being in step, but alignment is by no means vital. Overall, EU regulation on the water industry is seen as good, thoughtful regulation that has driven up standards for consumers. Stability is key and regulatory disruption makes it harder to plan across decades. Any changes must therefore be carefully considered as the water industry operates on a very long-term timetable.

AEROSPACE

The UK is a world leader in the aerospace industry, providing the design, manufacture and in-service support of both civil and defence aircraft and helicopters. From technology and exports, to apprenticeships and R&D investment, the sector contributes significantly to the UK's economy – generating £32 billion a year, including £28 billion in exports. It is also a very successful industry, seeing 23% growth between 2010 and 2017.²

In this sector, a small number of large global companies design and manufacture the final aircraft and account for the majority of employment and turnover. However, there are a very high number of micro to medium sized companies which supply raw materials and components up the chain. As a result, jobs created by the aerospace industry are in clusters, particularly in the South West and East Midlands of England and in Scotland and Wales. In total, the aerospace industry directly employs 120,000 people,³ mainly in high-skilled roles like high-value engineering.

But the aerospace supply chain is not just local: a Boeing 737 has a total of 600,000 parts⁴ and an Airbus A380 has 200 Tier 1 suppliers.⁵ Top tier aerospace firms operate across EU countries, and it is routine for components and materials to cross borders on multiple occasions before they are integrated into the final aircraft. Similarly, for maintenance and repair operations, parts are flown over for fixing. This has to happen at speed to ensure planes can keep flying, which is why supply chains and operations tend to span across regions like Europe rather than across continents. UK aviation companies build and repair planes across Europe.

To continue to be a world player in the aerospace industry and prevent disruption to trade, convergence with EU regulation in this sector is vital

To protect consumers and some of the most finely tuned supply chains in the world, UK negotiators should seek to agree full convergence between UK and EU rules for aerospace. These rules are primarily under the safety regulatory framework of the European Aviation Safety Agency (EASA). The UK should also continue to support the aerospace safety rule-making process through participation at the EASA Management Board, Committee and technical working groups. To achieve this, a financial contribution to the EASA budget will be required. Convergence with other important rules for manufacturing will also matter – such as REACH regulations on chemicals which matter to the aerospace industry throughout the production process, in everything from the alloys used in base materials to the thermal paints that coat aeroplane parts.

Divergence from EU aerospace rules would not only significantly increase costs for UK business at every part of the supply chain and slow processes down with increased checks, but also reduce the EU's effectiveness in developing quality regulation. For the UK, this scenario would lead to a regulatory no-man's land, with no involvement in rules in either of the two key markets for aerospace – EU and US – and would significantly increase compliance costs, particularly if the UK pursued a regime differing from both the EU and

the US. It would require the UK to dramatically increase its highly skilled resource at the Civil Aviation Authority to compensate for additional requirements it has never had, at a cost to both industry and the tax payer. The industry estimates that the change required could take as long as 5-10 years.

Convergence with the EU rules on airworthiness is essential for UK aerospace manufacturers

Given the complexity of the machines aerospace manufacturers produce and the importance of keeping the people who fly within them safe, the aerospace industry is highly regulated. There are EU-wide rules on airworthiness and environmental standards, which all aircraft and their parts must comply with to be certified to fly. EASA sets out the specifications that aircraft must meet before they can be certified to fly under those regulations. It has produced very detailed specifications on the standards for auxiliary power units, the software that is used within aeroplane computers, engines, propellers and fuel vents for example – as well as the rules for different kinds of machines like hot air balloons, helicopters and microlights.

Achieving an airworthiness certificate is a long and complex process. In the case of large aircraft, the period to complete the compliance demonstration is set at five years, and can be extended. The manufacturer has to present its project to EASA to agree which rules it will have to comply with, it has to establish a complex certification programme to show how it will demonstrate that compliance, and then undertake a range of tests. The tests take place on the ground and in the air, and even the simulators that test the machines have to be built to EASA's specifications. Once these rigorous tests are complete, the certificate of airworthiness is issued and the aircraft or engine is allowed to be used in any EU Member State.

Convergence with these airworthiness rules is essential to ensure that aerospace manufacturers in the UK can continue to be competitive in the European market. Undertaking these safety tests multiple times would be costly and would affect the time it takes to bring products to market as a result of the additional work required to obtain approvals, putting the UK's aerospace industry on the backfoot.

And convergence with these rules is also crucial for UK aerospace's maintenance and repair operations. The businesses that fix and maintain aircraft are highly regulated, as are the individuals that work within them. These specialised companies work at pace, to short deadlines, to repair parts that have been damaged and will need to be able to continue to operate under EU rules rather than separate UK and EU rules in order to deliver their services to companies across Europe.

“When it comes to Brexit effects, the most vulnerable part of our company is our aircraft part returns and repairs business. We handle literally tens of thousands of components each year. When something breaks, the parts are sent to a repair vendor somewhere across Europe, the site where the expertise is. Sometimes it’s so urgent to get a working component back that an engineer will fly to the airport with the parts in their suitcase to make sure we hit the deadline – which can be as short as 4 hours. It’s a truly pan-European operation. But the UK will only stay a part of that if we remain part of Europe’s rules because we have to keep fixing things to Europe’s standards.”

Aerospace company with sites across the UK and Europe

Continuing to play a role in EASA’s regulatory-setting processes is the best option for delivering passenger safety across Europe and the world

EASA is one of the two pre-eminent aviation safety regulatory bodies globally; the other is the Federal Aviation Administration (FAA) of the US. This strength means that EASA can drive up standards across the world. Through bilateral aviation safety agreements (BASAs), EASA has been working to harmonise rules on aviation safety with countries such as the US, Canada and Brazil. This supports not only passenger safety across the world, but the competitiveness of the UK aerospace sector as the effort required for UK aerospace manufacturers to obtain approvals in other countries is reduced while standards across the world are driven up.

EASA’s significance in the global environment for aerospace and aviation rule-making is key to making it an attractive partner to collaborate with on rules. Continued convergence with EU aerospace rules will therefore not only support the UK industry’s strength in Europe but in significant global markets as well.

“We work with both EASA and the FAA. It’s clear to us that EASA is much more innovative than the American authority. It’s highly important to remain involved with the organisation leading the world in this space.”

American aerospace manufacturer with significant operations in the UK

Failure to secure convergence between UK and EU rules in aerospace would cause significant disruption in the European supply chain

The UK is a substantial player not just in the European aerospace industry, but in the global one. It is a vital part of the supply chain and if convergence with EU rules is not agreed, it will have significant commercial consequences for the industry across the EU.

The work and data produced by the UK’s Civil Aviation Authority as part of EASA has been valuable and would be missed. The UK provides around 25% of all safety data gathered by EASA annually (around 15,000 occurrences), and UK nationals make up around 8% of EASA’s total regulatory workforce. Without continued mutual access of the CAA to EASA, and EASA to the CAA, both parties would operate less effectively. This mutual access must include the data held by each party. Given the importance of consumer safety which this work and data contributes to, convergence is essential for both sides.

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

AGRI-FOOD AND DRINK

Covering everything from individual dairy farmers to international frozen food manufacturers, agri-food and drink is one of the largest industries in the UK. 3.9 million people were employed in agri-food in 2017.⁶

Farmers and food and drink manufacturers are located throughout the UK, but there are clusters of localised sectors in specific geographies. For example, whisky is one of Scotland's leading industries, employing 10,000 people;⁷ East Anglia produces a significant percentage of the UK's wheat – enough for 5.7 billion loaves of bread,⁸ and lamb is predominately produced in the South West of England and in Wales.

But the UK does not produce enough food to sustain itself alone. Around 40% of all food consumed by the country and much of the protein underpinning the dairy and livestock sectors is imported,⁹ making trade for the sector a very important issue. The EU alone accounts for 29% of the food on the shelves in the UK. As such, trade with the EU is significant for the food and drink sector.¹⁰ Trade between the UK and Republic of Ireland is also substantial, as 41% of the Republic's food exports go to the UK, in trade worth €4.4 billion.¹¹

There are opportunities for improving regulation in agri-food and drink, but regulatory equivalence is vital to keep trade as frictionless as possible

Agri-food and drink businesses face a range of complex regulatory challenges as the UK leaves the EU, and failure to deliver solutions will have critical implications for food security, prices and choice. Maintaining consumer confidence in the safety and authenticity of UK food and drink is paramount for industry. Equivalence between the UK and EU in many areas of agri-food and drink regulation would go a long way towards ensuring that trade can be conducted as smoothly as it is today, which is essential for food security on both sides of the Channel. Nonetheless, Brexit is an opportunity to look again to see how regulations might be improved upon for food and drink companies and UK farmers. Where there are ways to improve regulations while still achieving the same minimum outcomes and ability to trade, such as around nitrates, these should be seized.

Negotiators must also consider how rules on the agri-food and drink sector will be made and enforced across the UK in future. Most food and environmental regulation, when it is not managed at an EU level, is devolved to Holyrood, Cardiff and Belfast. There is a risk of further regulatory fragmentation between the devolved administrations once the UK leaves the EU if the integrity of the UK's internal market is not protected effectively. Different rules for food and drink across the four nations could make producing the UK's breakfast, lunch and dinner more complicated and expensive.

Negotiators will have to work hard to achieve sufficient equivalence in rules to avoid major barriers to trade

The production, transportation and even the packaging of agri-food and drink goods is highly regulated – sometimes under Single Market rules and sometimes under the Common Agricultural Policy – but food can nevertheless flow relatively freely between Member States because the rules are the same in each country. But agri-food and drink products from outside the EU's regulatory area can face major barriers to trade.

Significant levels of alignment with food and drink rules will be needed to avoid food having to pass through Border Inspection Posts. The UK currently only has a small number of these, at major ports and airports, and only food from non-EU countries is checked to ensure it meets the stringent hygiene standards EU rules set out. The tests are varied: Border Inspection Posts examine the levels of heavy metals in white crab meat and the levels of salmonella in pork, undertake veterinary checks on feathers and trophy animals, ensure pet food is correctly labelled, compare certificates for frozen fish against the real products, and much more. If UK products had to undergo this testing, there would be significant disruption to the flow of agri-food and drink between the UK and the EU. A deep level of alignment on EU rules will be necessary to prevent this.

"If UK and EU rules don't match, and if the regulators aren't trusted to be equivalent, there will be veterinary checks at borders. Those checks can go on for days and if you're selling a product like fresh chicken which has, at best, a 14 day shelf-life every hour matters. It's entirely possible we'll have to sell our chickens into Europe frozen instead of fresh, which decreases their value significantly."

UK-based poultry farmer

UK equivalence with rules on food of animal origin will be necessary to ensure UK products are able to enter the EU for sale

Fish, meat, honey, dairy and eggs are particularly highly regulated under a specific EU regulation on products of animal origin. For example, for egg processing factories making custards or hard boiled eggs for sale, the rules state how facilities should be laid out to ensure that washing dirty eggs and breaking them open takes place in different locations, that the products must be delivered to customers within 21 days of the eggs being laid, how the liquids from inside eggs should be stored at 4°C or below if they're not being used immediately, how there must not be more than 100mg/kg of egg shell or membranes left inside a product and much more.

To continue exporting food made from animal products to the EU, UK businesses will need to continue meeting these detailed rules so divergence from them would not be in the interests of UK companies. That would leave the many thousands of UK firms that sell, transport or store fish, meat, honey, dairy or eggs with two sets of rules to abide by. In practice, this would often mean those businesses obeying whichever rule sets the highest standard. For example, hypothetically, if the UK rules on vets in slaughter houses stated those vets had to have 150 hours of supervised work experience when the EU's rules stated vets needed 200 hours of work experience, businesses selling to the EU would ensure their vets had 200 hours. But if, for example, the UK significantly changed the wording on the health certificate required at slaughter houses, the slaughter house would have to provide two health certificates or have ways of separating out meat for the UK and meat for the EU. That would create complications and the potential for additional cost, driving up food prices.

Additionally, under EU rules, any food processing plant, food transport firm or storage facility handling products made from animals must be registered and listed with the UK's regulator the Food Safety Agency (FSA). As the UK is currently an EU Member State, companies that are approved by the FSA and allowed to sell products to UK consumers are also automatically able to sell their products to EU consumers as well. Continued mutual recognition of the FSA as able to enforce these EU rules in the UK and of the UK's approved sites will be necessary to ensure these businesses can trade products of animal-origin with the EU at all. Achieving that mutual recognition will also require the UK's rules on monitoring residue and controlling salmonella to remain equivalent to the EU's as well.

Divergence on rules for food labelling would impact the competitiveness of food manufacturers

Since 2011 and the introduction of the Food Information for Consumers Regulation, food manufacturers have been required to label their products with clear and comprehensive information. It introduced rules to make providing nutritional information mandatory on processed foods, rules to make providing information on which country the food has come from mandatory for many meats, and rules to ensure allergens like peanuts and milk are highlighted in lists of ingredients.

A single set of labelling regulations means food and drink manufacturers can produce food in the same packaging to sell anywhere in the EU. The UK will need to adopt at least unilateral alignment with these rules in order to prevent companies exporting from both sides of the Channel facing increased costs in producing two sets of packaging with different information on them. This change would impact smaller businesses most significantly, as large companies often already have the ability to change their labels into different languages for different geographies.

"We trade all around the world, but probably the easiest business we do is within the EU. We put all the same labels on the cheese that we sell throughout all the EU countries. And then when we trade into other countries that might speak the same language as us for example, like Australia or the US, the labelling is quite different. If you look at the US for example everything has to be labelled separately in pounds and ounces. We go into the Australasian regions and quite a lot of the weight legislation is different. So just little subtle changes that can add quite a lot of complication and cost."

Medium-sized English cheese company

"A business as big as ours can cope with two sets of regulation. We dread the cost of it, and that will either be passed on to consumers or hit our ability to bring new products to market. But we can cope. Smaller companies in our industry on the other hand will really and genuinely struggle."

International alcoholic drinks company

Continued involvement with the European Food Safety Authority would help protect consumers on both sides of the Channel

The European Food Safety Authority (EFSA) is the EU's key agency for food safety, responsible for the science of food safety, undertaking risk assessments, advising on best practice implementation of food safety rules, and communicating scientific findings to the public. EFSA does not directly design policy and regulation on food safety, but it produces scientific opinions and advice for EU institutions and businesses, and this then forms the basis for European policies and legislation. Its remit covers food and feed safety, nutrition, animal health and welfare as well as environmental, plant protection and health matters.

The pooled expertise that EFSA provides is unparalleled and there is currently no agency in the UK that could take the responsibility on if the UK were to diverge significantly from the EU overnight. Nevertheless, the UK Food Standards Agency in conjunction with the Health and Safety Executive with its constituent bodies such as the Chemicals Regulatory Directorate are already gearing up for the challenge. In the meantime, negotiators must ensure that the UK continues to have access to the risk assessment expertise of EFSA in the short term, until an equivalent robust and independent UK scientific risk assessment body becomes fully functioning, to ensure that future regulation continues to be based on sound science and evidence. It is important the UK continues to have access to intelligence gathering tools including the Rapid Alert System for Food and Feed, the European Food Fraud Network and EFSA's Emerging Risks Exchange Network.

CASE STUDY

APPLYING TO SELL A REGULATED FOOD PRODUCT

EU rules mean that many new food additives such as flavourings have to be assessed for safety. EFSA is the body that undertakes this risk assessment, in a thorough process that pools expertise across Member States and industry in order to protect consumers.

- **Step 1:** Companies can get advice before submitting an application by accessing guidance documents, information sessions, industry roundtables and webinars organized by EFSA
- **Step 2:** The company submits an application
- **Step 3:** EFSA holds a hearing to review the application, led by experts from national food authorities (including the UK's FSA) which sit on the appropriate working groups
- **Step 4:** EFSA submits a recommendation to the EU Commission which makes the final decision

UK food exporters will still have to go through this process after Brexit. There are two decisions for negotiators to take. Firstly, whether the UK is represented in the room when the recommendation is being put together. Secondly, whether UK businesses have to go through this complex process twice to sell in both the UK and the EU. The negotiation of mutual recognition of UK and EU processes post-Brexit for the assessment of these food additives will be necessary in order to prevent this latter complication for innovative products.

Providing changes don't put trade or consumer safety at risk, there could be opportunities to better regulate farming in the UK

There are areas of regulation for the agricultural and food and drink industries where businesses believe there may be opportunities to create better rules than the existing ones. The Nitrates Directive is an example of this. It aims to protect water quality by preventing nitrates from agricultural processes polluting water sources. This is the right aim to have,

and farmers believe there should absolutely be regulation in place to achieve this objective. However, the way the Directive has been written is inflexible, and doesn't take account of the reality of farm practices and actual conditions because it dictates 'closed periods' of time when the application of fertiliser and some manures are banned. These closed periods do not take account of external factors such as weather conditions outside of the set period which might impact when it is more or less appropriate to apply fertilisers. This may be something that the UK could look to improve as it leaves the EU.

While the Nitrates Directive is just an individual example, there are others. Farming businesses in the UK have no interest in lowering environmental standards, as these are vital in protecting human and animal health as well as the land. UK food has a reputation for being high quality, and farmers do not want to see that reputation diminished. However, opportunities to improve the regulatory framework to rely more on evidence, be motivated by outcomes and informed by the reality in the fields should be taken up as the UK leaves the EU.

There is a shared interest in maximizing both choice and safety for consumers on both sides of the Channel

The very high levels of trade between the EU and UK for the food sector means that any consequences of changes made in the regulatory framework for business would be felt on both sides of the Channel. With nearly 30% of all food consumed in the UK coming from the EU, any changes made to UK labelling regulations on nutrition for example would increase costs for both UK and EU businesses by requiring them to provide two different sets of information to sell into each market. Continued regulatory cooperation to ensure consumer confidence in the high standards of food safety regulations will ensure that trading can be conducted much as it is today and that the high levels of protection enjoyed by both food operators and consumers will not be affected.

AUTOMOTIVE

The automotive sector is one of the UK's greatest economic success stories of recent times. The sector accounts for a very significant part of the UK economy, generating £21.5 billion of GVA in 2016,¹² and with an annual turnover of £77.5 billion in 2016.

It is a diverse sector that ranges from cars to commercial vehicles to motorsports. The international car manufacturers that are household names are only the tip of the iceberg in the UK industry; the vast majority of automotive business are small to medium sized companies that sit in the middle of the supply chain and supply raw materials and build parts from cup holders to batteries. 2,500 suppliers support six standard car manufacturers, nine engine manufacturers and 24 other whole vehicle manufacturers. With hubs located in the

West Midlands, North West, North East and West of England, 814,000 people including 78,480 apprentices work in the automotive industry.¹³

Exporting is a major part of the automotive sector's function, as eight out of ten cars the industry makes are sold abroad – 1.35 million in 2016. However, the industry in the UK doesn't just export whole vehicles: component suppliers in the UK may supply both locally and internationally, and the UK makes many more engines than it does whole cars. In total, the automotive sector is responsible for 13% of the UK's exports,¹⁴ and the EU is the predominant market for trade. In 2017, the UK imported 67% of the cars it registered from the EU and 54% of cars exported from the UK went to the EU.

Full convergence on multiple regulations is key for the highly integrated, multinational automotive sector

The strength of the UK automotive industry has been built on a pan-European supply chain, so any changes to customs procedures that disrupt the flow of goods between the UK and EU would be damaging. As the production of cars involves the use of metals, fabrics, chemicals, technologies, plastics and more, there are a range of EU rules that matter to keep trade in these parts flowing – including the important REACH regulation. The UK automotive sector is looking for convergence with these rules. Divergence would increase costs and challenges for UK automotive, and would weaken the sector's ability to export and to operate competitively.

Additionally, continuing UK influence over EU rules on automotive is vital. The UK automotive sector is unique in its diversity. The sector is made up of volume manufacturers, premium manufacturers and a number of small-volume manufacturers. In addition, the UK is a leading location for commercial vehicle and engine manufacturing. No other EU Member State can claim to have such a diverse industry, and it is critical that the UK retains influence over the rules that will apply to the sector and is able to represent the diverse interests of UK automotive.

Continued convergence on a large number of rules on automotive will be necessary to secure the right to issue harmonised type approvals in the UK and EU

The ongoing validity of European type approvals issued by the Vehicle Certification Agency (VCA) is of key concern for the automotive sector. Before a car or part is put on the market to be sold, all motor vehicles, trailers and their systems, components and separate technical units must go through rigorous testing to ensure they meet the necessary technical, safety and environmental standards. A range of EU rules must be adhered to, such as the Pedestrian Protection Regulation which requires all cars to have energy absorbing bonnets and front bumpers, and the General Safety Regulation which – among many other things – requires all new buses and trucks to have advanced emergency braking systems.

In the UK, the VCA is the body which carries out these tests. The process it supervises is a complex one – practically as well as from a regulatory perspective. Whole vehicles require hundreds of tests to take place before being placed on the market. For a large volume passenger car, the physical type approval process can take between 6 to 18 months and cost between £350,000 and £500,000 per vehicle.¹⁵ If the UK is not directly a part of the EU type

approval framework in the future, manufacturers that wish to sell a type of vehicle in both markets would have to undertake this process twice. This would increase costs, create delays and inefficiencies, negatively impact manufacturers' future plans and undermine technology implementation timetables.

It should therefore be a key objective in the Brexit negotiations to maintain the VCA's right to issue European approvals, and vice-versa for EU agencies. Existing approvals must be allowed to circulate until their natural expiration. This will require convergence with EU rules. To achieve this, it will be necessary to negotiate continued convergence on the dozens of relevant rules in the UK and the EU.

"It is vital that the Government moves quickly to secure an agreement with the EU that the UK will continue to have an authority that can issue EU approvals. This is important to avoid weakening the competitiveness of the UK as a location for product development and R&D."

International automotive manufacturer employing 13,000 people in the UK

The best way to meet environmental aims is to work across borders, so the automotive sector is looking for convergence with EU rules on CO₂ emissions

The EU's current rules on CO₂ emissions by vehicles are the toughest in the world, setting ambitious aims to reduce CO₂ emissions and other air pollutants produced by new vehicles. To meet these aims, the EU has set out a limit for the level of CO₂ produced across the new cars sold by manufacturers over a period of time. This target is being lowered year on year to encourage continual improvement: in 2015, the target was 130g of CO₂ produced per kilometre on average. By 2021, the average will be 95g of CO₂ per kilometre.

But there is a level of flexibility in how this target is calculated to support manufacturers as they constantly make improvements. The emissions limit takes into account the different levels of emission produced by different kinds of cars, spread across the entire fleet, through the calculation:

$$\frac{(\text{emissions of car type A} \times \text{registrations of car type A}) + (\text{emissions of car type B} \times \text{registrations of car type B}) + \text{etc}}{\text{total number of registrations}}$$

Calculating emissions this way means that an older model that has higher emissions can be partially offset by sales of another model that has lower emissions. Manufacturers work hard to ensure their sales are balanced out to hit the target. If manufacturers fail to reach the target, they face fines of €95 per g of CO₂ over target times by their total registrations.

Having pan-European rules for CO₂ emissions helps manufacturers reach their targets as it provides for flexibility: companies can spread the target across the EU and meet the needs of a range of markets. For example, a firm can use the sales of electric vehicles in a country like the Netherlands which has the infrastructure to support them, and use those efficiency

savings to offset the sale of higher-emissions vehicles in countries where there is a smaller appetite for electric cars. There are numerous advantages to this, including greater model choice for consumers.

To preserve this flexibility, to continue to benefit from pan-European collaboration on the environment, and as UK companies will continue to export to the EU and have to conform to these standards and regulations anyway, the UK and EU should agree convergence on CO₂ emissions rules and continued UK inclusion in the EU's vehicle CO₂ monitoring mechanism. This should include provisions for continued influence over the regulatory process through representation on technical working groups. This matters now and during transition, as well as into the future as the EU has already initiated the process for a new CO₂ emissions standards package that will come into force after 2021.

"We're investing heavily to meet European environmental standards. It was easier to find improvements when those rules first came in, but to meet them now as they continue to raise those standards means a big drive towards electric. Every marginal gain counts. So the regime is a robust one but it also allows for flexibility. If we only had the UK to average out our emissions limit across, if we lost that flexibility, it would make that innovation much more difficult."

European automotive company with several factories in the UK

The best way to meet environmental aims is to work across borders, so the automotive sector is looking for convergence with EU rules on air pollutants

The automotive industry is also looking for the UK to continue to be fully converged with EU emissions legislation on other air pollutants – such as nitrogen oxides and particulates. Regulations known as Euro Standards define the limits for the exhaust emissions of new vehicles sold in the EEA and, like rules on CO₂ emissions, these rules have been pushing improvements over time. For example, the limit of NO_x produced by a petrol car in 1992 was 0.97g per kilometre. In 2014, it was reduced to 0.06g per kilometre.

In 2017, a new element to the Euro standards was introduced, known as the Real Driving Emissions test. This improves the testing of vehicles to compare the results on emissions produced by a car in a laboratory environment and the results produced by a car being driven on a road. The process tests how a car's performance differs up and down hills, at different altitudes and temperatures, when weighed down, and on different kinds of roads. This is gold standard testing, and Europe was the first region in the world to introduce compliance checks in this way.

To avoid the need to go through multiple tests and meet multiple standards to sell both to the UK and the EU, the UK automotive industry is seeking convergence with the EU's world-leading emissions legislation, including the Euro standards.

Avoiding divergence from EU rules that undermines the competitiveness of the automotive sector is in the EU's interest as well as the UK's

As a highly integrated industry, with parts in the supply chain that often travel between the UK and EU multiple times, convergence is important to avoid undermining competitiveness for the sector on both sides. Neither the UK or the EU wants extra costs for new checks and the slowing down of the process would damage the just in time manufacturing model that the industry uses. While the UK automotive industry has a very strong small and medium sized supply chain as well as well-known luxury brands, many of the mass car manufacturers operating in the UK are European owned. Furthermore, with 79% of imported components coming from the EU,¹⁶ the UK is a very significant market for EU automotive companies and so regulatory divergence would have an enormous impact for the sector across the continent.

AVIATION

In an increasingly interconnected world, the aviation industry is one of the great facilitators. While most people think of aviation as the means of transport to sunny climes or snowy slopes, the sector also plays a vital role in the economy. 63% of business travellers reach the UK via air,¹⁷ and in 2015 goods worth around £160 billion were shipped by air between the UK and non-EU countries – over 40% of the UK's extra-EU trade by value.¹⁸ As well as personal post, goods transported by air are usually high value, perishable or required for 'just in time' manufacturing activity.

Air connectivity contributes significantly to economic growth in the UK and within the EU through direct employment, facilitation of tourism and the increase of trade and investment. The aviation industry directly contributes £52 billion to UK GDP and supports 961,000 UK jobs.¹⁹ As well as airline personnel that are the front face of the aviation industry, every airport supports a thriving ecosystem of retailers, repair operations, logistics links and more – which is why they are major regional employers. Over 50,000 jobs in the aviation sector are based in London, followed by the South East with 36,000 and the North West with 28,000.²⁰

Europe is an important market for UK aviation: each year 53 million EU and UK residents travel by air between the UK and the remaining EU Member States.²¹

Convergence between UK and EU rules is fundamental for the aviation sector

To ensure the UK remains a global and influential leader in the aviation sector, and can keep costs low for travellers on both sides of the Channel, continuing high levels of regulatory convergence with EU aviation regulations will be vital. In a sector that is, at its essence, built on the ability to move across borders, an agreement on market access rules is essential. Additionally, continued membership of the European Aviation Safety Authority (EASA) will

be important to prevent double certification and discrepancies in safety provisions between the EU and the UK in the field of civil aviation safety. Importantly, aviation falls outside the remit of the World Trade Organisation rules, and so, unlike other sectors there is no automatic fall-back when the UK leaves the EU. A deal must be agreed.

Aviation market access between the EU and the UK must be secured to ensure connectivity continues, and convergence between rules in this sector will be necessary to achieve this

Currently, UK airlines have automatic access to the EU Single Aviation Market, allowing planes to fly across and between European countries. This is facilitated by a number of rules that have been developed to build a level playing field in areas like safety and the environment, and to build the infrastructure needed to co-ordinate 26,000 flights across the continent each day. The rules are wide-ranging. For airports, some of the most important rules include those on air traffic control – with a harmonised system of rules and certification for organisations providing air navigation services. And for airlines, there are common rules on how slots for flights are allocated and how to create the most efficient flight routes for example, as well as rules creating joint targets for reducing delays and costs. The EU sets out rules to ensure that inspections of aircraft are the same – so the requirements for pilots' licences, procedures, manuals and safety equipment carried on board, for example, are the same wherever the planes land. But EU aviation rules also cover air balloons and helicopters, military aircraft and even drones.

One of the benefits of having a fully integrated market such as this is the flexibility that airlines have to place aircraft at short notice on the most commercially advantageous route in the EU, regardless of which country that is. That means that when an airline expands and brings in new aircraft to add additional capacity onto the market, it is simple to move them as the market develops. So if a route proves to have less demand than anticipated, it is easier to shift to a different one. If the UK and EU aviation markets are separated, this would be much more difficult and the market would be less responsive and efficient. If airlines are less able to develop routes in this adaptive way, there will be less choice for consumers and less competition, potentially adding costs.

The UK Government should therefore work with the EU to protect and secure the current level of market access in any agreement – including the right to fly intra-European routes and domestically within EU Member States. These abilities – to fly from Hamburg to Frankfurt as well as from Frankfurt to Florence, instead of just Glasgow to Frankfurt – are not commonly included in traditional aviation agreements and will only be possible if the UK converges with EU aviation rules.

If convergence is not maintained, this will have an impact both on the industry and the consumer. While airlines can undertake some mitigating actions to ensure they comply with EU market access restrictions, such as taking out an Air Operator Certificate, this will ultimately increase business complexity and cost. That cost will either result in certain routes no longer being commercially viable or fare increases. On some routes, certain airlines may even need to withdraw their services, reducing the competition that drives prices down for EU consumers.

The individual air service agreements which operated between the UK and each of the Member States before the creation of the Single Aviation Market are not a sufficient fall-back. A question mark remains over their legal validity, as they were all superseded by membership of the internal market. But whatever their legal status, these agreements are restrictive, antiquated and not fit for purpose.

To maintain flexibility in how aeroplanes are used – including at short notice – convergence on wet leasing rules is needed

At present, EU regulations permit aircraft and their crew to be transferred between carriers easily in a process called wet leasing. When airlines experience issues like staff shortages, or planes have to be grounded for maintenance, or even if seasonal variation means an airline is at capacity, leasing aircraft from another owner can help plug the gap – both for commercial airlines and operators of charter jets. For firms managing an air network, wet leasing can be extremely valuable to both the owner and the borrower, as it allows for the efficient deployment of capacity between carriers. Within the air cargo sector in particular, wet leasing is a common practice: there are numerous cargo airlines, including some based in the UK, that specialise in supplying aircraft, crew, maintenance and insurance services.

Convergence on EU rules for wet leasing will be important to ensure open and liberal access. The process of wet leasing for third country airlines is much more complicated than the EU process and requires the lease to be approved by the domestic government department that is most relevant as well as the national regulatory authority, and a permit to be issued and paid for.

“It will be important to ensure aircraft continue to be based here in the UK. If there are fewer planes making their base here, we’ll see a meaningful reduction in frequency, volume and choice for consumers as well as an increase in price. But we’ll also see fewer jobs available for maintenance and cleaning crews as well.”

Airport based in the UK

UK membership of EASA is imperative – the UK should continue to play a key participatory and leadership role in the agency

EU rules on the aviation sector are not just designed through the process of legislation in the European Commission and Parliament, and enforced by the European Court of Justice. Instead, a decentralised agency – EASA – plays a crucial role in the design, monitoring and enforcement of standards for the aviation sector.

As well as having oversight of technical safety standards as set out in the Aerospace section of this report, EASA plays a crucial role in producing a wide range of guidelines that matter for airlines and airports. For example, EASA produces guidelines for procedures in situations where civilian pilots flying general aircraft lose control of their plane. A shared procedure in such a scenario is helpful so that air operators, whatever country they’re in, can respond to emergencies in a standard way as pilots have been trained to act in the same way whatever border their plane has crossed. Similarly, EASA trains all national aviation authorities to ensure all aircrew are certified in the same way – so that the

conditions for a pilot or engineer's licence is the same, the credits for training are the same, as are the medical fitness tests. On an international airline where the cabin crew may have certifications from authorities in different countries, this really matters.

Continued convergence with the EU rules EASA supervises and involvement to support the policymaking process EASA goes through is crucial. If the UK Civil Aviation Authority is no longer a part of EASA, outside the EU aviation market and no longer benefiting from the services EASA provides, it would have to set up new systems, hire more people and create UK standards and practices for processes that already exist. These UK standards would then have to go through the process of being recognised in new bilateral aviation safety agreements with third countries, like the US. Should other countries not be satisfied with the UK's initial arrangements, they may require inspections of the UK's airports and airlines, which would incur additional costs. Convergence and continued involvement in EASA is therefore crucial.

"Continued UK participation in EASA is critical post-Brexit. First, safety is the industry's number one priority and EASA has played a key role in promoting aviation safety in Europe since its foundation. Second, the UK is a significant contributor to the work of EASA and its departure would reduce the bandwidth of the organization in terms of technical and policy expertise. Finally, the UK's departure would force it to recreate a self-standing national safety infrastructure. This will take significant time and resources and would be a 'reinventing the wheel exercise' that could be avoided by the simple expedient of remaining within the EASA family. Of course, there are political obstacles but the parties should seek to forge mutually acceptable compromises given the importance of safety to the industry and general public."

Transatlantic airline carrier

Based on the UK's relationship with the Single Aviation Market after Brexit, provisions will also have to be made for the UK's aviation links with other countries

Traditionally, market access between countries is negotiated on a bilateral basis through air service agreements (BASAs). That has continued while the UK has been a member of the EU aviation market – for example, the UK recently agreed a deal with China to increase the number of flights operating between the two countries from 40 to 100 each week. But the EU has also negotiated a number of agreements providing for flight conditions between the EU and other countries which, importantly, includes the US. As well as negotiating to continue market access between the EU and the UK after Brexit, it will be important to secure a US-UK agreement that authorizes airlines to transport goods and services between the United States and the UK, as well as a UK-EU agreement that allows carriers to continue to connect passengers and goods between the United States and the EU via the UK post-Brexit.

If the UK and EU agree convergence of aviation rules, consumers on both sides will benefit

Maintaining the benefits from competitive connections for passengers and the UK economy is vital for UK prosperity – but also for the EU's, given the significant role UK airlines play in the EU and the reliance of a number of EU airlines on easy access to the UK market, which is the largest aviation market in the EU and the third largest market in the world after the US and China. These benefits are significant. The increased airline competition facilitated by EU legislation – and largely driven by UK-based carriers – has led to the reduction of air fares within Europe. On average, the price of intra-European flights has decreased in real terms from €200 in 2002 to under €100 in 2016.²²

BROADCASTING

The UK is the European leader for broadcasting, far outstripping any other Member State as the location for around 1,400 TV channels, three times as many channels and more than twice as many on-demand services than any other European country.²³ This industry has been growing strongly over the last decade, becoming home to both a large number of pan-European media companies, and global broadcasting businesses that use the UK as a base for their European operations. This has brought many benefits to the UK. International broadcasters directly contributed over £1 billion to the UK economy in 2017 – up 50% from 2011.²⁴ The multichannel sector has doubled the number of people it directly employs in the UK over the last decade and, through investment in infrastructure and skills, has helped to create a thriving eco-system for 27,600 SMEs – the vast majority of which are micro-businesses employing fewer than four people.²⁵

The world-class audio-visual firms based in the UK provide high-skilled, high-value employment to 194,000 people – and while just under half of these jobs are in London, the sector employs 13,000 people in Scotland, 14,000 people in the North West, 12,000 people in the South West and 18,000 people in the South East. 5.7% of these people are EU nationals.²⁶

EU consumers are an important market for the UK's audio-visual businesses. More than half (761) of the TV channels licenced in the UK broadcast overseas, namely into the EU: 40% of the audio-visual sector's exports go to the EU, making the region hugely valuable to Britain's industry.

To protect high-skilled jobs and small businesses in the broadcasting sector, convergence between UK and EU rules will be essential

The UK will have to negotiate hard to convince the EU to ensure the UK's licenced TV channels can continue broadcasting to EU consumers. Historically, the EU has not included

audio-visual services in its Free Trade Agreements, with some limited exceptions such as in the EU-South Korea agreement. But, given both the value and the potential presented by the UK's broadcasting companies, it will be important to seek to achieve this. The UK will most likely need to both continue to apply EU rules on broadcasting and secure the trust of EU Governments that will want to know their citizens are not being exposed to content that breaks the rules, and to have recourse if the rules are broken.

Negotiating convergence with the Audio Visual Media Services Directive will be necessary to protect market access

Currently, EU rules allow for the TV channels based and licenced in the UK to broadcast into the EU automatically, in an arrangement similar to the passporting regime for financial services. The Audio Visual Media Services Directive (AVMSD) is a set of rules which state that firms only have to get a licence in one country in order to broadcast into any of the others. This is the Country of Origin rule. So, at present, UK firms receiving licences from Ofcom automatically have permission to broadcast into every other EU country. Getting that licence requires the TV channel to pay a fee to Ofcom and prove that it meets a host of requirements laid out by AVMSD and enforced by the domestic regulator. In the UK, content broadcast by a TV channel must meet Ofcom's broadcasting code, meeting rules on protecting minors, privacy and religious freedom, as well as applying restrictions on advertising, promotions and investment recommendations. The company itself also has a range of obligations that it has to meet, including promoting equal opportunities and retaining recordings in case of complaints.

If the UK does not negotiate a reciprocal agreement on the Country of Origin principle, broadcasters will be forced to move jobs and investment from the UK to the EU to continue supplying their services to European viewers. Companies will not just have to get a licence for the UK and EU separately, with all the costs and complications involved – AVMSD requires a broadcaster to make editorial decisions and have a significant part of its workforce in the country where it is licenced. International broadcasters would therefore, reluctantly, be forced to restructure their European operations to obtain a licence to broadcast in a remaining Member State. This would jeopardise the UK's status as a leading global hub for broadcasting, severely limiting the ability of international broadcasters to base their transfrontier channels in the UK.

"It's not just broadcasting companies that benefit from AVMSD but the suppliers of satellite capacity and physical technology that support cross-border broadcasting as well."

Multi-national television company

"If we have to move our editorial team to Europe, lots of other teams would follow too. It makes sense to keep sales in the UK but the creative energy will follow the bosses."

International broadcaster with a number of European TV channels

"Ofcom is a strict but fair regulator, and is reasonable to work with. It's one of the reasons we're in the UK. But we may have to move our licence to Europe if we don't secure market access, and have already started scoping out options in the Netherlands."

American TV channel

As well as affecting the ability to broadcast, divergence from international rules on broadcasting could potentially impact the competitiveness of UK content creators

The minimum set of regulations for broadcasters that the AVMSD lays out includes content quotas – rules which require broadcasters in the EU to ensure that the majority of the content they show to viewers is European. Currently, UK film and TV shows qualify as 'European works', and – along with the strength of the creative sector – this has supported demand for UK content, making Europe one of the most important markets for UK TV exports. This is particularly important for independent British programme makers. The UK is a world leader in programme exporting globally, with sales to international markets in 2015/16 rising to more than £1.3 million, a 10% increase from £1.2 million in 2014/15,²⁷ and supporting that growth to continue should be a priority.

Therefore, it is essential that after the UK leaves the EU, UK film and television content continues to qualify as 'European works' for the purposes of EU quotas. This should be eminently possible as – fortunately – the UK has signed and ratified the Council of Europe's Convention on Transfrontier Television, which is not an EU initiative. This should mean that UK content will continue to legally qualify as 'European works' after the UK leaves the EU. The UK should therefore remain a signatory to the Convention so that content producers from animators in Bristol to the filmmakers of Game of Thrones in Belfast can maintain their competitive advantages on the global market.

If the UK and EU agree some form of mutual access for audiovisual services, consumers on both sides will benefit

EU consumers clearly value channels that are broadcast from the UK. Furthermore, some 35 services, including major players like Netflix, are available in the UK under EU licences. If the UK and EU do not agree a form of mutual market access there is a risk that consumers will lose some of these services and content, or even see a reduction in quality of service as the broadcasters will have to manage the costs of relocation.

CHEMICALS

The UK chemicals industry is a highly diverse sector that is made up of a wide variety of businesses, making adhesives, artificial limbs, automotive parts, cosmetics, dialysis machines, food packaging, military helmets, inks, pesticides, sports equipment, solar panels, window frames and more. These companies together accounted for £12.1 billion of the UK's GVA in 2016 and directly employed 99,000 people. In particular, chemicals businesses are very significant regional employers: key clusters in the UK are in Scotland and the North East and North West of England. These geographical clusters develop because suppliers of feedstocks and end-users of their outputs need to be close to each other, and supply chain and related services grow around them. The industry is made up of micro, small and medium sized businesses, with 86% of UK chemicals firms employing 49 or fewer staff members.²⁸

The UK and EU chemicals industries are highly integrated: in 2016 the EU was the destination for 59% of UK chemicals exports and the UK imported 72% of its chemicals from the EU.²⁹ The sector's complex supply chains mean products cross borders multiple times, creating a truly multi-national industry. This isn't just important for chemicals businesses. As well as being its own prominent sector, the chemicals industry plays a substantial role in products which matter for other manufacturing sectors such as aerospace and automotive, and so plays a very important role in multiple supply chains.

Convergence with EU rules on chemicals is not only essential for the sector, but for every manufacturer

UK negotiators should pursue ongoing convergence between the UK and EU on chemicals regulation as the chemicals industries on both sides are so closely integrated through exports, imports and supply chains that to diverge would be very disruptive for business. Upheaval in the chemicals supply chain and regulatory framework would impact everything from farming to water companies, and would drive up costs that would eventually be passed on to consumers of a range of products and services.

The chemicals industry is one of the most highly regulated sectors with one of the most extensive and complex frameworks of rules. These rules are detailed and constantly evolving under the purview of the European Chemicals Agency (ECHA). Convergence with the REACH regulation – the main rule governing the use of chemicals in the EU – alongside convergence with the Export and Import of Hazardous Chemicals EU Regulation, convergence with the Biocidal Products Regulation and the EU Classification, Labelling and Packaging Regulation (CLP) is essential for UK chemicals companies. In a survey of their members, the Alliance of Chemical Associations found that 70% of chemicals and chemicals-using companies said that REACH and CLP are of high importance for their businesses to operate and that 20% of respondents would consider moving their business from the UK if there is no access to REACH.³⁰

Convergence with REACH regulations is essential for chemicals businesses, their supply chains and customers

The REACH regulation is one of the most comprehensive and important rules in the EU – the legislative text is over 500 pages long. It tracks chemicals through the supply chain, to ensure that the risk posed by substances which are potentially dangerous is minimised. The rules aim to protect both the environment and the general public, but they also simplify trading chemicals across EU borders because businesses only have to prove they have complied with those rules to one authority – the ECHA. This regulation is seen as the gold standard in the international chemicals industry, with some multi-national companies already adopting REACH despite not exporting to the EU, to bring their own compliance to the strongest standard. Indeed, a recent Chemical Industries Association report, examining the chemicals management regimes of some key global economies (Brazil, Canada, China, Japan and the USA), confirmed that all, with the exception of the USA, are increasingly influenced by REACH.³¹

In the context of Brexit, one of the most important parts of REACH is the rules on registration of chemicals. Currently, companies are responsible for collecting and registering the properties and uses of the substances they manufacture or import above one tonne a year. They also have to assess the hazards and potential risks presented by the substance. This information is communicated to the ECHA through a registration dossier containing the hazard information and, where relevant, an assessment of the risks that the use of the substance may pose and how these risks should be controlled. Registration is based on the 'one substance, one registration' principle. This means that manufacturers and importers of the same substance must submit their registration jointly, giving the ECHA a fully joined-up overview of supply chains.

Additionally, REACH rules around authorisation of chemicals are very important. Currently, companies and the registered users of their products have to be authorised before they are allowed to use or manufacture very hazardous substances known as 'Substances of Very High Concern'. This extra layer of protection is important to ensure the people handling the riskiest chemicals – such as those which cause cancer, mutations or infertility – are kept safe at work.

Convergence with REACH is absolutely essential because if the UK leaves the EU and the transition period ends without negotiating convergence, any chemicals registered or sites authorised in the UK will become invalid in the eyes of the ECHA. This would create a regulatory no-man's land, and mean that chemicals made in the UK and used throughout international supply chains would no longer be allowed to be used in the EU. As the process of making new authorisation and registration applications can take between two to three years each, the window for companies to make new applications in Member States ahead of the UK's departure has already closed – so even relocating activity may not remove the risk of serious disruption in supply chains.

If the UK began to diverge from REACH regulations, UK businesses would face a serious competitive disadvantage from having to comply with a UK version of REACH in addition to the European version in order to import and export. As the UK chemicals industry has become highly integrated within European supply chains, this would be a significant problem.

Additionally, if the UK were to diverge from EU chemicals regulation, UK-based companies that export to the EU could face the prospect of having to set up EU based offices manned by skilled regulatory compliance personnel in order to appoint Only Representatives (ORs) and reregister

substances themselves. While some companies already have experience in this area, many importers from outside the EU and downstream user companies are SMEs which only have a UK base. A lack of convergence would mean them having to establish an OR in the EU for the first time – a precious use of resource that could be better dedicated to innovation and expansion.

The exact same principles that apply to REACH also apply to the EU Biocidal Products Regulation. Any disinfectant, pest control product or preservative must be authorised in a very similar way to REACH-relevant chemicals.

CASE STUDY

SOME UK BUSINESSES HAVE PASSED THE POINT OF NO RETURN TO MAKE NEW REACH AUTHORISATIONS

If the UK leaves the EU chemicals regulatory framework, REACH authorisations held by UK companies will no longer be recognised as valid under the EU regime. The European Chemicals Agency (ECHA) does allow for some UK-based authorisation holders to transfer to an 'Only Representative' based in the EU but for some businesses, such as UK-based importers, there is currently no mechanism to achieve this as there is no UK body to register with. In losing their legal effects, customers in the EU-27 will either be required to find alternative suppliers with a valid authorisation in the EU-27 or apply for authorisation themselves.

One of the overall aims of REACH is to enhance innovation and with that the authorisation process has been deliberately designed to be a significantly difficult, complex and expensive process, taking at least two years for chemicals to undergo the process for approval. Therefore, the time and cost for a business to get a substance authorised again would become a huge burden and duplication of work already carried out. Furthermore, due to the years that it would take to complete a full authorisation again, businesses have crossed the point of no return to begin new authorisation applications, even with a transition period lasting until the end of 2020. Like REACH registrations this is likely to cause significant market disruption to the industry and to key customer industries such as aerospace, automotive and pharmaceuticals on both sides of the Channel.

Convergence with the Classification, Labelling and Packaging Regulation is essential to meet international standards of safety information

The EU's Classification, Labelling and Packaging (CLP) Regulation ensures that a single set of standard symbols and phrases that identify hazardous chemicals and inform users about their risks is used across the EU. This rule stems from the United Nations' Globally Harmonised System (GHS) on the classification and labelling of chemicals. Ensuring a single standard for labels that denotes corrosive, poisonous or flammable chemicals is essential as chemicals cross borders often, and it is simply not safe for there to be confusion in laboratories about what symbols mean.

The CLP – as well as the Detergent Regulations – also state that companies selling chemicals products within the EU must have a Responsible Person based there. This is an individual or an office that can be held legally accountable if there are problems with the chemicals, and this Person must possess a Safety Data Sheet describing the product, how it was made, the risks identified, and so forth.

It is vital that the UK continues to use the symbols as set out in the CLP and the UN GHS to maintain simple, high standards of communication – and of course, to ensure that chemicals products labelled in the UK can be sold in the UK and across the rest of the world. It is also important that products labelled with UK-based Responsible Persons can continue to sell into the EU without requiring re-labelling. As countries internationally have applied these rules in different ways, convergence with these regulations is vital.

“Continued participation in the ECHA and REACH is imperative for all UK businesses that use chemicals to operate.”

Aerospace manufacturer with 22,000 employees

“As well as making our cross-border operations easier, being part of REACH and the ECHA means we get notifications before chemicals are withdrawn which is incredibly helpful.”

Small defence supplier with 200 employees

“We sell mixtures to EU customers, and right now those European companies don’t count as importers so don’t need to register under the REACH framework. Those European companies will need to register to import our products after Brexit if we’re not aligned. But we face a huge risk that they’ll choose not to purchase our products anymore and pick European ones instead, to avoid the costs and complications of registrations.”

Small Welsh company specialising in chemicals for the construction industry

The costs for UK business of divergence from chemicals regulations would be echoed throughout Europe

The EU is the UK’s biggest trading partner for the chemical sector, with 59% of exports going to the EU and 72% UK imports coming from the EU³² These high levels of trade between the EU and UK are a result of the highly integrated nature of the sector, its own supply chain, as well as the supply chains in other sectors that it feeds into.

Due to this integration and interconnectedness of chemicals across the economy as well as the highly regulated nature of the sector, any divergence from the EU regulatory framework will impact businesses in the EU equally if not more so than UK businesses. As well as the potential barriers at the border, the sector could face increased costs in order to comply with the new rules. These costs to business would ripple throughout European sectors as well, across the European companies that are downstream users of chemicals.

CONSTRUCTION

Construction is one of the UK's most vital sectors, literally laying the foundations for every other. Contributing about 6.1% of UK GVA, or around £111 billion in 2017,³³ it is the second largest sector in the UK in terms of jobs, and employs about 2.1 million people, roughly 7% of the UK's workforce. Of these individuals, around 900,000 are self-employed, while 99.8% of businesses across the industry are SMEs, the majority of which are micro-businesses with fewer than 10 employees.³⁴

Across the UK, construction is the largest sector of employment by volume of jobs in each region, accounting for at least 8% of the workforce in every region of England except the North East.³⁵ The construction product manufacturing subsector, based largely in the Midlands and North of England, employs more than automotive and aerospace manufacturing combined, according to the Construction Product Association. Firms in this industry operate with extremely slim margins and manage a high level of risk, so exposure to major external forces can quickly have a negative effect on the industry. That makes Brexit important and also means Government needs to go further in giving greater certainty over work pipelines for the long-term.

The EU is vital to the UK's construction sector. The UK imports billions of pounds worth of construction services and products each year, 60% of which comes from the EU.³⁶ Last year, this included essential construction products such as £875 million worth of electrical wire and £775 million of timber, and in 2016 the UK imported £3.5 billion of materials from Germany and Italy combined.³⁷ However, the EU is also important to the construction sector because it contributes such a large part of the workforce. Recent data estimates that EU nationals make up around 9% of the UK construction workforce overall, but in London overseas workers make up half of the workforce, the majority of which are EU nationals.³⁸

The construction sector is highly regulated and may benefit from improvements in regulation in some areas and convergence in others

If Brexit triggers a fresh look at how to effectively regulate a sector as critical as construction, that could well bring benefits not just to the construction industry but every other that relies on it. There are certainly some opportunities to secure improvements. However, to safeguard businesses and jobs in an already volatile sector, any changes to the status quo must be carefully thought through, there must be a considerable cost benefit, and businesses must be given ample time to adapt. And in regulatory areas that allow trade, convergence on rules will be necessary.

Importantly, UK construction businesses are also looking for the UK Government to ensure they retain access to overseas workers, that workers at all skill levels can continue to work in Britain, and that businesses are able to flexibly and easily move staff around the UK and Europe.

The UK and EU have aligned closely on procurement regulations and guidelines to allow businesses to bid and win for contracts across Europe more smoothly, the benefits of which firms would like to see retained. On health and safety, the strength of existing UK legislation

has been reflected in EU-wide directives and the UK continues to lead the way in levels of health and safety performance, which ensures collaboration between international businesses meets the same stringent standards.

Equivalence in procurement rules matters, but there are still opportunities to improve how the UK procures construction work

In construction, current public procurement regulations provide opportunities to tender for everything from plastering work in German zoological gardens, to consulting on sound insulation in cultural centres in Poland. Therefore, like other sectors, UK construction businesses want to ensure equivalent procurement legislation is agreed so they can continue to bid for EU contracts, and do not want to see legislation change to diminish these benefits.

However, Brexit can be an opportunity to improve the effectiveness of public procurement so that it becomes more efficient and is driven by delivering long-term value, not short-term savings. This does not require divergence from EU rules, but a change in how they are applied in the UK. Existing procurement processes are onerous and time-consuming. The sector is looking for regulation to evolve so that it drives behavioural change in public procurement teams.

It would be of significant benefit if leaving the EU encourages the UK Government and local authorities to simplify procurement procedures to reduce wasted time and cost, addressing issues most notably caused by long tender shortlists, low quality tender guidance, and poor communication from clients. Construction firms also want to see procurers improve commercial skills and tender in consideration of the lifetime value of the project, rather than the current practice of simply awarding work to the lowest bidder. Businesses would therefore be more confident in pricing tenders that proportionately reflect the risk involved. This can all be achieved without risking market access.

Regulatory convergence on construction products and materials is vital

The Construction Products Regulation mandates the standards manufacturers of construction products must meet to sell into the European market. The introduction of this regulation in 2013 was a significant change for the industry, and enforced CE marking on all construction products placed on the market and used to construct European homes and buildings. The CE mark states that a product has been produced to a European standard or – if it is a new product that does not have a standard that is relevant – has been through a technical assessment to ensure that it is safe.

There are hundreds of construction standards, covering everything from the testing of sauna stoves to anti-seismic devices that protect buildings during earthquakes, and from the specifications for surfaces for indoor sports areas to the seals for piping. Because these standards are pan-European, it means that there is only one standard needed for all Member States, instead of separate standards being used in different ones. This means that companies manufacturing construction products only have to meet one standard and have their products tested once in order to sell across every Member State.

Convergence between the UK and the EU on construction products regulation is vital to ensure that UK construction products manufacturers remain competitive and able to export simply. In the Government's 2013 Construction Strategy, it set a target of improving the industry's exports by 50%, after 20 years of a worsening trade deficit – which currently stands at around £5.9 billion with the EU.³⁹ Making it more difficult for the industry to export to the EU would not support the industry to meet this target.

But convergence is also important to facilitate the easy movement of imports. 62% of the UK's construction imports are from the EU,⁴⁰ and many of these goods have to be delivered to construction sites 'just in time'. Introducing multiple requirements for the import of goods would also introduce delays in complex construction supply chains and processes. It is inevitable that the UK will continue to need to import construction products quickly after Brexit, because it simply does not manufacture all the materials it needs domestically. For example, 52% of softwood timber is sourced from the EU, with only 40% sourced within UK and Ireland⁴¹ – replacing this volume of wood from within UK supplies would be impossible.

"We are in favour of the regulatory status quo, as divergence between the EU and UK would result in our member companies having to comply with two sets of rules instead of one. This would likely lead to manufacturers stocking multiple products for different markets (and more time and resources for the testing of those products) which will result in increased costs."

Construction Products Association

"Having a single set of standards for construction products across the EU reduces complexity and cost for the construction sector in UK. Through CEN and CENELEC, the UK has been in a position of global influence, and it's served us well domestically and internationally. We must ensure that voice isn't marginalised and we keep working to define the standards that underpin trade in products and services in our sector."

Engineering professional services firm

Construction businesses are not looking for major changes in health and safety regulation after Brexit, prioritizing stability

Health and safety is one of the most important issues for UK construction companies. Effective regulation is vital to continue driving improvement in working conditions and reducing the number of accidents in the industry. The EU has a number of specific rules on health and safety that are relevant. The Framework Directive is the main regulation but there are also directives on requirements for temporary construction sites, avoiding the manual handling of heavy loads to avoid back injury, reducing exposure to excessive noise and vibration from power tools, among others.

Divergence from EU health and safety rules is not a priority for the sector. A change in legislation would place time and cost pressures on small and medium-sized businesses if they have to absorb new rules, train staff and implement new guidelines, at a time when there are already many pressures. Larger firms owned and/or operating internationally will want to avoid the administrative burden of managing projects across dual regulatory regimes.

But more importantly, much of EU health and safety legislation has been based on existing UK law and EU health and safety regulation only sets a minimum standard. If the UK wanted to seek improvements it could do so whatever the relationship between UK and EU rules after Brexit. This may be something the Government wanted to consider as, although construction compares well with other major European nations,⁴² it is consistently the poorest performing UK sector by number of fatalities at work. The sector's accident per hours worked rate is far better than the agricultural and waste and recycling sectors, though stands at three times the average across all industries.

The UK construction industry will continue working towards sustainability whatever the relationship between UK and EU environmental and energy regulation after Brexit

The UK is generally regarded as an international leader in climate legislation, having established the Climate Change Act in 2008 and launched the Clean Growth Strategy in 2017. The construction sector has equally effective legislation when it comes to environmental regulations such as the UK Building Regulations, which cover the energy performance of buildings.

The sector is a global leader in low carbon construction and has independently driven forward schemes such as BREEAM and CEEQUAL which raise standards in sustainable building methods. There is little to suggest divergence from EU legislation would alter the sector's drive to continue innovating towards lowering emissions and improving the energy efficiency of built assets. However, it is worth noting that many manufacturers of materials such as steel and cement are covered by the EU Emissions Trading System (EU ETS), a trading market for carbon that is steadily enforcing reduced emissions, and a majority of UK manufacturers want to remain part of this market.⁴³ More information on the EU ETS can be found in the energy section.

Convergence in certain areas of construction is important for EU companies wanting to grow in the UK

It is important for the EU to secure equivalence in procurement regulation to take advantage of the opportunities that exist in UK construction. Major infrastructure and energy projects such as HS2, Heathrow and nuclear and tidal projects will provide billions of pounds worth of work for businesses. There will be need for specialist international expertise as well as high demand for skilled labour, alongside products and materials from outside of the UK.

If the UK and EU are not aligned on regulations that ensure companies are able to bid competitively for work, have access to necessary labour markets, have the freedom to move their employees, or to trade smoothly in products and services, the EU could lose a valuable market to export into, and be restricted from working on major UK construction projects.

CONSUMER GOODS

Consumer goods move fast and consist of a huge range of manufactured and crafted products, including clothing, furniture, household appliances, tools, jewellery, toys and cosmetics. Businesses in this industry vary significantly. It is estimated that firms employing around 300,000⁴⁴ people manufacture consumer goods in the UK, responsible for products including luxury handbags, alarm radios, papers and shower gel. However, there are also many consumer goods businesses that import their products and operate logistics hubs in the UK. Many companies like this make products that are not readily produced in the UK, such as white goods. 98% of UK clothing is imported, for example.⁴⁵

The EU is an important market both for the import and export of consumer goods, though imports are predominantly higher than exports and imports are principally non-EU.⁴⁶ The UK also acts as a trade hub for non-EU imports to enter the EU. For example, one consumer goods company that manufactures all its clothing products in Asia then ships them to hubs in the North East of England and from there, the company coordinates distribution across the UK, Ireland and Northern Europe.

To keep goods manufacturers competitive and maintain high standards, alignment with EU product safety regulation is vital

The consumer goods market is increasingly globalised. With the click of a button or even the scan of a fingerprint, people can order WiFi-controlled blenders from Germany, glow-in-the-dark flipflops from China or Tolkien-themed wedding rings from New Zealand. But behind this international market place is a network of rules that ensures the goods purchased by consumers are of a high quality and safe. Many of these rules have been driven by the EU. Harmonised regulations have helped create a level playing field, boosting fair competition in the market by outlawing failure to meet safety and environmental regulations.

To maintain these high standards and collaborate on their enforcement, keep costs low for consumers, and ensure the smooth flow of trade – including that all important next day delivery – convergence with product legislation and standards will be essential. Convergence between UK and EU rules on products governed by the New Approach Directives will be needed to ensure the continued benefit of CE marking, as will mutual recognition of the Notified Bodies that clear products for sale on either side of the Channel. As with many industries, when it comes to the manufacturing of consumer goods in the UK, future convergence with REACH regulation on chemicals and alignment with environmental rules is also important for the sector.

Unilateral commitment to alignment of UK rules on product safety with EU rules on product safety would reassure consumers of continued commitment to quality in the UK

A single product that is manufactured for consumers may be regulated by multiple different pieces of EU legislation, which will often overlap. One of the most important and far reaching is the General Product Safety Directive (GPSD), which provides a baseline standard for safety – setting the rules that both businesses and regulators must abide by to provide and regulate most products for sale. The rules are general: the directive creates an overarching requirement that consumer products must be safe, that businesses must keep the documents that demonstrate the goods they sell are safe, and that – if goods are proven to be unsafe – action is taken. This action is taken on a pan-European basis through the RAPEX system which allows national authorities to quickly exchange information about products that have been proven to be dangerous. Only seven EU countries contributed more to this pan-European safety system than the UK in 2017.

The GPSD is generally regarded by business as sensible regulation, and divergence from this rule that would create lower standards would harm consumer safety and the reputation of UK products. Divergence to raise standards would be unnecessary as more dangerous products tend to have their own unique regulations (see below). Unilateral alignment with the GPSD is therefore the best option for consumer product companies both importing to and exporting from the UK.

Involvement in pan-European product safety processes would protect UK consumers

When unsafe products are placed on the market, action is led by authorities in the country that discover the rule-breaking. But these authorities co-ordinate action on a pan-European basis, as products do not normally enter the EU and stay in one country. The online RAPEX system allows national authorities to quickly exchange information about products that have been proven to be dangerous. Only seven EU countries contributed more to this pan-European safety system than the UK in 2017.⁴⁷

If the UK does not achieve continued involvement of its national regulatory authorities within RAPEX, the UK will miss out on alerts about dangerous products on the market – ranging from perfumes which have not been properly labelled with the allergens they contain and tattoo ink that contains dangerous levels of lead, to lights that catch fire when plugged in too long and Avengers dolls that contain carcinogens in the plastic.

Businesses are seeking convergence with the New Approach Directives that set out pan-European standards and allow CE marking for particular kinds of consumer goods

In addition to the GPSD, consumer products can also be regulated by more specific EU-level product legislation. In general, these rules are written to create higher safety standards for products that might have specific risks attached, or where it is particularly important

to consumer protection that they perform to a high standard. For example, the Pyrotechnic Articles Directive sets out the rules for the production and sale of fireworks, and the Personal Protective Equipment Directive sets out the rules for a range of goods including equestrian helmets, paintballing goggles and oven gloves. Additionally, there are rules that ensure consumers are properly informed about the products they are using. For example, the Textile Labelling Regulation sets out the rules for consistent labelling of clothes, as the Footwear Labelling Directive does the same for shoes.

In particular, the measures known as 'New Approach Directives', now covered by the New Legislative Framework (NLF), are very important for business. There are around 30 New Approach Directives which apply to a range of products. Unlike the rules of the GPSD – where products are not required to go through a complex process involving a specific authority – goods that are part of the NLF are often required to be tested thoroughly before they are placed on the market. Sometimes, the rules state the manufacturer of the goods must have a self-declaration kept on file of the processes they went through to ensure the product was safe. On other occasions, the manufacturers must use special facilities called Notified Bodies to test and approve the products for sale.

Once the goods have been proven to be safe under the rules, the manufacturer is required to affix a CE mark to their product before placing it on the EU market. This mark confirms that the product complies with the essential safety requirements in the relevant New Approach Directive. When a CE mark is placed on a product manufactured in one part of the EU it can be lawfully sold and marketed without restriction throughout every other Member State. To sell into the EU from outside it, manufacturers in non-EU countries must also meet these rules and apply a CE mark.

Businesses selling consumer products are looking for negotiators to agree convergence with the New Approach Directives as divergence from these rules would create a lot of complexity. It could even lead to UK manufacturers of consumer goods having to produce goods for both the UK and the EU to different standards – with different production processes and multiple sets of testing – resulting in additional costs. Divergence would also create the potential for a reduction of choice for UK shoppers as international consumer goods companies are very unlikely to produce a product to meet just UK standards. This recognition must act in both directions: the UK should continue to recognise the CE mark as a stamp of quality that acts as permission to sell goods on the UK market, and the EU should recognise UK goods affixed with a CE mark safe for sale.

There is precedent already set for the third countries to recognise CE marking: the same rules also for the most part apply in Turkey and Switzerland for example. Turkey participates fully in the CE mark scheme, and Switzerland in part. But it will only be possible for the UK to participate in the CE marking scheme if it continues to converge with these product rules.

"Divergence from EU product regulations would damage the UK's competitiveness and could significantly impact trade."

Retailer, 80,000 employees

“The UK’s market simply isn’t large enough for us to make products specifically to British standards or specifications. That’s the reality for us and many others. To keep giving consumers choice, it will be important to keep rules aligned.”

International kitchen products importer

“We’ll have to comply with European safety regulations whatever happens – and we need to ensure that Britain doesn’t go it alone with its own. And it’s even more important Wales and Scotland don’t have different rules from the rest of the UK. We desperately need a UK single market as well.”

SME designing and manufacturing kettles

Mutual recognition of the notified bodies which undertake conformity assessments is essential to allow the smooth flow of consumer goods between the UK and the EU

A significant number of EU rules on consumer goods require products or systems to be independently tested, certified or inspected. The independent bodies that undertake this testing are called Notified Bodies. These bodies are private-sector testing facilities which are only allowed to operate with the permission of the Government, and can perform the conformity assessments that test products against the relevant EU legislation. For example, a Notified Body will check children’s toys against the requirements of the Toy Safety Directive, a NLF rule which requires both a conformity assessment and a safety assessment procedure that identifies potential hazards like lead paint, loose parts that might be swallowed or poorly produced components that might shatter. Once a Notified Body has determined a manufacturer has conformed to the relevant assessment criteria, it will usually issue an EU type-examination certificate to show the product assessed meets the legal requirements. Currently, type-examination certificates issued by UK Notified Bodies are recognised across the EU (and vice versa).

Mutual recognition of UK Notified Bodies as able to assess products to EU conformity standards and of EU Notified Bodies as able to assess products for sale in the UK is essential. Combined with convergence on the rules relevant for sale of consumer products, this should mean that products manufactured for sale on either side can continue to circulate freely, only go through one set of testing, and that testing can be carried out close to the site of production. These three steps will save significant costs for businesses and consumers. This must go beyond the mutual recognition of conformity assessment within the Canadian CETA deal, as this still requires two sets of testing. If the UK does not negotiate mutual recognition of UK Notified Bodies, they will lose their status as EU Notified Bodies and will be removed from the Commission’s information system on notified organisations and unable to assess products for sale in the EU.

CASE STUDY

THE COST OF COMPLIANCE WITH TWO SETS OF REGULATIONS FOR BUSINESS

The cost of compliance with two different sets of regulations would be challenging and mean additional administrative burden and expense, especially for luxury manufacturers. If divergence occurred, for example on mattresses, a company selling mattresses both to the UK and the EU would have to test its products twice over. As the most important safety test for mattress is flammability, this would mean doubling the number of mattresses the company had to set on fire to test.

Convergence on cosmetics regulation will be needed to ensure small cosmetics companies can continue to access the EU market

Currently, cosmetic products sold in the UK and the EU are regulated by the Cosmetics Regulation. This sets out the rules for safely producing any cosmetic for sale in the EU. But it also states that any lipstick, eye shadow, face mask, hair dye, perfume or other cosmetic must be labelled with the name and address of an entity called a 'Responsible Person' which must be based in the EU. The Responsible Person must hold a Product Information File which states the ingredients of the cosmetic, how the cosmetic is manufactured, provides any proof to support claims of beneficial effects, data relating to animal testing and more. Before a cosmetic is sold, this Product Information File has to be submitted to the Member State that the Responsible Person is based in. Additionally, the company must notify the Commission online of its intention to sell the product through the Cosmetics Product Notification Portal which enables authorities in Member States to exchange information about products that have bad side effects. But only one notification online, one Product Information File and one Responsible Person is required for sale throughout the EU, which creates a level of simplicity and reassures firms that their formulas will be protected.

Convergence between UK and EU rules on cosmetics is important to keep the trade in cosmetics flowing freely. Without it, UK companies will have to purchase a Responsible Person in the EU to sell across borders, or surrender their intellectual property rights to European firms who can manage that process for them. Setting up a Responsible Person in the EU, re-notifying and re-labelling products would be difficult and costly even for large companies and may be prohibitive for smaller ones. Additionally, losing the access UK poison centres and enforcement authorities have to the Cosmetics Product Notification Portal would create risks for consumer safety. Divergence from EU cosmetics rules is therefore not in the interest of either businesses or consumers.

If the UK diverges from product safety regulations, goods from the EU would face rising barriers entering the UK

UK domestic demand for consumer goods is highly reliant on imports from the EU and the rest of the world. With sectors such as textiles importing 41% of goods from the EU and furniture at 45%,⁴⁸ the UK is a major market for EU exporters. This means that any

divergence of the UK from EU product regulations, including safety regulations, could increase barriers for trade for EU businesses. Furthermore, consumer goods manufacturers across the UK and EU are often small or medium sized businesses and therefore in the case of UK divergence would be more susceptible to increased costs of compliance with a second set of UK specific product regulations in order to continue to export into the UK. Additionally, if the UK was removed from the RAPEX system, EU consumers would no longer benefit from the identifications of unsafe products that the UK regulators can provide.

CREATIVE INDUSTRIES

The creative industries are one of the UK's greatest success stories and a vital driver of growth and soft power. From broadcasting to advertising, and music to publishing, the UK has cemented its position as a world leader for the creative industries. Taken together, the UK's creative industries support two million jobs, contribute over £90 billion to the UK economy, and were responsible for exporting over £20 billion of services in 2015 – over 40% of which went to the EU.⁴⁹ The sector makes a substantial contribution to the UK's cultural heritage and helps to project the UK's brand to audiences around the world.

Although the majority of creative businesses are concentrated in London and the South of England, the creative industries also play an important role across the whole of the UK, with gaming hubs developing in the North East and production hubs in the devolved nations. The sector also provides high-skilled employment to 137,000 people in the North West, 132,000 in Scotland, and 148,000 in the East of England.⁵⁰ Of all the people employed in the UK's creative industries, 6.7% are non-UK nationals.

The EU is the most important market for UK creative exports, with 45% of the sector's exports going to the EU and 57% to Europe overall. For example, the EU accounted for 74% of the UK's exports of textiles and apparel in 2016, a figure which has risen by 36% over the past five years to now stand at £6.7 billion.⁵¹ And last year, British recorded music exports rose to their highest levels this century, with sales outside the UK rising by 11% to a record £265 million in 2016.⁵²

Divergence from EU rules in the creative industries would have an impact on the cross-border protections these businesses can currently have

For creators selling both goods and services across borders, the most important EU regulations are those around intellectual property and copyright, which take many forms. In general, the creative industries want to maintain as many of these protections as possible, and – depending on the rules involved – this can be achieved through a robust domestic regime in the UK and negotiating regulatory convergence in the areas which protect creative products across borders.

The Digital Single Market has the potential to be increasingly important for the UK creative sector in the years ahead, whatever the deal achieved in Brexit negotiations, and the UK should continue doing what it can to shape its direction. The creative industries are also interested in the future of domestic funding streams to boost the sector's many SMEs, as CreativeEurope and the European Framework Programmes have been a significant source of investment in recent years.

To protect investment and growth in the creative industries sector, a stable and robust copyright regime should be maintained

Copyright is the bedrock of the creative industries, enabling creators to derive a financial return for their work. Currently, the UK is a part of the EU's copyright and enforcement framework, which provides a high level of protection for creative works.

One of the most significant of these rules is the Copyright Directive which provides for the European implementation of an international agreement forged at the World Intellectual Property Organization. Its aim is to harmonize copyright across the EU, to provide creators with protections and ways to enforce those protections. This – in theory – builds a level playing field. For example, if a British SME discovers its designs are being plagiarized it can seek recourse with these rules as its legal basis, in the same way an SME in France or Italy could. However, copyright rules are not totally harmonised across the EU, as lots of Member States have exemptions. For example, Poland and Greece have different copyright rules from the rest of the EU on use of content in educational illustrations, Spain and Austria have different rules about content that is quoted for criticism, and the UK, Ireland and Belgium have different rules from the rest of the EU on the ownership of photocopied content.

In order to continue providing a high level of protection for UK creative works, the UK must maintain a robust and properly enforced copyright framework. Businesses in the creative industries rely on copyright licensing to service global markets, and therefore any disruption to the regime will place the UK at a competitive disadvantage. The UK Government should consider this carefully as it transfers EU rules to domestic ones through the Withdrawal Bill. Moreover, the UK must pay close attention to the direction of EU copyright rules in the future. The EU institutions are currently updating the EU copyright framework through the Digital Single Market strategy and it is critical that the UK continues to shape the proposals through the transition period. As UK businesses will keep wanting to sell their content into the EU market whatever the deal agreed, the new copyright rules will continue to matter for British companies and consumers. The UK's strategic interests must therefore be represented in the discussions.

"The 21st century has been revolutionary for our industry. Whether it's the rise of Amazon or e-books, things are changing quickly and driving innovation. With more and more customers turning reading content on screens rather than on paper, enforcing copyright protections across borders just gets more important."

UK publishing company

Regulatory convergence with Community Design Regulations is key to support the commercial success of the UK's fashion industry

The EU legal regime for the protection of intellectual property rights allows UK designers to register their designs and trademarks under one single application that covers the entire EU. This is incredibly valuable to the fashion sector as it allows designers to save on the costs of registering all their designs across a portfolio. Under the existing EU regime, the Community Design (registered and unregistered) Regulations automatically protect any design that is first shown in the UK from being copied. This protection lasts for three years and during that time designers can rely on the regulation to enforce those rights across the EU.

If the UK does not negotiate convergence with EU rules, UK designers will lose that cross-border protection and will have no choice but to disclose their designs first in another EU Member State in order to rely on the Community Design Regulations. This would inadvertently harm London Fashion Week, which is an important platform for promoting UK businesses, and enables the UK's £28 billion industry to remain competitive. This could result in the UK losing its position as a key player on the global fashion stage. It is therefore crucial that convergence is negotiated on the Community Design Regulations.

"On about 20 separate occasions, we've experienced copycats of our designs being sold illegally. Our products are high quality, and these cheap knock offs undermine our brand as well as setting us up for unfair competition. Being part of the registered and unregistered Community Design Regulations has meant we've been able to stop the sale of those counterfeit products. These rules make the investment we put into our designs worth it, because we can protect them."

SME manufacturer based in the North West of England

Negotiating convergence on the rules around the cross-border portability of online content services will provide benefits for both UK and EU consumers travelling across the EU.

Until very recently, UK consumers who are subscribers to an online content service which is delivered on a portable basis were not legally able to access many of those services when temporarily present in another EU Member State. This includes TV content, online music services, e-books and video games. Under its Digital Single Market Strategy, the European Commission has changed this situation by introducing the cross-border portability for online content services regulation, which came into force on 1 April 2018.

The portability regulation will offer UK subscribers who have paid for online content services the ability to access that content when they are temporarily visiting other EU Member States.

If the UK does not negotiate convergence with these EU rules, then both UK consumers travelling to the EU, and EU consumers travelling to the UK will no longer be able to benefit from the portability regulation – a key consumer benefit that viewers will have become accustomed to.

There is mutual interest in getting copyright protections right

It is in the EU's interest to negotiate some form of co-operation or convergence when it comes to protections for creative products across borders. For example, it is not in the EU's interest for its creative businesses to have to seek separate registrations for their designs in the UK as well as in the EU, as this adds costs. And by their nature, when infringements of intellectual property happen, they happen across borders – whether through online piracy of films and TV programmes or in the production of counterfeit goods. There is mutual interest for continuing cooperation between agencies in order to share intelligence and tackle these crimes collaboratively.

DEFENCE

The UK's defence sector makes significant contributions to both national security and economic prosperity. In 2016 alone, the industry turned over £23 billion and delivered £8.7 billion in GVA to the UK economy. 150,000 people and more than 4,000 apprentices work within the defence industry, mainly in high-skilled jobs⁵³ and this is projected only to grow. The sector has seen an average of 10% annual growth since 2010, and more than half of UK defence companies surveyed in 2016/17 expected to grow by 10% or more in the coming year.⁵⁴

Globally, the industry helps position the UK as a world-leader in innovation and advanced manufacturing, through programmes such as the Queen Elizabeth class aircraft and the F35 typhoon fighter jets. For international defence organisations, the UK is also often viewed as a gateway to working across the wider EU. In light of this, a number of key global defence suppliers have service or manufacturing hubs located in the UK. These are crucial to regional prosperity, as the defence sector is spread out across the length and breadth of the UK. Most notably, the South West hosts the largest and most significant defence cluster made up of not only large international corporations, but also a strong network of smaller local suppliers.

A significant proportion of UK defence suppliers rely heavily on well-connected international supply chains and have sites in a number of EU states which employ hundreds of thousands of EU nationals. As a result, their day-to-day operations not only depend on consistent pan-European standards and processes, but also require significant goods, services and highly-skilled staff to be moved quickly and easily across borders – primarily for the repair and maintenance of defence equipment. Europe continues to be the dominant export market for the UK defence industry, with approximately 81% of companies exporting to this region.⁵⁵

Convergence to ease trade in goods and services in defence is vital, but there are changes the UK can make to boost the industry without divergence

As an industry that constitutes a lot of advanced manufacturing with specialised supply chains that criss-cross borders, alignment in rules to ensure goods and services can move

easily across borders is vital. In particular, the continued convergence with REACH (the regulation on the Registration, Evaluation, Authorisation and Restriction of Chemicals) is particularly vital for the defence industry where the handling of particularly dangerous chemicals is a standard function.

Continued convergence with European aviation safety regulations is particularly crucial for the UK defence industry maintaining its air force capabilities

As detailed in the Aerospace sector section of this report, the European Aviation Safety Agency (EASA) and the regulatory frameworks it monitors have a range of vitally important functions for the health of that industry. Those functions are equally as important in the defence sector, given the role it plays in the development of helicopters and aeroplanes. But there are also some more specific areas relevant to security that EASA regulates. For example, EASA enforces the Aircrew Regulation which plays an important role in certifying the training of military pilots as well as certifying military airworthiness of machines. The UK's Civil Aviation Authority does not currently have the full range of skills and competencies to do this independently.

Convergence here is vital because developing a domestic certification process would not only take significant time and resources, but a regulatory vacuum could mean that the Ministry of Defence would be unable to use new pilots in its military operations which in turn would have significant implications for national security. The UK should therefore seek continued membership of EASA and convergence with its regulatory frameworks.

But, there are opportunities to improve how UK businesses compete for European defence contracts, while remaining equivalent for the purposes of market access

As with other sectors, under current EU rules, UK and EU firms have the right to compete for defence contracts in other member countries. In defence, however, for contracts above £100,000, the Defence and Security Directive (DSD) also applies and ensures that there are mechanisms put in place to protect defence and security interests, while still maintaining fair and open competition. While this has helped open up the internal market in the EU, implementation of the DSD has been patchy and the procurement of high-value, strategic, complex defence systems is often still conducted outside of the Directive, limiting its impact on the UK defence industry.⁵⁶

In addition, there are some procurement rules that are not consistently implemented across the EU, and the UK's departure could be a trigger for Government to re-examine how the UK awards defence contracts – without necessarily diverging to the extent that it loses market access. For example, under current EU law, Member States are forbidden from using offset agreements – which enable countries to gain economic benefits when they spend their defence budgets with foreign suppliers. This means, for example, that countries should not require foreign businesses to use local suppliers as a condition of awarding them a large defence contract.

In principle, curbing the use of offsetting agreements is desirable as they have the potential to prevent contracts being awarded based on quality and value. The UK defence industry therefore strongly supports the banning of formal industrial offsetting requirements within the European Defence Market. In practice, however, the way in which these provisions are applied is inconsistent. In particular, current rules allow offsetting to occur for the “protection of the essential interests of security”, which some countries use extensively to continue to benefit from offsetting and promote their own industries, while others do not. This prevents the creation of a level playing field across Member States and has the potential to stifle competition.

Similarly, while current EU rules forbid the use of some forms of state aid because it distorts competition, there are again a number of broad exceptions which Member States can apply in practice. Adherence to these rules is therefore also patchy and inconsistent.

As a result, while equivalence in procurement rules to maintain market access is important, industry would welcome steps to place the UK on equal footing with its European competitors, as it is clear the status quo on both state aid and offsetting could hamper the health and competitiveness of the UK defence market. Rigorous enforcement of existing rules by the European Commission could ensure fairer competition for European defence opportunities, however this could also be achieved by the UK taking steps to create – and apply – its own more tightly defined offsetting regulations.

Driving growth and competition across the European Defence Industry will benefit both the EU and UK

The future of the UK and European defence industry will be one of the few areas that feature in the negotiations both in security and economic strands of the talks. It is in the interest of Europe as well as the UK to get it right in both. The European and UK defence industries are very closely integrated through exports, imports and supply chains, and so a smooth flow of goods and services is vital for a number of key European defence suppliers.

Large pan-European defence programmes also rely heavily on the UK and without alignment UK participation in these projects may be hindered. This could in turn lead to higher delivery costs for the EU as they seek to fill the gaps left by the UK withdrawing from participation. It is also in the interests of both the UK and the EU to negotiate continued openness in procurement markets. The UK has a significant public procurement market: in 2015 the value of this market was over £260 billion, 13.6% of UK GDP. UK procuring entities also account for around a quarter of the value of tenders published in the Commission’s public tenders database.⁵⁷

ENERGY

Secure, affordable and sustainable energy supplies are critical to households and businesses across the country, underpinning the UK's economic health and prosperity and providing the foundations of a modern industrial strategy. In 2016, the energy sector created £24 billion in GVA, and delivered £88 billion in economic activity through its supply chains – purchasing goods such as aluminium for transmission lines, and services ranging from construction to cost-saving technologies. The value of investments made by the UK energy sector in 2016 was £11.9 billion, meaning that almost £1 in every £16 invested in the UK was in the energy sector.⁵⁸

The energy sector has an important presence across all regions of the UK. The sector directly employs around 148,000 workers and supports a further 582,000 through supply chain, consulting and other energy related activities. This means that the energy sector supports around 1 in 48 jobs across the UK – and these jobs are not just in London. For example, the sector employs 19,000 people in the South East, 22,000 people in Scotland, and 13,000 people in the North West.⁵⁹

Alignment with the EU energy and climate change rules will help achieve secure, affordable and low-carbon energy supply for customers

EU and UK energy rules have become highly integrated over the years. The UK is physically connected to Europe through sub-sea pipes and wires, and Northern Ireland and the Republic of Ireland operate an all-island single electricity market. The UK and EU are key trading partners in energy, with the EU supplying approximately 12% of the UK's gas and 5% of electricity in 2016. Common rules govern this complex relationship in order to ensure the market functions efficiently and delivers secure, clean and affordable energy to businesses and households.

Given the critical nature of the energy system, it is vital that a pragmatic approach to negotiations is taken in this area. Appropriate regulatory convergence will be needed to ensure barrier-free access to the Internal Energy Market, and the preservation of the Integrated-Single Electricity Market (I-SEM) on the island of Ireland. Full participation in the EU Emissions Trading System (EU ETS) until 2020 and at least equivalence afterwards will be important, as will a close relationship with Euratom and EU climate change objectives. And given the complexity of this area, it will be important that the UK continues to have a say over the rules that it applies. Getting it right on energy matters in order to keep the supply of energy secure and affordable for customers, as well as for meeting the UK's climate change goals.

Barrier-free access and appropriate regulatory convergence with the Internal Energy Market will be important to ensure that the UK and the EU can continue to trade energy effectively

Currently, the UK is part of the EU's Internal Energy Market (IEM), which is a long-term project to liberalise and harmonise the energy markets of EU member states, with

the aim of making energy supply more affordable and secure for businesses and households across Europe. Over the last 20 years, the EU has worked to achieve this through the introduction of several legislative packages, the most recent being the 2016 Clean Energy Package which intends to further the EU's progress towards a stable, competitive and sustainable energy system.

Interconnectors – the physical links that allow the transfer of energy across borders – are an important feature of the IEM, and the existing gas and electricity interconnectors between the GB market, the EU, and the island of Ireland play a critical function in improving the efficiency of energy infrastructure and contributing to a cost-effective system. Interconnectors increase competition, support the stability of the energy system and reduce price volatility. Post Brexit, it is important that effective trading arrangements continue to facilitate this, as well as further interconnector projects where economically beneficial.

Appropriate convergence with the current EU rules on the IEM, including the EU energy packages and the network codes for gas and electricity markets, will be essential to ensure that the EU and the UK can continue to trade energy in a harmonised way. Negotiations on the future of the UK's involvement in the IEM should include the agreement of a practical and cost-effective approach to accessing and facilitating interconnectors based on a level playing field between domestic and overseas generation, a common-sense approach to common network codes, and a degree of flexibility regarding alignment on future rules where appropriate.

To protect the interests of businesses and consumers in the Republic of Ireland, Northern Ireland and Great Britain, preserving the Integrated-Single Electricity Market is of utmost importance

Northern Ireland and the Republic of Ireland have shared a wholesale electricity market since 2007. This is known as the Single Electricity Market (SEM), and is made possible by a common set of rules established by parallel legislation in Westminster and the Irish Parliament. This is currently being upgraded to link the all-island Irish electricity market more deeply with the European market and this replacement arrangement – the Integrated-Single Electricity Market (I-SEM) – is scheduled to go live in May 2018. The I-SEM will be made possible by a range of harmonised rules, including how energy is bought and sold and how the companies that generate electricity are remunerated. By harmonising rules in this way, and integrating the all-island electricity market with European electricity markets, the I-SEM will enable the free flow of electricity not just across Ireland but across borders as well. This all-island approach has delivered proven benefits for consumers across the island including increased competition, efficient use of renewables, lower costs and improved security of supply.

Businesses on both sides of the Irish border and the Irish Sea want to see the benefits of the I-SEM maintained. The integrated nature of the Irish and Northern Irish electricity systems, plus the dependency of Ireland and Northern Ireland on gas and electricity network connection to the EU via Great Britain, means that bespoke regulatory provisions

will be required to ensure that the I-SEM is preserved. At a minimum, continued policy alignment across the island of Ireland will be required to maintain a level regulatory playing field, further underlining the need for the UK's continued alignment with the IEM.

The UK's ongoing influence in key EU agencies and bodies would allow both sides to manage regulatory alignment and ensure the energy sector continues to flourish across Europe

It is clear that the UK's energy challenges and opportunities are closely interlinked with the EU and ensuring regulatory alignment in the short term will be essential for the provision of secure, affordable energy on the path to a low-carbon economy for the benefit of both households and businesses. However, it will be important to ensure that the UK maintains involvement with the development of the system, rules and regulations – which it has already made significant contributions to. This is particularly important with a number of policy areas planned for review post-Brexit, such as the Offshore Safety Directive and the Environmental Liability Directive. A key part of this will be ensuring the UK's ongoing influence in key EU agencies and bodies such as the Agency for the Cooperation of Energy Regulators, the European Network of Transmission System Operators for Electricity (ENTSO-E) and Gas (ENTSO-G) as well as the European Nuclear Safety Regulators Group. The UK Government should ensure that the extent of alignment with future new or amended legislation is consistent with the overall global competitiveness of the UK's energy sector.

The benefits of the UK's membership of Euratom should be maintained, whether through continued membership or new arrangements, to support the on-going role of nuclear energy in the UK

As part of its membership of the EU, the UK currently participates in Euratom – the European Atomic Energy Community. This organisation provides significant benefits for its members, including access to a common EU market where the rules on the trade of nuclear materials/fuels, equipment, technology and services are harmonised so they can flow relatively freely. This is important for a wide range of energy-related businesses, but also for medical technologies and treatments that use nuclear material. Euratom also provides for nuclear safeguards arrangements – the measures which ensure that countries comply with their international obligations not to use nuclear material for weapons purposes. Moreover, membership provides access for EU Member States to key international markets for the trade in nuclear products and services, and close cooperation on nuclear policy, safety and regulation through Nuclear Co-Operation Agreements, including the US, Canada, Japan and Australia.

Failure to preserve continuity in these arrangements on nuclear would result in significant damage to the UK civil nuclear industry. The current arrangements are vital for the operation of the existing nuclear fleet (which provides 20% of UK electricity generation) and the delivery of the nuclear new build programme, commencing with Hinkley Point C. It is therefore important that the benefits of this community are maintained, whether through continued membership of Euratom or replacement arrangements.

The UK should ensure full participation with the EU ETS until the end of 2020, with at least equivalence thereafter, to help UK's efforts to decarbonise

The EU ETS is the largest trading scheme for greenhouse gases in the world; it has the greatest potential to reduce emissions in the lowest-cost way, and create a clear market signal to drive low-carbon investment across Europe. The EU ETS is made possible by a number of EU Regulations and Directives introduced over the last 15 years. It works by setting a cap on the total amount of greenhouse gases that can be produced by those covered by the regulation. Within this cap, which reduces over time, companies can trade emissions allowances with each other to manage those emissions as needed across the economy, creating a flexible system in which investment in clean, low-carbon technologies is incentivised.

The current phase (Phase III) of the EU ETS ends in December 2020, and – in line with transition arrangements – it is in the interest of all participants for the UK to participate in the EU ETS and remain aligned to these rules until that point. Thereafter, the UK should either continue its participation in the EU ETS, provided it maintains its influence on any future reforms and has access to the associated innovation funds, or establish an appropriate domestic approach, aligned with the EU system. Importantly, a future regime must ensure continued decarbonisation and competitiveness across the UK. More broadly, the UK already has ambitious domestic emissions reduction targets, and is a significant contributor to the EU's climate change targets and the global efforts to reduce emissions through the Paris Agreement. Continued collaboration in this area can support the ambitions of both sides to continue their leadership in tackling climate change.

In a rapidly changing world, a close relationship between the UK and the EU on energy and climate change objectives is in the interest of both sides

Agreeing regulatory alignment would also be beneficial for the EU in tackling global energy and climate challenges, supporting the economic transition and building a more competitive Europe. The UK has played a key role in liberalising energy markets and has been a leader in tackling climate change, supporting the EU's energy transition to a low-carbon economy. Like other EU Member States, the UK also plays its part in balancing the system and enhancing security of supply throughout Europe. Additionally, the UK was instrumental in the development of the EU's 2030 framework for climate and energy policies, which has put the EU on a clear path to delivering a competitive, low-carbon future while allowing Member States the flexibility to decarbonise their economy in the most cost-effective way. Ongoing collaboration and mutual support as Europe transitions to a low carbon economy while maintaining secure and affordable energy supplies therefore offers potential benefits to both the UK and EU.

FINANCIAL SERVICES

The UK is home to a world-leading financial services centre. The sector is a major contributor to the UK economy in its own right: the sector accounts for around 7% of UK GVA, and generates more than £79 billion in global exports, of which 36% is exported to the EU. It is a sector where the UK has a strong comparative advantage, as it generates a trade surplus of £25 billion in EU trade.

Over many years, the financial services sector has developed into a highly sophisticated and interconnected ecosystem with a large variety of firms – banks, insurers, asset managers, market infrastructure providers and exchanges – providing diverse products and services to firms, households and investors. It plays a crucial role in enabling growth across the economy, helping households save and invest by providing everyday services such as bank accounts and mortgages, and channelling much-needed capital for businesses to grow through lending or access to capital markets. The sector also contributes more than 10% – or £70 billion – of the UK’s overall tax revenues.⁶⁰

The scale and nature of the interlinkages between the financial services sector and other sectors are also significant: the entire ecosystem is supported by related legal, accounting and professional services, as well as hospitality and leisure services, real estate, telecommunications, technology and others. Firms in the sector also create many high-skilled and high-value jobs for 1.1 million people, not just in London but throughout the regions: around two-thirds of jobs in financial services are outside of London.⁶¹

The UK should seek an agreement on financial services that is underpinned by regulatory alignment and mutual recognition to enable market access

For consumers and businesses on both sides of the Channel, a broad agreement for mutual access on financial services is needed, based on mutual recognition of EU and UK rules. Given the depth of the relationship between the UK and EU financial services businesses and their customers, this should be a comprehensive agreement, covering rules for core financial services, insurance, capital markets and investment services, but also access to financial market infrastructure including payments, clearing and settlement systems.

For a range of financial services industries, a close relationship with EU rules, based on mutual recognition, will be necessary to achieve mutual market access

Currently, the system of shared UK and EU rules on financial services means that banks, insurers and investment companies licensed or authorised in any EEA country can provide services to clients in other EEA countries without needing to achieve multiple authorisations. This is because firms given permission to operate by a regulator anywhere in the EEA are assumed to have met the same standards and should in effect be treated as if they were locally authorised. This system of mutual recognition has enabled banks and

other financial institutions to benefit from scale and efficiencies as well as remote access to market infrastructure located in other Member States, such as trading platforms, clearing and settlement services.

Similarly for insurance, the Solvency II Directive creates a common prudential framework for insurers across Europe. It also allows firms authorised in one Member State to operate in another easily. Because of the cross-border alignment provided by the Directive, UK-based insurers are able to accept risks from clients in all EU (and EEA) Member States on the basis of their approval from the UK-based regulator for insurance (the PRA) without needing to meet additional requirements in other Member States. As well as making individual transactions easier, it makes doing business much simpler for firms that are present in multiple Member States as it reduces the need to deal with multiple authorities across jurisdictions.

It will be necessary to negotiate continued market access through mutual recognition of rules to avoid unnecessary costs of trade for these businesses through complying with different sets of regulation, keeping costs low for all clients. However, this will also be important to avoid any potential fragmentation of capital markets activity that result in an increase in the cost of finance for European businesses and SMEs.

Many firms, including banks and insurers have said that it is likely that they will need to establish a licensed entity in the EU to continue carrying out regulated financial services activities. This is a complex and expensive process, which involves applying for a license (which can take around 12-18 months), setting up offices and local operations, and moving and hiring local staff. In addition to this, banks also face requirements to have a substantial presence in the EU (no 'empty shells'), which necessitates significant additional capital and liquidity to be housed in the EU. Some estimates suggest that this could be in the order of €40 billion of additional capital, which, as studies from the Bank of International Settlements (BIS) have shown, could result in an increase in the cost of finance across Europe.

For example, a global insurance firm expects to lose its passporting rights due to Brexit. If there is no agreement to maintain mutual market access for insurance between the UK and the EU once the UK is a third country, the ability of its underwriters to insure risks in the EU (and EEA) will depend on the firm establishing an underwriting presence in the EU. However, setting up an insurance subsidiary in the EU is costly, and is far less efficient than the current system of market access, as it entails additional friction in the way the business is transacted.

Mutual recognition of UK and EU payments regulation will be necessary to ensure consumers continue to benefit from fast cross-border payments

The UK is currently part of the Single Euro Payments Area (SEPA) and EURO1 payments systems. SEPA revolutionised cross-border payments within the EU by establishing a single

set of tools and standards that make cross-border payments in euro as easy as national payments. 32 countries, including the EU Member States and the UK have replaced their existing national euro credit transfer and direct debit schemes with the standardised SEPA systems for credit transfer and direct debit payments.

Continued mutual recognition of rules on payments regulation is needed for UK and EU consumers, businesses and public administrations to continue making and receiving credit transfers, direct debit payments and card payments seamlessly. While, if the UK left SEPA and its regulatory framework, there are global alternatives for card payments, there are no global alternatives for credit transfers and direct debit payments that come close to being as efficient as SEPA. The alternative for credit transfers and direct debit payments is the SWIFT system which usually involves fees and takes an average of 1-3 working days to process payments. In contrast, the next stage in SEPA will allow these payments to be processed in 10 seconds or less, a system that some claim is modelled on the UK's Faster Payments Service.

If the UK is to continue a form of regulatory alignment with the EU, it will be necessary to negotiate a way of cooperating on rules over time

Although there is little desire for the UK to depart significantly from current rules and regulations for financial services, the EU is not a static organisation and its regulatory framework is likely to continue to evolve post-Brexit. Given the size and importance of the financial services sector to the UK, and the consequences for financial stability if there is regulatory failure, the UK necessarily has a strong interest in ensuring that the future regulations that apply to its financial institutions work well for its businesses.

Influence is particularly important for ensuring that the rules that are applied to the sector are appropriate for the UK's unique financial hub, particularly where the UK possesses businesses that are very specialised. For example, the types of insurance products offered in various markets are different, which means insurers' business models vary. These differences are reflected in the Solvency II rules which take steps to accommodate the different products that are offered, such as through 'matching adjustment' measures which cater for the specific nature of annuity products which are largely only offered in the UK. Without UK involvement in the development of EU insurance legislation, particularly the forthcoming Solvency II review in 2020 and in the absence of the UK's voice in regulatory developments, the characteristics of the UK market would not be expected to be reflected in the rules.

The UK should therefore seek, as part of the negotiations, to encourage regulatory and supervisory cooperation between the UK and the EU. Such a model would need to provide a framework to develop rules, as well as to monitor and constructively address potential regulatory divergence, including dispute resolution mechanisms.

A strong role for the UK in international for a is also important to keep influencing EU rules as well as global ones

Regulatory cooperation does not just happen within the EU, but on a global stage. The UK has helped to shape financial regulations at the global level through its membership of the G20 and the Financial Stability Board, as well as through membership of the International Organization of Securities Commissions, the Basel Committee on Banking Supervision and the International Association of Insurance Supervisors. This has been crucial in preserving the UK's interests in financial regulations. For example, the UK's voice was critical in the Basel Committee when the post-crisis banking reforms were shaped and implemented. This has also enabled the UK to shape regulations at the EU level, as many of these effectively originate from the UK's international commitments such as the G20.

It is therefore important that the UK remains committed to and continues to champion the use of international standards and regulations in financial services and maintains a world-leading regulatory regime post-Brexit, as this has contributed to its attractiveness as an international financial centre. It is not an either/or choice.

Both UK and EU firms and consumers will benefit from an agreement to continue mutual market access in financial services

Whether it is corporate lending, issuing debt or equity, trading financial assets on exchanges, hedging against or insuring for complex commercial risks, or managing investment portfolios on behalf of EU clients – UK financial services offer an enormous amount to businesses and individuals in the EU.

One particular advantage of continuing a deep relationship between UK rules and EU rules to allow market access is the efficient access EU businesses currently have to deep and liquid capital markets in the UK. Between 2011 and 2016, this meant EU businesses have been able to access financing from international banks based in the UK worth €400 billion in debt and equity issuance.⁶² This has helped companies borrow to grow and acquire new businesses. More than 30% of the trading volume of Daimler and Siemens shares – both headquartered in Germany – takes place on UK trading platforms.

But that is not where the benefit stops. The access to expertise and services that do not exist elsewhere in the EU is also crucial – not least in insurance. UK insurance firms have provided approximately 30 million insurance contracts to EU customers,⁶³ and offer very specialist expertise such as in aviation, marine and energy-related insurance. For example, the London Market underwrites 60% of the world's aviation insurance, insuring airline fleets for risks such as hull damage or war and terrorism-related incidents, which is needed for aircraft to fly. Currently, European airlines save money by being able to insure their entire fleet from a single hub in the UK.

HAULAGE

493,000 lorries traverse the UK's roads every day,⁶⁴ delivering everything from caravans and roof timbers, to hay bales and automotive parts to homes and businesses in every part of the country. Overall, approximately 76% of goods moved are by haulage,⁶⁵ though many industries play a role in the transport of a single product: a parcel can land at an airport, be loaded onto a train, then transferred to a lorry in a single day. Haulage directly contributes £13.1 billion to the economy in GVA, but this total increases to £62 billion if road freight haulage across all sectors is included.⁶⁶

190,000 people in the UK are employed by the haulage sector,⁶⁷ which is spread across the regions. This is most concentrated in the North West (15%), and lowest in the North East and London (3.5%).⁶⁸ But 10% of people employed in haulage are European,⁶⁹ and skills challenges are a major issue in the industry which has an aging population of HGV drivers.

While the majority of road freight transported by UK hauliers is solely for UK transportation, the EU is a hugely important market. 45% of freight traffic between the UK and EU is on roll-on roll-off lorries, which literally drive off ships and onwards to their destination. Additionally, 24% is trailer traffic. That compares with the rest of the world, where only 1% doesn't come from shipping containers.⁷⁰ Ireland, the sole EU country sharing a land border with the UK, is the UK's biggest freight trading partner – the UK exports twice the amount to Ireland than it imports.⁷¹

To maintain unimpeded access for road haulage into the EU, and the goods on board, alignment with EU rules will need to be negotiated

To maintain the smooth transportation of products across borders, a customs arrangement and deep relationship with the Single Market for goods matters enormously – but so too does alignment on the rules for both the drivers and the vehicles that are actively transporting those products. For drivers, this must start with the mutual recognition of drivers' licences, including alignment with the Community Licence and Driver licencing qualifications. For vehicles, and the haulage companies that own them, mutual recognition of haulage licencing and all rules flowing from it such as vehicle standards must also be negotiated to preserve unimpeded access for cross-border road haulage operators in the UK and the EU.

Additionally, ensuring no divergence between UK and EU rules on basic vehicle requirements – such as on emissions and road worthiness testing – will be necessary to smooth the transportation of vehicles and ensure the costs of purchasing fleets of vehicles remain as low as possible.

Continued equivalence of UK and EU rules is essential to maintain the benefits of the Community Licence and keep costs as low as possible for UK hauliers

Haulage vehicles that cross borders, as well as the businesses that manage those vehicles, are subject to both EU and international rules. These rules create two particularly important requirements that must be met before companies and vehicles are allowed to move goods

across the UK-EU border. The first of these is the requirement for any haulage operator to have a Standard International Operator Licence for road transport. Businesses applying for this have to demonstrate they have enough space on their operating site for lorries to park and load, and that there is safe access to the site. They also have to demonstrate they have a specially qualified Road Transport Manager on site. This person, who will be the individual working with suppliers, training staff, managing supervisors, arranging maintenance and managing contracts, needs to have a Certificate of Professional Competence. Once the business has a Standard International Operator Licence and a Road Transport Manager with a Certificate of Professional Competence (CPC), it can apply – free of charge – for the second requirement: a Community Licence.

The Community Licence is special because, unlike other forms of international permit, it allows HGV drivers to undertake a process called cabotage. Rather than allowing a driver to only deliver from Glasgow to Greece, it allows a lorry to do three jobs in any Member State within seven days, before it has to return to the UK. So, for example, a UK lorry could make a delivery to the Netherlands, pick up a delivery in the Hague to deliver to Belgium, then take a delivery from Brussels back to the UK. That makes operations much more efficient – the lorry driver is essentially able to earn the cost of the journey home on their way back.

Negotiation of equivalence between UK and EU rules on the international haulage market will be necessary to ensure both that UK haulage sector can continue to be able to access the benefits of the Community Licence and to ensure that the UK's Traffic Commissioners Office is still able to issue the Community Licence after Brexit. Mutual recognition of UK-issued CPCs for Road Transport Managers as sufficient to meet the requirements of the Community Licence will also be necessary. Without equivalence of these requirements, the ability of the UK's haulage companies to undertake cabotage would be removed. In its place, the UK and EU would likely need to reintroduce bilateral permits or establish a new authorization system allowing for international road haulage. Both would raise administrative costs and complexity. Indeed, the Road Haulage Association has estimated that instead of the estimated costs of £8 per movement that exist today, a permit system could incur costs of £53 per movement for UK operators⁷² on average – 6 times the cost of today's regime. As a bilateral permit system would create a limited number of permits allowing movement for UK HGV companies, this system would also directly reduce market access and restrict the ability of UK operators to meet the demand of their customers.

“When we're transporting things like gases and chemicals, there can't be delays. Delays mean that the products we're carrying start to change state while they're in our tanks. When you're talking about chemicals like liquid nitrogen that have to be kept under pressure at low temperatures, delays aren't an option.”

Transport solutions company

“DHL supports the continued alignment with EU regulations & directives regarding the road haulage profession. Any changes in this area would make it more complicated for UK businesses to continue to operate seamlessly with Europe. Minimising any barriers to cross-border trade is paramount for ongoing, successful trade with Europe.”

DHL

“The importance of alignment with EU rules is most clear to our business when we are crossing borders with our goods into non-EU countries. Delivering to or picking up goods from Switzerland, for example, even though it has associate membership with the EU through EFTA, is a third more expensive and takes 24 hours longer than delivery to neighbouring Italy. There are even different rules which apply to our drivers working in Switzerland, which adds an extra layer of complication to manage.”

Pan-UK haulage company that makes deliveries across Europe

Negotiating continued equivalence of UK and EU driving licencing rules would help to keep the haulage sector competitive

In addition to rules on haulage vehicles and operations, there are currently EU rules that apply to the drivers of these vehicles as well. At present, harmonised EU rules on the qualifications for HGV drivers mean that a driver qualified to operate a lorry in one Member State can do so freely in any other on the same qualifications. This is a two step process. Firstly, the driver must achieve a HGV licence. In the UK, this means drivers taking four sets of tests – on theory, handling of a HGV, appropriate reactions in particular scenarios and on road driving. Secondly, the driver must achieve a Driver Certification of Professional Competence (CPC), which is valid for five years. In the UK, the DVLA ensures HGV drivers have 35 hours of the latest safety training to meet the requirements needed for achieving this certificate. The requirements of and the processes conducted by the DVLA are equivalent to the ones that HGV drivers must meet if taking their tests in France, Sweden, Hungary or any other Member State. Drivers are therefore permitted to move between European nations without seeking additional permissions.

Negotiating equivalence with the rules on the qualifications needed for HGV drivers will be necessary to ensure mutual recognition of UK and EU HGV drivers licences and CPCs, which help cross-border hauliers to remain competitive. If drivers have to get separate licences for the UK and EU and undertake separate training provided by UK and EU authorities to achieve CPCs, it will come at substantial cost to businesses and individual drivers – who are often self-employed. The road haulage sector operates on very narrow margins as it stands – in 2016 the report profit margin of the top 100 road hauliers was 4%⁷³ – so additional costs such as these would have a substantial impact on the sector’s competitiveness.

“Alignment to ensure there is no need to check lorry drivers for excessive amounts of time – that the right to deliver and the right to work is automatic – is part of the solution for our infrastructure pinch-points like Dover.”

British haulage provider

If the UK and EU agree equivalence of haulage rules, consumers and businesses on both sides will benefit

The UK agreeing equivalence of rules would also mean that EU-based haulage companies could continue to enter and supply their services in the UK. The UK has a rapidly growing demand for e-commerce and allowing cross-border trade to continue within the bounds of

EU regulation would suit both UK and EU operators. Equivalence would mean allowing an Irish operator to collect goods in the UK in transit to another EU State, or a Dutch haulier to make a delivery to Birmingham, pick up another in Bath and deliver it to Belgium on route to cover the costs of the journey. Equivalence of these rules would also have additional benefits for EU haulage companies: UK Road Transport Managers could continue to be certified to work within EU operators without certification, EU citizens residing in the UK and holding EU driving licences for lorries could continue to drive in the UK without needing to retake tests, and EU haulage companies would not have to comply with a permit system to drive goods into the UK – a system estimated to add costs of £26 per movement for EU operators.⁷⁴

HIGHER EDUCATION

The UK higher education sector is genuinely world leading. Universities play a vital role in ensuring the future success of the country – whether that's helping to ensure a skills base fit for the decades ahead, at the cutting edge of new teaching and research methods, or in expanding links abroad – the sector's strength is in its diversity. As research has demonstrated, universities provide significant benefits to the UK. In 2014-15, the higher education sector generated £95 billion of gross output in the economy, earned £13.1 billion in export receipts and supported more than 940,000 jobs (equivalent to 3% of all UK employment).⁷⁵

These benefits are felt across the UK's regions and nations. As anchors within their local communities, universities help to ensure prosperity is shared and help to boost regional growth. For example, the University of Birmingham has estimated that almost 1 in 50 jobs in the city depend on the university,⁷⁶ whilst universities in Wales are estimated to generate over £5 billion of output for the Welsh economy⁷⁷ and Queens University in Belfast has been estimated to support over 6,000 jobs across Northern Ireland.⁷⁸

The EU has deep links with the UK's higher education sector, not least through the 130,000 students and 48,000 staff that come from the EU to a UK university.⁷⁹ These people add to the vibrancy of the higher education sector as they are able to bring fresh ideas, added diversity and unique skill sets to the UK.

There are not specific EU rules for the higher education sector, but in some areas regulatory alignment will matter

EU Member States are responsible for the way their higher education sectors are organised, regulated and delivered. EU regulation therefore tends to intersect with this sector, rather than directly impact it. If, for example, there is divergence in chemicals regulation, UK universities are less likely to be included in collaborative research projects into chemicals under the Framework Programmes. However, there are a number of areas where universities will benefit most from continued regulatory alignment between

the UK and the EU. This particularly includes data flows – as researchers regularly handle significant volumes of personal data, and transfer them across borders during collaborative projects.

One of the most important areas for regulatory alignment for the higher education sector is mutual recognition of qualifications

The freedom for workers to perform their profession across the EU has been key in supporting trade between the UK and the EU, with businesses on both sides of the Channel benefitting from rules on the recognition of professional qualifications. These rules are limited to a small number of professions, but healthcare professionals and architects currently benefit from automatic recognition across the EU and qualifications for lawyers, auditors, insurance intermediaries, commercial agents and other professionals go through a general process for mutual recognition. For example, lawyers qualified in the UK can shuttle back and forth on the Eurostar providing advice to clients in Brussels on both English corporate and finance law and EU competition law.

UK professional qualifications are respected worldwide, which means that many EU nationals come to the UK to study, or study for a UK qualification in their own Member State. This supports growth in the UK higher education sector. It is estimated that around 30,000 students from the EU (except the Republic of Ireland) are registered with UK professional bodies. Many professionals are attracted by the high quality of work experience in the UK, and often begin their careers in the UK to build up their experience post-qualification before returning to their home countries to share their knowledge and expertise.

If there is no mutual recognition of qualifications after Brexit, individuals who are in the process of acquiring their qualifications would face great uncertainty, and potential practitioners would be less likely to seek a UK qualification in the future.

The UK and EU should therefore look to secure a dynamic mutual recognition agreement for professional qualifications, to simplify the process of highly-skilled workers providing services across borders and support the higher education system in the UK. This agreement should include diplomas, certificates and other evidence of formal qualification. After its exit from the EU, the UK should also look to negotiate similar agreements with other third countries as appropriate, to increase services trade on a global stage.

One of the higher education sector's top priorities is continued involvement in Framework Programmes, which helps the UK to influence EU rules

UK participation in Horizon2020 and previous European Framework Programmes has been hugely beneficial for British businesses alongside the research community. These Framework Programmes allow businesses and education centres to work together across borders on shared priorities. They are an important source of long-term funding and provide unique collaborative opportunities. In themselves, these benefits are significant. Cross-border working, for example, is now essential in bringing together capabilities on single projects and areas such as medicine, cyber-security, robotics and big data. And

under Horizon 2020, the UK is placed second only to Germany in the number of project participants and share of funding.⁸⁰

But one often under-looked benefit of UK involvement in the European Framework Programmes is the role the UK can play through them in shaping future regulation across Europe. Participation in these EU programmes enables universities, scientists and businesses to have regulatory influence and shape the direction of new regulation in the EU right from the start – which will matter to exporters and importers in the UK whatever the relationship negotiators agree. For example, through Horizon2020, the University of York is currently collaborating on research to inform regulation on minimising unwanted catches in European fisheries, the University of Dundee is currently collaborating on research to improve the market and regulatory framework for crowd-funding renewable energy projects, and the University of Southampton is currently collaborating on research to support the implementation of regulation on eIDs.

The UK should seek to secure bespoke associated country status for future research programmes in order to safeguard the ability to collaborate with partners across the EU and maintain early-stage involvement in and development of international regulations.

“We have found participation in EU research programmes to be extremely beneficial to our business strategy. We gained access to the latest research by working with academic partners and other leading-edge companies... it was especially useful to work with other tool companies to establish a common format that can be used by multiple tools.”

Medium-sized manufacturer based in the North of England

As the UK is home to a world-class higher education sector, EU Member States value it as an important part of the research and innovation ecosystem

The UK is rightly regarded as a world leader in higher education. According to the latest global league tables, the UK is home to the two best-ranked universities in the world, with three UK universities featuring in the top ten.⁸¹ Also, despite the fact the UK represents just 0.9% of the world’s population, it punches well above its weight when it comes to higher education and accounts for 9.9% of downloaded academic articles, 10.7% of citations and 15.2% of the world’s most highly-cited articles.⁸²

Given the UK’s world-class universities, its research ecosystems are highly valued by European businesses, universities and third-sector institutions and, as such, are regarded as an important part of the EU’s own innovation ecosystem. The interests of the UK and the EU when it comes to higher education should be highly compatible. A group of advisers for the European Commission, for example, has stated that “continued engagement with the UK within the post-2020 EU R&I programme remains an obvious win-win for the UK and the EU”.⁸³

HOSPITALITY AND TOURISM

The UK's hospitality and tourism industry – covering hotels, restaurants, food service, pubs, service apartments, clubs, visitor attractions and more – is one of the UK's largest and most successful industries, contributing £127 billion to the UK economy, or 7.1% of GDP.⁸⁴ The UK is fifth in the world for international visitor expenditure and the eighth largest for visitor numbers. It is also the UK's fifth largest export sector, contributing over £59 billion of GVA, and the fourth largest employer, accounting for 3.2 million jobs.⁸⁵ ONS figures reveal that, since 2009, the UK tourism industry has provided economic growth at a faster rate than most other industries and provided additional employment at almost twice the rate.⁸⁶

The revenue and jobs created by this success story are spread widely across the UK. The sector is a major employer throughout the UK, ranking in the top six employers in each region. Only 17% of these jobs are in London: these businesses employ 304,000 people in Scotland, 353,000 in the North West, 298,000 in the South West and 455,000 in the South East.⁸⁷ Importantly, many of these jobs are in rural and seaside areas, parts of the country which are often the poorest. Tourism allows wealth to move from urban centres to these areas, a vital source of income. In 2016, urban visitors spent £25 billion in rural and seaside destinations, supporting over 460,000 full-time jobs in these areas.⁸⁸

The EU is of critical importance for the UK hospitality and tourism sector, because of its proximity. Over 65% of the 32 million people that visited the UK in 2016 were from other EU countries, contributing around £10 billion to the UK economy.⁸⁹ 9 of the top 10 source countries for visitor numbers were EU Member States, with France, Germany and the Republic of Ireland providing the most visitors to the UK.⁹⁰

There are opportunities for divergence from some EU rules on the hospitality and tourism industry, but convergence is the main priority in most areas

There are sections of the hospitality and tourism industry which are affected by very specific pieces of EU regulation, and others – like national parks, monuments, caravan parks and sporting attractions – which are not. Overall, the hospitality and tourism industry is clear that the UK should negotiate convergence with the EU on the frameworks of rules and regulations which underpin the high levels of travel between the UK and EU, as well as those that keep the movements of data, food, drink and animals easy. And while convergence on many consumer protection rules in hospitality and tourism is not necessarily essential, levels of protection for holiday makers should not be lowered as the UK must remain renowned as a safe place to visit.

However, the UK's exit from the EU could provide a small number of opportunities for divergence to support the nation's thousands of small hospitality and tourism businesses, without affecting consumer protections or movement of goods or people.

It is vitally important that agreements facilitating travel between the UK and the EU area largely maintained

There are a wide range of joint EU rules that currently make travel between the UK and the EU easier. The most obvious of these, perhaps, is the visa regime, where it is in the interests of both sides to be liberal. However, the future of regulations on airlines and airports in particular, as laid out above in the section on the aviation sector, will also be critical as the vast majority of movements of visitors between the UK and the EU is by plane.

An adequacy agreement on the UK's data regime is also vital to support movements between the UK and the EU. As well as providing a framework for services such as payments and marketing across borders, the General Data Protection Regulation provides a clear set of rules for facilitating the data sharing required to support counter-terrorism and security matters related to travel between the UK and EU. It is not in the interest of the UK's hospitality and tourism sector in particular for the UK to diverge from the EU's data rules and risk onerous restrictions or administration for businesses and enforcing authorities.

The ability to share and receive personal data between EU Member States through mechanism such as the EU Passenger Name Records Directive is also critical to the functioning of the industry and alignment here should be maintained. The mutual recognition of drivers' licences and qualifications in diving and skiing, when effective, has also been helpful for consumers and travellers.

"Leaving the agreements that attract European tourists would be very bad for our industry. We need to make it easier for people to come and visit Northern Ireland, not harder."

Small hotel chain in Northern Ireland

For many hospitality and tourism businesses, continued high standards in consumer protection and safety is one of the highest priorities and some aspects will require negotiating convergence of rules

One of the most well-known cross-border consumer protection initiatives is the European Health Insurance Card (EHIC) scheme. If the UK and the EU do not successfully negotiate a future for the EHIC's applicability for UK citizens in the EU and EU citizens in the UK, it will require travellers to purchase private travel insurance, adding to the costs of travelling abroad – including for business purposes – and go some way towards discouraging the movement of visitors between the UK and the EU.

However, the UK's EU membership has been important in building high standards of consumer protection in the hospitality and tourism industry in other ways. For example, collaborating on cross-border standards is one way to improve health and safety within the industry – such as in the co-ordination of safety standards for amusement park rides. The EU does not presently regulate in this area, but CEN (the European Committee for Standardization) has worked with industry to develop a standard on the design, manufacture, installation, maintenance, operation and testing of rides in amusement parks.

It is in the UK's interest to continue to converge on standards such as this for a number of reasons. Firstly, because implementing this standard across the European nations of CEN will support the cross-border trade in fairground and amusement park machinery going forwards, as well as promoting high levels of health and safety which encourages attendance at tourism businesses. But it also supports UK industry's voice across the world; the international standards organisation is now in the process of making this standard the international benchmark.

A large proportion of the hospitality and tourism sector is domestic, and businesses could benefit from divergence from EU rules in a limited number of specific areas

Once the UK has left the EU, there may be opportunities for more flexible domestic regulation that better reflects the needs of the hospitality and tourism industry, and would help improve the competitiveness of domestic tourism businesses.

One opportunity identified by businesses in the sector for after the transition period is the revision of the Package Travel Regulations, which the UK is required to implement by July 2018. Currently, this regulation stipulates that a holiday offer including two of three elements – transport, accommodation and any other tourism service – is a package holiday. Any business offering a package holiday is legally responsible for every part of it. For example, if a London hotel offers a product to their customers that combines an evening stay with a trip to see Hamilton at the theatre, or a Stratford B&B offers a weekend away with tickets to Shakespeare's birthplace, or a Cardiff guesthouse offers a night's visit with a tour of Doctor Who filming sites, this is deemed to be selling package travel even if the business offering the activity is not formally linked to the attraction. For many small businesses, being legally responsible for anything that happens to the customer is an unacceptable risk to take on.

The Tourism Alliance believes that a small change in this regulation – changing the definition of a package holiday to include transport – would free domestic tourism businesses from enough unnecessary red tape to boost the UK's domestic tourism industry by £2.2 billion per annum and create an additional 40,000 new jobs.⁹¹ Divergence here should not, in theory, interact directly with the UK's ability to trade.

Continued mutual recognition of most regulation on zoos probably is not necessary – except where it allows movement of animals for breeding, where convergence is vital

Zoos are regulated in a small number of ways by the EU. The Zoo Directive is the primary piece of legislation that matters – a rule setting out responsibilities of zoos to have certain objectives on conservation, education, protecting the quality of life of zoo animals and the health of the public. Given the diverse nature of zoos across the EU, and the difficulties in providing set requirements for a large number of species, these rules focus more on guidance and tools to promote good practice. The UK has transposed these rules as part of an amendment to the existing Zoo Licensing Act 1981. Given the flexibility of the minimum standards laid down by this directive,

there is no reason why the UK would want to diverge as it is free to go above and beyond at any time. But equally, convergence, mutual recognition or equivalence is unlikely to be necessary here as zoos are domestic institutions and the Zoo Directive is not relevant to any trade.

However, there is some movement between zoos that is facilitated by EU rules, though not under the Zoo Directive – and that is the movement of captive animals, particularly for the purposes of breeding. A huge list of animals – primates, wolves, camels, bears, bats, lemurs, anteaters, beavers and many more – as well as their semen and embryos are covered by the Balai Directive. This allows zoos in the UK to move animals around Europe much more easily than under the UN provisions that operate for non-EU movements.

There are lots of risks involved in moving exotic animals across borders, not least from disease, so the Balai Directive is complex. Among other things, it requires premises receiving animals from abroad to have adequate quarantine facilities, a vet on hand, detailed records of animals being moved and the ability to dispose of any carcasses adequately. There have been some difficulties with the implementation of it in the UK. However, if the UK left without negotiating convergence with EU and UK rules for movement of zoo animals, it would be subjected to stringent measures that would render this activity much more difficult for organisations, which are usually not-for-profit. This would have a serious negative impact on breeding programmes and conservation efforts, as the UK is unable to maintain the genetics and viable populations of many species on its own given its limited number of animals.

While alignment with most rules affecting museums will also not be necessary – those that underpin the easy exchange of cultural objects between the EU and UK would benefit from equivalence

Museums in the UK exhibit some of the most diverse collections in the world, helping them to resonate and attract with the broadest range of audiences. This is supported by the trade in cultural objects between EU states, which is currently governed by a complex mix of UK and European legislation, with much of the UK legislation being implemented as a result of EU Directives, particularly regarding preventing the illicit trade in objects, returning cultural property amongst Member States, and export licensing. To allow museums to continue to prosper, it is important that no new regulatory barriers are put in place that undermine the easy exchange of museum objects or specimens with other EU Member States.

The UK and EU tourism industries are highly interdependent, so maintaining ease and safety for visitors and more must be a priority for both sides

The UK and EU tourism industries are highly interdependent. 45.7 million (76%) of trips by UK residents are to other EU destinations, while 23 million (67%) of visitors to the UK are from other EU states. Visitors from the EU contribute around £10 billion to the UK economy each year while outbound tourism to the EU contributes an estimated £19 billion to the EU.⁹² The safety of citizens visiting either side is anticipated to be a priority for negotiators, and there is a lot of shared interest in keeping the hospitality and tourism industries on both sides thriving.

The shared interest is particularly strong between Northern Ireland and the Republic of Ireland. In 2016, Tourism Ireland – a joint funded cross border collaborative body – estimated that over 2.1 million tourists visited Northern Ireland and contributed over £527 million to the local economy. Over 75% of tourists come to Northern Ireland via the Republic of Ireland. Residents of Great Britain are also the largest group of visitors to the Republic of Ireland, representing 41% of total tourists and contributing over £960 million to the local economy, while Northern Irish tourists account for 13% of total visitors to the Republic of Ireland, contributing over £320 million.⁹³

LIFE SCIENCES

The UK's life sciences sector is a key driver of prosperity in the UK and a renowned global success because of both its economic and social contribution, and unique contributions to innovation, research and development. 5,142 life sciences companies – from medical device, medical diagnostic and pharmaceutical manufacturers, through to the synthetic and industrial biotechnology industry – generated approximately £63.5 billion in turnover in 2016. These firms employed 233,000 people across the UK, with over a quarter of these jobs in highly skilled research and development roles.⁹⁴ Many of these jobs are based in the area known as the 'golden triangle', comprising of Oxford, Cambridge and London but life sciences are not just a strength of the South East and East of England. The medical technology sector, for example, is more evenly spread throughout the UK, including in the Midlands and Northern Ireland.⁹⁵

As well as its significant economic contributions, the sector plays a critical role in tackling some of the most significant challenges of our time, including treating cancer and seeking to halt dementia through its research and development functions. At the same time, the sector is on the cusp of leading a medical revolution through the trailblazing use of artificial intelligence and immunotherapies.

Overall, the sector is highly dependent on the global marketplace. Globally integrated exports of pharmaceutical and medical technologies make a significant contribution to the UK's trading status, accounting for 5.2% of UK goods and service exports by value. Within this, the EU marketplace is central. The UK exported 48% of its life science manufacturing products to the EU in 2016 and it has been estimated that about 45 million packs of medicines are supplied from the UK to other European countries each month, while more than 37 million packs come from Europe to the UK.⁹⁶

To ensure patients are able to access the latest medicines in a timely manner, convergence with existing EU regulation is critical

In this area, maintaining patient safety is the overarching goal in the negotiations for both government and the life sciences sector. To do this, negotiators must seek to ensure the

supply of medicines and medical technology is seamless post-Brexit and that timely access to new medicines and technologies is not hindered. Convergence between UK and EU rules on life sciences is essential to ensure these aims, as is continued involvement in pan-European pharmacovigilance activities to monitor the safety of medicines and minimise the loss of expertise from both the UK and the EU. Regulatory divergence would add very little competitive edge to the UK's life sciences sector and would in fact potentially be harmful to patient safety.

It is critical that arrangements for the regulation of medicines and medical devices are addressed as a matter of urgency given its central importance to patient health and safety. For the UK, the resource, time and expertise required to build and legislate for a stand-alone regulatory model would be significant – and not in the interests of UK patients, EU patients or the sector itself.

Convergence with every stage of the EU rules that govern the production and sale of medicine is essential to ensure patient safety

The manufacturing, processing, marketing, moving and monitoring of medicines is highly regulated in order to ensure that businesses making, selling and transporting medicines follow absolute best practice. As the ingredients and products that these companies use can both save and change lives, this is essential. Across the EU, a range of rules on the life sciences industry are harmonised – including regulations and directives on Good Manufacturing Procedure, Good Laboratory Practice and Good Distribution Practice for firms handling medicine for both human and animal use. These rules are harmonised in order to ensure that the regime for medicines in every Member State is as robust as the regime in any other. But having the same set of rules also means that a market is created that allows medicines to flow freely – something which is essential when dealing with the production and transportation of products that have to be delivered to patients within hours, such as those with radioactive elements. It also creates a streamlined process and supply chain for medicines across Europe where, for example, a product may be designed in Germany, produced in Ireland, sterilised in the UK and then packaged in Denmark.

It is critical that there is convergence between the standards and regulations that govern the production and sale of medicines post-Brexit in order to maintain medicine supply across the EU and UK. Any trade barriers could lead to delays and even shortages of the supply of medicines. If medicines are stuck in border checks, in warehouses or manufacturing sites, they could also be subject to extensive retesting requirements. This could lead to severe disruption of companies' supply chains and ultimately disruptions to the supply of life-saving medicines.

A radiopharmaceutical product is licensed for the treatment of patients with castration-resistant prostate cancer. Each treatment dose is made to order based on an individual patient's weight. The treatment has a half-life of 11.4 days and a supply route that starts with production in Norway. Like many other treatments, this medicine crosses multiple borders in Europe before arriving in the UK. Potential interruptions and delays in the supply chain associated with importation requirements and additional UK certification, as a result of divergence from EU regulations, could risk timely and safe access to this treatment for patients.

Continued convergence with EU rules is essential to maintain co-operation in the authorisation of medicines, which makes access to medicine quicker, cheaper and safer

One of the most important parts of bringing a new medicine to market is the authorisation – the process by which the product is tested and approved for sale. The European Medicines Agency (EMA) is the body which sits at the heart of this process, a decentralised agency of the EU within which Member States collaborate on rule making and enforcement across Europe.

EU rules provide for the rigorous testing and approvals of medicines to take place in a number of ways. Namely, an authority in a Member State – like the Medicines and Healthcare Products Regulatory Agency in the UK – can recommend to the EMA that a product is safe for sale across the EU, either before or after approving the product for sale within its own borders. Alternatively, the EMA can issue an approval for a medicine it has authorised for sale itself, automatically licensing the product for sale across the EU. This process is often the preferred one for very specialised medicines – products created to treat a relatively small number of patients who suffer from rare diseases – as this process needs expertise to be pooled from across the EU to ensure patient safety. The UK currently benefits from the availability of 427 medicines that have been created in this way.⁹⁷

Convergence with EU rules and involvement in the existing centralised marketing authorisation procedure is vital to ensure that companies only have to submit a single marketing authorisation for products to be sold across the EU. If this does not take place, companies will have to go through the approval process twice over – once to sell into the EU and once to sell into the UK. The evidence of third countries suggests that this could delay the authorisation of products for patients by many months and even discourage some companies from seeking authorisations to sell into the UK at all, particularly those which are for rare diseases.

Negotiating convergence in rules governing the testing of medicines and cooperation in the authorisation of medicines must also include the ability for quality testing and Qualified Person release for the whole of the EU to continue from the UK. It must also cover rules around batch testing and ongoing market surveillance as, once a product has been released for sale into the EU, it must be periodically re-tested to ensure its safety. The UK contributes substantially to ongoing pan-European pharmacovigilance, as part of a coordinated system to ensure that EU Member States are alerted of problems detected with medicines licenced for sale, so action can be taken across the EU to preserve patient safety.

“For our business, you can’t get trade right without getting regulation right.”

Medium-sized life science firm in the East Midlands

“We export around 95% of our UK-manufactured products. If there were to be different product and safety standards for the UK, it would slow down market launch for our products and in particular delay availability of our latest life-saving technology for UK patients.”

Medium-sized medicines technology company

“Some of our products have half-lives as short as 6 hours. Customs delays are the biggest threat to their delivery, but if rules start to diverge and create barriers behind the border we’ll have no choice but to expand our lab in Sweden and make those products for European patients there.”

Multinational pharmaceuticals company with over 1,000 employees in the UK

In order to ensure patient safety, the UK must continue to converge with key regulations on medical devices that are in the process of implementation

EU rules that are important to the life sciences sector are not just limited to medicines. Harmonised rules on medical devices also play a significant role in the sector. These rules cover the manufacture and handling of everything from the surgical gloves that the NHS uses 10s of millions of each year, to the most complex, advanced scanning and automated monitoring machines. These harmonised rules allow both a robust level of safety for patients and the free flow of them across borders.

The EU rules on medical devices are currently being updated, to reflect the growing reality that, as well as stand-alone medical devices, there are many medicinal products which contain a device component for delivery or use. Regulation must keep up with innovations like 3D printed hip joints, apps linked to feeding tube technology and smart heart implants. Companies operating in the life science sector therefore have a keen interest in the future of medical device regulation. The introduction of the new Medical Device Regulation and In Vitro Diagnostic Regulation is due to be fully applied in 2020 and 2022 respectively. The new regulations will replace the EU’s current Medical Device Directive and In Vitro Diagnostics Directive and are intended to drive greater confidence in patient health and safety.

There is a strong case for the UK continuing to converge with the new Medical Device Regulations. The new rules include important improvements to modernise the current system such as stricter pre-market requirements for higher risk medical devices. They also refer to the inclusion of certain aesthetic devices, improved transparency, reinforcement of rules on clinical evidence and strengthening of post-market surveillance as well as improved coordination mechanisms between EU countries in the fields of vigilance and market surveillance. The regulation of medical technologies has been built with considerable UK influence and expertise, and benefits from consistency and scale. Even more significantly, the regulatory system is critical to delivering safe, effective medical technologies which have passed rigorous testing.

Convergence with the updated Clinical Trial Regulation is important to ensure the cost of bringing new medicines to patients is kept as low as possible while maintaining safety

The way clinical trials are conducted in the EU will undergo changes when the Clinical Trial Regulation comes into application in 2019. The regulation harmonises the assessment and supervision processes for clinical trials throughout the EU. The goal of this regulation is to create an environment that is favourable to conducting clinical trials in the EU, by ensuring the highest standards of safety for participants and increased transparency of trial

information. Additionally, EU rules on clinical trials state that clinical trials being conducted in the EU must be sponsored by an EU-based legal entity or the sponsor must have a legal representative established in the EU.

The UK successfully lobbied for changes to the updated regulations which, amongst other things, will streamline research processes. Therefore, convergence with the new regulations is seen to be in the best interests of the UK. Should the UK choose to diverge from the regulations, UK-based sponsors or ex-EU sponsors using a UK-based legal representative would therefore need to establish a legal representative in the EU to continue to conduct trials in the EU. This could be potentially costly, and make the UK a less appealing location for clinical trials in Europe; impacting the UK innovation base and the opportunities to conduct trials in the UK.

The UK is a crucial player in the sector's regulatory framework and its departure would significantly impact the EU

Continuing to be part of EU regulatory frameworks, processes and procedures would provide significant benefits for public health in both the UK and the EU. The UK makes a substantial contribution to the work of the EMA and in 2016 was the Rapporteur for one in five EU centralised approval procedures for medicines. Furthermore, the UK is a key player in European pharmaceutical development, constituting 10% of the EU's total production and contributing approximately 20% of the EU's total R&D.⁹⁸ The UK cooperates and shares expertise in the assessment of new medicines and of new safety information. Both the UK and EU are dependent on each other for exchange of information in the regulation of medicine which ensures that patient safety is at the forefront of the development of any new medicines. And as 45 million packs of medicines are supplied from the UK to other European countries each month, there is real incentive to get this right for both sides.

New products must be tested in clinical trials. This is regulated by the EU's Clinical Trials Regulation

Medicines development is a global process. Having a harmonised approach to how medicines are tested in clinical trials is important so that a medicine is developed to global standards. Convergence is needed so that the company does not have to have parallel processes in place in both the UK and the EU.

The manufacturers must get authorisation to be allowed to produce the products

The UK has the 2nd highest number of good manufacturing practice sites in the EU, and convergence would ensure these manufacturing sites are protected and can continue leading Europe. Manufacturers need access to the ingredients of medicines which may come from the EU.

Importers must get authorisation to be allowed to bring the products into the EU

With convergence agreed, importers will only have to go through the authorisation process once instead of twice. Duplicating marketing authorisations has been estimated to add an additional £45,000 per medicine.

New products must achieve "market authorisation" before they can be sold. There are three different kinds of procedure:

- Centralised: The EMA approves the product for the entire EU
- Mutual recognition: A national body recommends a product it has already approved be sold across the whole EU
- Decentralised: A national body approves and recommends a new product to be sold across the whole EU

If convergence is not agreed, UK medicines will also face delays in coming to the EU market. 45% of marketing authorisation applications submitted to the EMA during 2013-2015 had not been submitted to all three third countries (Australia, Canada, and Switzerland) by the end of 2016. Applications that were submitted to the third countries faced delays in submission of two-three months and in 5-15% of cases the delay was greater than one year.

The UK alone will face challenges in making independent market authorisations and the MHRA will need to rapidly increase capacity and skill sets to clear a greater range of products. Once medicines are authorised, the authorisations need to be constantly maintained; doing this in parallel will be a duplication of work.

The distributors must get authorisation to be allowed to ship and drive the new products to their destinations

With convergence agreed, distributors will only have to go through the authorisation process once instead of twice.

New batches of product must be routinely tested

The UK has the 3rd highest number of sites involved in batch certification in the EU. Convergence would ensure these sites are protected.

Pharmacovigilance activities are conducted on an ongoing basis to identify any risks and the findings circulated throughout the countries involved

The UK has detected the greatest number of "signals" or flaws in medicines since 2012. The EU would benefit from this expertise continuing.

Convergence would ensure information about these signals are spread quickly across the UK and EU.

MARITIME AND SHIPPING

From the shipyards of the River Clyde and Fife to the day trippers on Dover ferries, and from the enormous mechanised ports of Felixstowe to the luxury yacht manufacturers of the South West, the maritime industry is an important part of the economy of an island nation of the UK. The maritime industries of shipping, ports and related business services contributed at least £8.5 billion a year to the UK economy in 2012, with shipbuilding and repair, construction of ports and marinas and marine leisure adding £2.5 billion more.⁹⁹

With over 110,000 people employed at sea, the UK has more sailors, engineers and fishermen on the water than any other country in Europe.¹⁰⁰ The shipping industry is particularly important to Scotland which, while reduced, is an historic strength. 31% of the 35,700 UK nationals employed in the shipping industry in 2013 were based in Scotland.¹⁰¹ The North West ranked second, with 4,200 people (or 12% of total) employed in the shipping industry.

Shipping has a crucial role to play in supporting UK exports by connecting UK businesses to European and global markets. The UK ports sector is one of the largest in Europe, handling 484 million tonnes of freight in 2016, of which 207 million was traded with the EU.¹⁰² This is highly concentrated: the ports of Dover, Holyhead, Harwich and Hull all do over 75% of their trade with Europe.¹⁰³

There is a careful balance to strike in future of EU rules on maritime and shipping, with both opportunities to be had and risks to be managed

Many of the rules that are most relevant to maritime and shipping businesses have been set on an international level, but there are EU rules that implement these international standards, go beyond them, or address different areas which matter to this industry. Negotiators may have to agree alignment on maritime rules to allow UK seafarers to serve on EU ships, if they wish to achieve cabotage for shipping, and to ensure relevant product standards are harmonised to keep the sector's manufacturers and users of machinery competitive. However, Brexit also brings with it opportunities to reform parts of the regulatory framework so it is better suited to how the maritime and shipping industry functions in the UK.

But even more important to the maritime industry than the future of EU rules is the future of – firstly – the UK's international trade policy. 99% of the UK's non-EU unitary freight traffic is via containers stacked upon ships, which compares with just 24% of the UK's EU-freight traffic that is conducted this way.¹⁰⁴ If the UK Government makes the right decisions to boost trade with the rest of the world in a sustainable way, there is a huge potential for growth in the maritime and shipping industry. Secondly, the future of customs arrangements with the EU will be very important. While the deep-sea ships which transport most non-EU goods to the UK generally drop off containers at ports for storage and checks over a timetable of days or even weeks while the ships themselves move on, the ships which transport EU goods rely on fast-moving flows and as little dwell time as possible for the roll-on roll-off

lorries they carry, not least because the ports set up to handle EU trade do not have the storage and space of those which specialise in non-EU trade. Thirdly, the depth of alignment in the rules for the trade in goods matter for the same reason as customs, as divergence will mean delays that will affect the maritime and shipping sector as surely as leaving the customs union without a sufficient alternative.

To preserve a liberalised shipping sector with minimal technical barriers to trade, the UK should continue to adhere by international regulations

Given the global nature of the maritime and shipping industry, most rules that matter to businesses in this sector are international ones, which – in the main – have been established by specialist United Nations agencies, namely the International Maritime Organisation (IMO) and, to a lesser degree, the International Labour Organisation (ILO). The IMO has responsibility for rules on the safety and security of shipping and the prevention of marine pollution by ships. It acts as the regulator at international level, and manages the Conventions that underpin maritime safety worldwide. This includes some rules which have environmental significance, as ocean pollution caused by ships is an issue that has to be tackled through international cooperation.

The EU has had a role in implementing the rules on the maritime sector that are set by both the IMO and the ILO. For example, there is an EU directive setting out the responsibilities for compliance with and enforcement of the ILO Maritime Labour Convention for certain flag states, which establishes the rights of seafarers to fair living and working conditions, security and safety. Similarly, there is an EU directive limiting sulphur content of marine fuels which fulfills the commitments of the IMO's International Convention for the Prevention of Pollution from Ships.

Maritime and shipping businesses want to see the UK maintain its commitments to these international agreements, and through the Withdrawal Bill process and transition period they should be applied consistently to provide certainty for the industry. However, in the medium to long-term, there are areas of these EU rules which could be improved, as the EU has tended to gold-plate these international requirements.

Additionally, companies in this sector would like to see the UK continue to strengthen its voice at the IMO, because – although firms support continued UK involvement in it – it is possible that the UK will no longer participate in the European Maritime Safety Agency (EMSA) after Brexit. EMSA has a formal co-operation agreement with the IMO, and is responsible for the development and implementation of EU legislation on maritime safety, pollution by ships and maritime security, as well as providing advice to companies on a wide range of topics, from verifying ships' CO₂ emissions to limiting sulphur content in marine fuels. However, the UK also has a substantial role in the IMO, where it has been a member since 1949. The UK is a "category A" council member at the IMO, recognised as a state with one of the largest interests in providing international shipping services, and given appropriate influence as a result. The UK should continue to invest in its representation here to drive the international agenda in line with its maritime and shipping priorities.

To protect mobility of employees in the shipping sector, it will be necessary to negotiate ongoing mutual recognition of seafarers' certificates through continued equivalence of rules

The EU Seafarer Directive primarily implements the IMO's International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, and includes provisions on a range of measures including the minimum level of training on the marine environment, electronic charts and information systems, requirements for security training to support seafarers should they have to ever deal with pirates, and specific pieces of guidance on situations like sailing in polar waters and serving on liquefied gas tankers. However, this is a Directive which goes further than the minimal international standards and raises them – for example by expressly stating that the minimum limit of daily rest for seafarers cannot be diminished by collective agreement, something the IMO convention does not do.

But as well as ensuring they are properly trained, this rule has additional benefits for the mobility of employees of the maritime and shipping industry. By creating pan-European harmonisation of rules for the training of seafarers, this Directive allows automatic recognition of seafarer certificates achieved within the EU. Because the standards a seafarer will have had to have met are the same across the EU, a seafarer trained and qualified in – for example – Denmark, and presented with a Danish seafarer certificate, is automatically qualified to serve upon a UK ship, and vice versa. However, unless negotiated otherwise, this will no longer be possible and while existing certificates will remain valid, they will be unable to be transferred between ships carrying different EU flags.

The UK should seek to continue to have equivalent rules to the EU on the training, certification and watchkeeping for seafarers to ensure the mutual recognition of seafarer certificates within the EU and allow UK seafarers to be engaged under any EU flag and conversely allow UK companies to employ any EU seafarer. There is precedent for this, as the Seafarer Directive provides for a system of recognition of third-country seafarer qualifications. 40 countries are part of this system, from Algeria to Vietnam. However, being part of this third-country system will require the UK's training processes to be assessed as equivalent by the Commission and EMSA, both initially and regularly through repeated assessments (at least every two years) in the decades ahead. This assessment procedure must begin as soon as possible to avoid any cliff-edge.

Brexit creates opportunities for the UK to boost the reputation and attractiveness of its ship register, but divergence from EU rules will come at a cost if the UK can no longer benefit from cabotage

Every legally-operating ship on any ocean is registered with a nation. By registering, ships are entered into the public records of the country it is registering with and once that process is complete the ship can fly the flag of the country concerned, as a symbol of belonging to it. It also has to accept certain duties laid down by that country: the ship has to abide by the rules of that nation, including safety standards, but also any local taxation, rules on the sale of alcohol, and wage laws. In the UK, registration takes place through the UK Ship Register (UKSR), and there are different processes to go through and rules that apply for yachts,

fishing vessels, leisure craft and merchant ships. The Maritime Coastguard Agency in the UK is then responsible for periodically inspecting the ship to ensure it confirms to the rules.

Currently, an EU regulation on the freedom to provide ocean trade services within the EU provides certain privileges to UK-flag ships. Under international law, UK-flag ships can deliver goods and passengers to and from ports in almost any nation – from the UK to Italy, for example. This EU regulation provides for cabotage – the ability of UK-flag ships to provide maritime services including domestic ferry services and short-sea freight within any other member state without discrimination, as long as the ships abide by any local rules those EU countries might have. So, for example, UK-flag ships could in theory provide services on routes between Greek islands or cruises along the Italian coast. However, it is not clear how beneficial this freedom has been to the UK industry thus far, and the theoretical benefits of this regulation have not been fully realised. So while there are benefits from negotiating continued convergence with the EU regulation on the freedom to provide ocean trade services within the EU, this is not a top priority for the maritime and shipping industry in the UK.

Regardless of whether or not it is possible to negotiate a way to preserve cabotage rights, the maritime and shipping sector wants to see the UK use Brexit as an opportunity to boost the competitiveness of the UKSR. For example, by becoming a more commercial entity through initiatives such as the integration of commercial surveyors within its operations and boosting its customer service, the UKSR has the potential to become a more attractive option on the global stage, particularly to larger internationally trading ships whose owners are free to choose where they register. This would help attract both international investment and expertise to the UK, to support the growth of the maritime and shipping industry.

There are opportunities for UK port policy to diverge from EU regulation that does not properly reflect how the UK industry functions

One of the concerns for UK ports over the past decade or so has been repeated attempts by the EU to legislate ports as part of its strategy to build an integrated trans-European transport network. Some of these steps are sensible, but last year the EU introduced a regulation on the provision of port services which creates a range of requirements around things like transparency of public funding and how charges for the use of port infrastructure are issued. While these regulations may be sensible for EU ports, they do not suit UK ports which are structured very differently: the large majority of EU ports are publicly owned, while in the UK the majority of ports are privately owned and operated.

The UK maritime and shipping industry would support divergence from some aspects of the Regulation on Port Services. Although aspects like requirements to provide port staff with adequate training are sensible and should be maintained, it is not in the best interests of UK firms to continue to apply EU regulations designed for a system of port ownership that does not exist in the UK.

Getting EU rules for maritime and shipping businesses right will benefit both sides

The UK is the leading short-sea shipping country in Europe, with a share of more than 14% of the total tonnage of EU short sea shipping in 2015.¹⁰⁵ If there are delays and disruptions to the smooth flow of goods transported via ship between the UK and the EU, this will have knock on impacts on European industry. Particularly at ports like Dover, anything that creates delays with boarding and unloading goods from ships will have an impact on ports at Calais. Similarly at other European ports, if there are disruptions because of UK ships at – for example – Rotterdam, international and Dutch ships entering the port will face disruption. This would have consequences in turn for European ‘just in time’ supply chains waiting for deliveries not just from the UK but from the rest of the world as well. Getting both customs processes and single market rules for shipping right are therefore of some mutual interest.

PROFESSIONAL AND BUSINESS SERVICES

Professional and business services (PBS) firms help both domestic and international businesses grow, innovate and manage global and domestic risks. These firms provide critical services to other firms, as there are few business activities that do not require, for example, accountancy, legal, engineering, architectural, recruitment, consultancy, advertising, research or assurance services.

The sector is a UK success story, accounting for 11% of UK GVA, or £188 billion,¹⁰⁶ and creating high-skilled and high-value jobs for the 4.5 million people directly employed in such businesses. Around two-thirds of jobs in legal and professional services are outside London,¹⁰⁷ particularly in leading regional centres such as Manchester, Birmingham, Edinburgh, Bristol and Leeds.¹⁰⁸

The UK’s PBS businesses are globally competitive: nearly one fifth (18%) of firms across these industries have international operations, and a quarter of all UK firms that traded internationally were from the PBS sector.¹⁰⁹ The EU is vitally important as a market for PBS firms. Of the £64 billion in global exports generated by these businesses, 35% are exported to the EU. It is the single largest export destination for UK exports of legal and professional services abroad, and the sector generates a trade surplus of £5.3 billion in UK-EU trade.

To ensure that firms can continue providing PBS seamlessly across borders, significant continued alignment and the mutual recognition will be essential

PBS have a long list of areas where the mutual recognition is important to ensure businesses can continue serving customers across borders. The free flow of data is also critical to

knowledge-intensive PBS businesses. For example, a CBI member that provides information services supplies data about potential customers to UK financial institutions to facilitate due diligence checks. This is needed to filter out individuals who engage in criminal activity such as money laundering or terrorist financing. The firm's UK customers can currently access the full range of data in its database, which includes personal information on individuals from around the world including the EU.

Additionally, it will be important to retain the ability to provide services on a "fly-in fly-out" basis. Much PBS work, such as audits and legal services for businesses with cross-border interests is carried out through workers from one Member State temporarily relocating to another. For example, a large global professional services firm reported that its employees undertook 17,000 business trips from the UK to the EU, and 10,000 from the EU to the UK. Many of these were taken at short notice and all enabled the firm to provide multicultural teams with a variety of skills and experience to serve global clients.

The continued mutual recognition of UK and EU professional bodies and standards of conduct will be important

The ability of firms to provide PBS on a cross-border basis is underpinned by their ability to establish a commercial presence or subsidiaries and provide services directly in a foreign jurisdiction, or to provide services remotely to foreign clients. For regulated businesses such as those providing legal advice and representation, audits and the preparation of financial statements, the barriers to doing business from abroad can often be very high.

In the EU this is made much easier by the mutual recognition of Member States' professional bodies and standards of conduct. For example, UK legal practitioners can represent clients in legal proceedings, establish a practice in any Member State, appear before EU courts and institutions, as well as give legal advice under the protection of EU legal professional privilege, as long as they are registered with the home professional body and comply with both home and host professional standards and regulations. The UK Bar Council and Law Society are recognised in the EU as the professional bodies responsible for regulating the conduct of UK-qualified legal professionals. Similarly, a statutory auditor that is approved in one Member State can currently be approved in another, following completion of either an aptitude test or an adaptation period, without having to requalify in the host Member State.

It will be important for the UK to negotiate the mutual recognition of professional bodies and standards of conduct, which will be critical in enabling UK-qualified professionals to provide vital services to EU corporates across borders.

"We had to half the number of people we employed during the financial crisis, and since then our focus has been on future-proofing our business. We've been so successful we've spread to China and Canada. But we've done that on the basis of being able to sell our services easily in Europe, gained experience in cross-border provision, and used it as a springboard. It's important other SMEs are able to do so too."

Fast-growing architectural services firm

An agreement on PBS should include mutual recognition of professional qualifications

The UK has benefited from the EU frameworks that grant recognition of qualifications obtained in the UK, on the basis that the quality of training and professional practice in the UK is recognised as broadly equivalent. For example, lawyers can practice in any EU Member State without having to requalify in each local jurisdiction.

Similarly, a UK registered auditor, can currently achieve recognition in an EU Member State, and the right to practise in audit, without the need to undertake the entire qualification procedure of the relevant national profession and associated bodies. Presently, it is necessary only to pass an aptitude test in that Member State. There is no requirement for audit experience specifically in the EU host Member State and the aptitude test purely covers the specific divergence between the home country qualification training and that of the host body with regards to statutory audit. In the absence of an agreement between the UK and the EU in this area, a UK auditor would be required to complete a full re-qualification in the Member State in which they wish to practise. This would mean the completion of new exams and the completion of a minimum three years of monitored practical experience requirements, all of which could take up to five years.

As far as possible, negotiators should take a liberal approach on professional qualifications to widen the pool of highly-skilled expertise the UK and EU can draw upon after Brexit. Specifically, the UK and EU should therefore secure a dynamic mutual recognition agreement for professional qualifications, to simplify the process of highly-skilled workers providing services across borders. This agreement should include diplomas, certificates and other evidence of formal qualification.

Mutual recognition and continued alignment of regulatory frameworks and standards is a priority for PBS firms

Across the EU, there is mutual recognition of financial reporting standards, such as the International Financial Reporting Standards (IFRS), creating a common approach which has helped to improve transparency and comparability in financial reporting by European listed companies, enabling investors to make well-informed decisions and thus supporting the efficient functioning of EU capital markets. The IFRS in particular is regarded as a globally-recognised reporting benchmark for listed companies. Continued mutual recognition of these standards is essential to enable the cross-border recognition of financial reporting between the UK and the EU post-Brexit.

The mutual recognition of regulatory frameworks for statutory audits is also essential to enable UK auditors to issue legally valid audit reports, which are required for entities seeking listings on regulated markets in the EU. Similarly, there are over 70 EU registered companies with securities permitted to trade on UK regulated markets, from more than 10 EU Member States. Their continued ability to list in the UK after Brexit will depend on UK authorities' acceptance of audit reports issued in the Member State in which the company is registered. To ensure this regulatory cooperation can last for the long-term, this should also be supported by regulatory cooperation between the UK's competent authority (the Financial Reporting Council) and the Committee of European Auditing Oversight Bodies.

In other areas such as insolvency, the UK's insolvency procedures and judgments are currently recognised throughout the EU, which is important in serving global businesses. Continued alignment and recognition of the domestic insolvency regime is important to avoid the need for insolvency practitioners to return to the expensive and time-consuming practice of making separate applications for recognition in every jurisdiction in which an insolvent party has assets, thus preserving the competitiveness of the UK's insolvency regime and industry.¹¹⁰

“Over the last year, we have heard from a number of clients who don't want their contracts written in English or Welsh law since Brexit. Keeping our legal systems competitive in Europe and globally has to be a top priority for negotiators, and that means ensuring it keeps being attractive and accepted across borders.”

Medium-sized legal company

Both UK and EU PBS firms and other corporates benefit from the mutual recognition of professional qualifications, frameworks and standards

The ecosystem of PBS in the UK has benefited businesses in both the UK and the EU, with customers and clients gaining access to world-class services across borders. Continued access is mutually beneficial as EU businesses, particularly those with international operations can continue to access much-needed specialist services in the UK. For example, London has the highest concentration of EU legal expertise and experience – outside Brussels – anywhere in the world.¹¹¹ Many EU corporates rely on access to UK-based legal professionals where an international contract has an English choice of law clause. The UK is also an acknowledged centre of expertise for complex intellectual property litigation. Barriers to the deployment of expertise, as well as regulatory overlap and duplicative burdens, would result in costs, complexity and a reduction of international competitiveness of both EU and UK businesses. Similarly, businesses with pan-European operations also benefit from seamless cross-border audits, as group auditors based in the EU are able to rely on the opinion of UK and EU auditors. Losing these benefits could undermine the value of audit and investor confidence.

The UK insolvency regime is world-leading, offering predictable, cost-effective and rapid outcomes for investors and creditors worldwide. London is a hub for complex, cross-border restructurings and related insolvency proceedings. At present many European corporates often shift their 'Centre of Main Interest' to the UK to facilitate restructuring and to benefit from the UK's insolvency regime. There is, therefore, mutual interest in ensuring that the UK's insolvency regime continues to be recognised by the EU. Similarly, the UK's continued alignment to IFRS accounting standards for financial reporting will also enable EU companies to continue to list in the UK.¹¹² It is critical for the efficiency of insolvency proceedings and in the related area of restructuring law and practice to avoid new duplicative burdens, and regulatory complexity, and to protect employment and creditors.

Both workers and businesses in the EU have also benefited from the UK's recognition of professional qualifications and work experience obtained in other Member States. For example,

an architect who obtains a qualification in Spain can work on a project in the UK, or indeed, establish their own practice in the UK or elsewhere in the EU. Figures from the Architects Registration Board show that around 1 in 4 architects registered in the UK are EU nationals. Many professionals also work across the Irish border. Chartered Accountants Ireland (the Republic's Institute) is in fact an all-Ireland body which also has reciprocal arrangements with Institute of Chartered Accountants in England and Wales and other UK professional accountancy bodies.

RAIL

The UK rail sector is part of the backbone of the British economy. It is worth £5.2 billion in GVA to the UK economy,¹¹³ and over 1.7 billion passenger journeys were facilitated by rail in 2016, including over 21 million through the Channel Tunnel in 2014.¹¹⁴

There are over 225,000 people employed by the rail sector in the UK¹¹⁵ in diverse jobs – from the traditional front-face of the rail industry at stations and on board trains to the range of experts managing the smooth-running of trains remotely, and from the specialist engineers delivering improvements and maintenance of the rail network to the plant workers across the country building trams, high speed trains, rail tracks, platform doors, signalling technology and more.

The EU is an important market for the rail sector – in terms of the trade in goods, the provision of services, and in terms of passenger numbers. For example, rail goods exports to the EU totalled £123 million, equivalent to 45% of the UK's total rail goods exports in 2016.¹¹⁶ And around 840,000 business trips were facilitated through the Channel Tunnel in 2015, the majority of whom were EU nationals. Combined with tourist travel, travellers to the UK through the Channel Tunnel spent around £1.7 billion.¹¹⁷

There is a wide variety of areas where a level of alignment between UK and EU rules on the rail industry is important

The vast majority of UK rail journeys are domestic, and this can create the impression that the rail sector is unaffected by Brexit. However, this is a misconception: businesses in the rail industry are clear that the UK should continue to converge with EU rules and technical standards that govern the manufacture of all parts of trains and their networks. Similarly, the UK will need to negotiate equivalence with a range of EU market access rules if it is to continue to enjoy European investment and the ability to provide cross border supply of rail services.

It is also important for negotiators to remember that the UK and the EU are physically connected by rail links both between England and France, and Northern Ireland and the Republic of Ireland. There is a continuing need for operational rules to be consistently applied both sides of the Channel Tunnel Rail Link to preserve existing arrangements. Divergence that reduces interoperability, or even barriers affecting qualifications for train drivers, would create costs and complications for rail businesses operating across borders.

Mutual market access for UK and EU rail companies to provide rail services will require continued equivalence with many EU rules on railways

Since 2001, the EU has introduced four packages of regulations and directives for the rail sector. One of the primary objectives of these packages of rules is to liberalise the railway market across the EU and open it up for competition, through efforts to establish the Single European Railway Area (SERA). Although the SERA still has a way to go before it is complete in reality, and there are still incidents of unfair competition and the prioritisation of national monopolies within the EU market, the UK rail industry largely supports the principles established in these regulations, and values the opportunities for all operators to provide open access services anywhere within the SERA.

Competition within the rail market has delivered significant benefits for passengers, including lower fares, increased service frequency and customer service innovations. Different kinds of rail services have been liberalised at different paces. Rail freight transport has been completely liberalised the longest, and any licenced and certified EU railway company is able to offer to bid for rail freight services in any other Member State. Similarly, the market for international rail passenger services has been liberalised since 2010, so UK companies currently benefit from the right to bid to operate trains that pick up and drop off passengers across borders on international routes. In 2018, for example, eight German contracts will be run by British companies, and the French and Finnish market are opening up further, adding more opportunities for British operators.¹¹⁸

British operators want to continue to be able to bid for EU franchise contracts in this way, and recognise the value of competition within the UK rail market that European businesses provide. To achieve this, continued equivalence between the UK's rules and a large number of the rules set out in the four railway packages will be necessary, including those that will achieve the continued recognition of the licences and certifications that the UK Office of Rail and Road issues.

Continued convergence with EU technical specifications for interoperability for the rail industry has real benefits in most areas

There are a number of EU regulations and directives which set out technical requirements for rail businesses, including those that operate as well as manufacture in the sector. This creates a single set of standards to allow signalling, trains and infrastructure to be compatible across borders. These rules include technical specifications for interoperability (or TSIs) which set out ways of meeting requirements on everything from noise levels of rolling stock to the technology at stations and on apps that display train times and allow bookings. A single set of pan-European standards means suppliers can effectively service domestic and EU markets and maximise economies of scale and competitiveness. Standardised specifications also reduce the costs for procurers on both sides as they can obtain products from a wider range of suppliers.

In the main, the UK rail industry is looking to continue to converge with EU regulations, TSIs and standards to ensure rail companies and businesses throughout the rail supply chain

can continue to buy and sell products and services efficiently across borders. Negotiating convergence would allow, for example, rolling stock built in the UK to be exported to the EU without modification. There are some potential benefits to diverging with some elements of railway standards domestically, but if the UK stopped applying all rail-related TSIs, there would be implications for international routes and rail supply chain imports and exports. Any changes must therefore be undertaken in consultation with the whole industry and based on a thorough impact assessment on all players in the UK railway sector.

“One in four containers that arrive in British ports make their onward journey by rail. On a network that is one of the most intensively used in Europe, delays caused by regulatory divergence could have a significant impact on domestic freight and passenger services.”

Rail Delivery Group

“We have benefited immensely from EU rules making cross border rail travel easier and cheaper. If divergence between UK and EU rules were to happen, this would lead to significant cost and complexity for our business. This in turn would affect our competitiveness and, depending on the nature of any differences between systems, it may not be possible to operate either from an economic or practical standpoint.”

Cross border rail services company

Negotiating continued equivalence between UK and EU rules on the training of train drivers would allow the mutual recognition of qualifications and access to a wider pool of talent

Provisions in the Directive on the certification of train drivers operating locomotives and trains on the railway system in the Community (or the Train Driver Directive) facilitate the certification and recognition of train drivers' qualifications across borders. As set out by these rules, the process of becoming a train driver is not a simple one, and requires train drivers to have passed both a physical medical test and a psychometric assessment undertaken by a recognised medical centre. The Office of Rail and Road (ORR) in the UK manages this process. Once a European Train Driving Certificate has been issued by the ORR, the train driver can be employed in either the UK or any EU country.

Negotiating the continued equivalence of licencing rules would prevent train drivers from having to achieve separate qualifications in both the UK and the EU, which has particular importance in the context of the UK's cross-border rail links. But achieving this equivalence of rules and mutual recognition of train driving certificates would allow both UK and EU rail businesses to hire from a wider pool of available drivers and plug skills gaps where they occur.

Securing continued involvement for the UK in the European Union Agency for Railways would allow UK rail to maintain influence over the rules it will continue having to apply after Brexit

The European Union Agency for Railways (ERA or The Agency) is one of the most practical and technical agencies of the EU. The UK is currently represented by the Department for Transport which sits on ERA's Management Board, and helps to craft the TSIs that are an integral part of the rail industry's regulation, as well as guidance for companies to help implement these rules. Importantly, ERA has a cooperation agreement with the European standards bodies CEN and CENELEC to ensure that it is building on best practice standard setting across Europe and is making doing business easier, safer and more environmentally friendly for businesses, and that the rail industry does not face the complexity of having to apply and abide by competing standards.

Businesses in the UK rail industry would support continued involvement with ERA after Brexit, in a cooperation agreement modelled on the arrangement in place for Switzerland. That would allow UK businesses to continue benefiting from both advice and the ability to input into the rule-making process, as whatever the deal with the EU exporting rail firms will have to abide by EU TSIs to export.

There is clear mutual interest in maintaining reciprocal market access for EU and UK rail goods and services

The Single Market has enabled British and European railway operating and manufacturing companies to set up complex supply chains and services that benefit competitiveness, growth and employment in both economies. Maintaining mutual market access through alignment of rules is vital for a number of European rail operators that are managing services in the UK, and the benefits of including UK competition in the EU market has increasingly meant increasing innovation domestically. Additionally, with the consideration of the Channel Tunnel Link in particular, there are very clear benefits to both sides of getting it right on rules for rail.

TECHNOLOGY

The UK is a world leading digital economy, and the technology sector is an exciting mix of home-grown entrepreneurial talent and international businesses that help put the UK at the top of several key indicators. The UK is number one in the world when it comes to e-commerce,¹¹⁹ and according to the World Economic Forum, 5th in the world when it comes to the availability of technology.¹²⁰ The digital sector is creating highly skilled, high productivity jobs that are stimulating the UK to be a world leader in technology. Four out of five of the largest global investments in artificial intelligence businesses were for UK firms.¹²¹

The tech economy is creating jobs twice as fast as the rest of the economy and spurring jobs and investment across the UK.¹²² In 2016 for instance, the digital economy supported 36,000 jobs in Birmingham, 22,000 in Liverpool and over 20,000 in Glasgow. Technology and digital businesses are driving regional investment and innovation with the latest evidence showing that over 65% of capital was invested in clusters outside of London.¹²³

The EU is an important partner for the UK's technology businesses with over 40% of exports heading to European destinations.¹²⁴ Smaller firms in particular benefit from the ability to smoothly access the EU's 500 million consumers. Additionally, involvement in the Digital Single Market which the UK has been instrumental in shaping was expected to boost the UK's domestic economy by £1.7 billion.¹²⁵ The tech sector also relies on access to global talent to thrive, as over 15% of the UK's tech workforce is foreign born.¹²⁶

A close relationship between UK and EU rules in technology will be necessary after Brexit to support truly global industries

The nature of technology and digital businesses means that economic activity is virtually borderless. But this borderless world is only made possible by a range of rules, which the EU has often led the world by designing. For the technology sector, alignment on data standards that pave the way for an adequacy agreement and alignment with a range of Digital Single Market proposals are priorities for the negotiations ahead.

Alignment on key rules and standards does not inhibit the UK from charting a path as a world leader in technology and innovation. The UK's creation of a Digital Charter, support of the development of artificial intelligence through the Industrial Strategy and the establishment of a Centre for Data Ethics are all recent examples of major proposals designed to strengthen the digital economy. Digital divergence is not required for the government to support the tech economy and in many cases regulatory alignment reduces red tape and supports growth. For example, convergence with EU chemicals rules helps support the UK 3D printing industry and convergence with EU automotive rules will help the UK lead the world in driverless cars.

An adequacy agreement and continued equivalence of the rules that support it is critical to securing cross border data flows which underpin modern economic activity

Businesses in every sector and of every size use data in some form, it's the essential currency of the modern business environment. The UK is a global leader in cross-border data flows, with 11.5% of the world's data flowing through its borders – three quarters of which is between UK and EU countries. For tech and digital businesses, the free flow of data is a top priority and fundamental to their everyday operations and ability to grow and innovate. Currently the UK's membership of the EU allows businesses in the UK to transfer data to and from all countries in the EEA as they are all governed by a single set of data protection rules. The General Data Protection Regulation (GDPR), provides the harmonised conditions under which personal data can be transferred within the EEA and sets clear standards for its transfer outside this area.

The UK was instrumental in shaping GDPR and equivalence of data protection standards is crucial to securing the free flow of data. Continued equivalence of data frameworks will pave the way for the UK to secure an "adequacy decision" from the EU which is crucial to uninterrupted data flows. An adequacy agreement also grants access to share data with other countries who have adequacy decisions with the EU, such as the US and Canada. As outlined in the Prime Minister's speech in March 2018, the tech and digital sector strongly support the UK government's ambition to align on data protection standards post-Brexit and to negotiate for a continued role for the Information Commissioner's Office on the international stage to engage on future regulatory proposals.

CASE STUDY

A bed and breakfast in Leicester relies on the free flow of data to secure customer bookings and find new clients. For instance, a customer coming from France would need their email address and financial information processed. Without the free flow of data, the Leicester business will need additional legal contracts to complete simple transactions, adding unnecessary cost and complexity. Alignment on data protection standards post-Brexit is the best way to secure the free flow of data and support the UK's £240 billion data economy.

Convergence between the UK's rules and the EU's Digital Single Market after Brexit will facilitate UK growth, particularly in e-commerce

Through its Digital Single Market Strategy, the EU has set out an ambitious suite of initiatives to facilitate frictionless e-commerce and growth across Europe. These regulations are the backbone of the digital economy and drive productivity through better access to services, tools and opportunities for businesses across all sectors. The UK has been an instrumental voice in developing the Digital Single Market and regulatory alignment reduces red tape for businesses and makes accessing new markets simpler.

While the government has stated that the UK will not remain in the Digital Single Market after Brexit, retaining convergence with many of these rules will be critical for both businesses and consumers. For example, convergence on the rules around the cross-border portability of online content services – as set out in the Creative Industries section of this report – will provide benefits for both UK and EU consumers travelling across the EU. And, as in the Telecommunications section of this report, regulatory convergence is needed on rules on roaming to avoid mobile phone costs rising for consumers.

“We’re not going to produce a UK-specific phone or laptop, so it’s hard to see how we would benefit from divergence, or where the marginal gains of flexibility would outweigh the benefits of the Digital Single Market.”

Technology products company

But the UK must take pay close attention to the direction of EU rules for technology companies in the future

In order to sustain frictionless data flows, access to content and support for the UK’s digital economy, it is highly likely that UK businesses will be required to adhere to new Digital Single Market regulations post-Brexit. Therefore, throughout negotiations and transition, the UK government must also continue to shape forthcoming regulations to best reflect the strategic needs of UK businesses and consumers.

This includes, for example, the forthcoming ePrivacy regulation which governs how communication services providers and websites use and collect personal data. The government should ensure that any update to electronic communications frameworks enhance trust and confidentiality in a proportionate and technology-neutral manner. The UK will need to stay abreast of potential changes to intermediary liability as part of EU-level platform regulation which, within the eCommerce Directive, underpins the modern framework for the internet and the responsibility of companies that host information. Any changes in this area would have substantial implications for the vast majority of businesses and thus requires serious business engagement and consideration. Other major files include proposed changes to platform regulation for platform to business relations and updated EU copyright rules which will continue to impact on British companies and consumers even after the UK has left the EU.

The outcomes of these proposals will be essential to UK businesses as they will ultimately shape how companies do business online and their ability to thrive and compete on the world stage. The UK must engage on these proposals as they continue to develop and ensure that its future digital economy rules provide access to EU markets.

European consumers and businesses both stand to benefit from getting it right on EU technology rules

The free flow of data after Brexit matters for the European digital economy, as over 10% of the world’s data flows through the UK’s borders and the EU benefits from being able to share and transfer that data. Crucially, the free flow of data is also essential to sharing law

enforcement and security data which helps make the UK and EU safer. And the UK aligning on GDPR enshrines the regulation as a globally recognised framework and supports the development of high data protection standards across the world.

Consumers on both sides have much to gain if the UK and EU agree to a mutually beneficial relationship on rules of the Digital Single Market, from EU-wide product standards for computers and consumer electronics, to the broadcasting services like Netflix available in the UK under EU licences, and the 1,400 TV channels broadcast by the UK across Europe.¹²⁷

TELECOMMUNICATIONS

Maintaining and enhancing the UK's world-leading position in communications and the wider digital sector is vital to delivering economic growth in a rapidly changing and more competitive, technology-driven post-Brexit world.

The telecoms sector is relatively decentralised from London, with just over 19% of those employed in telecoms based in the capital. There are clusters in the North West, where there are 18,000 people employed in telecoms, and the South West, where there are 17,000.¹²⁸ Technicians, engineers, construction workers, researchers and cyber-security experts work alongside each other to deliver this vital infrastructure.

The UK telecoms sector directly contributes over £30 billion to the UK economy annually,¹²⁹ while the digital industry, which depends heavily on the services of the telecoms sector, contributes £118 billion to the economy (16% of the total UK economy).¹³⁰ But whether it is connecting parents with children, eBay sellers with customers, traders with financial markets, or scientists with satellites, this industry enables much more than economic value.

The UK's telecommunications businesses are looking for certainty and stability to ensure continued long-term investment

Keeping costs for consumers low, continually improving service to businesses and homes, and investing to rapidly adopt the latest technologies are the priorities of the telecoms sector as the UK exits the EU. The telecoms sector faces a range of EU regulations which are currently undergoing consolidation and is, in the main, looking for UK rules on telecoms to be equivalent to EU rules. There are some specific areas – such as in the regulations that make removing roaming charges possible – where the telecoms sector is looking for the UK and the EU to negotiate convergence of rules, to continue providing the best services possible to consumers.

EU regulation of the telecoms sector has been largely good regulation, and stability is the priority in order to continue achieving the good objectives of EU rules and preserve investment certainty

There are a range of EU rules that directly impact the UK telecoms sector, which have been recently combined into a new European Electronic Communication Code. This sets out the basic obligations both of the businesses involved in telecommunications and the powers, duties and independence of the national regulators responsible for monitoring and enforcing those rules. In the UK, this is Ofcom.

This code (which draws together five Directives that had previously been operating and updates them) sets out, among many other things, the single set of rules for how telecoms networks should be able to be accessed and interconnected – for example that companies should negotiate in good faith when undertaking requests and not unduly withdraw permission to use a network once it has been granted. It guarantees a simple way for companies get authorisation to operate on a radio frequency. In the UK this means that companies only have to apply to Ofcom for provision instead of jumping through multiple hoops. It also sets out the obligations for telecoms companies to protect the data flowing through their networks.

Competition and choice across borders has been made possible by regulations such as these, and over the years, the EU framework of telecoms rules has been useful in providing investors with regulatory certainty. By introducing a system to encourage competition across the EU market and allowing UK telecommunication providers to negotiate the interconnection of networks and service across the EU, consumers have been offered greater choice in both fixed services like broadband and mobile network selection. As a result, prices for telecommunication services have fallen,¹³¹ and new services such as 4G and ultrafast broadband have been introduced.

Businesses believe that many of the regulatory principles the EU has driven forwards over time are tried and tested, and that the core elements of the current successful framework should be retained through a similar regime after Brexit. The key priorities are stability and fairness in whatever rules are adopted after Brexit, as well as how those rules are enforced.

“The current UK regulatory framework, which is grounded in EU law and ensures an important role for the EU Commission, has worked well for the most part and has been successful in delivering substantial investment and effective competition in the UK across a wide variety of markets. A key element of the sector’s future success will be a stable and proportionate regulatory environment with appropriate checks and balances.”

BT

“This is an exciting time for the telecoms industry, with 5G fast approaching. Our focus should be on innovation and improving our products and services for customers. There’s no interest in the industry in tearing up rules which have served us well.”

Mobile communications provider

Regulatory convergence is needed on rules on roaming to avoid costs rising for consumers

Recent EU roaming regulations mandate that telecoms companies have to provide “Roam Like At Home” services throughout the EU, so that – for example – someone using a UK phone doesn’t face extra fees from French network operators when they’re travelling, and vice versa. This is made possible by a pan-EU agreement on wholesale price caps, which enforces a harmonised price that telecoms operators in the EU can charge each other to provide cross-border calls. So, for example, a Spanish operator cannot charge more than €0.01 for a text sent by a German phone through its network. This creates a level playing field and makes abolishing roaming charges possible.

Negotiators will need to achieve regulatory convergence on wholesale access charges to avoid EU companies being able to charge UK companies above and beyond the currently capped amounts. This would create additional costs for mobile operators, and the risk that this would have to be passed on by raising roaming charges on their customers abroad.

If the UK and EU get it right on telecommunication rules, consumers on both sides will benefit

EU businesses provide over £3.8 billion worth of services to the UK telecoms sector,¹³² and for the businesses that generate revenue from such service provision, it is important that the right deal is reached for telecoms in the Brexit negotiations. Additionally, it is important for consumers that the deal agreed ensures prices for all types of provision by the telecoms sector are kept as low as possible as the UK leaves the EU. This matters because the UK has the largest telecoms services sector in the EU with 18.8% of the whole¹³³ – but also because over 65% of the 32 million people that visited the UK in 2016 were from other EU countries, and are set to benefit from falling roaming charges.¹³⁴

WASTE AND ENVIRONMENTAL SERVICES

At the end of the life of any product, when treatments are required for ailing buildings, and indeed at times of crisis, the waste and environmental services sector steps in. Around 6,200 companies¹³⁵ in the UK collect, treat and dispose of waste – from crisp packets to dangerous industrial by-products. These firms fulfil a crucial function at the end of the supply chain, but perhaps most important in the long-term is the role these businesses play in sustainability, from creating energy through waste and recycling existing products like newspapers and electronics.

The waste industry is a growing one, with a total annual turnover of £9 billion¹³⁶ and over 100,000 employees. Because waste is an issue across the country, employment is too: 17% of employment costs in the sector were incurred in London, 15% in the South East and 15% in the North West.¹³⁷ Many of these businesses are small, specialising in particular kinds of hazards and creating a network of interdependent firms.

Trade with the EU matters for the UK's waste sector, not least because the UK's reprocessing industry lacks the facilities to use every kind of waste material produced by domestic households and businesses. These extra waste materials are therefore shipped across the world, including to the EU. For example, 93% of the UK's refuse-derived fuel exports in 2016/2017 were exported to the EU.¹³⁸

To protect continued trade of waste with the EU, some alignment to EU and international rules will be important – but there are also opportunities

Waste and environmental services businesses are highly regulated by a range of domestic, EU and international laws. Where EU and international rules allow the sector's businesses to trade with the EU, it will be important for the UK to negotiate or confirm some form of alignment – both to allow the continued easy trade in waste but also to allow UK service businesses to continue to provide their expertise across the Channel.

However, for the vast majority of EU rules on the waste and environmental sector, negotiating convergence or equivalence will not be necessary for trade – and firms in this industry are looking for Brexit to be an opportunity for some improvements in regulation and how it is applied and enforced. These changes should be to support the UK's ambitious environmental aims as well as the industry's competitiveness, and should be developed in close collaboration with businesses.

Continued commitment to the Basel Convention and the OECD decision on waste movements will be necessary to ensure waste can continue to be traded with the EU

The procedures governing the trade of waste within the EU are largely derived from international rules, namely the Basel Convention and the OECD decision on waste movements.

The Basel Convention introduced a system of controls for the trade and disposal of hazardous waste across borders, including the need for businesses and waste authorities to seek 'prior informed consent' before sending waste overseas so that the country that waste products are being exported to has the ability to have a say over the materials that enter its territory. In addition to this, countries that are part of the OECD have a simplified system of waste transfer, having agreed on how waste breaks down into different categories and how each kind of waste crossing borders should be treated. For example, glass fibre waste and electronic scrap can be traded easily through the 'Green Procedure' and traded almost as if they were normal commercial products. In contrast, problematic waste materials such as antifreeze fluids and flammable magnesium waste are traded through a more strictly controlled 'Amber Procedure' – requiring at minimum a contract between the business that generated the waste, the company handling the waste, and the recovery facility the waste is being exported to.

The EU's Regulation on Shipments of Waste incorporates both these international rules and systems, and lays down its conditions for the disposal and recovery of hazardous waste within European borders. Under this regulation, to continue exporting waste to the EU, the UK will have to continue to be a part of the Basel Convention and/or apply the OECD Decision. Businesses in the waste and environmental services sector support the UK continuing to commit to both of these international rules.

In addition, there are other EU rules which UK businesses may still be required to comply with for the trade of waste in general. For example, the Waste Framework Directive sets out a definitional framework for waste management, explaining when waste ceases to be waste and becomes a secondary raw material, and how to distinguish between waste and by-products. There are concerns in the industry that divergence in, for example, definitional differences may have a sluggish effect on continued trade and increase prices to export waste. This is particularly sensitive given the tight profit margins in the per-tonne movement of waste industry.

“With the recent changes China has announced, it's even more important we maintain alignment to ensure we can keep transporting waste to Europe.”

UK-based construction company

There are some benefits to the UK and EU's rules on waste and environmental services matching, but alignment is by no means vital

Beyond the trade in waste and the over-arching Waste Framework Directive, a number of EU rules currently apply to the UK's waste and environmental sector, which have set the standards for a range of processes – from the disposal of spent batteries and used cars, to the use of sewage in farming processes and the removal of off-shore oil platforms.

In the main, EU rules on the waste and environmental services sector have driven improvements, both in terms of the industry's competitiveness and the UK's environmental performance. The Waste Electrical and Electronic Equipment Directive has driven the creation of a growing industry of small, specialist companies finding new uses for and ways of disposing of the 530,000 tonnes of electrical and electronic waste collected in the UK¹³⁹ – from

Etsy sellers making jewellery made out of microchips and resistors, to businesses that are experts in deconstructing ovens and fridges. Similarly, the Landfill Directive has helped drive the Landfill Tax, which has reduced the standard waste landfilled by around 38 million tonnes over 15 years.¹⁴⁰ This has also driven the export of refuse-derived fuel which has grown from near zero in 2010 to 3.2 million tonnes in 2016¹⁴¹ – a method of recycling that is estimated to create savings in greenhouse gas emissions of around 90% compared with landfill.¹⁴²

However, Brexit is an opportunity to look again at how the waste and environmental services industry is regulated and businesses want to see opportunities in this area seized – providing any changes to the rules do not impact the UK's ability to trade with the EU and do not diminish the UK's ambitions to maintain high environmental standards. One example of such an opportunity to reform current practices is in the way in which recycling targets are set. Currently, recycling targets are based on weight of material collected and recycled – creating an incentive to collect heavier items even if this material is low-quality, contaminated or even compostable. A review of this practice would support the UK's environmental ambitions.

Firms are keen to provide the Government with input on how else the opportunities of Brexit can be seized for the sector, without damaging either trade or lowering environmental standards. And as Government progresses with negotiations, businesses in the waste and environmental sector are looking for greater certainty on the UK position on waste management and environmental law, to support their long-term planning both on emissions targets and methods of waste disposal.

“While past improvements in UK waste and resource management have been largely driven by EU legislation, ESA believes Brexit can provide the UK with an opportunity to further improve environmental protection and resource efficiency, by developing policies, targets and regulations for the sector which are more UK-centric, pragmatic and risk-based. Much will depend on whether Defra’s resources and waste strategy, due to be published in the autumn of 2018, strikes the right balance between ambition and realism.”

Environmental Services Association

“Uncertainties surrounding Brexit highlight the clear need for the UK to become more self-sufficient in energy recovery and recycling capacity, to prevent the loss of valuable domestic energy, aggregates, and metals from Britain. This has been prescient to the waste industry for quite some time, yet the lack of a clear government vision or commitment has resulted in our pleas going unanswered.”

Cory Riverside Energy

If the UK ensures the continued easy trade in waste with the EU, businesses and consumers on both sides will benefit

At present, and at least for the medium-term, the UK will continue to rely on EU value chains and facilities to process a proportion of its waste. While the balance of importance of getting rules right in the waste sector is therefore tilted towards the UK, there are also benefits

for EU nations that rely on the import of waste to process into energy for example. The Netherlands is the UK's biggest importer of refuse-derived fuel, receiving 1.5 megatonnes each year.¹⁴³ This is used by Dutch waste operators to produce sustainable energy. Greater elimination of procedural barriers to facilitate this has been achieved through the agreement of the Green Deal with the Netherlands and France. Keeping the cost of waste imports low helps keep the cost of energy for Dutch companies and consumers low, and there is therefore interest from both sides in getting the rules for this sector right post-Brexit.

WATER

Perhaps few sectors play a more fundamental role to every person in the UK than the water industry, charged with delivering safe and clean water to over 63 million people as well as businesses. Behind the taps in every building sits a network of water collection, treatment, delivery and disposal operations. And for some industries, like agri-food and drink, and the manufacturing of materials like paper, metals and fabrics, water even plays a key role in the production process.

127,000 people are employed in the water sector, predominantly across 21 key suppliers. The highest number of these individuals are based in the North West (6,500), followed by the Midlands (6,000) and London (5,000).¹⁴⁴ But from chemists to engineers, there are also many innovative SMEs working with household names to solve challenges such as leakage, problematic pesticides and water conservation.

Although water suppliers are necessarily regionally based, the EU is a growing market for the UK water sector. British Water estimates that 30% of markets where its members are currently most active, or most interested in becoming active is the EU.¹⁴⁵ Additionally, many of the materials used in the supply chain of the industry – such as vehicles and materials for the construction of pipes – are often imported from the EU.

The UK's water businesses are looking for certainty and stability to ensure continued long-term investment

The water industry is a vital part of the UK's infrastructure and one which operates on long planning horizons. Stability is therefore absolutely key, as regulatory disruption makes it hard to plan across decades. And while the UK water industry is not majorly exposed to Brexit from a regulatory perspective, it does have some concerns about future long-term financing. That is because the European Investment Bank, which the UK is not expected to be a share-holder in after Brexit, is the largest debt investor in the UK water industry, accounting for some 13% of the water sector's gross outstanding debt.¹⁴⁶

There are some benefits to the UK and EU's water regulation matching, but alignment is by no means vital

Trade in water with the EU is limited as businesses in the sector largely serve the UK market. However, there are a number of EU rules which are relevant to domestic businesses. The Water Framework Directive is the primary rule that all water businesses in the EU must conform to. This sets out a common framework for water management and protection in Europe, regulating ways of managing groundwater, reservoirs, canals and ports, ways of reducing water pollution, and even establishing a common system for measuring different aspects of water so sources across the EU can be compared properly. However, this is not the only rule. The Urban Waste Water Treatment Directive, Drinking Water Directive and more add to the range of EU rules for this sector. It is worth noting that there is a fair degree of flexibility in these rules at EU level as they provide minimum standards rather than maximum ones.

EU rules in the water sector have – by and large – brought benefits both to consumers and the environment. The Bathing Water Regulations are a notorious example of this, credited with major improvements in the cleanliness of UK beaches. EU water rules have also encouraged innovation and stimulated market competition, as well as significant amounts of cooperation across borders to improve systems. For example, UK businesses and universities are currently collaborating with European counterparts through Horizon2020 to develop autonomous, AI-supported technologies for managing rivers, ultra-efficient low-flush toilets, and using algae to treat wastewater.

Stability on regulation of the water sector is the priority, as divergence could put the investment that companies have put in to meet these rules at risk. Instead of looking to change current EU rules – and by doing so create the potential for affecting water companies' five year plans – the UK Government should look to build upon the gains made as part of its 25 year environmental plan. When the EU changes its rules in future, and in negotiations, ongoing convergence on rules is not a priority, because the trading relationship between the UK and the EU's water businesses is limited – but the UK could continue to benefit from paying close attention as new EU rules on water are developed.

“Many European regulations have brought benefit to the environment and helped to improve quality. We believe the UK Government needs to maintain these high standards and work with companies to determine where regulations are adding most value. Looking beyond the sector, we believe there is real potential for the Government to reform directives such as the Common Agricultural Policy, incentivising best practice in chemical use on land and improving the quality of water courses and the environment even further. There is also a need for companies to turn to innovation and find answers to challenges independently of Government regulations; like Anglian Water has, securing finance at a similar cost to EIB funding on the Green Bond Market – the first utility to ever do this.”

Anglian Water

There are considerations that should be made to limit unnecessary divergence in water policy on the island of Ireland

Northern Ireland is the only part of the UK that shares a land border with the EU – but it shares a border of water as well. The border criss-crosses and intersects rivers, pools, loughs and streams as well as roads. Ministers, Departments and Agencies North and South have been cooperating in a particularly formal way since the introduction of the Water Framework Directive to share the responsibility of managing these linked systems. Indeed, last year NI Water and Irish Water teamed up on a £4.7million initiative to improve water in border towns. This project is part-funded by the EU.

This reality may make water regulation a negotiation issue for the EU. However, this may be one of the simpler areas of cross-border issues to resolve as water quality and resources are devolved in Northern Ireland.

CONCLUSION

It's hard to overstate the importance of the decisions that will be taken over the next six months. As the UK and the EU set out the principles for a new economic relationship, agreeing the future of rules will be perhaps the most complicated and economically crucial task. But it is one that must be got right: alongside securing the right customs relationship, rules will be key to keeping barriers between the UK's market and the Single Market as low as possible, and will establish the basis for the UK's competitiveness for decades to come. The consequences of getting it wrong will be far-reaching. And the job of untangling 40 years of economic and regulatory integration is a mammoth one and should not be underestimated.

Negotiators should be guided by the evidence, and decisions made on the basis of what is best for jobs, wages and living standards across the UK and Europe. And the evidence is increasingly clear that, while there are absolutely opportunities to improve rules and processes as the UK leaves the EU, for the majority of businesses diverging from EU rules and regulations will make them less globally competitive, impacting those jobs, wages and living standards that should be at the heart of this process. Therefore, where rules are fundamental to the trade or transport of goods, the UK and EU must negotiate ongoing convergence – delivering a level of cooperation that is far deeper than a standard Free Trade Agreement. Similarly, as part of the new relationship, both sides should look to set a new international precedent in the trade of services and digital products. And alignment will need to come with mechanisms for influence and enforcement that meet the concerns of both sides.

The experience of companies across the country will be essential in the months ahead to deliver a deal that works for both the UK and the EU. A major acceleration in the partnership between business and the UK Government is needed to make a success of Brexit to ensure this experience is heard. The CBI and its members look forward to continuing to work with government to secure the best possible outcome in the vital months ahead.

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