

Securing a competitive UK manufacturing industry post Brexit



£148
BILLION
TURNOVER



1.1
MILLION
EMPLOYEES



A report on the impact of a no-deal Brexit today, and beyond an implementation period.

A no-deal Brexit will cause severe damage to our industry and must be avoided. EURIS industries support the principles of the Chequers agreement, and this report identifies the key elements needed for a business and consumer friendly Brexit. It calls on the UK Government to reach a Withdrawal Agreement with the EU in October and deliver continued free trade between the UK and EU as quickly as possible.



Foreword

The negotiations on the future relationship between the UK and the EU27 are the most important for EURIS industries since the formation of the single market in 1993. A no-deal outcome would have lasting impacts on our industry and its ability to contribute some £148 billion to the UK economy. This report provides specific information and guidance on the significant dangers of no-deal, and the opportunities that a 'business friendly' deal will bring.

Many companies have confirmed that their supply chains, and overall businesses have been affected post referendum, initially by the currency changes and latterly by the uncertainties of a no-deal future. The EURIS Brexit Watch has monitored 32 economic indicators since the referendum. The effects on the business environment are clear to see, and have been confirmed by the results of a EURIS survey of industry.

We are part of a European supply chain, and this is fundamental to the functioning of UK manufacturing, for the supply of intermediary products and components, and finished goods. We therefore need to work closely with our European colleagues. EURIS has established a network of European trade associations, working together on the key dangers to industry across the EU. I am delighted that some of our senior EU colleagues have publicly supported the EURIS objectives of a viable and business friendly deal - and the dangers of no-deal. We have also observed the

recent distribution of guidance from our EU trade association colleagues, to their members, pushing for companies to prepare for the worst case. Our concern is this may lead to decisions to move business out of the UK.

EURIS industries need a deal based on the principles set out in the Chequers White Paper. We will support the UK Government to achieve these objectives but will highlight the high-level dangers if a no-deal outcome looks likely. EURIS continues to work closely with our Government.

The UK has a very innovative industrial sector, looking to meet the challenges of climate change, digitalisation and societal needs, with massive opportunity for UK growth and exports. However, these objectives will become very challenging without a good and workable deal between the UK and the EU.

I implore all involved in the negotiations to consider the views of EURIS and take the advice, guidance and expertise on offer from industry to get the deal we all need.



Dr Howard Porter
BEAMA CEO, EURIS Chair.

Who we are



EURIS is an advisory body of 13 trade organisations representing industrial product suppliers covered by the Single Market. Our aim is to work with Government and industry to ensure a successful exit from the European Union that does not incur barriers to trade and a resulting loss of business and employment opportunities in the UK.

EURIS represents a wide range of manufactured products in the UK. Our supply chains are complex and international, involving many intermediary products and components as part of the manufacturing process. This market is not easy to define, and is often over looked in Brexit coverage, but it represents a significant proportion of UK imports and exports, and therefore vital to the UK economy.

Our members



Supported by the work of the UK Trade Policy Observatory



TURNOVER¹
2017
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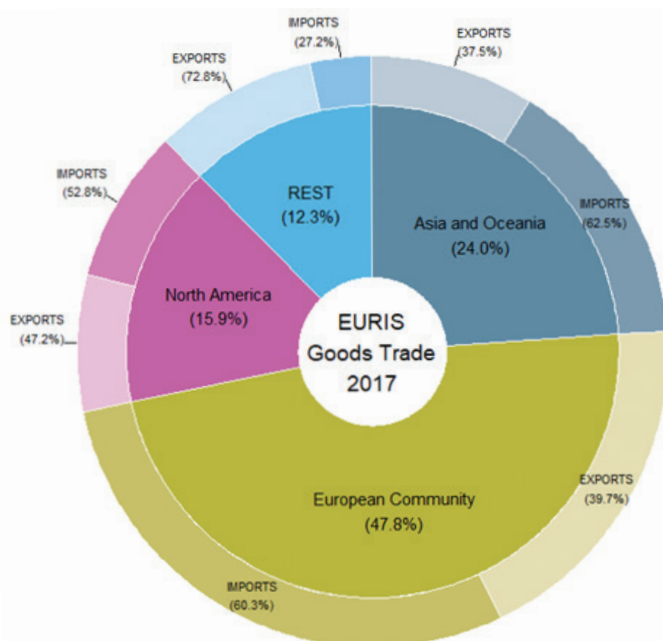
EXPORTS¹
2017
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BILLION

EMPLOYMENT
2017
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EURIS has undertaken an unprecedented survey of our industry (from SMEs to multinationals) to support our recommendations for a business friendly Brexit. This is the most detailed supply chain survey of its kind ever undertaken and highlights the hidden impacts of Brexit. Here we publish our results.

¹ Turnover and export data is sourced from the Office for National Statistics. Export and import figures are supported by HMRC (HS codes)

Our market



Distribution of EURIS industry goods – imports and exports (2017)

Survey results

TRADE

82% of respondents import intermediate products (for use in the manufacturing process) from the EU.

52% of respondents stated that over half their sales were intermediate inputs for other companies

37% of respondents don't know if their products will meet EU Rules of Origin

Imports are an important element of our costs and competitiveness

Imports account for more than half total costs for **44%** of companies

OUR KEY BREXIT CONCERNS ARE:

Regulatory divergence, border delays, standards and tariffs

Just **4%** of respondents are not concerned about any elements of Brexit impacting on their business

REGULATORY DIVERGENCE

83% of respondents support continued regulatory alignment with the EU

Once we leave the Single Market **81%** of firms don't know how much it would cost them to prove their products comply with EU regulations

EMPLOYMENT

40% of respondents would face a skill shortage without EU workers.

30% of respondents rely on sending / receiving labour on short term assignments to and from the EU

CUSTOMS AND BORDER DELAYS

79% of respondents said unpredictable border delays will add significant or major costs to their business

15% of firms think a 2 hour delay would impose costs on them

SUPPLY CHAIN ADJUSTMENT IS HAPPENING TODAY

36% of respondents were confident they haven't lost sales due to Brexit

15% of respondents have lost exports already

1/3 of respondents are thinking about changing or have already changed suppliers due to Brexit

Companies do not have the information they need to prepare for BREXIT

83% of respondents are spending less than **10%** of management time on Brexit preparation

INVESTMENT

Approximately **1/3** of respondents have already seen a fall in investment due to Brexit. Only **2%** of respondents have seen an increase in investment



Summary of our findings

Regardless of the type of Brexit deal we get, the EU will always be our biggest trading partner.

Our industry is embedded in an EU and global supply chain. A large proportion of our industry imports and exports components and intermediary products for the manufacturing process. This is a difficult element of the supply chain to trace, but holds significant value to the UK. Impacts on costs for this part of the UK market as a result of border costs, tariffs and a further fall in exchange rate will significantly impact on the competitiveness of industry in other global markets.

**NO-DEAL WOULD
CREATE IMMEDIATE
TRADE BARRIERS
FOR THE UK AND
CAUSE SIGNIFICANT
LONG-TERM DAMAGE
TO OUR MARKETS**

It is not a choice of exporting to Europe or the rest of the world. If we become less competitive in the EU we will be less competitive in other international markets.

The Government's target to develop stronger trading relationships with other non-EU Countries is a positive move. However, this can only be done if we maintain a strong alignment with EU regulation and standards for product design and compliance. Our supply chains depend on a close relationship with the EU to uphold our competitiveness globally. For EURIS sectors generally, Government has been poor at supporting new markets in recent years, especially for intermediary supply chains.

We can see from other non-EU countries neighbouring Europe, trade with the EU remains by far the largest proportion by volume. For example, Switzerland's trade with the EU is worth 237.5 billion CHF. This is comparable with 67.8 billion CHF with the US and China combined. Switzerland has an FTA with China, but the proportion of trade is relatively low (22.1 billion CHF). We should therefore not underestimate the importance of trade with our neighbours, no matter how far we progress with developing new trade relationships.





Summary of our findings

EU regulation enables industry to remain competitive in a global market. 83% of survey respondents support continued regulatory alignment with the EU.

Product regulation has a critical role in ensuring that a high standard of safe and compliant goods are placed on the EU market. There is no benefit in moving away from the EU regulatory system for industrial and manufactured products. In diverging we would only isolate ourselves from other global markets.

Manufacturing supply chains are not national.

Notwithstanding the welcome 'reshoring' trend, to treat supply chains as 'national' will introduce inefficiencies and distort the market, making our manufacturers less competitive in the long run. It is not possible to accommodate the needs of our supply chain in the UK alone. Isolating ourselves from the EU would cost UK jobs, not create them, as supply chains are moved and manufacturing disrupted.

Imports account for over half of total costs for 44% of companies.

Any increase in barriers to trade of imported products will therefore have significant impacts on the competitiveness of our market globally.

There will always be immigration needs for our industry.

Dynamic companies need good workers. These are sometimes in short supply. Companies have told us that if they can't source skilled and non-skilled workers from the EU when they require them, they we will have to find them from elsewhere, or relocate.

We are already feeling the strain as companies have made decisions to change suppliers.

The longer the uncertainty over the Brexit process continues, the more long-lasting damage will be incurred by our businesses. EU 27-member states have been warned to 'prepare for the worst' and review their supply chains. For most companies changing suppliers is a significant decision, and one very rarely reversed. We are aware that EU27 companies have started to select non-UK suppliers.

Not all the impacts of Brexit are immediately obvious.

Evidence suggests the full extent of cost implications from Brexit are not known. The complex nature of our supply chains means it is nearly impossible to calculate the ultimate cost and impact to associated parts of the economy. Our survey showed that; 37% of respondents do not know if their products will meet the EU Rules of Origin. Also 81% of firms do not know how much it would cost them to prove their products comply with EU regulations.

Rules of Origin

Background

Rules of Origin are the basis for determining how a manufactured good is treated under the WTO regime in respect of where it is said to have originated from. The key criterion is that of 'substantial transformation'. This is applied differently by different WTO members (although the WTO is working towards harmonised application). EU countries use EU-wide criteria. Rules of Origin are necessary for implementing trade policy measures, including trade preferences, quotas, antidumping measures and countervailing duties. Presently, trade within the Single Market does not require any Rules of Origin declaration, and trade with third countries is carried out on the basis of products being of EU origin, even if they are marketed (quite legally) as UK manufactured.

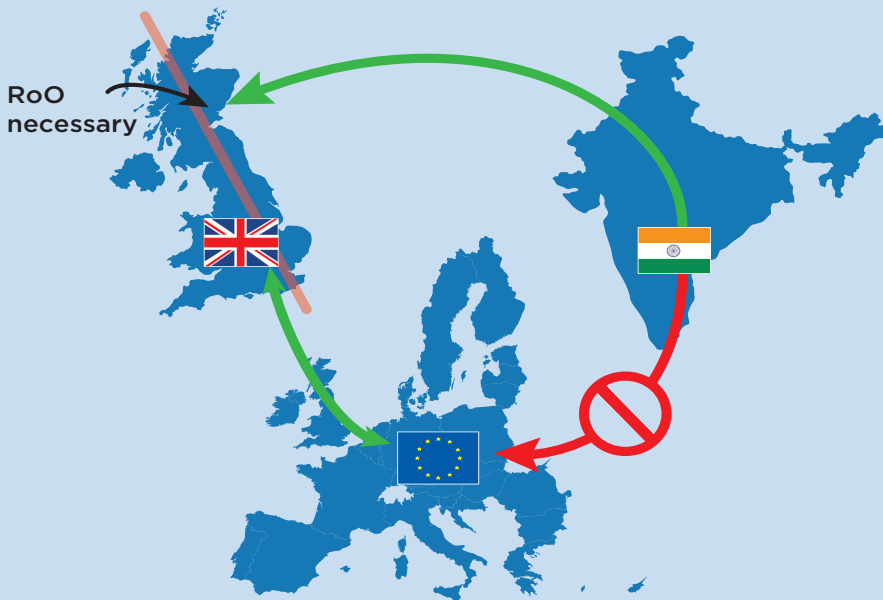
The EURIS position

The UK should continue to use the EU's Rules of Origin procedures. This would avoid unnecessary and costly duplication. It will also avoid exporters who only sell into the EU from having to put new processes in place to identify the origin of their goods.

In the case of advanced engineering the issue is particularly acute. As supply chains have become ever more internationalised, the proportion of the content of many goods manufactured in a single country has declined to a point where it has fallen beneath the threshold required for their classification as such on a strict single-country only basis. This is certainly the case in respect of much of the UK's machinery industry. Effectively many of the goods we manufacture would not be considered of UK origin. That manufacturers include EU components in their definition of indigenous manufacture reflects the profoundly international basis on which most modern advanced engineering supply chains operate.

In reality, the manufacturing supply chains are not national and, notwithstanding the welcome 'reshoring' trend, to treat them as such will introduce inefficiencies and distort the market, making our manufacturers less competitive.

Rules of Origin explained



Example - Rules of Origin

- The UK signs an FTA post Brexit with both the EU and India.
- The EU does not have an FTA with India.
- To stop Indian goods entering the EU market without paying tariffs, RoO checks are necessary on UK goods exported to the EU.



Rules of Origin (continued)

UK Global Trade

The immediate issue is that once the UK becomes a 'third country', either after the exit date (30 March 2019) or at the end of any implementation period (31st December 2020), UK content in products will cease to be classed as EU content and vice versa. Therefore, as well as the potential for tariffs, customs delays and non-tariff barriers between the UK and EU27, UK components and other content will cease to count as EU for the purposes of EU preferential free trade agreements with multiple countries around the world.

The pressure is already on for EU companies to remove the UK element from their supply or value chains to eliminate the risk of losing preferential trade terms by falling under the (typically) 40% EU content requirement. That pressure may become reciprocal as UK companies review their suppliers and sourcing towards a much more UK-only focus, but clearly this would mean sourcing from within a single nation rather than from 28. In many cases the types of components and products needed would make such adjustments impossible. We also now understand in greater detail the extent of trade in intermediary products for the manufacturing process and also how reliant EURIS industries are on an EU supply chain.

This pressure may be alleviated in the short term by an implementation agreement which postpones the UK having third-country status until the end of transition/implementation; in the medium term by a free trade agreement between the UK and EU which includes cumulation, i.e. treating UK content as EU for origin purposes and vice versa; and in the long term by forming free trade agreements with the 60+ countries with which the EU has agreements wholly or partially in place. Although the principles involved are fairly simple,

the detail of calculation of origin in a complex product or system is extremely complicated. There are multiple options for an agreed methodology and thus greater scope for genuine error, misapplication and complex disputes. Regardless of what is agreed, UK businesses seeking to export will be involved in a much more complex system than has ever applied previously. In addition, the history of negotiation of free trade agreements in general, and Rules of Origin in particular, suggests that this will be a lengthy process. Unless this is addressed without delay there will be a prolonged period during which UK manufacturers risk being cut out of large areas of international trade.

Rules of Origin – Implications of no-deal

As UK manufacturers will have no preferential tariffs or other preferences with either the EU or any other country/market, rules and certification of origin will be of reduced importance as there will be no ability to claim preferential tariffs.

Those UK manufacturers who are in supply or value chains with companies based in EU27 states will likely find that they lose contracts and are dropped from tender lists as their customers or corporate groups seek to preserve their ability to certify the end product as being of EU origin.



Rules of Origin (continued)

Any UK content may otherwise cause the end-product to lose its preferential treatment in overseas markets. This is already happening as the uncertainty of the overall position and of the application of rules of origin under different FTAs makes dropping external content the easiest solution.

The reverse will also apply, although until the UK has agreed FTAs with some other countries there will be no Rules of Origin to qualify for, so levels of UK content will be less relevant. If customer countries have anti-dumping measures or other trade remedy measures in place, then they may need to investigate the origin of imports from the UK to assess whether additional duties will apply in which case certification of origin will become essential.

1/3 of respondents are thinking about changing or have already changed suppliers due to Brexit

15% have lost exports already

We have already seen communications from some member states and the European Commission advising EU companies to remove UK content² and review value chains. Thilo Brodtman, CEO of the German Engineering federation (VDMA) states:

‘It is urgently necessary to prepare for Brexit and also expect the worst case. The local market is too small to be profitable for most medium-sized companies. Exports to the EU could be made much more difficult in the future. Of course every single company has to calculate this for themselves. Production in continental Europe, however, seems much more attractive for the future’.

We expect to see EU companies withdrawing from investment projects the closer we get to a no-deal and anticipate many will review their supply chains to reduce UK content in their products. This presents a serious risk to UK industry, the cost of which is very difficult to estimate.

Next Steps

Rules of Origin is an area where UK trade bodies, notably the product manufacturers within EURIS, can provide a vital bridge for the UK to establish the areas of common ground that UK and EU27 businesses can agree will be mutually beneficial and find ways forward on those that prove more contentious. This requires the Department for Business, Energy and Industrial Strategy (BEIS) and the Department for Exiting the European Union (DExEU) to establish their position and initial proposals, in conjunction with manufacturer trade associations, to enable industry dialogue to move forward on a substantial basis. EURIS is already working with Government to achieve this and will ensure continued engagement.

2 <https://www.welt.de/wirtschaft/article179338680/Brexit-Wirtschaftsverbaende-prangern-Sorglosigkeit-bei-deutschen-Unternehmen-an.html>

Ensuring the UK remains competitive

EURIS welcomes the principles of the Chequers agreement and the proposals outlined to ensure a 'business friendly' Brexit is achieved.

These include proposals for:

- ★ A free trade area for goods
- ★ Protection of integrated supply chains and 'just in time processes, and introduction of a Facilitated Customs Arrangement' to avoid delays or extra costs for customs clearance between the UK and EU
- ★ Agreement not to impose tariffs, quotas or routine requirements for Rules of Origin on UK-EU trade in goods
- ★ Facilitation of cumulation with current and future FTA partners
- ★ Support for businesses to send people to provide services across Europe and reciprocal provisions for intra-corporate transfers and to move and attract talent.

This is all reliant on a deal being established with the EU. Should we enter into a no-deal scenario from March 2019 the risks are severe for our industry. EURIS represents a wide variety of different industries, from manufacturing process and automation equipment, lighting, catering equipment, energy technologies for buildings and the infrastructure that makes up the end to end energy system powering the country. So, our supply chains are not easily summarised or explained. They are complex, and in some cases components and people may cross a border several times before a product is placed on the market.

The UK Government recently published its Export Strategy,³ which outlines an ambition to grow exports as a share of GDP from 30% to 35%. This is a great ambition but it is questionable whether this is achievable if we damage our trade links with the EU.

In this chapter we consider how we maintain a competitive UK manufacturing industry as we approach Brexit, and beyond.

³ <https://www.gov.uk/government/publications/export-strategy-supporting-and-connecting-businesses-to-grow-on-the-world-stage>

A case study from the energy sector

Innovative Decentralised Energy Technologies

The manufacture of low carbon energy products is one area where post-Brexit trade barriers could slow down the UK's ability to capitalise on an innovative growth sector. Examples of particular strength in the UK include smart grids, energy storage, offshore wind, electric vehicles and solar PV, amongst others.

The potential of this sector is recognised by Government in the Clean Growth Strategy and Industrial Strategy. In 2015 the low carbon goods and services industry contributed over £42 billion in Gross Value Added to the UK economy. This is estimated to grow over 5 times by 2030, accounting for 8% of GDP and over 2 million jobs.⁴

Government support for renewables and cleantech has underpinned this growth by increasing deployment and allowing the establishment of cost-effective supply chains, often requiring components to cross borders. The import of such goods includes solar panels, wind turbines, energy storage, heating, cleaner lighting, solar thermal and insulation. The EU accounts for around 64% of all low-carbon equipment imported by the UK. At the same time, the EU is also the UK's primary market for low carbon equipment exports (55%), which includes growth industries like electric vehicles.⁵ As such, failure to secure favourable trading arrangements could increase the cost of low-carbon products used within the UK while raising barriers to access our primary market.

Trade Tariffs could impact the UK's ability to capitalise on leading positions in low carbon product innovation.

A failure to secure a favourable trade arrangement could increase the cost of low carbon equipment, hampering deployment in the UK and affecting our competitive advantage to capitalise on these sectors post-Brexit. For example, within energy storage, battery pack prices have fallen 73% between 2010 and 2016 and it is expected will more than halve again by 2030.⁶ While Brexit will not stop this trajectory, it could decelerate it and divert investment to other more favourable European markets. In the immediate term, uncertainty around these costs is also hampering the exploration of new markets as developers find it difficult to accurately model costs despite huge demand across Europe for decentralised energy solutions.

Given the nature of these supply chains, EU Rules of Origin requirements could also play a significant role. Small innovative cleantech companies may lack the expertise to quickly prepare for this additional administrative burden, while the additional costs and general complexity could deter companies from considering their products export potential.

In a 'no-deal' WTO scenario the focus for low carbon goods will switch to the adoption of the WTO Environmental Goods Agreement, which is a plurilateral deal currently being negotiated by 46 WTO members. This will aim to bring tariffs on environmental goods down to zero. However, it is not comprehensive, as it does not include cleaner vehicles and some low-carbon equipment used in heating, insulation and lighting. Furthermore, the agreement is currently stalled due to opposing demands from the EU and China.⁷ In the short to medium term, it would be better to be able to rely on a bilateral agreed trade agreement on low carbon products with the EU, rather than depending on plurilateral negotiations to be completed.

⁴ Ricardo, Energy & Environment, commissioned by the CCC (2016) *UK business opportunities of moving towards a low carbon economy*, Available: <https://www.theccc.org.uk/publication/uk-energy-prices-and-bills-2017-report-supporting-research/>

⁵ LSE, Grantham Research Institute on Climate Change and the Environment (2017) *the UK needs free trade with the European Union in low-carbon technologies*, Available: <http://www.lse.ac.uk/GranthamInstitute/news/uk-needs-free-trade-with-the-european-union-in-low-carbon-technologies/>

⁶ APPG on Energy Storage (2017) *Batteries, Exports and Energy Security*, Available: <https://www.r-e-a.net/resources/rea-publications>

⁷ Green Alliance (2017) *Britain's trading future; A post Brexit export strategy led by clean growth*, Available: https://www.green-alliance.org.uk/britains_trading_future.php

Export of Electric Vehicles

The EU currently accounts for a large proportion of the UK's export in electric and hybrid vehicles.⁸ It is currently unclear what tariffs the UK market may face on leaving the Customs Union, however, failure to secure a trade agreement could possibly see member states apply the Most Favoured Nation tariff of 10% on UK imports of electric and hybrid vehicles.⁹

This could damage the UK industry, especially given the expected demand for such products, driven by EU member state commitments to stop the sale of new petrol or diesel cars within the next two decades.

EU Funding in Low Carbon Products

In addition, R&D and support for commercialisation of innovative low carbon energy products have been helped by EU funding. EU Regional Development Funds, Horizon 2020 and direct financing from the European Investment Bank have all helped to demonstrate the commercialisation of UK technologies and skills. It is reassuring that Government has so far committed to maintaining such funding out to 2020, but there is little clarity around what might then replace such funds.

Maintaining Energy Systems Regulations and a Strong Framework for Climate Action

Aside from trade concerns, a failure to maintain energy system regulations, decarbonisation targets and environmental standards after Brexit will also impact the low carbon product manufacturing market.

The UK has been an influential force in the design of the EU's current energy policy, resulting in the development of a secure, and affordable low carbon energy system across Europe. The UK's energy system is designed around European Network Codes and energy trading coupling systems that make up the Internal Energy Market. In addition are the UK's commitments as part of the EU Emission Trading Scheme (EU ETS).

So far, the UK has provided strong indications that it wants to maintain alignment to these systems, remaining part of the EU ETS until at least 2020

and exploring the strongest possible continued co-operation with the Internal Energy Market. In the meantime, EU energy system integration is set to become yet more comprehensive with the current Clean Energy Package, which will likely come into force as the UK departs the EU.

Such arrangements facilitate and drive forward the deployment of low carbon energy products. This demonstrates the interrelation between favourable trade policy and broader energy issues.



⁸ LSE, Grantham Research Institute on Climate Change and the Environment (2017) *the UK needs free trade with the European Union in low-carbon technologies*, Available: <http://www.lse.ac.uk/GranthamInstitute/news/uk-needs-free-trade-with-the-european-union-in-low-carbon-technologies/>

⁹ WTO Tariff Analysis Online, HS Code 870380 and 870370, MFN Applied Duty Rates <http://tao.wto.org>

Ensuring the UK remains competitive

Implications of no-deal on trade

If there is no agreement on trade, the UK will lose all trading advantages with the EU and also the Free Trade Agreements (FTAs) which the EU holds with over 60 other trading partners. This would also mean that the UK would become the only WTO member state to have no additional trading preferences under regional, bilateral or other FTAs so would be the only state trading solely on WTO terms. In terms of trading advantages the UK would also rank behind almost all WTO observer states including Andorra and the Vatican - of those observer states only Syria and East Timor have no additional preferential trade agreements in place.

This would mean that all UK exports worldwide would be subject to the relevant WTO tariff. For products in the EURIS industry sectors these are typically 2-4%. Depending on margins this can make a substantial difference to competitiveness.

Potentially more of an issue is the additional complication for either the supplier or the customer in assessing and dealing with the associated administration and customs processes. Evidence from Switzerland shows that SMEs often do not take advantage of FTAs because the compliance costs outweigh the tariff benefits.

A no-deal Brexit will cause border delays. 77% of respondents confirmed unpredictable border delays will add significant or major costs to their business.



EU product regulation

Current EU regulations adhered to by our sector are all essential in securing safe and compliant products that can compete on the global market.

Examples include:

- ★ Eco Design 2009/125/EC
- ★ Energy Labelling Directive 2017/1369/EC
- ★ WEEE 2017/699/EC
- ★ RoHS 2011/65/EU
- ★ REACH Regulation 2006/1907
- ★ Machinery Directive 2006/42/EC
- ★ Low Voltage Directive 2014/35/EU
- ★ Measuring instrument Directive 2004/32/EU
- ★ Electromagnetic Compatibility 2014/30/EU
- ★ Radio Equipment Directive 2014/53/EU
- ★ Construction Products Regulation 2011/305/EU
- ★ General Product Safety Directive 2001/95/EC
- ★ Accreditation and Market Surveillance regulation 2008/756/EC
- ★ Waste Shipment regulation 2013/1013/EC
- ★ Waste Framework Directive 2008/98/EC
- ★ Battery Directive 2006/66/EC
- ★ Packaging 2015/720/EU
- ★ F Gas regulation 2014/517/EU
- ★ Alternative Fuels Directive 2014/19/EU
- ★ Conflict Minerals Regulation 2017/821/EU

83%
**of survey respondents
want continued regulatory
alignment with the EU
post Brexit**

All of the products and equipment produced by EURIS industries are 100% compliant with the relevant European regulations and standards. Almost all current products have been developed and brought to the market under the Single Market requirements. For companies in the EURIS industries to continue to operate in European member states, post Brexit, 100% compliance needs to be maintained, irrespective of the UK status with the market. This includes any products or components exported, and all products and component imported by companies.

The complex relationships between company operations in the UK and across the EU makes it necessary to continue with compliance in the future.

We understand that while we remain in the EU, and during any implementation period, any existing European directives, legislation and standards must be adhered to. Under the EU Withdrawal Act it is expected that all legislation will remain UK law. UK Government input into the creation of new regulations will continue until we leave the EU. As industry our involvement and input into the process of setting new regulation is likely to continue post Brexit, given our membership of and influence in EU trade associations.

EU product regulation (continued)



EURIS members are already engaging with UK Government departments on individual regulations and directives, reviewing how future alignment can be maintained and risks associated with divergence.

The majority support for continued alignment with EU regulations aligns with the UK Government Chequers agreement and ambitions to create a 'common rule book' for goods between the UK and EU and a UK treaty commitment for ongoing harmonisations with EU rules for goods necessary for 'frictionless trade'.

We support the UK Government's aim to seek continued participation on EU technical committees in setting out new or amended product regulation. In terms of UK industry involvement in the continued setting of new EU regulations, the majority of EURIS members have already confirmed continued membership of EU trade bodies post Brexit and therefore industry's oversight of and input into the regulatory processes will continue, working closely with other member states.

Many EU regulations that our members currently comply with are underpinned by a complex and advanced set of regulatory instruments that in

some cases would be very difficult and time consuming to replicate again in the UK. A good example is REACH¹⁰. This has evolved over many years and the registration of substances under Article 3 for our members to ECHA (European Chemicals Agency) is an established practice. It is also time-consuming and can present challenges in tracking tier 1, 2 and 3 components across a supply chain. Should companies have to comply with duplicate systems this would incur administrative costs. We are therefore calling for continued access to REACH post Brexit.

Political rhetoric can indicate a desire to 'deregulate' and remove ourselves from the burdens of EU legislation. However, regulation has a role in ensuring products entering the market are secure, safe and competitive.

Diverging from EU regulation will only isolate the UK from other markets and duplicate compliance administration for our members, adding cost. Ultimately this cost will be passed to the end customer. It will also result in companies deciding not to engage with duplicate systems, preferring the system that gives them access to the biggest market and most confidence.

In harmonising with EU product regulations we are not giving up sovereignty but ensuring a business friendly Brexit which will not impose additional barriers to trade.

¹⁰ Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) is a European Union regulation dating from 18 December 2006. REACH addresses the production and use of chemical substances, and their potential impacts on both human health and the environment.

Product safety and compliance

The Independent Review of Building Regulation and Fire Safety (Hackitt report)¹¹ has placed product safety and standards in the spotlight in the UK. The review, while targeting high-rise buildings and construction materials, highlights more generally requirements to manage the safety of products in domestic buildings today.

Electrical safety is in our focus, and here we consider the implications of Brexit in maintaining an existing regulatory and certification system set up to ensure products are tested and certified against the highest safety standards in the world. Electrical safety is a good example of why our industry supports the application of regulatory instruments for compliance. Regulation is seen as a means to maintain competition in the market.

The Government published a strategy on 'Strengthening national capacity for product safety' in August 2018.¹² This outlines the need to ensure 'UK regulation that encourages new ideas and new business, and delivers the highest standards of safety and protection for consumers'. For product manufacturers this requires continued alignment with the EU regulatory and certification system. EURIS agrees that for an economy to work for consumers and industry this is essential. The strategy demonstrates a clear understanding from UK Government for alignment with EU product regulations, and in the following section of the paper we expand on the process by which our industry currently tests and certifies products, and related risks associated with Brexit.

For the electrical product manufacturing business, the current regulatory process is enshrined in EU law. On the following page we provide an example of a ventilation product, and the regulations they adhere to in order to sell into the European market. In proving compliance with EU regulation and associated standards, the product is CE marked, which is an indication that the product meets all of the safety and energy directives.



¹¹ <https://www.gov.uk/government/publications/independent-review-of-building-regulations-and-fire-safety-final-report>

¹² <https://www.gov.uk/government/publications/strengthening-national-capacity-for-product-safety-strategy-2018-2020>

Evaluating requirements to CE mark a product – a ventilation industry case study



The first step is to determine the harmonised directives that the product is subject to, and then determine the harmonised standards that apply. A CE mark procedure may be required by several separate individual directives and standards. These must be assessed and complied with before the CE mark is applied.

Some typical examples of Harmonised Legislation for a product include:

- EU1253/2014 implementing Directive 2009/125/EC Eco Design requirements for ventilation units.
- 2011/65/EC Restriction of the use of certain hazardous substances
- 2009/125/EC Eco Design of Energy Related Products
- 2014/30/EU Electromagnetic Compatibility Directive (EMC)
- 2014/35/EU Low Voltage Directive (LVD)

Typical examples of relevant harmonised standards for a product include:

- BS EN 61000-3-3 EMC
- BS EN 61000-3-2 EMC
- BS EN 55014-1 EMC for household appliances
- BS EN 60335-2-80 (2015) Household and similar electrical appliances. Particular safety requirements for fans.
- BS EN 60335-1 (2010) Household and similar electrical appliances. General Safety requirements.

CE marking rules also require the manufacturer of the product to create a technical file which should contain the information required to show that the product properly complies with the requirements.

The technical file should include:

- Wiring and circuit drawings
- General Arrangement Drawings
- List of parts
- List of applied standards

- Risk assessment
- Records of assessments to standards
- Data sheets for components
- Copies of labels and markings including energy rating and energy use labels
- Instructions for user, maintenance and installer in EU languages
- Test reports
- Declaration of Conformity

Note: this list is not exhaustive.

The technical file is held by the manufacturer and should be available to the relevant authorities for up to 10 years after the last date the product is made.

A product is designed to conform to the requirements defined, and is then submitted for testing to the various standards, in this case to a notified body.

Tests are carried out to the standards required, and some of the tests can be destructive. A test report is subsequently issued to the manufacturer. The CE certificate and CE mark may be applied and the product placed on the EU market only once the requirements of the directives have been met.



CE marking and standards post Brexit



Applying the CE marking process to products is key to ensuring that safety is enshrined in the design and manufacture of such products. This process has evolved over a long period dating back to the early days of the Common Market but has been designed to generate a common legal framework for products. This provides a framework for market surveillance and ensures that products are made to the highest standards of safety and, increasingly, energy efficiency.

CE marking is not just important for Business to Consumer (B2C) product sales, but is a key priority for sectors operating in Business to Business (B2B) industries. The future of CE marking and the Brexit implications, for not only the mark itself but also the associated processes of certification and compliance is a major concern to EURIS industries. There could be impacts on consumer goods and industrial products, and this needs to be carefully understood as the UK Government make plans for when we leave the EU.

UK manufacturers use Notified Bodies (NBs) to check that their products conform to the essential requirements of European Directives, which have also been transposed into UK law. NBs are also known as Conformity Assessment Bodies (CABs), which are accredited by a National Accreditation Body (NAB), appointed by the respective member state. For the UK it is UKAS who provides the list of UK accredited bodies to BEIS, who then supplies the list of UK NBs to the European Commission.

In leaving the Single Market the risk is that our UK NBs are no longer recognised by the European Commission as they would no longer reside in the European Union. This would mean that at a huge expense, manufacturers would be forced to use NBs on the continent to CE mark their products. Although existing certifications may still stand, variations to design, factory audits and new products entering the market would require EU NBs to certify their products. For a UK manufacturer this could therefore require them to certify twice for the EU and UK market. Our UK NBs employ 4,500 people, and the sector alone is worth £2bn, and will be at risk once we leave the EU.

Additional costs for certification in the UK may be passed to the consumer. Depending on the product and market in question it may not be possible to pass this cost to the customer, in which case the cost is burdened by UK business. Any deviation from the European CE marking system, and EU product legislation and standards on which product safety is secured will open the UK market up to potentially unsafe and uncertified products.

Foreign/non-EU products entering the EU market need to follow this process and CE mark. Should the UK deviate from the EU system we could become vulnerable to products with lower safety standards entering the UK market. The CE mark is recognised globally as a quality mark of a high standard, and industry view this as providing a competitive advantage for some sectors when exporting. Should the UK not continue with the current CE mark aligned with EU regulation, we risk losing the competitive advantage EU products gain from such a rigorous process.

In light of this it is hard to ignore the importance of **market surveillance**. Any company can stamp a CE mark on their product, but unless the testing and certification process of individual products is appropriately overseen by market surveillance authorities we will always risk having unsafe or non-compliant products entering the market. Remaining part of the EU system will aid market surveillance authorities in tracking products and working with other EU authorities to tackle issues of noncompliance. It is evident to industry that existing market surveillance is not handling this effectively today and therefore significant improvements are needed.

We have confirmation from the UK Government that in the event of an implementation period with the EU, CE marking will still be used and recognised in the UK during this period (until 31st December 2020). Furthermore, UK NBs will still be accountable in the EU. EURIS concerns are around what occurs post 31st December 2020, and in the event of a no-deal.

CE marking and standards post Brexit (continued)



Standards

Currently, particularly in the industrial products sector, the UK is very active in influencing the drafting of harmonised standards. These standards define the 'state of the art' for product safety and performance and it is therefore vitally important that we continue active involvement. The alternative would be the UK having to work to, and CE mark against, standards which UK industry has not been able to inform and influence.

With the rapid digitalisation of industry, buildings and energy networks, and the evolution of low carbon energy production, products and systems, this is now a matter of utmost importance.

100% compatibility with European standards is vital for the UK economy and to ensure the safety and security of consumer products. The UK therefore requires full membership of CEN CENELEC to continue leading and influencing European standards.

There are opportunities post Brexit for UK industry to take a leading role in directing standards and therefore influence new regulatory frameworks and industrial processes. This is seen as a positive way to handle our potential lack of voting power for new regulations and would enable us to steer them from the outset. The UK could do a lot more to support industry involvement in the standardisation process in the EU and internationally. Ensuring we cement our role alongside other countries for key UK sectors is vital for the success of UK industry post Brexit.

More support is needed to improve our direct influence in EU and international standards and EURIS calls for a post Brexit support framework for industry.

Implications of no-deal on product certification

Product testing and certification by UK Notified Bodies will become invalid for EU27 trade purposes regardless of previous conformity assessments and CE marking. Depending on arrangements made by the UK NB to transfer registrations to EU27 locations, it may be necessary to re-test and re-certify existing and new products in the EU27.

Also, under CE marking rules, the technical file on any product traded in the EU must be accessible at an address within the EU. A UK manufacturer may need to either persuade an EU importer or distributor to hold this and the associated liabilities (which may involve own-branding) or register an office in an EU location, however nominal this arrangement might be.

Industry needs assurance of what the process would be from day one after the exit date of March 2019, especially in a no-deal scenario. Based on a European Commission stakeholder notice this would mean UK NBs are no longer accountable for products sold into the EU market and manufacturers will have to certify with both EU and UK NBs should they wish to sell into the UK and EU market. In the long term we ask for full alignment.

In conclusion, we need a harmonised system to:

- Uphold the safety of electrical products in the UK
- Limit additional administrative burdens for UK manufacturers and companies wishing to import products or components into the UK market
- Ensure we do not become a dumping ground for non-EU products not meeting the high safety standards upheld by existing EU regulation and standards
- Maintain our competitiveness in a global market



Intellectual property and copyright law

Intellectual Property (IP) rights are essential to all technology businesses and the key to establishing competitiveness in both domestic and export markets. Without adequate protection and enforcement of designs, patents, trademarks, know-how and other IP, UK businesses will lose sales, reputation and market share. Equally, having first-class legal protection in the UK will be of minor significance unless UK IP rights match the protections and enforcement regimes in our biggest export market, the EU. EURIS industries believe that the development of a workable and beneficial IP system is one of the most important agreements needed for a post-Brexit business environment in the UK.

- It is essential that the UK remains aligned to EU policies and legislation
- Currently, individuals and businesses have a choice when registering their trademarks or designs. National rights can be obtained by registering with the UK Intellectual Property Office (IPO) or, if wider protection is required, an application can be made to the European Union Intellectual Property Office (EUIPO), for an EU Trade Mark (EUTM), or a Registered Community Design (RCD). These unitary rights afford trade mark or design protection in all current member states of the EU, including the UK. In addition, because the application and registration process is centralised, the system provides for a fast and cost-effective system of obtaining extensive protection.
- Without agreement to allow the UK to retain participation in EUIPO unitary rights, UK businesses currently holding only EUTMs or RCDs will have to register UK Trade Marks and Registered Designs with the UK IPO. In the event of no-deal with no withdrawal agreement and transition period they will need to register these before March 2019 or lose all the protection currently held.
- A key arrangement for IP rights holders is the Application for Action (AFA) process, which enables rights holders to instruct Customs across the EU to detain shipments of goods entering or leaving the EU, where there is a reasonable suspicion on the part of Customs that the goods infringe their IP rights.
- Any future solution that does not have at its heart EUTMs and the AFA process will lead to increased costs and difficulties for those seeking to protect their IP. Increased costs and lack of clarity on the future intellectual property protection environment, could discourage research and development investment in the UK and easily undermine any national innovation policy.
- It is a very positive step that the UK has now ratified the EU Unitary Patent regime as this should reduce cost and complexity for innovative companies seeking to protect IP. As things stand, this would be lost on the UK's exit from the EU so lobbying should now proceed to allow for the UK's continued participation, preferably also allowing for other states such as Switzerland to participate.
- UK and EU IP enforcement must also remain aligned, with maintenance of information exchange and market surveillance regimes to avoid either the UK or EU markets becoming a safe haven for counterfeiters or other pirates of IP.

Implications of no-deal on employment



EURIS industries currently employ

1.1 MILLION employees

Any reduction in UK access to the EU market will reduce UK sales there, and these will not quickly be compensated for by trade agreements with other countries.

If sales fall, either employment falls or productivity (and eventually wages) fall as the same workers produce less. But as well as potentially reducing access, Brexit is generating uncertainty (now and until issues are finally resolved) and dislocation (when it happens), especially if it takes the form of an unanticipated no-deal exit. Uncertainty and dislocation reduce investment, cut productivity growth and cost jobs. We know from the EURIS survey that firms are already experiencing a reduction in export and some supply chains have or are at risk of being relocated. We therefore expect this to impact on employment within affected sectors.

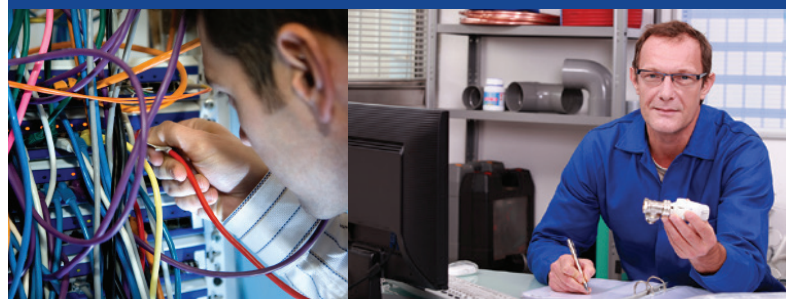
We are already seeing geographically mobile firms relocating some activities to the EU, and most will not take on the expense and risk of returning to the UK even if full access was restored. These are permanently lost jobs. An extended period of time in a no-deal world will mean that UK firms are less competitive in European markets, leading to further contraction.

The only way to keep access to the EU and remove the uncertainty and dislocation is by making new deals with the EU to cover trade, regulation, standards, employment, customs and all other

aspects currently entailed in EU membership. We do not know how many jobs will be lost under no-deal, but if uncertainty and dislocation persist it could be significant. If EURIS members lost just 10% of their workforce, that would be 110,000 jobs, more than three times the number employed in steel making in the UK. This would be at a time when other areas of the economy were suffering uncertainty and dislocation, losing jobs not creating them.

EURIS industries rely on a workforce from the EU, and 30% of survey respondents rely on sending or receiving labour on short term assignment to and from the EU.

40%
of survey respondents stated they would face skills shortages without EU workers (skilled and non-skilled)



Given the need for a workforce from the EU there will always be a need for immigration. Dynamic companies need good workers. These are sometimes in short supply. Companies have told us that if we cannot source skilled and non-skilled workers from the EU when they need them, they will have to find them from elsewhere, or relocate.



Conclusions

UK industry is already experiencing reduced exports and we have evidence of supply chains being relocated from the UK. A no-deal Brexit would create immediate trade barriers for the UK and cause significant long-term damage to our markets

UK manufacturers will have no preferential tariffs or other preferences with either EU or any other Country or market. UK companies will have to default to WTO rules as of March 2019.

Every one of the 164 WTO member states has bilateral or multilateral FTAs at least with nearest neighbors, as do all the WTO observer states including Andorra and the Vatican. The only exceptions are Syria and East Timor who would be joined by the UK at the bottom of all global trading leagues.

Rules of Origin means those UK manufacturers who are in supply or value chains with companies based in EU 27 states will likely find that they lose contracts and are dropped from tender lists as their customers or corporate groups seek to preserve their ability to certify the end product as being of EU origin. Evidence suggests this is already taking place.

Manufacturers will have to test and certify their products with Notified Bodies in the EU and the UK separately if they intend to sell into both markets. A no-deal Brexit will cause border delays; 79% respondents said unpredictable border delays will add significant or major costs to their business.

Future Trade

UK manufacturing is embedded into complex supply chains across the EU. The EU is today, and we expect always will be, our largest trading partner. It is not a choice of exporting to Europe OR the rest of the world. If we become less competitive in the EU we will be less competitive in other international markets. This is especially acute for EURIS, sectors who we represent such a large proportion of trade for intermediary products.

The UK Government's Export Strategy¹³ outlines an ambition to grow exports as a share of GDP from 30% to 35%. This is a great ambition but it's questionable as to whether this is achievable if we damage our trade links with the EU.

CALL TO ACTION

Our industry needs clarity and a Withdrawal Agreement confirmed with the European Commission in the Autumn.

Further delays and the risk of no-deal will result in significant and long-term damage to the UK manufacturing sector and economy.

We have shown evidence the UK will always be closely tied to the EU as our primary trading partner. Our potential to develop trade links with non-EU countries is dependent on accepting this.

We therefore need to maintain regulatory alignment for our sector with the EU, and continued membership and involvement in the creation of EU and international standards for the industry.

¹³ <https://www.gov.uk/government/publications/export-strategy-supporting-and-connecting-businesses-to-grow-on-the-world-stage>

EURIS six principles for a business-friendly Brexit

EURIS is looking to the future and is determined to ensure that manufacturers and suppliers in the UK are able to realise new growth potential through the Brexit process. In order to achieve this, we have developed the following six principles which will help to provide certainty in relation to regulations and standards – enabling UK manufacturers to continue to trade, innovate and grow.

EURIS is calling on the UK Government to acknowledge these principles and ensure they are an integral part of the ongoing negotiations with the EU.

- 1. EU-UK Regulatory Alignment:** Adopting or mirroring EU technical product regulations for the long-term is essential for product manufacturers to remain competitive in the EU and other international markets.
- 2. Post Brexit Industry and Government Liaison:** EURIS welcomes and fully supports the UK Government's proposal for an implementation period. However, in addition to the proposed period, it is essential that there is a long-term mechanism to confirm and recommend for adoption aspects of European legislation that specifically impact on the products covered by EURIS members, to ensure no new non-tariff barriers to UK-EU trade.
- 3. UK Market Surveillance Operations:** EURIS is calling for the maintenance and enhancement of existing UK market surveillance and enforcement operations, in co-operation with the EU, to eliminate unsafe and non-compliant products from the market. There is a considerable risk that if there is any regulatory divergence on safety or environmental performance, the UK could become a 'dumping ground', for non-EU compliant products.
- 4. Frictionless Borders:** Frictionless trade across borders would allow both the product supply industry and those industries we supply parts to, such as the aerospace and automotive industries, to remain competitive in the modern world economy. The UK is the EU's biggest trading partner, so it is in the interests of both parties that we reach a positive agreement on customs arrangements. Frictionless borders would involve no significant additional tariffs, no greater administrative burdens and no delays at the border.
- 5. Trade Negotiations Prioritised:** Trade is the key driver of growth and prosperity and is crucial to both the future of the product supply sector, and the competitiveness of those sectors to which we supply, as our supply chain involves both imports and exports. Negotiating new trading arrangements between the UK and the EU is an exceptional challenge and must have top priority. For non-EU markets, there are considerable opportunities for growth, but this will be a much longer-term process requiring close working between industry and the Department for International Trade, alongside targeted Tradeshow Access Programme funding.
- 6. Access to Skilled Labour:** The UK is a hub for international talent and this must carry on post Brexit with the UK continuing to attract the brightest and the best employees from around the world. Recruiting the finest talent possible, without bureaucracy and delays, will ensure that small and large businesses across the UK are able to continue to invest and grow. To ensure this remains the case, EURIS is calling for the continuation of the current rights of EU nationals in the UK and an immigration system that does not deter talent from the EU coming to the UK.

Brexit Watch

EURIS Brexit Watch monitors the short-term UK macroeconomic indicators to assess the impact of the UK decision to leave the EU on UK economy. The focus of this reporting is to monitor what has happened as opposed to what will happen.

Some Observed Points

Exchange Rates

Sterling has lost approximately 12% of its value to the Euro and 10% to the US Dollar since the referendum.

As a result, import prices have gone up significantly, increasing prices of raw materials, which are predominantly imports, well over 20% since June 2016. The price index of goods leaving the factory gate has gone up only 6.5% in the same period. Manufacturers have therefore absorbed much of these cost increases, taking a hit on their profit margins. The short-term impacts of these low profit margins are not immediately obvious, but in the long term, it can significantly affect a much-needed investment to make UK manufacturing more competitive on the global stage, impacting on R&D and innovation.

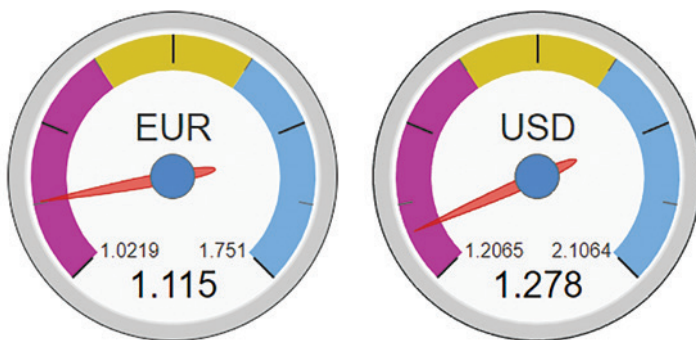


Fig 1: Daily exchange rates since January 1999 showing lowest, highest and current - (current value is 17th August 2018)

Goods Trade

UK trade in goods with the EU is more than trade with the rest of the world. UK trade with EU in the first half of 2018 was £216.7 billion, 52.1% of the total UK trade in goods.

For every £1.00 of goods exported to EU in the first half of 2018, UK imported an equivalent of £1.55 value of goods. On the other hand, for every £1.00 of goods exported to non-EU, UK imported an equivalent of £1.26 value of goods.

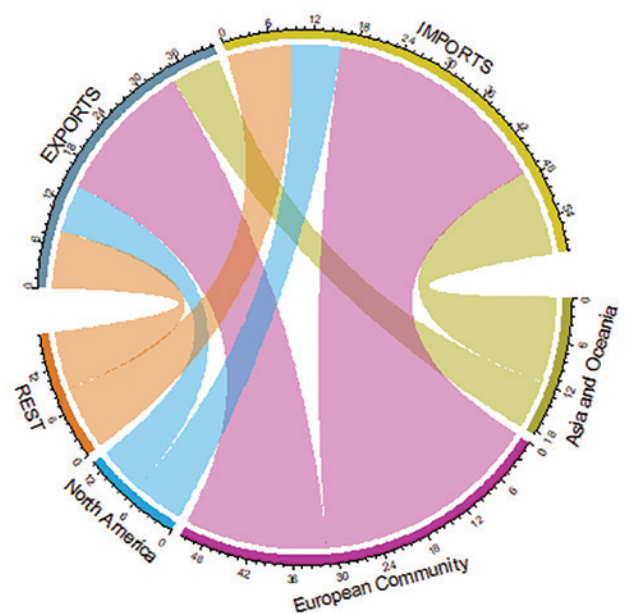


Fig 2: Distribution of UK Trade in Goods - (Jan 2018 - Jun 2018)



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