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North East Freight Partnership

Investigation into how Brexit may impact on how freight is transported in the region and potential mitigation

The North East Freight Partnership is supported by the North East Combined Authority and the North of Tyne Combined Authority

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The North East Freight Partnership

Delivering Safe, Sustainable & Efficient Freight throughout the North East of England

Quality information

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1. Introduction

1.1 Background

This report identifies and recommends interventions seeking to address the challenges for freight enterprises based in the North East of England, focusing on the potential trade implications of a 'hard' Brexit scenario[1]. The emphasis of the report is on the existing and future trends of international trade between North East England and the remaining European Union countries, including imports and exports across international borders and diversification into new markets.

Unless a transition deal can be agreed, the UK formally leaves the EU in March 2019, which will significantly impact the North East as it has a reliance on trade with the EU supported by regular sailings to the EU. Brexit could have significant impact on freight movements in the North East, as departing the Customs Union and Single Market could mean disruption to supply chains, with the potential introduction of tariffs on a range of goods and products traded with the EU.

The UK's departure from the European Union and potentially the Customs Union altogether could bring new border controls and customs arrangements with monetary tariffs; resulting in additional administrative and technical requirements for North East firms. The impact on the efficiency of trade flows and supply chains could create disruption for businesses to a critical point with additional costs either being absorbed (lowering profitability) or passed onto customers (making trading conditions tougher).

1.2 Methodology

This study has adopted the following methodology:

- A concise literature review
- Analysis of export and import data in both the UK and the North East
- Review of responses to Brexit by selected exporters/importers
- A research exercise conducted through structured telephone interviews with key stakeholders, face to face meetings and workshops with companies, organisations and other stakeholders such as the regions ports
- An overview of the current challenges and mitigation measures for Brexit in international trading and freight sectors

On the basis of the research undertaken the study proposes adaptations or measures to address the issues. The report aims to inform the wider freight transport community in the region focusing on areas such as manufacturing, chemical production and engineering by highlighting the risks of Brexit and identifying mitigations to those risks.

[1] For an indication of what this entails, see the approach adopted by the Department of Finance in *UK EU Exit: Trade Exposures of Sectors of the Irish Economy in a European Context (September 2017)* - http://igees.gov.ie/wp-content/uploads/2017/10/UK-EU-Exit-Trade-Exposures-of-Sectors-of-the-Irish-Economy-in-a-European....pdf

2. Literature Review

As part of this study the North East Freight Partnership has assessed a wide range of literature. This literature review looks at the latest export and import data for the British haulage sector and seeks to demonstrate the challenges the region might face posed by Brexit.

The main literature reviewed is stated below: -

- "How will Brexit impact the European logistics industry?" (SupplyChainDigital.com, Jul 17, 2017)
- "Analysis - what impact will Brexit have on supply chain operations?" (SupplyChainDigital.com, Sep 07, 2017)
- "Concerns as HMRC faces 'fivefold rise in customs checks' after Brexit" (The Guardian, Mar 31, 2017)
- "One year to Brexit: How businesses in the most economically exposed region of the UK are coping" (Independent, March 28, 2018)
- "Free port status for UK's North East chemicals hub could mitigate Brexit damage – ICIS" (ICIS Brexit report, April 05, 2018)

These pieces of literature have different viewpoints that give different opinions on the impact of Brexit on both the North East and the UK, there is also some relevant supporting literature used to back up views stated with references.

Justin Fox from Supply Chain Digital[2] categorised the Brexit impacts to the wider European logistics industry into three categories: importing goods into Britain from the EU, freedom of movement and customs and border controls. In particular, in terms of custom and border control, Justin mentioned, "residents of some EU member states enjoy extremely relaxed border controls, and are generally free to cross borders without being stopped. When Britain leaves the EU, this will have to change, and stricter border controls will be reinstated between Britain and its EU neighbours. Trade between Northern Ireland and the Republic is strong, and it's thought that border controls could cost businesses billions each year, with a knock-on effect felt throughout the logistics industry." Oxera, an economics consultant, has supported this claim estimating that the additional cost to "UK PLC" will be £1 billion as delays slow productivity and the free movement of people will harm economic output as people with the correct skills in the market place become more difficult to find[3]. This will mean North East businesses will be negatively impacted by Brexit due to stricter regulations at borders, leading to a delay in materials passing both in and out of the UK and the additional tariffs for importing and exporting.

This opinion is also supported by Nicholas Hallam, the CEO of Accordance, who said there could be a "five-fold rise in customs checks" at UK ports after Brexit. He also said that HMRC estimates that the number of customs declarations at Dover and elsewhere could rise from 60m a year to 300m a year[4&5]. It would also pose significant impacts on import and export markets of fresh food between the UK and EU countries. As approximately 30% of all food consumed in the UK is imported from the EU, the cost of customs declarations and food waste could increase the costs of the whole supply chain[3&4]. Regarding the impacts to freedom of movement, Justin pointed out that "Almost 10% of commercial drivers in the UK are from other EU countries. The UK, like many countries, is experiencing a shortage of experienced commercial drivers. If Brexit

[2] https://www.supplychaindigital.com/logistics/how-will-brexit-impact-european-logistics-industry
[3] https://www.theguardian.com/politics/2017/jul/29/uk-border-customs-chaos-hit-hard-brexit
[4] https://www.supplychaindigital.com/scm/analysis-what-impact-will-brexit-have-supply-chain-operations
[5] https://www.theguardian.com/politics/2017/mar/31/uk-ports-struggling-fivefold-rise-customs-brexit-hmrc-mps-declaration

restricts the options for EU nationals to work in the UK haulage industry, it may well force earnings for British drivers up, but it remains to be seen whether that would be enough to encourage more young people to choose driving as a career."[1]

The average HGV driver salary in North East England is £18,967, which is 12.9% less than the average national salary £24,333 and 34% less than the average salary from all sectors in the North East England, standing at £28,703. HGV driver vacancies in North East have gone up 24.5% year-on-year meaning the existing high number of vacancies for commercial drivers in North East could be intensified after Brexit as the skill set becomes sparser. This may mean that HGV drivers either move out of the region for better salaries or hauliers will up the rate they pay their drivers in order to retain their workers increasing costs in the supply chain[6].

Ben Chu, from the Independent newspaper, disagrees with this viewpoint, albeit from an overall skills shortage point of view. He thought that the impact of Brexit on a skills shortage would not be as damaging for the North East. "Official data shows that the North East has the lowest proportion of EU workers in England. They account for just 1.8 per cent of population, less than half the 5.5 per cent average for the UK. Such figures suggest that the North East would be relatively unscathed if the government clamped down on EU migration in the coming years"[7]. Due to the relatively low percentage of EU workers in this area at present, Brexit may not pose a larger threat to skills in the North East in comparison to the rest of the UK[8]. Ben's opinion does not specifically focus on HGV drivers but on the regions' economy as a whole, but does take into consideration a sizable proportion of labour in the supply chain, such as warehouse workers, loaders and auxiliary staff.

ICIS, the world's largest petrochemical market information provider and analyser, has a differing opinion on the approach to Brexit and has stated "an ideal scenario would be to give free port status for the UK's North East chemicals hub to mitigate Brexit damage"[9]. Generally speaking a free port is legally located outside of a nation's economic remit and is free to trade which means it is exempt from taxes and duties[10.]

Lucy Raitano from ICIS said "Free port status for Teesport would mean products could be imported into the area, manufactured and exported again without being subject to tariffs and import procedures. The port's deep water access and well connected land transport make it a candidate to obtain the special status."[9]

To support this Redcar MP Anna Turley has called for the Government to grant Teesport area 'free port' status to help boost the economy. She stated that a free port area would help the North East build upon its current strengths in chemicals, steel, energy and logistics and realise its vision to become the most attractive place in the country for high value manufacturing." The impact on the North East would create a further 20,000 jobs and increase the regions imports by 40,000 tonnes per year, boosting the region's economy and offsetting some of the negative impacts expected due to Brexit[11]. The regions' economy is expected to shrink post- Brexit which could result in either a loss of jobs, a lack of new jobs or both. The creation of 20,000 jobs in the region should be something seriously considered to aid the North East's economy.

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[6] https://www.adzuna.co.uk/jobs/salaries/north-east-england/truck-driver
[7] https://www.independent.co.uk/news/business/analysis-and-features/brexit-businesses-north-east-economy-uk-gdp-trade-vulnerable-england-a8269886.html
[8] https://www.independent.co.uk/news/business/analysis-and-features/brexit-businesses-north-east-economy-uk-gdp-trade-vulnerable-england-a8269886.html
[9] https://www.icis.com/resources/news/2018/04/05/10209367/free-port-status-for-uk-s-northeast-chemicals-hub-could-mitigate-brexit-damage-mp/
[9] http://lexicon.ft.com/Term?term=freeport
[11] https://www.gazettelive.co.uk/news/teesside-news/free-port-status-could-make-14134793

2.1 Summary of Literature

As discussed in the literature the key areas of focus are:

- Customs and Border controls
- Export and Imports
- HGV driver shortage
- A free trade area outside of any economic area

Further thoughts from Anna Round of the IPPR North ‘Think Tank’ has supported the view that short, medium and long term growth will be stunted due to Brexit, stating, “The key for the UK’s future will be whether or not it can manage to strike a new trade deal with the EU, and be able to pursue a strong free trade agenda. If so, we could see a permanent gain in GDP by 0.6% by 2030, if not, a permanent loss of 0.8% – and wider estimates range from 1.6% in gains to 2.2% in losses. Success would entail the UK being able to negotiate a comprehensive free trade deal with the EU, undertaking substantial deregulation at home, and engaging in strong pursuit of free trade with the rest of the world[12]”.

The literature review has highlighted the potential negative impacts of Brexit in particularly the cost of delays to UK businesses as a result of delays in borders and customs checks. The literature highlights the potential impact it will have on hauliers as a result of “hard borders” between the UK and the remaining EU members.

The literature review also discusses skills shortages, chiefly, HGV drivers. The lack of HGV drivers in the UK, and more importantly for North East business has been identified as a constraint. The demand for HGV drivers in the North East will be compounded by Brexit as the free movement of people within the current economic area will stop, with the potential for some of the current 10% of Non-UK drivers either returning to the EU or new drivers choosing to stay out of the UK resulting in further shortfalls for companies replacing an ageing workforce.

There is also discussion about negating the impact Brexit will have on the North East. If, as highlighted by ICIS, one of the North Easts’ ports is given a Freeport status there could be a creation of around 20,000 jobs, which would help an area of the UK with traditionally high unemployment.

The above literature highlights the primary impacts of Brexit to transportation and logistics in the North East, including economic damage owing to stricter border controls and the potential shortage of commercial drivers. The ideal of creating free port status for Teesport has been proposed and supported by a few MPs who consider it has great potential to mitigate the Brexit threats in the North East.

[12] http://ukandeu.ac.uk/the-implications-of-brexit-for-the-north-east-and-cumbria/

3. Analysis of Exports and Imports both in the UK and North East

Both exports and imports from the EU have played a major part in the economic success of both the UK and the North East. In this section there is an analysis of the amount of freight crossing into and out of the UK, taking into consideration other economic areas than the EU. There is also an analysis of non-freight related exports and imports (service sector) and how regionally the North East compares to other UK regions.

3.1 The Impacts of Brexit on the UK's and North East's Economy

A 15 year model developed by the HM treasury has been used to advise the UK government on Brexit scenarios (As shown in Table 3.1). The forecasting model suggests that the North East and West Midlands would see the biggest slowdown in growth after Brexit. In three scenarios the forecasts for the North East show negative growth by -3% if the UK remains in the single market, -11% with a "trade deal" scenario and -16% where there is not a trade deal in place.

Table 3.1: Government assessment of Brexit deals on economic growth over 15 years

Government region	Single market	Free trade (Trade deal)	No deal
East Midlands	-1.8%	-5%	-8.8%
Eastern	-1.8%	-5%	-8%
London	-1%	-2%	-3.5%
North East	-3%	-11%	-16%
North West	-2.5%	-8%	-12%
South-East	-1.5%	-4.5%	-7.5%
South-West	-1%	-2%	-5%
West Midlands	-2.5%	-8%	-13%
Yorkshire and Humber	-1.5%	-5%	-7%
Northern Ireland	-2.5%	-8%	-12%
Scotland	-2.5%	-6%	-9%
Wales	-1.5%	-5.5%	-9.5%
UK	-2%	-5%	-8%

The North East, West Midlands and Northern Ireland will suffer the most after the UK's withdrawal from the EU according to Brexit impact studies released to MPs by the Government[13].

Without a deal, it is projected the UKs' GDP would reduce by 8%; with a trade deal it would shrink by 5% and staying in the single market would reduce the economy by 2%. Under every scenario, London would be the region least affected and the North East being impacted the most.

The North East would see economic damage as a result of Brexit and it will have a devastating effect on jobs and wages in the region. Manufacturing businesses, hauliers and a large number of exporters in North East will be hardest hit compared with any other region of the UK. Brexit

[13] Brexit: Official forecasts suggest economies throughout UK will be hit. http://www.bbc.com/news/uk-politics-42977967

would mean the North East economy shrinks by 3% even if the UK remained a member of the single market but this appears highly unlikely as the Government insists that Brexit must involve leaving the single market.[14]

If there is a "no deal" scenario, exporting into the EU is still a relatively cheaper option in comparison with exporting into other trade areas, but, there are still some high tariffs on particular goods. Products such as agricultural have an average tariff of 8.5% in comparison to non-agricultural, with the average being 2.3% in 2014. Below in table 3.2 is a summary of the average EU tariffs by product type illustrated as a percentage added to each of the products.

Table 3.2 Average EU tariff by product type (%)

Type of Product	% of import duty
Animal Products	15.7
Dairy Products	35.4
Fruit, Vegetables and plants	10.5
Coffee & Tea	6.1
Cereals and Preparations	12.8
Oilseeds, fats & oils	5.6
Sugars & Confectionary	23.6
Beverages & Tabaco	19.6
Cotton	0
Other Agricultural products	3.6
Fish & fish products	12
Minerals & Metals	2
Petroleum	2.5
Chemicals	4.5
Wood & Paper	0.9
Textiles	6.5
Clothing	11.5
Leather & Footwear	4.1
Non-electrical Machinery	1.9
Transportation/equipment	4.3
Other manufactures	2.6

The impact of leaving without a trade deal would mean that UK businesses would have to incur these costs on exports. These costs will have to be absorbed by either customers within the EU as part of their supply chain or by the exporting businesses themselves.

As shown in Table 3.3 below the North East's main growth areas in relation to exports are from manufactured goods and construction products[15]. Transportation services to the EU (direct movement of goods) rose by 4.97% which in comparison to other UK regions is second to only Yorkshire and Humber. In contrast the North East has seen a vast reduction in the amount of

[14] https://www.independent.co.uk/news/uk/politics/brexit-latest-leaked-impact-assessment-economy-gdp-north-east-west-midlands-a8199746.html
[15] Office for National Statistics, 2017

primary exports (Raw materials and fossil fuels), highlighting the reliance on sectors such as manufacturing and transport.

Table 3.3: Average annual growth rate of exports 2011-15, by region and sector (as %)

	Sector												
Region	Primary	Manufacturing	Transport	Travel	Construction	Wholesale Motor trade	Retail (ex. Motor trade)	ICT	Proff. Services	Insurance & Pensions	Finincial	Admin. Support	Public Admin. and Other
North East	-20.47	13.13	4.97	8.04	13.36	-9.30	-5.15	4.82	7.43	4.31	1.84	12.53	1.74
North West	-3.47	20.73	3.74	8.42	6.84	11.91	-2.35	4.94	6.97	-4.57	4.33	20.54	31.87
Yorkshire & H.	18.92	15.49	7.24	3.73	-6.24	-12.12	-1.18	10.91	-0.13	-5.63	-2.14	10.93	33.65
East Midlands	14.74	24.78	3.32	5.36	16.12	12.07	-6.60	7.41	0.87	-4.59	1.65	-6.36	-11.56
West Midlands	7.46	21.89	2.91	11.75	11.61	2.23	-12.19	4.15	6.18	-7.74	2.60	5.10	18.24
East England	6.61	-1.94	-0.78	8.07	0.95	-12.25	-7.24	14.58	-2.49	-2.35	6.63	20.06	1.31
London	-6.09	-4.29	5.78	8.40	16.92	-20.07	5.19	8.90	6.40	-1.18	-2.07	17.73	9.91
South East	29.59	-0.59	-0.61	6.39	-4.66	-10.52	17.48	7.02	6.50	-0.44	3.68	21.63	3.98
South West	-22.45	10.02	0.98	4.81	12.24	-10.47	15.76	5.66	3.64	-5.40	1.77	3.68	41.42
Wales	22.47	10.96	-6.94	8.09	-24.02	-17.30	-3.15	8.55	8.65	2.83	2.44	15.83	56.51
Scotland	7.17	-0.08	2.35	5.46	10.27	1.07	-3.62	14.86	19.90	-7.42	9.26	5.56	11.06

3.2 Service Sector Exports

The North East has the lowest growth within service sector exports to the EU, cumulative 7.43% (see table 3.4) increase during 2011- 2015 but still has a very small percentage of the total amount of service sector exports in the UK, as shown in Table 3.4 indicating that it has room for business to get market share from other UK regions.

Table 3.4: Total services exported to EU, by region and year, £ millions

Region	2011	2012	2013	2014	2015	Share %
London	90,163	89,833	93,182	91,967	100,427	46.3
South East	29,935	31,233	33,407	35,274	34,067	15.7
North West	12,872	14,487	16,930	17,448	17,614	8.1
Scotland	12,198	14,253	16,434	16,949	15,726	7.2
East England	10,793	12,459	13,086	12,891	11,783	5.4
South East	8,703	9,845	10,362	10,428	9,550	4.4
West Midlands	6,346	7,297	8,089	8,261	7,513	3.5
Yorkshire & Humber	6,334	6,955	6,891	6,617	6,797	3.1
East midlands	4,267	4,825	4,962	5,458	5,427	2.5
Wales	3,863	4,445	4,701	4,690	4,526	2.1
North East	2,796	3,408	3,707	3,381	3,510	1.6
Total	188,270	199,040	211,751	213,364	216,940	100

3.3 Goods Sector Exports

Table 3.5 shows the UK exports of goods by each region of the UK (2017). The North East exported £7.6 billion of goods to the EU with total exports from the region being £12.9 billion. Meaning the North East has the second highest reliance on exports to the EU in the UK.

There is a heavy reliance on exporting goods within the North East with 59% of the regions goods exports going to the EU. This is above the UK average of 49%. In comparison to the rest of the UK the value of the goods is still relatively small, being 5% of total goods exported with only Northern Ireland having a smaller value of goods exported to the EU.

Four of the top five export partners for the North East are EU member states which are Netherlands followed by the US, Spain, Germany and Belgium.[16]

Table 3.5 Exports of goods by country and regions in UK-EU trade in 2017 (Value in £ billion)

Region	EU	Total	% EU
North East	7.6	12.9	59%
North West	14.2	28.7	49%
Yorkshire & H.	9.7	16.8	58%
East Midlands	10.7	20.5	52%
West Midlands	14.7	33.5	44%
East England	15.2	29	52%
London	15.2	36.2	42%
South East	22.4	45.3	49%
South West	9.3	20.5	45%
England	118.9	243.4	49%
Wales	10	16.5	61%
Scotland	14	28.7	49%
Northern Ireland	4.8	8.6	56%
Unallocated - Known	14.3	20.8	69%
Unallocated - Unknown	0.1	10.4	1%
UK	162.1	328.3	49%

The destination of exported goods from the North East, as highlighted in Table 3.6, indicates after the EU, Asia and North America are the largest destinations accounting for 13% and 11% of the total respectively.[17] Table 3.6 highlights the dependence of trade with the EU by North East businesses and the amount the disproportional impact of increased tariffs and customs checks would have.

[16] HMRC Regional Trade Statistics, 6 September 2016
[17] HMRC Regional Trade Statistics

Table 3.6 Exports of goods from the North East in 2017

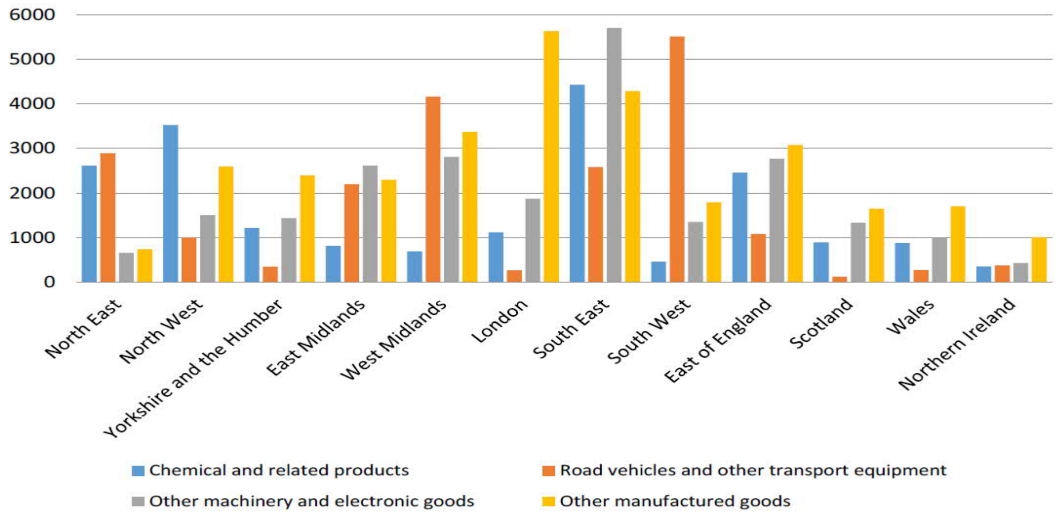
Economic Area	% of NE exports
European Union	59%
Asia & Oceania	13%
North America	10%
Western Europe (Ex. EU)	6%
Middle East and North Africa	5%
Eastern Europe (Ex. EU)	4%
Latin America and Caribbean	2%
Sub-Saharan Africa	2%

In 2017, the North East economy added an extra £250m to the value of its exports, with the majority of the increase derived from trade with the EU. Businesses in the region exported a total of £3.16bn worth of goods and services during the three months ending September 2017, £248m higher than during the same period in the previous year. Overall UK exports grew by 11.6% in the year-ending December 2017 with the value of UK goods exported increasing by 13 per cent and imports increased by 10 per cent.

Per Capita, the North East now exports more goods to the EU than any other region, but this does highlight the dependence on demand from EU businesses. The EU remained the North East's biggest international trading partner, with over 59% of total exports being shipped to EU countries. Trade to other regions outside of the EU fell, causing concern that many companies could suffer if the UK does not manage to secure a strong trade deal during Brexit negotiations.

Figure 3.1 shows regional differences in the value of goods exported to the EU in 2017, focusing on the most important sectors. There are very significant regional differences in this regard, particularly for the export of chemicals, and vehicles and other transport equipment.

Figure 3.1: Value of exports to EU by sector and region, 2015 (selected goods £ million)



Whilst the UK is a member of the EU there are no tariffs on trade with other EU member states. Goods imported into the EU from non-EU countries pay the EU's common external tariff, unless there is a free trade agreement or preferential trade agreement. This will change when the UK leaves the European Union, with the trade deal determining what tariffs are being placed on which products.

3.4 Import Analysis

The North East has the joint fifth highest percentage of amount of goods imported from the EU (60%) as shown in (Table 3.7)[10].

Table 3.7: UK goods imports by country and region (£ billion, 2017)

Region	EU	Total	% from EU
North East	7.9	13.2	60%
North West	20.6	36.8	56%
Yorkshire & H.	16.8	33.1	51%
East Midlands	15.0	26.4	57%
West Midlands	22.7	36.7	62%
East England	31.4	48.0	65%
London	29.5	62.3	47%
South East	58.2	92.4	63%
South West	11	24.8	44%
England	213.2	373.6	57%
Wales	7.4	34.3	22%
Scotland	9.1	17.6	52%
Northern Ireland	4.8	7.5	64%
Unallocated - Known	21.4	34.3	62%
Unallocated - Unknown	0.6	11.4	5%
UK	256.6	468.7	55%

The impact on imports from the EU is likely be significant. If there are tariffs imposed by the UK government on imported goods from the EU there will be an increase of costs on businesses based in the EU which will either have to be absorbed or passed onto the customer based in the UK.

As highlighted by table 3.7 the impact on a reduction in the amount of goods coming into the North East could have a devastating effect on the supply chain for the region. All elements from workers at the ports, HGV drivers and shop workers would be affected by large tariffs imposed at UK borders.

3.5 Brexit's impact on skills

3.5.1 The impact on skills

Residents of all EU member states are currently free to live and work in any other EU country. Britain has long benefitted from this arrangement, with EU workers making up a significant percentage of employees in a wide cross-section of industries.

The impact of a skills shortage would not be as pronounced in the North East as it has the lowest proportion of EU workers in the UK with 1.8 per cent, less than half the 5.5 per cent average for the UK. Such figures suggest that the North East would be relatively unscathed if the government clamped down on EU migration in the coming years as the majority of workers are sourced from the region[18], however this does not necessarily factor in skills shortages in certain sectors. Within the North East, 5% of the population work within the transport and logistics industry, with a disproportionate amount of EU nationals working in the industry[19].

3.5.2 Impacts of Brexit to transportation and logistics in the North East

The UK HGV driver shortage will be impacted by Brexit as almost 10% of commercial drivers in the UK are from other EU countries. The UK once offered an excellent opportunity for drivers from other EU countries but many of those drivers are now going back to the continent for work as they fear they are being used as a pawn in negotiations.

The uncertainty surrounding residency rights for EU workers in the UK is compounding a pre-existing problem in the logistics industry. If Brexit restricts the options for EU nationals to work in the UK haulage industry, it may well force earnings for British drivers up, but it remains to be seen whether that would be enough to encourage more young people to choose driving as a career.

One alternative possibility open to North East is to make the logistics industry a targeted sector for overseas recruitment. The British government is already exploring ways in which it could avoid a 'talent drain' after Brexit, and singling out specific sectors for special immigration treatment as an option.[17]

3.6 Impacts on customs and border controls

Under EU law member states enjoy relaxed border controls and individuals and goods are generally free to cross borders without being stopped. The single market also means that goods and services can be freely traded throughout the Eurozone. When Britain leaves the EU this will change and stricter border controls will be reinstated between Britain and its EU neighbours.

Whilst the border between Northern Ireland and the Republic of Ireland might be the most extreme example of the border control issues raised by Brexit there will be similar issues for North East England as the lifeblood of the region is it's ports, with the additional border checks both in and out of the UK slowing the process around the supply chain.

Following on from Brexit North East businesses may need to change production/manufacturing processes for potential changes in standards regulation. Businesses within the EU have had to demonstrate the quality of their products by becoming accredited by the CENELEC, which is the governing standards body of which British Standards Institute (BSI) is an accrediting body.

Accredited businesses are allowed to display the CE marking, meaning that a particular product matches a minimum standard expected for products in the EU. The UK standard is currently determined in a similar manner as the BSI is an accrediting member of the CENELEC, but post-Brexit this may change as the BSI moves from being an accrediting member. Positively the BSI has been in engagement with CENELEC about post-Brexit standards with legislation being married to reflect the same standard[20] and all being well there should be a simple transition suitable to both parties.

3.7 Summary of data analysis

Data from the Office of National Statistics (ONS) shows UKs' exporting of services to the EU has enjoyed relatively large growth over the past few years[21]. The data from the ONS reveals a large growth of financial services from London but relatively small growth from the North East. The North East's modest growth in the service sector is compounded by the reliance on

[18] https://www.independent.co.uk/news/business/analysis-and-features/brexit-businesses-north-east-economy-uk-gdp-trade-vulnerable-england-a8269886.html
[19] ONS:2017
[20] https://www.bsigroup.com/globalassets/localfiles/en-gb/about-bsi/nsb/brexit/bsi-brexit-standards-update-20-jul.pdf
[21] Office for National Statistics, 2017

exporting goods as the main revenue stream for businesses in the North East (as shown in table 3.3).

As expected, post Brexit, the EU demand for goods from the UK may decrease as increased tariffs and border checks take effect. The impact of Brexit will also have a negative effect on goods imported to the region as for the same reasons as exports, the costs of trade will increase and make demand and willingness to sell goods to the UK diminish. This will have obvious implications on productivity and output from businesses that rely on raw materials from the EU, which, in turn may put North East jobs at risk.

Gaining competitive advantage for freight hauliers and operators is going to play a key part for the survival of their respective businesses and has been discussed in supply chain analysis for long periods, with many ideas floated, the use of alternative fuels being one of the ideas recommended and potentially balancing the loss of revenue with a cost saving[22]. This would benefit manufacturers, transport and constructions companies as it would give them a unique selling point and reduce costs on the price of fuel giving a more robust business model to pursue future growth.

Exports are the economic lifeblood of the North East with Europe being its biggest exporting market. The capita per head, of the region's 2.6 million population, gives a figure of £2,100, the highest of any region in the UK.

Although there is less dependence on service sector exports, half of the North East's services exports went to the EU in 2015, again the largest proportionate share of any UK region. These raw facts on trade are the primary reason why the government's modelling exercise paints such a uniquely bleak economic picture for the North East due to Brexit[23] with around 60% of goods exported and roughly 50% of services exported to the EU shows a reliance of free trade with the EU and any change having a negative impact.

[22] http://www.supplychainquarterly.com/news/20170818-the-impact-of-brexit-three-key-logistics-concerns/
[23] https://www.chroniclelive.co.uk/business/business-news/north-east-exports-continue-grow-14044422

4. Case studies

4.1 Large importer and exporters in North East England

Using the annual ranking of the North East's largest businesses (by turnover), we have selected three representative companies to help analyse the impact of Brexit on the region.[24] The companies chosen represent a cross section of the different types of exporting and importing industries in the North East. The three companies are:

- Nissan Motor Manufacturing, car manufacturer, Sunderland: £5.2bn turnover
- The Sage Group PLC, software developer, Newcastle: £1.6bn turnover
- Hargreaves Services PLC, minerals and logistics, Durham: £342mn turnover

4.1.1 Nissan Motor Manufacturing

Since the Japanese company selected Sunderland to play host to its European base in 1986 the manufacturer has developed some state-of-the-art facilities, broken production records and attracted a lengthy supply chain of component manufacturers supporting jobs for more than 10,000 people, 7,300 of whom are directly employed by NMUK in the city.

That's a significant proportion of the 15,000 people employed in Sunderland's automotive sector and according to "Make It Sunderland's most recent Automotive Report, with a further 13,000 in supply chain companies across the region. The plant now produces more cars than Fiat's four plants in Italy, exporting to 92 overseas markets.[25]

The supply chain from this plant spans hundreds of separate companies in 24 different countries. Furthermore, 70% of all Nissan cars sold in Europe originate from Sunderland. Nissan brand sales in Europe totalled 735,725 while recorded sales in Western Europe were 663,718, an increase of 6.7% on 2015 levels. March 2017 sales totalled 107,592, a rise of 10% on the previous year. In a growing TIV context, Nissan sales were strong in all major markets in Western Europe during FY2016, with continued increases in Spain (+13.3%), UK (+7.5%) Italy (+4.8%), France (+4.7%) and in Germany (+4.7%).

Table 3.8: Total sales for FY2015 and FY 2016 for Nissan in Europe

Country	FY2016 Sales	Total FY2015 Sales	Total % Change
UK	176,770	164,406	+7.5%
Russia	89,944	113,179	-20%
France	80,646	76,838	+4.7%
Germany	78,733	75,201	+4.7%
Spain	69,148	61,005	+13.3%
Italy	65,997	62,982	+4.8%
Europe (as a whole)	756,762	737,501	+2.6%

[24] https://www.chroniclelive.co.uk/business/business-news/who-north-easts-largest-200-13912009
[25] http://www.thejournal.co.uk/business/business-news/mapped-nissans-supply-chain-huge-7254559

Conversely, from the relatively positive sales figures in 2016, published figures from Nissan, have already shown that consumer confidence has been affected by Brexit, with Year-to-date figures released (up to September 2018) for car sales in the European market fell by 11.7% in comparison to sales in 2017. This is also reflected in the down scale in production at the Sunderland production plant, which saw production year-to-date which fell by 8.7% at the production plant in Sunderland.[26]

Professor David Bailey, an economics lecturer at Aston Business School, has warned that major car manufacturers may shift production of new models to factories in Continental Europe because of the uncertainty surrounding Brexit. The UK auto industry boasts plant utilisation running at over 70%, with several plants running 24/7 operations (KPMG 2014). This compares favourably to European nations such as Italy, where utilisation runs at just over 50%. Leaving the European Union without a trade deal could cost Nissan's Sunderland operation half a billion pounds every year and put its future in doubt as the potential loss in demand would mean lower utilisation, cost cutting and ultimately a reduction in staff.[27]

The World Trade Organisation (WTO) has suggested, as part of a trade deal that a 10% tariff on automotive exports is added to all imports and exports between the UK and EU is implemented. Paying such a tariff would cost Nissan more than £400 million a year, while the cost of buying supplies would increase by £100 million.

The Society of Motor Manufacturers and Traders, an industry steering group for the automotive industry, have provided written evidence to the UK governments "Select Committee" outlining the automotive sector's priorities during Brexit negotiations. These include having an interim arrangement with the EU, keeping the single market, free-trade, access to workers, and certainty on automotive regulations.[28]

4.1.2 The Sage Group PLC

The Sage Group plc, commonly known as Sage, is a British multinational enterprise software company with headquarters in Newcastle. It is the UK's second largest technology company and is the world's third-largest supplier of enterprise resource planning software (behind Oracle and SAP), it is the largest supplier to small businesses and has 6.1 million customers worldwide.[29]

Sage has a 78% of its market share in the EU, with the subscriptions increasing by 37% over the last few years. In contrast to the outlook for manufacturing companies Sage's CEO seems to think that Brexit will not have a major impact on its services stating "I think what's important for us and lots of business leaders is just to get back to what you're there for and what the essence of your business is about. It's about looking after your customers and your employees and connecting the two to drive better outcomes for everybody."[30]

As previously stated Sage have seen a rise in business from the EU and have focused on developing a better service, better technology and better ways for their customers to use their platforms.

4.1.3 Hargreaves Services PLC

Hargreaves Services PLC is a multi-sector business that focuses on transportation & logistics, coal distribution, Earthworks and infrastructure services and Energy projects. It has headquarters in Durham employing roughly 2,000 people.

[26] https://www.nissan-global.com/EN/IR/RESULTS/2018/
[27] https://www.chroniclelive.co.uk/news/north-east-news/nissan-gives-fresh-signals-production-12667340
[28] https://www.chroniclelive.co.uk/business/business-news/nissan-could-make-future-models-13887771
[29] https://en.wikipedia.org/wiki/Sage_Group
[30] http://uk.businessinsider.com/sage-ceo-stephen-kelly-on-brexit-and-millennial-entrepreneurs-2016-7?international=true&r=UK&IR=T

Hargreaves logistics division has felt the impact of Brexit already. Following on from the Brexit referendum a major UK port delayed a £7m earthworks project until the UK and EU have reached an agreement. Hargreaves was due to provide groundworks and logistical support to the project.

The company have issued a trading update warning that its transport and earthworks divisions are at risk due to their exposure to the construction sector and to public sector projects, many of which could be delayed due to the economic uncertainty caused by Brexit[31]. In the statement they have tried to allay fears to shareholders as have stated the companies holding's in Coal and Coke in the US should off-set any losses from its UK business as the price of the UK's currency is expected to fall against the US-dollar.

The company has also stated that the companies UK operation may see a downturn as the demand for construction declines and the cost of raw building materials increases post-Brexit. The company has stated in its annual report that they do not intend to change their business model due to Brexit and have their business development teams looking at five year pipeline sales following on from reviewing market data[32].

Hargreaves seems to be awaiting the result of the Brexit negotiations and are proceeding cautiously with their UK business, albeit trying to retain a business as usual approach. Their leadership team have recognised the impact of Brexit and have contingency plans in place for each of the eventualities[24].

4.2 Summary of Case studies

For companies that are dependent on manufacturing, Brexit will prove to be a difficult challenge. The uncertainty of what the customs arrangements could be will make companies, such as Nissan, concerned, as their entire supply chain both in and out of the EU is likely to be affected. The uncertainty and negative effects could lead to a reduction on staffing numbers, which would be devastating for the region, as a downturn for Nissan would, in general terms; mean a downturn for other car manufacturers in the North East leading itself to an employment crisis.

As with manufacturing the transportation industry in the North East would be affected. Hargreaves is a good example of how a business has already been impacted by Brexit, with the delay and possible cancellation of a project. Hargreaves has been impacted by the lack of current willingness of investors to construct new developments in the North East.

The Sage example shows how a market leading service provider will negate Brexit. This case study highlights the growth of the service sector in the UK and how the service sector is seemingly more robust than the goods sector (and all associated sub-sectors).

The traditional method of haulage companies trying to absorb costs, thus cutting profit margins, is not a focus for service sector companies who will pass any increase in cost directly back to the costumer. This progressive market strategy is seemingly positioning these businesses in a better way to deal with Brexit.

[31] http://motortransport.co.uk/blog/2016/07/05/hargreaves-services-suffers-brexit-shock-after-major-project-delayed/
[32] https://www.hsgplc.co.uk/media/90335/Hargreaves_AnnualReport2017.pdf

5. Analysis of stakeholder engagement

A research exercise conducted through structured telephone interviews and a skills workshop with companies, organisations and stakeholders was undertaken to gain a broad range of results in order to get as much information as possible.

5.1 Stakeholder Workshops

As part of this report a stakeholder workshop and several telephone interviews with key stakeholders from the North East were undertaken. The workshops were attended by road haulage operators, industry consultants, a port operator and local government authority representatives.

The workshop discussed the topic of driver retention, attracting new talent to the freight industry, the ageing HGV driver workforce, the importance that EU nationals play in the industry and the career paths people can expect from a career in logistics. The key points derived from the workshop are highlighted below:

- There are 600,000 eligible HGV drivers in the UK but only 300,000 use their license professionally
- There is currently an estimated shortfall of 60,000 HGV drivers in the UK
- The average age of a HGV driver is 53 years old, with 13% over 60 years old and only 2% under the age of 25
- The perception of HGV drivers, the way in which they are treated, pay, conditions and the lack of career prospects deters people from pursuing a career as a driver
- Lack of investment and reluctance from companies to train HGV drivers as they fear drivers will simply move to another company after completion of training
- Lack of clarity for development/career progression in the industry for all staff as logistical professionals
- Continued Professional Development (CPD) should be encouraged in freight to attract new people to the industry
- There seems to be a lack of careers advice for young people
- There is a lack of knowledge and exposure of the office based/non-operational jobs in the freight industry
- The freight industry needs to do more to encourage young people into the industry by engagement activity such as open days
- Government funding for training and apprentices is difficult to source as the “Skills for logistics” agency closed in 2014
- Apprenticeships for HGV drivers are difficult to implement as there a lot of “upfront” costs associated

5.2 Telephone interviews

The telephone interviews were conducted with several operators, a port and the local chamber of commerce. The size of the organisations varied from 50 employees to 10,000 with turnover of the organisations between £10 million and £500 million. The organisations (anonymised for the survey) were chosen as they operate in different areas of commerce in the North East but they all have a vested interest in the movement of freight in the region. The questionnaire was aimed at gauging opinions about the interviewees respective organisation's position on Brexit and the impact that each of the scenarios could have.

The areas of discussion for the telephone interviews were on the topics of impact on their business, modal choices for transport, split of imports/exports in trade, trade with the EU, the positive or negative impact of Brexit on their business, the impact of skills within their business and the staffing levels of their business. Certain key points from the telephone interviews are highlighted below:

- 100% of the respondents used the road network to either import or export goods
- 29% of the respondents used the rail network to either import or export goods
- 43% of the respondents imported or exported their goods via ports
- 15% of the respondents imported or exported their goods via air transport
- The participants were still unsure as to what extent Brexit will impact there organisation until a deal is complete
- There was a mix of opinions on Brexit scenarios with some declining to answer due to company policy on the subject
- Each of the respondents were unsure on how Brexit would affect their imports and exports
- 15% of the respondents thought that Brexit would be positive for the UK
- 15% thought that businesses would adapt and move forward as business as usual
- The majority of interviewees did not believe that staffing levels would be either positively or negatively would be affected
- 80% of the participants did not feel that they would have to retrain staff on new customs arrangements
- 28% stated if training was needed they would make this a part of ongoing staff development rather than hire new staff

5.3 Summary of Stakeholder engagement

From the stakeholder workshop one of the key themes was the lack of HGV drivers harming haulier's productivity. If there were more HGV drivers, not only in the North East, but UK as a whole, the supply chain for each of the major sectors in the North East would be more profitable and efficient.

The workshop identified that there is an "ageing" driver workforce with 13% due to retire over the next few years and only 2% under 25 entering the HGV driving profession, thus showing a lack of interest in the occupation from younger people.

There are also a number of issues with retaining drivers and attracting people to the vocation. The perceived low pay, poor working conditions and lifestyle drivers have to adopt is unattractive in today's labour market, with more young people choosing to go to University and pursuing different careers. There could be a solution to solving the skills gap of 60,000 HGV drivers by attracting a large percentage of the other 300,000 licenced drivers back into the profession through solving some of the issues stated. Perhaps there is a need to consider the merits of a subsidised license acquisition project to encourage more Category C licence or C+E licence acquisition to pursue a career as a HGV driver.

The stakeholder workshop also identified that there was a lack of careers advice and government funding available for training and development in the freight sector, whether that be for apprenticeships or other training. There is also an absence of advice at an early stage for young people advising them on the total amount of roles available in the freight sector. The impact for North East haulier's post-Brexit will be the difficulty in replacing staff that have the necessary skill set required to benefit their business.

From the telephone interviews the key themes surrounded the uncertainty about the Brexit deal and what impact it will have on customs, trade and movement of people with the remaining EU27. As highlighted all of the organisations interviewed stated that they either import/export or move their goods through the UK road network, which would need HGV drivers, and as discussed in the stakeholder workshop there is a shortage of these.

Nearly half of the organisations had direct contact with a UK port for their imports or exports, but did not feel the need to hire new staff to deal with new customs paperwork or to deal with delays in their supply chain.

The telephone respondents were not as concerned with the skills shortages and did not believe they would have to reduce or increase staffing numbers. A third of the organisations stated that they would retrain current staff as part of continual professional development to deal with each of the different Brexit scenarios.

6. Challenges and Potential Mitigation

6.1 Summary of key challenges

Throughout this report there are a number of common themes that indicate there will be negative impacts due to Brexit for both the North East and the UK as a whole. This section summarises the key challenges highlighted in each of the sections of the report.

6.1.1 Challenges raised by the literature review

As discussed in the literature review and data section both the import and export markets will see decline in the economy due to additional customs, borders controls and tariffs imposed on both imports and exports with figures quoted around the £1 billion mark.

As part of the literature review a key topic for the North East was that of a potential skills shortage especially in the HGV driver category. Due to the comparatively low wages of North East drivers, they may choose to leave the region for better pay elsewhere in the UK. This is then compounded by the inability to recruit drivers as the UK has a short fall of around 60,000 HGV drivers and the issue of not being able to ‘freely’ bring HGV drivers from the EU, which for the past 20 years has been the case to plug the gap in the market.

The literature review also highlighted a possible solution to the customs and borders issues faced by businesses in the North East post Brexit by making one of the Ports a ‘free trade’ area operating outside of any economic agreements. The Freeport area would focus on the chemical production sector, a large contributor to the regional GDP.

6.1.2 Challenges raised by the data analysis

The data analysis emphasised the dependence on trade by North East businesses with the EU for both imports and exports. Two of the key export sectors that may be affected by Brexit are the manufacturing and transportation sectors which have seen significant recent growth. With the standard tariffs imposed by the EU on imports coming in from other economic unions would have a significant impact for businesses in the North East as around 60% of export trade is with the EU.

There is also a dependence on imports by North East businesses, with 60% of goods coming from the EU. This will have the potential of affecting the supply chain with extended delays due to customs checks and paperwork, a view supported by the literature review. There may also be the issue of sourcing raw materials for manufacturers in the North East due to imposed tariffs by the UK government. If there is an increase in tariffs on imported goods they may become too expensive to be absorbed by either the consumer or businesses within the supply chain which in turn will see a downturn in regional output and all of the associated assumptions such as job losses, decreases in prosperity and negative future growth.

6.1.3 Challenges raised buy the case studies

The case studies identified that manufacturing importers and exporters in the North East would suffer post Brexit in any of the scenarios besides staying within the current customs arrangements. Nissan’s North East plant sees a large proportion of produced vehicles sold into the EU, which could mean moving production to an EU member state if EU import tariffs become too expensive to absorb.

Sage has a more positive view of Brexit and it appears that they will not be as affected due to the type of business they are. They are primarily a service based company offering software to businesses and are comfortable in their position as market leader that any increase in tariffs on the products/services they sell will not be affected as they believe their customer base will absorb the price difference.

Hargreaves has highlighted the cost of raw materials imported may become more expensive to buy and a delay in a major project because of Brexit. The company has also identified that they may concentrate on other areas, issuing a warning to their shareholders with respect to their transport and earthworks division due to an expected downturn in trade post Brexit.

6.1.4 Challenges raised by the telephone interview and stakeholder engagement

The telephone interviews and stakeholder engagement identified that road haulage was still the main modal choice for companies in the North East. The telephone interviewees seemed less worried with the impact of Brexit on the North East than both the literature review and data would suggest, although only 15% stating that Brexit would be positive. The telephone interviewees were also less concerned with the skills their employees had and were confident that they could provide training to existing staff when needed to cope with additional business pressure related to Brexit.

The stakeholders who attended the workshop were more concerned with the lack of HGV drivers, amongst other skills, within the region which supports the data and some of the literature. They identified the lack of “young people” coming into the transport industry as a problem and that lack of talent attraction will lead to a less productive, innovative and competitive market place.

6.2 Mitigations against the challenges

Throughout the report there are a number of key themes that follow through each of the sections and the summary. This section showcases ways in which businesses in the North East can lessen the impact of the challenges and start processes to help negate the issues highlighted.

- Encourage diversification of markets and customs clearance training
  - If North East businesses diversified their offerings to include more services they could negate some of the negative impact of Brexit as they would offer a more varied portfolio. Information and resources could be provided by organisations including the North East Freight Partnership to support freight and logistics organisations in exploiting new and emerging markets.
  - This could include cultural considerations, opportunities, regulatory barriers and routes to market. Resources could include events, information leaflets and training.
  - This will be dependent on what type of deal is struck as part of the negotiations between the UK government and the EU. Businesses in the North East could take current tariffs imposed on goods coming into the EU as a benchmark and strategically plan on how they need to focus their business activities; whether it be to explore new economic areas, new markets or diversify their business offering to try and reduce some of their current risk.
  - Customs clearance expertise is likely to be of great importance due to the UK potentially assuming 3rd country status. The provision, marketing and funding of training in this area is likely to be of great importance if continued trade with the EU is to be facilitated effectively.
- Freeport Status
  - As mentioned in the literature review the North East could develop their case for making one of its Port areas a free trade area. This would become an attractive prospect for investors, importers and exporters alike.

- Supporting International traders by streamlining the customs arrangements. This has been proposed by the UK government, with trade barriers removed as part of a "new deal". The customs arrangements in essence would not change from the current ones and there would be a seamless transition[33].

- Encourage uptake of roles in the sector by promoting opportunities and providing career pathways
  - Build on the work started by the North East Freight Partnership Skills Group by improving linkages between the sector and training and education providers as well as promoting career opportunities
  - Introduce a subsidised HGV licence acquisition or upgrade programme to make entry to the profession more affordable, accessible and attractive to work in
- Work with local Chamber of Commerce
  - Involving the North East Chamber of Commerce (NECC) to help support local businesses adjust to whatever issues Brexit may hold and get advice on the subject of new legislation or changes to the industries that will impact a given organisation. The NECC can also help put forward proposals/lobby on behalf of businesses in the North East (Such as the Free port area) to the Central government.
- Support the North East Brexit Group
  - By Supporting the North East Brexit Group, whose members include businesses, education, trade unions, local authorities and voluntary organisations, with the purpose of ensuring that opportunities and concerns are identified and communicated consistently to the relevant government authorities and that advice and support is given to North East businesses and residents as the detail of changes emerges.[34]
- Encourage enterprise with freight forwarders from Scotland
  - Making the North East a more attractive alternative to travelling down to southern ports for hauliers in Scotland or the North working for manufacturers, freight forwarders or shippers. This could be done by increasing service frequency, or lowering ferry fees to Europe via each of the different ports in the North East perhaps supported by centralised funding.
- Encourage North East ports to expand roll on/roll off & load on/load off facilities and services
  - The expansion of facilities at the regions ports could be a useful alternative to hauliers in both the UK and the EU. With the congestion in southern ports, in particular Dover, coupled with the expected customs delays at the busier ports, the North Easts ports are ideally positioned to take advantage of local, direct crossings to northern European destinations. This present a real opportunity for North East ports.

[33] Future Customs arrangements: A future partnership paper, HM government 2018.
[34] https://www.nelep.co.uk/news/north-east-partners-agree-key-messages-for-the-brexit-negotiations/

7. Further Information

7.1 Useful reading

There are a number of useful online tools to help Businesses in the North East prepare for any of the Brexit scenarios. The toolkits have been produced by either businesses, trade associations or by the UK government.

https://www.gov.uk/government/publications/eu-settlement-scheme-employer-toolkit

https://www.gov.uk/government/collections/how-to-prepare-if-the-uk-leaves-the-eu-with-no-deal

https://www.britishchambers.org.uk/media/get/Business%20Brexit%20Checklist.pdf

http://www.ciarb.org/policy/brexit-toolkit

http://www.exportgrowth.co.uk/brexit-toolkit/

https://www.businessgrowthhub.com/brexit/toolkit

https://fta.co.uk/international-trade/brexit

https://www.rha.uk.net/getmedia/c98d0219-fcf7-434e-b9cd-51f2ff0c316c/180730-Brexit-pull-your-finger-out-final.pdf.aspx

https://www.bifa.org/news/articles/2016/jul/what-brexit-means-for-uk-shipping

7.2 Useful contacts

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