The Anderson Centre - Written evidence (NIP0012)

18th June 2020

Having worked on various projects concerning the impact of Brexit on the Northern Irish agrifood industry since 2017[1], please find below The Andersons Centre's (Andersons) responses to the questions raised which we are in a position to provide input on.

A. Scope

We understand that the Committee is exploring the extent to which concerns around the Northern Ireland Protocol and agrifood are being mitigated through its implementation, and agrifood issues linked to the Protocol and wider UK-EU relationship. The issues identified include:

- the level of additional checks and other controls on agrifood ingredients and products moving from Great Britain to Northern Ireland
- possible barriers for Northern Ireland agrifood products going into Great Britain
- what the UK-EU Future Relationship agreement will mean for the impact of the Protocol
- the involvement of Northern Ireland industry in implementation decisions
- the impact of COVID-19 on preparations for the end of the Transition Period.

B. Questions

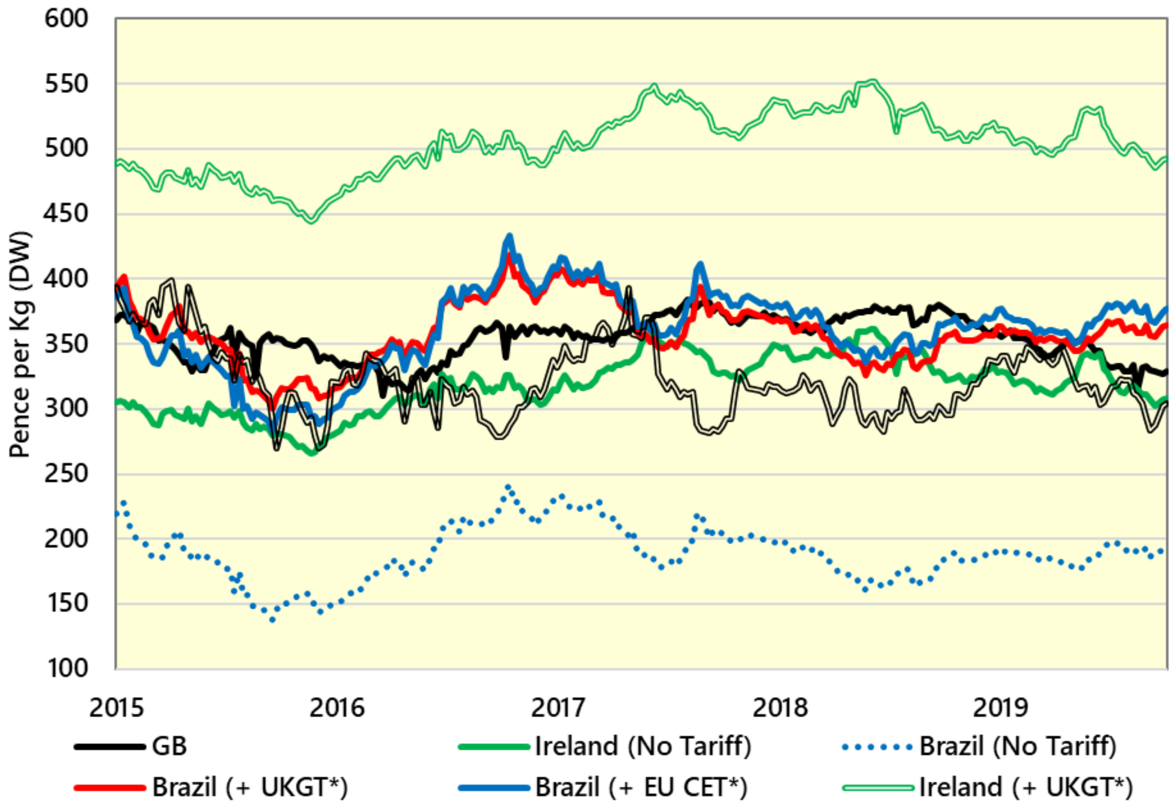
In submitting its responses, Andersons has focused on answering a selection of the questions raised by the Committee.

1. **What is the worst-case scenario here for the Northern Ireland agrifood sector, and what is the best case? Which issues are you most worried about?**
   The worst-case scenario is that there is No Trade Deal between the UK and the EU once the Transition Period ends in December. As Northern Ireland will continue to apply the EU Customs Code and Single Market regulations with regards to agrifood and other industrial goods, this would effectively mean tariffs being applied to goods entering Northern Ireland from Great Britain. This alone would generate significant upheaval on trade. It would be further exacerbated by Great Britain diverging from EU regulatory standards, particularly concerning Sanitary and Phytosanitary (SPS) formalities as this will make checks on agrifood trade arriving into Northern Ireland from GB more stringent. Such a scenario would seriously undermine the competitiveness of many NI agrifood sectors which rely on key inputs and raw materials from GB.
   The situation would further deteriorate if the UK, in future, decides to apply much lower tariffs on imports than its recently announced Global Tariff (UKGT) schedule, or agrees free-trade agreements (FTAs) with low-cost third country producers (e.g. Brazil). This is because produce from other

[1] For example see: https://www.lmcni.com/site/wp-content/uploads/2017/09/LMC-Final-Report_31_Aug_17.pdf

countries, often produced to different standards than domestic UK producers are subject to, would severely undercut the prices that UK farmers receive. This would have severe negative ramifications for the NI agrifood sector at it relies on the UK market for the majority of its sales. Figure 1 below illustrates the extent to which produce from Brazil would undercut British producers if it was allowed to enter the UK on a tariff-free basis.

Figure 1 – Comparison of Steer (R3) Deadweight Prices (or Equivalent) (UK p/kg) - 2015 to 2019



Sources: Bord Bia / Andersons

*** Tariffs:** Based on carcase beef (UK GT 12.0% + £1.47/kg) (EU CET 12.8% +€1.768/kg. Note that the UK tariff is based on the recent UK Government announcement on 19th May.

Note: Ireland refers to the Republic of Ireland.

The best case scenario would be that the UK and the EU agrees a comprehensive Free Trade Agreement (zero tariffs and zero quotas) which also includes a comprehensive regulatory equivalence agreement which ensures close alignment between the UK and the EU in the future but as part of an independent trade policy for each party. This would minimise the scope for divergence between GB and NI and would mean that any regulatory formalities which took place (e.g. SPS related checks) would be much less burdensome. For instance, physical checks on red meat consignments entering Northern Ireland from GB could have a 1% check rate as opposed to the default rate of 20% that the EU applies to standard third country trade. This would mean far fewer delays at the border and significantly reduced scope for value deterioration, which is a major concern for perishable chilled products as it accounts for the majority of non-tariff measure (NTM) costs for perishable produce.

2. **What challenges do you anticipate for Northern Ireland agrifood products going into Great Britain?**

   It now appears that NI businesses will have to complete Exit Summary Declarations when shipping goods from Northern Ireland to the rest of the UK. Whilst the UK Government has committed to using technological solutions where possible to minimise the burden, the level of bureaucracy is set to increase. This will add costs for Northern Irish companies doing business in the rest of the UK which will erode their competitiveness.

   Added to this, there are concerns around the extent to which Northern Irish produce will be considered as "British" in the future. Domestic produce is highly valued by some UK consumers and if Northern Irish produce is considered to be distinct to other domestic produce, this could undermine its competitiveness in the UK market.

   There are also potential issues around integrity if it emerges that there are insufficient controls to prevent ineligible EU or other third country produce entering the GB market via Northern Ireland. Again, this could contribute negatively to the overall demand for NI produce.

   Linked with all of the above, there could also be challenges around the Rules of Origin because being simultaneously part of the all-island economy on the Island of Ireland and the UK internal market, there may be goods in circulation in Northern Ireland which have components which are ineligible to enter the UK market, due to Rules of Origin limits. These products would either have to change their inputs' content or be subject to tariffs on the proportion of goods deemed ineligible for the UK market.

3. **What do you expect the impact to be on the agrifood sector of any additional formalities in the following areas after the Transition Period, for goods moving from Great Britain to Northern Ireland?**

   a. **Sanitary and phytosanitary (SPS) formalities**

      There will be significant impacts in this area as the EU Official Controls will need to be applied on consignments entering NI from GB. This will mean documentary and identity checks on 100% of consignments for products of animal origin and other agri-food goods entering Northern Ireland. It will also necessitate physical checks on a proportion of these consignments and sampling on a proportion of the goods that are physically checked. For some products, the default levels of physical checks are significant (50% for poultry products, 20% for red meat). A Brexit trade deal could help to mitigate some of these checks. For instance, the CETA agreement between the EU and Canada adopted a 10% physical check rate on beef products entering the EU from Canada. Rumours emerging from the UK-EU negotiations suggest that a 30% physical check rate would be adopted for poultry products and 15% for red meat.

      Whilst Andersons has not undertaken a recent study on the impact of these non-tariff measure costs on GB trade into NI, it did an analysis for the AHDB[2] last year on trade barriers that would affect UK-EU beef and sheepmeat trade generally. This study assessed the impact of NTM costs across four scenarios:

1. **"Current":** reflected the situation when the UK was a member of the EU.
2. **Low:** outlines the minimum NTMs that the UK would face when trading with the EU as a third country brought about by an all-inclusive Regulatory Equivalence agreement akin to New Zealand's veterinary agreement with the EU for red meat.
3. **Brexit Deal:** UK is outside the Customs Union and Single Market, but with a meaningful Free Trade Agreement including agriculture, and a customs arrangement.
4. **No Deal:** the UK would apply the import tariffs it announced in March 2019 on all imported beef and sheepmeat produce from the EU27 and third countries which do not enjoy enhanced access via free trade agreements or TRQs. This included the 230Kt TRQ for beef products also announced in March 2019. UK exports to the EU would also be subject to the EU Common External Tariff (CET).

The study found that for beef and lamb, the NTM costs ranged from 0.6% to 5.7% ad-valorem equivalent (AVE) on a probability basis as a result of Brexit. Annex I below provides an overview of the estimated NTM costs for UK-EU27 trade which could be taken as a proxy for GB to NI trade as a result of implementing the Protocol. If a load is subject to the full range of regulatory checks (i.e. is a "checked load" as per the estimates shown in Annex I), then the NTM costs would be significantly higher (up to 32.6% on an AVE basis). The highest NTM costs were unsurprisingly associated with a No Deal Brexit scenario. Under a Brexit Deal with physical check rates akin to CETA, the NTM costs were estimated to range from 0.7% to 3.3% depending on the product in question.

Based on a physical check rate of 15%, one would anticipate that the impact of NTMs on future GB-NI trade post Transition would be somewhere in between these estimates.

Given that profit margins in the beef industry are frequently less than 3%, this additional cost would be significant.
The costs of SPS formalities are likely to be even higher in AVE terms in the poultry sector. This is because the value of the product imported is lower on a cost per tonne basis and coupled with higher rates of physical checks, the impact of the NTM costs will be higher in AVE terms.

b. **customs (including tariffs), VAT and excise, and product-related regulatory controls.**
Here, much will depend on how the Protocol is implemented and what is defined as being "at risk" of entering the EU Single Market. If products dispatched from GB to NI for supplying Northern Irish retail

[2] Report accessible via: https://ahdb.org.uk/knowledge-library/red-meat-route-to-market-project-report

outlets are classified as "at risk", then the impact of tariffs and associated customs regulation would be substantial. Especially, as there are likely to be hundreds of different product types in an individual load. If such products are not defined as being at risk, a significant proportion of the problem will be addressed, but serious issues would remain.

In the red meat and poultry supply chains where inputs from GB account for a sizeable proportion of raw materials used by NI processors at certain times of the year, there remains scope for significant upheaval. Particularly as these products are subject to some of the highest tariffs, it could create significant cash flow problems if a deferred payment system is not put in place. Even with a deferred payments system, it should be noted that for some frozen products, which contain inputs from GB, these products might not be sold for up to 12 months. Such products would be in storage during that time and could potentially still be defined as at risk of entering the EU Single Market and not subject to a tariff rebate until it is proven that they have been used in the UK.

The potential impact of other regulatory controls are included within the NTM cost estimates outlined in Annex I which were compiled based on cost assessments across 25-30 cost categories which encompassed customs formalities, Rules of Origin certification and the like. Importantly, these assessments did not include the impact of tariffs which were analysed separately. Based on the information presented in Annex II, tariffs for beef and lamb products can surpass 90% in some cases.

4. **How can the UK-EU Future Relationship reduce any possible negative impacts of the Protocol on the agrifood sector?**

There are a few key areas where the negative impacts can be significantly mitigated including;

- **Tariffs:** obviously, a comprehensive Free-Trade Agreement (FTA) between the UK and the EU which includes zero tariffs and zero quotas for agrifood products would address the tariffs issue on trade between the UK and the EU. It would also help to reduce the amount of customs formalities as one of the two reasons why customs checks are undertaken is to verify whether the correct import duty has been applied (the other reason is to ensure that the products in question are eligible to enter a country's (or trading bloc's) territory and conform to Rules of Origin and other regulatory requirements).
- **Non-Tariff issues:** as alluded to above, having a regulatory equivalence agreement similar to the veterinary agreement that the EU has in place with New Zealand would substantially lower the volume of regulatory checks that need to be undertaken. For instance, SPS-related physical checks could be as low as 1% for red meat (vis-à-vis the 20% default). This would lower NTM costs substantially as indicated in the "Low" scenario in Annex I below, but would not reduce formalities completely.

- **Safety and Security:** other trade experts have suggested that if the UK and the EU could reach an agreement on this issue, then it might be possible to obviate the need for Exit Summary Declarations on trade from NI to GB. This sounds very sensible and should be pursued by UK and EU negotiators. Ideally, this could be applied at a wider UK-EU level as it would help for trade across the English Channel. Failing that, an agreement covering the UK and Ireland might merit consideration. The Common Travel Area is already in place to address the free movement of people. Given the importance of peace and security resulting from the Good Friday Agreement, then special arrangements between the UK and Ireland should be considered to protect this.
- **Fast-track AEO accreditation:** special economic authorisations such as Authorised Economic Operator (AEO) status could help to obviate some (but not all) customs and security related control measures. That said, many industry stakeholders perceive that the burdensome amount of time and administration involved with getting AEO accreditation, makes it only feasible for large-scale businesses. A fast-track AEO accreditation system merits further exploration. It is also noteworthy that the UK/EU's AEO regime does not currently extend to SPS type regimes, and is only available to businesses who have been trading with third countries for at least 3 years. However, if a fast-track or lighter-touch AEO accreditation system could be provided to at least help SMEs to deal with VAT-related issues or availing of deferred duties, it would help. Again, sufficient time is required to implement such systems.
- **e-Certification:** is being embraced by other countries (e.g. New Zealand) as a means to reduce the burden of border controls. For instance, procedures such as e-certification and residue sampling at source could be undertaken and then communicated to relevant stakeholders as the produce is in transit. This greatly reduces the administration time involved and the risk of losing documents in transit. Some suggested that the UK should play a greater role in this initiative post-Brexit. Longer-term, it could help to reduce the regulatory burden of cross-border meat trade with both third countries and the EU. The potential of electronic declarations whilst meat products are in-transit could play a significant role in reducing the pressures involved. It would also make the prospect of serving new overseas markets more viable, especially for chilled products.
- **Clear communication between UK and foreign regulatory authorities:** close communication between UK governmental agencies and on-the-ground representatives of competent authorities in the EU27 (and other third countries) will be crucial as the new arrangements are implemented. It is insufficient to just speak at policy-making level. Inspectors on the ground need to understand how regulatory arrangements are evolving. If port-level inspectors are confused, then inevitably, shipments would be delayed until any confusion is resolved. This is particularly pertinent in the context of differing practices between ports and port authorities involved in

cross-border trade. It would also be a key issue to manage when official labels or certifications get changed.

- **Training on new regulatory control procedures:** is particularly crucial for SMEs as many will have to undertake customs declarations and other regulatory procedures for the first time. In the Republic of Ireland short courses on understanding customs procedures have been made available to businesses by the Irish Government's export development agency (Enterprise Ireland). The availability of similar courses, not just covering customs, but other regulatory procedures such as SPS would be of benefit to the industry. Linked with this, ongoing support needs to be made available by regulatory authorities to businesses as they adapt to the changes. Whilst some agrifood businesses may be considered small in a UK-level context, they can play an important role in a given regional/local economy. If such businesses do not have the necessary expertise to compete in future and cease trading, there could be significant economic implications for their localities.

5. **How can the Government better engage with and provide support to your members and the wider Northern Ireland agrifood sector?**
   As Andersons is not directly involved in trading agrifood goods in Northern Ireland, this question is not applicable.
6. **What are the most pressing actions needed from the Joint Committee and its supporting bodies?**
   As Andersons is not directly involved in the trade of agrifood products, it is not best-positioned to comment. That said, below are a few points which Andersons believes that the Joint Committee needs to be focusing on.
   - **Set-out in detail the regulatory controls to be applied on GB to NI trade:** it is only once this is in place can businesses begin in earnest to prepare for the arrangements that are due to be implemented post-transition. *This must be addressed as an urgent priority and should include;*
     - Outlining where in the supply-chain regulatory checks would take place on shipments from GB to NI.
     - What documentary procedures and associated IT systems will be required to administer trade in both directions.
     - Set out in detail the transit arrangements that will need to be put in place for GB-NI trade routed via Dublin.
   - **Define what "at risk" to the EU Single Market means:** there has been a lot of focus on the EU protecting the integrity of its Single Market, however, there appears to be little detail on what this means operationally in practice. It would help if a threshold would be established to ascertain what a material risk to the Single Market would be. For instance, consumers shopping in Northern Ireland and bringing fresh meat across the border for personal consumption would in most circumstances not be considered a material risk. However, from a business-to-business trading perspective, and to ensure that no illegitimate "backdooring" (or smuggling) is taking place, further clarity is required.

- **Ascertain the additional costs to NI businesses arising from the Protocol:** this can only be done once the detail of the arrangements are established. The methodology used by Andersons to calculate the NTM costs on beef and sheepmeat trade in the 2019 study conducted for the AHDB could be potentially leveraged to help to estimate such costs. As other stakeholders have mentioned, Northern Irish businesses should not be placed at a competitive disadvantage within the UK internal market as a result of the Protocol.
- **Managing existing Tariff Rate Quotas (TRQs):** set-out how the TRQs in place when the UK was a part of the EU will be administered once the UK exits the Transition period. This is important because significant volumes of New Zealand lamb for instance are processed in Northern Ireland when there is limited domestic produce available (e.g. January to March). If, in future, such consignments are administered separately by the UK and the EU27 (i.e. the existing 228Kt TRQ is split 50:50 between the UK and the EU, each having 114Kt allocation), under which TRQ allocation would consignments arriving into NI fall into? Then, would this meat be permitted to be sold into the UK market (if it arrives under an EU27 allocation)? Or into the Republic of Ireland (EU Single Market) if it arrives under a UK allocation?
  Andersons previously suggested that pre-existing TRQs when the UK was part of the EU should continue to be shared by the UK and the EU. In other words, using the NZ lamb example above, NZ exporters could continue to send lamb into the UK and/or the EU27 up to the 228Kt limit without being subject to the default third country tariffs. Precedents exist elsewhere for this. For instance, the US and Canada share a beef TRQ (11,500t) for exports into the EU. Such an arrangement would overcome most of the concerns that third countries such as New Zealand would have on TRQs which prompted them to reject the initial UK-EU proposal on splitting TRQs based on historical trade. Such an arrangement would not preclude new TRQs being introduced by the UK or the EU27.

7. **Do you expect the Protocol arrangements to be ready for 1 January 2021?**

Whilst bodies such as the HMRC appear to be making progress in implementing the customs-related systems that will be required for the Protocol to be implemented, there is a substantial volume of work needed in other areas (e.g. veterinary controls). It must also be emphasised that there are two key components of being "ready" for the Protocol arrangements. The first one relates to Government agencies where the UK might be partly ready. The second crucial component is the ability of businesses to implement systems required to make the Protocol work. There is no point in claiming that once Government is "ready" that everything is in place. Businesses, large and small, also need to be prepared. This will take much longer to implement as companies can only really prepare once the Governmental stakeholders have decided on the detail. This will take a significantly longer time frame than January 2021 to achieve.

8. **How is COVID-19 affecting the agrifood sector's preparation for the Protocol?**
The Covid Crisis has, rightly, taken precedence over Brexit issues in recent months as the safety of employees working in the agrifood sector and the consumers that they serve is paramount. This has undoubtedly meant that the focus of all agrifood businesses has been diverted away from implementing the Protocol. Therefore, preparation has been significantly inhibited and necessitates a further *"adjustment"* or *"application"* period after December 2020.

9. **Will the Protocol solve the issues it is intended to?**
From an Andersons perspective, it would appear that the Protocol protects the all-island economy on the Island of Ireland, and the EU Single Market (which is the key issue from an EU perspective). It would also appear that this can be achieved whilst maintaining Northern Ireland's position as an integral part of the UK as Northern Ireland would stay within the UK customs territory. That said, there are consequences of the Protocol being implemented which will add costs to businesses in Northern Ireland. Such costs need to be addressed so that Northern Ireland's competitive position in the UK market is not eroded. This could be potentially backed-up by legislation which would ensure that Northern Irish produce is not discriminated against or disadvantaged in any way in the UK as a result of implementing the Protocol.

Annex I – Non-Tariff Measure Cost Estimates for Beef and Lamb

Table 1 – Estimated NTM Costs for Chilled Boneless Beef (HS code: 02013000)

Trade Flow and Load Type	NTM Cost	Current	Low	Brex. Deal	No Deal
UK to EU27 (Price per tonne: £4,854)					
LoLo – Checked load (14t)	£/load	£125	£1,325	£5,492	£17,510
	AVE (%)	0.2%	1.9%	8.1%	25.8%
	£/tonne	£8.92	£95	£392	£1,251
LoLo – Probability-based (14t)	**£/load**	**£125**	**£598**	**£974**	**£1,837**
	AVE (%)	**0.2%**	**0.9%**	**1.4%**	**2.7%**
	£/tonne	**£9**	**£43**	**£70**	**£131**
RoRo – Checked load (18t)	£/load	£157	£1,489	£6,850	£22,133
	AVE (%)	0.2%	1.7%	7.8%	25.3%
	£/tonne	£8.70	£83	£381	£1,230
RoRo – Probability-based (18t)	**£/load**	**£157**	**£529**	**£799**	**£1,684**
	AVE (%)	**0.2%**	**0.6%**	**0.9%**	**1.9%**
	£/tonne	**£9**	**£29**	**£44**	**£94**

Source: The Andersons Centre (2019) on behalf of the AHDB

Table 2 – Estimated NTM Costs for Frozen Boneless Beef Cuts (HS code: 02023090)

Trade Flow and Load Type	NTM Cost	Current	Low	Brex. Deal	No Deal
UK to EU27 *(Price per tonne: £2,794)*					
LoLo – Checked load (14t)	£/load	£125	£1,312	£2,360	£4,225
	AVE (%)	0.3%	3.4%	6.0%	10.8%
	£/tonne	£8.92	£94	£169	£302
LoLo – Probability-based (14t)	**£/load**	**£125**	**£585**	**£939**	**£1,545**
	AVE (%)	**0.3%**	**1.5%**	**2.4%**	**4.0%**
	£/tonne	**£9**	**£42**	**£67**	**£110**
RoRo – Checked load (18t)	£/load	£157	£1,472	£2,823	£5,052
	AVE (%)	0.3%	2.9%	5.6%	10.0%
	£/tonne	£8.70	£82	£157	£281
RoRo – Probability-based (18t)	**£/load**	**£157**	**£513**	**£754**	**£1,309**
	AVE (%)	**0.3%**	**1.0%**	**1.5%**	**2.6%**
	£/tonne	**£9**	**£28**	**£42**	**£73**

Source: The Andersons Centre (2019) on behalf of the AHDB

Table 3 - Estimated NTM Costs for Chilled Beef Carcases (HS code: 02011000)

Trade Flow and Load Type	**NTM Cost**	**Current**	**Low**	**Brex. Deal**	**No Deal**
UK to EU27 *(Price per tonne: £2,043)*					
LoLo – Checked load (14t)	£/load	£125	£1,307	£3,429	£9,328
	AVE (%)	0.4%	4.6%	12.0%	32.6%
	£/tonne	£8.92	£93	£245	£666
LoLo – Probability-based (14t)	**£/load**	**£125**	**£581**	**£937**	**£1,638**
	AVE (%)	**0.4%**	**2.0%**	**3.3%**	**5.7%**
	£/tonne	**£9**	**£41**	**£67**	**£117**
RoRo – Checked load (18t)	£/load	£157	£1,466	£4,197	£11,613
	AVE (%)	0.4%	4.0%	11.4%	31.6%
	£/tonne	£8.70	£81	£233	£645
RoRo – Probability-based (18t)	**£/load**	**£157**	**£507**	**£752**	**£1,428**
	AVE (%)	**0.4%**	**1.4%**	**2.0%**	**3.9%**
	£/tonne	**£9**	**£28**	**£42**	**£79**

Source: The Andersons Centre (2019) on behalf of the AHDB

Table 4 – Estimated NTM Costs for Chilled Lamb Carcases & Half-Carcases (HS code: 02041000)

Trade Flow and Load Type	**NTM Cost**	**Current**	**Low**	**Brex. Deal**	**No Deal**
UK to EU27 *(Price per tonne: £4,243)*					
LoLo – Checked load (14t)	£/load	£125	£1,321	£5,043	£15,729
	AVE (%)	0.2%	2.2%	8.5%	26.5%
	£/tonne	£9	£94	£360	£1,123
LoLo – Probability-based (14t)	**£/load**	**£125**	**£595**	**£966**	**£1,794**
	AVE (%)	**0.2%**	**1.0%**	**1.6%**	**3.0%**
	£/tonne	**£9**	**£42**	**£69**	**£128**
RoRo – Checked load (18t)	£/load	£157	£1,484	£6,272	£19,843
	AVE (%)	0.2%	1.9%	8.2%	26.0%
	£/tonne	£9	£82	£348	£1,102
RoRo – Probability-based (18t)	**£/load**	**£157**	**£524**	**£789**	**£1,628**
	AVE (%)	**0.2%**	**0.7%**	**1.0%**	**2.1%**
	£/tonne	**£9**	**£29**	**£44**	**£90**

Source: The Andersons Centre (2019) on behalf of the AHDB

Table 5 – Estimated NTM Costs for Chilled Lamb Legs (HS code: 02042250)

Trade Flow and Load Type	**NTM Cost**	**Current**	**Low**	**Brex. Deal**	**No Deal**
UK to EU27 *(Price per tonne: £6,385)*					
LoLo – Checked load (14t)	£/load	£125	£1,335	£6,616	£21,966
	AVE (%)	0.1%	1.5%	7.4%	24.6%
	£/tonne	£8.92	£95	£473	£1,569
LoLo – Probability-based (14t)	**£/load**	**£125**	**£604**	**£986**	**£1,937**
	AVE (%)	**0.1%**	**0.7%**	**1.1%**	**2.2%**
	£/tonne	**£9**	**£43**	**£70**	**£138**
RoRo – Checked load (18t)	£/load	£157	£1,501	£8,294	£27,862
	AVE (%)	0.1%	1.3%	7.2%	24.2%
	£/tonne	£8.70	£83	£461	£1,548
RoRo – Probability-based (18t)	**£/load**	**£157**	**£537**	**£817**	**£1,814**
	AVE (%)	**0.1%**	**0.5%**	**0.7%**	**1.6%**
	£/tonne	**£9**	**£30**	**£45**	**£101**

Source: The Andersons Centre (2019) on behalf of the AHDB

Table 6 – Estimated NTM Costs for Frozen Lamb Legs (HS code: 02044250)

Trade Flow and Load Type	**NTM Cost**	**Current**	**Low**	**Brex. Deal**	**No Deal**
UK to EU27 *(Price per tonne: £4,459)*					
LoLo – Checked load (14t)	£/load	£125	£1,323	£2,618	£4,729
	AVE (%)	0.2%	2.1%	4.2%	7.6%
	£/tonne	£8.92	£94	£187	£338
LoLo – Probability-based (14t)	**£/load**	**£125**	**£596**	**£956**	**£1,576**
	AVE (%)	**0.2%**	**1.0%**	**1.5%**	**2.5%**
	£/tonne	**£9**	**£43**	**£68**	**£113**
RoRo – Checked load (18t)	£/load	£157	£1,486	£3,154	£5,700
	AVE (%)	0.2%	1.9%	3.9%	7.1%
	£/tonne	£8.70	£83	£175	£317
RoRo – Probability-based (18t)	**£/load**	**£157**	**£526**	**£776**	**£1,349**
	AVE (%)	**0.2%**	**0.7%**	**1.0%**	**1.7%**
	£/tonne	**£9**	**£29**	**£43**	**£75**

Source: The Andersons Centre (2019) on behalf of the AHDB

Annex II – Tariff Impacts on UK Exports to the EU27 for Selected Beef & Lamb Products

Table 7 – Impact of Selected Country Tariffs on UK Exports for Selected Commodities

Rank	HS Code	Description	Exports to the EU	Exports to China	Exports to the US
1	02013000	Fresh/chilled boneless beef	57%	12%	4%
2	02041000	Fresh or chilled lamb carcases and half-carcases	41%	15%	n/a (normally 0.7 US cents/kg)
3	02023090	Frozen boneless beef cuts (excl. forequarters) (≤5 pcs)	92%	12%	4%*
4	02011000	Fresh/chilled beef carcases or half-carcases	75%	20%	0.4% (based on fixed tariff of 4.4 US cents/kg)
5	02042250	Fresh or chilled sheep legs	37%	15%	n/a (normally 2.8 US cents/kg)~
6	02044250	Frozen sheep legs	39%	12%	n/a (normally 2.8 US cents/kg)#

Sources: HMRC, The Andersons Centre (2019), WTO and USITC
* Based on HTS code 02023002 (high quality frozen beef cuts)
~ Based on HTS code (02042240 (other frozen sheepmeat cuts with bone-in)
# Based on HTS code 02044240 (other frozen sheepmeat cuts with bone-in)