

## **Pamela Coke-Hamilton, Director, International Trade and Commodities, UNCTAD<sup>1</sup>– Written evidence (FFT0014)**

Following the departure of the United Kingdom of Great Britain and Northern Ireland from the European Union in January 2020, the Parties are negotiating a new trade agreement during the transition period which ends in December 2020.

Bilateral and regional trade agreements increasingly include provisions on regulatory aspects relating to the protection of health, safety and the environment which may pose potential barriers to trade. Tariffs have often been reduced while the number and complexity of other policy measures, non-tariff measures (NTMs),<sup>2</sup> that can potentially affect trade, has increased significantly.

Non-tariff measures (NTMs) can be distinguished into two broad categories. First, technical measures (notably sanitary and phytosanitary (SPS) measures and technical barriers to trade (TBT)) which are used as policy instruments to achieve mainly non-trade objectives such as the protection of health, safety and the environment. Second, non-technical measures which include many traditional trade policies, and are often intended to affect trade, such as quotas, licences, price controls and para-tariffs, as well as rules of origin, government procurement and subsidies. The International Classification of NTMs provides a comprehensive list.<sup>3</sup> The term non-tariff barriers is sometimes used as well to refer to NTMs.

This note summarizes recent work in the area of NTMs that is relevant for bilateral and regional trade agreements and thus, the negotiations between the United Kingdom and the European Union. The note focuses on technical regulations and makes six key points supported by evidence.

### **1. Non-tariff measures are important policy measures to protect human, animal and plant life, and are instrumental to achieve the UN Sustainable Development Goals**

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<sup>2</sup> The group of Eminent Persons of Non-Tariff Barriers defines NTMs as "policy measures other than ordinary customs tariffs that can potentially have an economic effect on international trade in goods, changing quantities traded, or prices or both" (UNCTAD, 2013).

<sup>3</sup> Recognizing the increasing importance of technical NTMs and the scarcity of available information, UNCTAD established a Group of Eminent Persons and a Multi-Agency Support Team (MAST). An essential step was the development of an internationally agreed classification for NTMs. This "common language" facilitates collection, analysis and dissemination of data on NTMs, with the final objective to increase transparency and understanding about NTMs. <https://unctad.org/ntm>

The use of NTMs has been increasing, measured by the number of notifications to the WTO (and evidence from collected NTMs (Yan Ing et al, 2016, page 22). Reasons include increasing awareness and interest in health and safety, and increasing complexity of production (e.g. food processing, global value chains, use of chemicals). Some argue that NTMs are used as disguised trade barriers when tariffs are bound at low levels. To date, there is no clear research evidence to support this claim, though anecdotal evidence exists. Overregulation, compared to international standards, is, however, frequent but may be related to higher consumer protection standards (ESCAP & UNCTAD, 2019)

NTMs are closely related to the SDGs. 42 per cent of measures are on average directly related in a positive way to the SDGs (ESCAP & UNCTAD, 2019). The share varies from country to country from about 10 to 70 per cent.

Most technical regulations, as “behind the border” measures, apply to foreign and domestic products equally. These measures are imposed for objectives that are not primarily trade-related: for example, human, plant and animal health, and the protection of the environment. Technical NTMs incur costs but cannot be simply eliminated due to their public policy benefits.

## **2. Non-tariff measures, in particular technical measures, increase production and trade costs, and matter more than tariffs**

From an economic perspective, there are potentially three kinds of costs associated with such measures (Shepherd & Peters, 2020).

1. First, there is a **direct compliance cost**: if product requirements differ across countries, a producer in Country A must retool and redesign their production process in order to be able to ship compliant goods to Country B.
2. Second, there is often an indirect **cost involved in demonstrating compliance** through testing and certification.
3. Third, the indirect **time cost of demonstrating compliance**: border delays that result from the need to produce paperwork and demonstrate compliance to the satisfaction of border officials.

There is no clear empirical evidence to show how much each of the components contributes to the costs associated with NTMs. In total and compared with tariffs, NTMs are three times more important for trade costs than tariffs (UNCTAD, 2013). In agriculture, NTMs can add on average 21 per cent of the product value to the trade costs (compared with a tariff average of 7 per cent) and for industrial goods 4 per cent (tariffs 2 per cent). On average, NTMs add approximately 7 per cent to trade costs for products overall (simple average, exports from high income countries, UNCTAD/World Bank, 2018). However, these are averages and include

e.g. bulk commodities where NTM related costs are typically low. For individual sectors such as animal products (27 per cent) and motor vehicles (10 per cent) average costs can be higher.

Recent data collection efforts allow for a comparison of the costs of technical NTMs (SPS and TBT) and non-technical measures. In the European Union, as in other high-income countries, the technical measures account for the lion's share of the costs related to NTMs (Cadot et al, 2015). Thus, the attention in the UK – EU trade negotiations should be on these measures. The costs of the EU are as follows:

Category	AVE
SPS	4.4
TBT	11.3
Non-technical NTMs	0.5
Total	16.3

*Source: Cadot et al. (2015). Note : AVE, Ad valorem equivalents are estimated costs stemming from NTMs expressed as a share of the value of the product.*

SPS and TBT measures have significant price-raising effects that exceed those of traditional non-tariff barriers. Each additional technical measure increases the prices of traded goods by about 2 percent (Knebel & Peters, 2019). The impact varies by sector: in agricultural sectors (where NTMs are more frequent) the effect is 1.2 per cent per measure; in manufacturing (where NTMs are less frequent) it is 3.4 per cent per measure.

The effects go both ways: the NTMs raise costs on imported products, and thus consumer prices; and also increases export prices, and thus reduces export competitiveness.

AVEs in the European Union are high for specific sectors, some where the United Kingdom has significant exports such as machinery and vehicles. Estimated AVEs by sector for the European Union are in the appendix. The appendix also shows indicators such as the coverage ratio (share of trade covered by at least one NTM) and the prevalence score (average number of NTMs per product).

### **3. NTMs related costs are higher for smaller and medium size enterprises**

NTMs disproportionately affect smaller companies (Fontagné et al., 2015 and Fugazza et al., 2017). Larger enterprises find it easier to comply with regulatory requirements. For the UK, in the absence of a trade agreement with the EU, this could imply that larger production companies such as car producers will face increasing costs but are likely able to overcome these additional barriers to trade. Some smaller companies may find the associated costs prohibitively high.

#### **4. Regulatory divergence of technical regulations increases trade costs**

An important component of costs related to NTMs is the high divergence of regulations across countries. Producers have to comply with hundreds of different regulations in export markets. Product and measure specific case studies, e.g. for the beef market<sup>4</sup>, quantify this effect. Recent research quantifies the effect of regulatory divergence for all merchandise trade and all NTMs (Knebel & Peters, 2019) and shows that costs are significantly increased through regulatory divergence.<sup>5</sup>

As mentioned above, each additional technical measure increases prices of trade goods by about 2 percent. For example, a TBT measure in the UK and a different TBT measure in the EU (addressing perhaps similar objectives) cause costs of 4 per cent. If two trading nations have similar, or 'overlapping', regulations, these price increasing effects practically vanish (Knebel & Peters, 2019). In the example, the total cost to the producer is only 2 per cent. The logic behind this is straightforward: if domestic and foreign regulations are the same, a producer does not have to adjust its product to the foreign market and does not incur additional costs (on top of compliance with domestic regulation).

Applying these results to the UK provides some interesting insights for regulatory policy after the end of the transition period. At the moment, technical regulations are largely 'overlapping' between the UK and the EU. Consequently, and as intended by the objectives of the EU Common Market, trade between EU members is almost seamless.

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<sup>4</sup> Wilson, Otsuki and Majumdsar (2003) examine the impact of residue limits of tetracycline (an antibiotic) in beef and analyse the trade effect of setting harmonized international standards. They find that beef imports are significantly lower for importing countries that have a more stringent residue limit. They estimate that regulatory convergence towards the international standard set by Codex Alimentarius would increase international trade of beef by about US\$ 3.2 billion.

<sup>5</sup> The study uses comprehensive data collected by UNCTAD and its partners through extensive analysis of national legislative documents. The data breaks down 58 different types of technical NTMs according to the International NTM Classification; 34 different types of SPS measures and 24 types of TBT. Furthermore, it distinguishes over 5'000 different products. All data is published online and is accessible free of charge through several web-portals. See <https://unctad.org/ntm> for a full list of partners and donors involved in the global effort. UNCTAD's TRAINS portal [trains.unctad.org](https://trains.unctad.org); World Bank WITS platform at [wits.worldbank.org](https://wits.worldbank.org).

## 5. Regulatory cooperation and harmonization efforts can reduce costs

Regulatory cooperation and harmonization efforts, including the development of international standards such as Codex Alimentarius, aim to address the first cost category (under key point 2. above), mutual recognition and equivalence agreements target the second cost category and trade facilitation efforts, including the World Trade Organization (WTO) Trade Facilitation Agreement, the third category.<sup>6</sup>

The European Union has four broad models with third countries (Shepherd & Peters, 2020).

- First, countries with which the European Union has no free trade agreement (FTA), WTO rules apply. Trade regulations have to follow certain principles, such as those specified in the WTO TBT and SPS Agreements, but are often very different. They provide for, for example, the requirement of scientific evidence, use of international standards and that regulations must not be more trade protective than necessary.
- Second, the European Union has more than 40 free trade agreements notified to the WTO. Free trade agreements often include provisions to strengthen regulatory cooperation. The FTA with Canada, for example, includes a chapter on technical barriers to trade that encourages cooperation in technical regulations. The Comprehensive Economic and Trade Agreement (CETA) includes a protocol that establishes the mutual recognition of European and Canadian Accreditation Bodies and Conformity Assessment Bodies by accepting the results of each other's conformity assessment certificates in areas such as electrical goods.
- Third, Iceland, Liechtenstein and Norway are part of the European Union Single Market (European Economic Area, EEA), sharing all technical regulations. This shares many similarities to European Union membership but may require committing to its four freedoms: free movement of goods, services, capital and labour (Sampson, 2017). The European Union – Switzerland bilateral relationship is somewhat similar though it does not share all technical regulations.
- Fourth, the European Union has a customs union with a few countries, as seen in the arrangement with Turkey on industrial goods. This implies common external tariffs and foresees that Turkey aligns itself with the European Union Acquis Communautaire in essential internal market areas. (The WTO rules on customs unions do not require eliminating restrictive regulations of commerce under GATT Articles XI and XX, which provide for exceptions to the elimination of quantitative restrictions and discrimination between countries where it is necessary, for example, for the application of standards or regulations for classification or grading; or to protect human, animal or plant life or health.)

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<sup>6</sup> This section summarizes the paper Shepherd & Peters (2020) including copying parts from it. For citation, please check against the original paper and cite Shepherd & Peters (2020). Responsibility of the messages here are with the author(s) of this note.

The European Union has devoted considerable attention to developing mechanisms to deal with the economic challenges related to NTMs. The Cassis de Dijon (1979) decision of the European Court of Justice established a general principle of mutual recognition, which means that goods produced in one part of the European Union can legally be sold elsewhere in the European Union. Following the decision, a “New Approach” to standardization was adopted, in which European Union-wide legislation (Directives) would be used only to set out essential requirements that products must meet in order to enjoy free movement within the European Union. Detailed technical specifications would then be set out in voluntary standards issued by standards organizations including the European Committee for Standardization (CEN) and national standards bodies. Firms remain free to deviate from the technical specifications contained in CEN or national standards, provided that they conform to the essential requirements set out in relevant Directives. Assuming they do, their goods can circulate freely within the Single Market.

Shepherd & Peters (2020) aim to quantify the implications of the above models for the United Kingdom – European Union trade. Not all options can exactly be quantified.

They find that there is a significant European Union membership effect. European Union membership is associated with a 37 per cent increase in bilateral trade among members, compared with 8 per cent for an FTA, and 13 per cent for a customs union. Controlling for tariffs, they still find a significant effect for the European Union membership but not the other trade arrangements. They interpret the effect above and beyond tariffs as European Union’s impact on NTMs. A potential increase of tariffs between the United Kingdom and the European Union, and taking rising trade costs related to NTMs into account, United Kingdom exports to the European Union can drop by 14 per cent in the absence of a free trade agreement and by 9 per cent even in the case a “standard” free trade agreement is signed.

This finding is in line with Cadot et al. (2015) who assess the effect of FTA membership on the regulatory distance between countries and find that only few FTAs actually significantly reduce the regulatory distance, i.e. lead to more similar SPS measures and TBT of countries that are member of a FTA.

The future trade relation of the United Kingdom and the European Union has also an effect on trade with third countries. Coke-Hamilton (2019) elaborates on this showing that some countries lose, and others win.

## **6. Options for the United Kingdom**

The UK has several options when it comes to technical regulations after Brexit – with different consequences.

1. Abolishing certain technical requirements in order to liberalize the UK market: On the one hand, this would indeed reduce costs for trade to and from the rest of the world. Imports become cheaper and exports more competitive. On the other hand, for trade with the EU, little would change. Imports from and exports to the EU would still have to comply with EU regulations, leaving unchanged both UK import prices of EU products as well as export competitiveness of UK products in the EU.
2. Changing certain technical regulations to generate unique requirements for the UK: For trade with the rest of the world, this may result in increased or decreased costs, depending on the details of such a change and the level of stringency of the new measure. In trade with the EU, however, costs will inevitably increase. The EU exporters to the UK as well as UK exporters to the EU would have to comply with EU regulations and *additionally* with the new UK regulation. The details and stringency of the new measures will determine the magnitude of increased costs, but not the direction of impact. When diverging from the EU regulations, the UK may converge towards other markets with cost-reducing effects vis-à-vis those other partners – a choice that has to be made with clear intent and reflection.

The UK could converge closer towards international standards, where they exist. In agriculture, the WTO Agreement on Agriculture mentions three standards. Other countries, though members of the standard setting agencies, make often little use of these standards, however. They often go beyond or stay below those standards (ESCAP & UNCTAD, 2019). Still, if this Option 2 is considered, international standards should be considered where possible.

3. Leaving technical regulations unchanged to preserve the status quo: In this case, high regulatory coherence with the EU would be maintained. Import prices from and export competitiveness in the EU would largely remain the same – except for the additional costs of border controls and other conformity assessment. Notably, if the UK maintains current regulations and the EU changes a requirement, this effectively represents a case of policy divergence with the effects of above case 2.

In sum, changes in technical regulations by UK policy makers will strongly impact trading with the EU; this concerns import costs and related consumer prices as well as export prices and competitiveness. Considering these consequences when building a unique national regulatory framework is critical and must be carefully weighed against possible gains vis-à-vis other trading partners.

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## Appendix: Table: AVEs of the European Union by Sector

EUN	Average AVE over all HS-6 products			NTM (Total)
	SPS (A)	TBT (B)	Other NTMs (C, D or E)	
1 Animals	23.0	13.5	1.8	38.3
2 Vegetables	22.1	7.9	0.3	30.3
3 Fats & oils	21.5	2.8	0.0	24.3
4 Beverages & tobacco	12.4	12.6	0.6	25.5
5 Minerals	0.0	6.1	0.0	6.1
6 Chemicals	0.1	16.6	0.0	16.7
7 Plastics	0.0	17.1	0.1	17.2
8 Leather	9.1	5.1	0.0	14.2
9 Wood products	0.0	5.2	0.0	5.2
10 Paper	0.1	4.2	0.0	4.3
11 Textile and clothing	0	12.5	5.1	17.6
12 Footwear	0	16.4	0.0	16.4
13 Stone & glass	0	12.4	0.0	12.4
14 Pearls	0	5.2	0.0	5.2
15 Metals	0	11.9	1.2	13.1
16 Machinery	0	20.5	0.0	20.5
17 Vehicles	0	19.0	0.0	19.0
18 Optical & med. Instr.	0	23.9	1.6	25.5
19 Arms	0	0.0	0.0	0.0
20 Miscellaneous	0	13.6	0.0	13.6
	4.4	11.3	0.5	16.3

Source: Cadot et al. (2015)

Table: European Union Non-Tariff Measures Indicators

Chapter HS	Frequency Index	Coverage Ratio	Prevalence Score
01_Animal	0.99	1.00	12.61
02_Vegetable	0.99	1.00	16.70
03_Food	0.99	1.00	14.69
04_Mineral_Fuels	0.67	0.90	3.70
05_Chemicals	0.97	1.00	6.71
06_Plastics_Rubbers	0.94	0.95	4.14
07_Hides_Leather	1.00	1.00	4.00
08_Wood	0.76	0.86	4.02
09_Textiles	1.00	1.00	5.77
10_Footwear	0.93	0.98	4.89
11_Stone_Glass	0.79	0.50	1.96
12_Metals	0.92	0.91	2.75
13_Machinery_Electrical	0.99	0.99	7.29
14_Transportation	0.95	0.98	2.83
15_Miscellaneous	0.86	0.93	5.78

Source: UNCTAD TRAINS NTM database, trains.unctad.org

<b>NTM chapter</b>	<b>Frequency Index</b>	<b>Coverage Ratio</b>	<b>Prevalence Score</b>
SPS	0.21	0.13	7.56
TBT	0.92	0.91	5.13
PreShipment	0.02	0.02	1.00
Quantity	0.05	0.02	1.01
Price	0.00		
Finance	0.01	0.01	1.00
Other	0.01	0.01	1.00

Source: UNCTAD TRAINS NTM database, trains.unctad.org

The **Frequency Index** captures a country's share of traded product lines subject to at least one NTM. The **Coverage Ratio** captures a country's share of trade subject to NTMs. Unlike the Frequency Index, it is weighted by import values, rather than using traded product lines. The **Prevalence Score** indicates a country's average number of distinct NTMs applied on regulated products. In doing so, it measures the diversity of NTM types applied and provides some indication regarding the intensity of regulating. See Penello Rial (2019) for more information.

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