

15 January, 2017

## The 'likeness' of e-cigarettes and cigarettes in the WTO

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## **Abstract**

The regulation of e-cigarettes is a relatively new topic. While the e-cigarette sector is fast evolving, the optimal regulation of these products is yet to be fully understood. Some wisdom may be borrowed from the regulation of cigarettes, but many tobacco relevant policies may not be applied to these new products. Evaluations are underway on many aspects of e-cigarettes, for example: their safety, potential health risks, illicit trade, taxation and advertising. This paper examines yet another dimension – one which arises at the intersection of international health and trade law. Namely; it looks at whether e-cigarettes and cigarettes may be found ‘like’ in a WTO dispute challenging trade restrictive measures applying to e-cigarettes.

In particular, the analysis focuses on a hypothetical ban on the importation, distribution, sale and offering for sale of e-cigarettes (referred to as a general ban) – a measure that is either being contemplated or already implemented in some domestic jurisdictions. It finds that e-cigarettes and cigarettes may be ‘like’ under WTO law. In the event that a positive finding is made on other remaining tests necessary to determine discrimination (importantly the ‘less favourable treatment’) and provided the regulating member finds no solid evidence to justify the ban under GATT Article XX, a general ban on e-cigarettes risks being found WTO inconsistent.

## Introduction

There are currently three regulatory approaches which governments can follow with respect e-cigarettes: i) banning trade in these products, ii) treating them as regular tobacco products or iii) treating them as pharmaceutical products.<sup>2</sup> The fact that banning trade in these products is a regulatory option for governments is evidenced by the WHO in a report issued under the umbrella of the Framework Conventions on Tobacco Control (FCTC) – a specialised treaty dealing with the control of tobacco. The Report, prepared for the seventh FCTC Conference of the Parties (COP 7) meeting, refers more than once to banning e-cigarettes, although the parties are free to choose among a list of other options.<sup>3</sup> Today there are 23 countries which have banned sales of all types of e-cigarettes, and 11 countries prohibit the sale of nicotine-containing e-cigarettes. Twenty-two countries that permit the sale of e-cigarettes regulate their marketing authorisation requirements and/or cross-border sale restrictions/regulations.<sup>4</sup>

A general ban on e-cigarettes, as is the case in some countries, is a highly trade restrictive measure to be applied to a product. In international trade and WTO terms this is as restrictive as a measure can get. While an importation ban would be GATT Article XI inconsistent (a provision which clearly prohibits importation bans), a general ban on e-cigarettes as applying to both imported and domestically produced goods can be challenged under a number of other WTO provisions, prominently under the General Agreement on Tariffs and Trade (GATT) and Technical Barriers to Trade (TBT) non-discriminatory provisions. The WTO non-discrimination has to be proven however in each case by following a number of legal tests as discussed below. If these tests return positive, a finding on discrimination would provide strong basis for a measure to be found WTO inconsistent (by the WTO judiciary), unless the defendant can successfully invoke a general exception available under the GATT Article XX (e.g. on public health). Thus, whether the measure is discriminatory or not under the WTO (an organisation of 164 Members to date), it has important implications for the future regulation by governments of e-cigarettes.<sup>5</sup> Any such government would therefore have to carefully assess the implications of banning e-cigarettes entirely – by reconciling health objectives with their other international obligations – including those contained in the WTO Agreements.

Against this background, this paper examines the concept of ‘likeness’ of cigarettes and e-cigarettes – an essential WTO legal step toward finding discrimination between products. The objective is to show that, from a WTO law perspective, e-cigarettes may be ‘like’ cigarettes. If a WTO Panel finds ‘likeness’ of the two categories, the legality of a trade-restrictive measure, like a general ban, will have to be further tested under GATT Article III. However, following a positive finding on discrimination and provided the defendant’s justification under GATT Article XX:b health exception (which will most likely be invoked by the defendant) is not supported by solid evidence, this measure may ultimately be found inconsistent with WTO law. This is particularly the case with the growing

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<sup>2</sup> Decision of the Conference of the Parties to the WHO Framework Convention on Tobacco Control, FCTC/COP6(9) on *Electronic nicotine delivery systems and electronic non-nicotine delivery systems* dated 18 October 2014, <[http://apps.who.int/gb/fctc/PDF/cop6/FCTC\\_COP6\(9\)-en.pdf?ua=1](http://apps.who.int/gb/fctc/PDF/cop6/FCTC_COP6(9)-en.pdf?ua=1)> accessed on 21 August 2016

<sup>3</sup> Electronic Nicotine-Delivery Systems (ENDS) and Electronic Non-Nicotine Delivery Systems, Report by WHO, Conference of the Parties to the WHO Framework Convention on Tobacco Control, FCTC/COP/7/11 at 1, available online at: <[http://www.who.int/fctc/cop/cop7/FCTC\\_COP\\_7\\_11\\_EN.pdf](http://www.who.int/fctc/cop/cop7/FCTC_COP_7_11_EN.pdf)> accessed on 24 October 2016

<sup>4</sup> See <http://globaltobaccocontrol.org/e-cigarette/policy-domains> accessed on December 2016

<sup>5</sup> The global market for e-cigarettes in 2015 was estimated at almost US\$ 10 billion. About 56% of this market was accounted for by the United States of America and 12% by the United Kingdom. 21% of the market was divided between China, France, Germany, Italy and Poland (3 to 5% each). The structure of the market may however change given that alternative nicotine delivery systems that heat-not-burn tobacco have been launched and nicotine inhaler technology that does not require a heating mechanism has been developed

evidence that e-cigarettes are less harmful than cigarettes. With that, a general ban may be considered as a “disguised restriction on international trade” as per the chapeau of GATT Article XX which states that:

*Subject to the requirement that such measures are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail, or a disguised restriction on international trade, nothing in this Agreement shall be construed to prevent the adoption or enforcement by any contracting party of measures: ...(b) necessary to protect human, animal or plant life or health...*

This paper is divided in three parts. Section 1 explains the essence of WTO discrimination obligations. Section 2 examines the ‘likeness’ between e-cigarettes and cigarettes under the GATT 1994. Examining the relevant WTO case law, Section 3 looks at the role played by the competitive relationship in conducting this determination. Finally, Section 4 examines the concept of ‘likeness’ under the WTO TBT Agreement, discussing the relationship between traditional ‘likeness’ elements and the regulatory purpose of the measure. The paper culminates with Conclusions.

## **1 Discrimination in WTO law**

Non-discrimination is one of the fundamental market access principles of the GATT/WTO system. The GATT 1994 non-discrimination obligations include national treatment (NT) and most favoured nation (MFN) treatment. The NT obligation is found in GATT Article III where paragraphs 2 and 4 of this provision have to be tested by the judiciary in order to establish discrimination of the products based on origin.

With respect to goods, national treatment means that, once imported products have cleared customs and the applicable tariff or duty has been collected, they must be treated the same as domestic products. Otherwise, discriminatory treatment could erode the tariff concessions, which Members have negotiated in the WTO. Thus, the objective of national treatment principle is “to protect expectations of the contracting parties as to the competitive relationship between their products and those of the other contracting parties [,]...to protect current trade [and] to create the predictability needed to plan future trade”.<sup>6</sup>

GATT Article III paragraph 2 is intended to tackle discrimination arising out of fiscal measures, whereas paragraph 4 applies to measures of non-fiscal nature. Under GATT Article III: 2:

*The products of the territory of any contracting party imported into the territory of any other contracting party shall not be subject, directly or indirectly, to internal taxes or other internal charges of any kind in excess of those applied, directly or indirectly, to like domestic products. Moreover, no contracting party shall otherwise apply internal taxes or other internal charges to imported or domestic products in a manner contrary to the principles set forth in paragraph 1.*

The WTO Appellate Body has made a distinction on how to read ‘likeness’ under the first and second sentences of paragraph 2 above. In making a determination under the first sentence, the traditional

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<sup>6</sup> United States - Taxes on Petroleum and Certain Imported Substances, 17 June 1987, GATT B.I.S.D. (34th Supp.) at 136, para. 5.2.2. (1988)

GATT-based test, which might be called the “physical characteristics” test, has been used in the second sentence (as complemented by an interpretative note ((Ad Article III)), the term ‘like products’ refers to a “directly competitive or substitutable product”. The second sentence comprises, normally, a broader range of products than the narrower ‘like’ product test of Article III:2, first sentence. How broad this may be in any given case rests on the determination of the panel based on all the relevant facts of the case. The answer on ‘likeness’ may also be different from the market of one WTO Member to the market of another WTO Member.

With more relevance to the discussion in this paper, Article III:4 of the GATT 1994 provides that:

*The products of the territory of any contracting party imported into the territory of any other contracting party shall be accorded treatment no less favourable than that accorded to ‘like’ products of national origin in respect of all laws, regulations and requirements affecting their internal sale, offering for sale, purchase, transportation, distribution or use.*

In the case of this provision – meant to deal with discrimination through internal regulation – the Appellate Body provided yet another approach to interpreting ‘likeness’, notably found in the *EC-Asbestos* case. It stated that a determination of likeness under Article III:4 is concerned with determining the nature and extent of a competitive relationship between and among products.

Completing the circle, the WTO MFN obligation is contained in Article I:1 of the GATT 1994, which states that:

*With respect to customs duties and charges of any kind imposed on or in connection with importation or exportation or imposed on the international transfer of payments for imports or exports, and with respect to the method of levying such duties and charges, and with respect to all rules and formalities in connection with importation and exportation, and with respect to all matters referred to in paragraphs 2 and 4 of Article III, any advantage, favour, privilege or immunity granted by any contracting party to any product originating in or destined for any other country shall be accorded immediately and unconditionally to the ‘like’ product originating in or destined for the territories of all other contracting parties.*

Both WTO non-discrimination provisions apply only to ‘like products’. A measure will not be found discriminatory under WTO law if products are *not* ‘like’. This makes ‘likeness’ central to the administration of GATT non-discrimination provisions.

Traditionally, ‘likeness’ in the WTO has been determined according to a four-tier test, although, occasionally, additional elements have been discussed. As the Appellate Body put it in *EC – Asbestos*, the underlying consideration, essential for this analysis and which needs to be applied with respect to each of these criteria, is fundamentally a determination of the nature and the extent of a competitive relationship between and among the products compared.<sup>7</sup>

Given that a general ban on e-cigarettes may stem from “laws, regulations and requirements...”, the likeness analysis in this paper is rooted in GATT Article III:4. As the WTO Appellate Body has explained, a measure is inconsistent with Article III:4 of the GATT 1994 when it satisfies the following three elements: (i) the measure is a law, regulation or requirement affecting a product’s sale,

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<sup>7</sup> WTO Appellate Body Report, *European Communities – Measures Affecting Asbestos and Products Containing Asbestos*, WT/DS135/AB/R adopted 12 March 2011 (*EC – Asbestos*) para. 99

offering for sale, purchase, transportation, distribution or use; (ii) the imported and domestic products are “like products”; (iii) the imported products are accorded “less favourable treatment”.

In the event that all discrimination elements above are fulfilled, a general ban on e-cigarettes will be considered as discriminatory under WTO law. For that, all three elements above will have to be met and supported by GATT Article XX analysis on the applicable exception.

The focus of this paper is on the second element: the analysis of whether cigarettes and e-cigarettes are ‘like products’. That being said, this paper does not assess the legality of a general ban under the WTO, but, rather, checks if one of the essential discrimination elements (that is; ‘likeness’) will be met. Also, the authors of this paper do not examine the relative importance of ‘likeness’ compared to other discrimination elements applicable under the relevant provisions. The authors in addition do not look at whether e-cigarettes are accorded ‘less favourable treatment’ compared to cigarettes as required in GATT Article III:4 (which these authors will research further),<sup>8</sup> nor do they suggest that ‘likeness’ should trump other relevant elements necessary to determine discrimination.<sup>9</sup>

## 2 Likeness under the GATT 1994

A four-tier traditional criteria used in the WTO jurisprudence to evaluate ‘likeness’ are: (i) the physical properties of the products; (ii) their end-uses; (iii) consumer preferences and (iv) the international classification of the products for customs purposes.<sup>10</sup> These criteria are analysed below (Sections 2.1-2.4) and complemented by a short overview of additional criteria which may inform the panel regarding the ‘likeness’ (Section 2.5-2.6). In fact, the Appellate Body stressed that the four ‘likeness’ criteria are ‘neither a treaty-mandated nor a closed list of criteria that will determine the legal characterisation of products.’<sup>11</sup> There is no established hierarchy between the ‘likeness’ criteria.<sup>12</sup> Therefore, neither criteria of ‘likeness’ is determinative as such, and should be assessed in the context of all other criteria.

Just as many of the considerations have to be made on a ‘case-by-case basis’, the ‘likeness’ criteria should be evaluated according to the weight that each of the elements of ‘likeness’ brings to the analysis. The WTO analysis of ‘likeness’ goes back to the early years of the WTO’s existence. Since that time, many new products have been introduced to the market, and it seems only logical that some ‘likeness’ criteria, such as the end-use and consumer’s taste and preferences, may be given more consideration than the tariff classification criterion that was primarily used in the determination of tariff discrimination.

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<sup>8</sup> For a very good discussion on the relative importance of the ‘likeness’ test in establishing discrimination at WTO compared to the ‘less favourable treatment’ test, see Joost Pauwelyn, *The Unbearable Lightness of Likeness* in Marion Panizzon, Nicole Pohl and Pierre Sauvé (eds), *GATS and the Regulation of International Trade in Services* (Cambridge University Press 2008)

<sup>9</sup> The fact that the likeness analyses is a stand-alone element of discrimination and independent research topic is confirmed by the WTO jurisprudence and academic work, including entire monographs. See for example Nicolas Diebold, *Non-Discrimination in International Trade in Services* (Cambridge University Press 2010); Won-Mog Choi, *‘Like Products’ in International Trade Law: Towards a Consistent GATT/WTO Jurisprudence* (Oxford University Press 2003)

<sup>10</sup> WTO Appellate Body Report, *EC – Asbestos*, supra, note 6, paras. 101-102

<sup>11</sup> WTO Appellate Body Report, *EC – Asbestos*, supra, note 6, para. 101

<sup>12</sup> Andrew Mitchell, Tania Voon, ‘Regulating Tobacco Flavors: Implications of WTO Law’, *Boston University International Law Journal*, Vol. 29:383, 398 referring to the WTO Appellate Body Report, *EC – Asbestos*, supra, note 6, para. 102

This is consistent with the Appellate Body's approach in *Japan – Alcoholic Beverages II*, according to which “products that present certain physical differences may still be considered ‘like’ if such physical differences have a limited impact on the competitive relationship between and among products”. As long as the differences among the products, including a difference in the raw material, leave fundamentally unchanged the competitive relationship among the final products, the existence of these differences does not prevent a finding of ‘likeness’.<sup>13</sup>

## **2.1 Physical properties**

There are several coexisting types of e-cigarette devices on the market: first-generation or so-called ciga-likes, second-generation tank systems and even larger third-generation or personal vapourisers. These devices can also be classified into closed and open systems depending mainly on the degree of control that users have over the e-liquid used in the e-cigarettes, the voltage and resistance applied to heating the e-liquid, and ventilation features.<sup>14</sup>

One of the main features of e-cigarettes is that their use does not entail combustion of tobacco, as is the case for cigarettes. The new non-combustible products comprise two general classes of products as explained below.<sup>15</sup>

### **2.1.1 Electronic Nicotine Delivery Systems**

The first class of e-cigarettes delivers nicotine and is referred to as Electronic Nicotine Delivery Systems (ENDS). These products generate nicotine-containing aerosols by use of an electronic device that heats a liquid, which is then inhaled by users (a ritual known as vaping). The main constituents of such a solution, in addition to nicotine, are propylene glycol or glycerol, and various flavouring agents.<sup>16</sup> The choice of e-liquid, the user's puffing style and the device's capacity to aerosolise the e-liquid at increasing temperatures by modulating its wattage and resistance will all determine whether the use of e-cigarettes produces a satisfactory experience to the user in terms of the speedy delivery of sufficient nicotine to mimic the sensory feel of smoking.

The second class in this category is heated products – a category that also delivers nicotine. These products heat a special tobacco material by using an electronic device in a temperature range below combustion to generate a nicotine-containing aerosol without combustion of tobacco material. This category should not be confused with yet another heated tobacco category – a cigarette that heats tobacco without the use of an electronic device (a category not examined in this paper).

### **2.1.2 Electronic Non-Nicotine Delivery Systems**

There are e-cigarettes on the market that do not deliver nicotine. These are referred to as Electronic Non-Nicotine Delivery Systems (ENNDS).<sup>17</sup> This market is composed of a high number of products

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<sup>13</sup> WTO Appellate Body Report, *Philippines – Taxes on Distilled Spirits*, WT/DS/403/AB/R, adopted on 21 December 2011 (*Philippines – Distilled Spirits*), para. 125

<sup>14</sup> Electronic Nicotine-Delivery Systems (ENDS) and Electronic Non-Nicotine Delivery Systems, Report by WHO, Conference of the Parties to the WHO Framework Convention on Tobacco Control, FCTC/COP/7/11 at 1, available online at: <[http://www.who.int/fctc/cop/cop7/FCTC\\_COP\\_7\\_11\\_EN.pdf](http://www.who.int/fctc/cop/cop7/FCTC_COP_7_11_EN.pdf)> accessed on 24 October 2016

<sup>15</sup> T. Tabuchi, K. Kiyohara, T. Hoshino, K. Bekki, Y. Inaba and N. Kunugita, ‘Awareness and use of e-cigarettes and heat-not-burn tobacco products in Japan’, National Center for Biotechnology (2016), abstract <<http://www.ncbi.nlm.nih.gov/pubmed/26566956>> accessed on 10 August 2016

<sup>16</sup> World Health Organization, E-cigarettes or electronic nicotine delivery systems, the revised statement, available online at: <[http://www.who.int/tobacco/communications/statements/electronic\\_cigarettes/en/](http://www.who.int/tobacco/communications/statements/electronic_cigarettes/en/)>

<sup>17</sup> FCTC/COP/7/11, *supra*, note 8, at 1

presenting different features applying to the device and e-liquid used. Although generally considered part of the e-cigarettes class, these products constitute a diverse group with potentially significant differences in the way they produce toxicants and deliver nicotine.

The UK Center for Tobacco Control Research refers to these products as being a 'parent product' to e-cigarettes. The organisation compares the relationship between them as being like full strength coffee and decaffeinate coffee – the latter of which looks, smells and tastes like its original counterpart – or Coca-Cola Zero, which aspires to be indistinguishable from conventional Coca-Cola.<sup>18</sup> Similarly, there is evidence of these e-cigarettes being designed to look and feel like conventional cigarettes. The simulated filters, vapour emissions, glowing tips, and tobacco flavourings, capture the allure of the original cigarettes.<sup>19</sup>

### **2.1.3 The harm perspective**

E-cigarettes mimic many features of all conventional cigarettes, but do not contain all cigarette-related chemical substances.<sup>20</sup> They offer a similar taste and sensory experience, and some categories physically resemble conventional cigarettes. Some studies have claimed that e-cigarettes imitate in shape the very experience of smoking by providing a healthier alternative of nicotine delivery,<sup>21</sup> while others have contested these findings.<sup>22</sup>

It is thus claimed that the use of e-cigarettes is less harmful than conventional tobacco smoking.<sup>23</sup> Different scientific studies confirm that nearly all the health risks of cigarettes come from tar, carbon dioxide and other substances found in the smoke, not from nicotine. Products that deliver nicotine without combustion are considered to carry lower health risks than conventional smoking.<sup>24</sup>

In light of the above, some may argue that e-cigarettes and cigarettes do not to share many physical characteristics which may be true for some of the e-cigarette categories. While the authors fully acknowledge that, as stated by the Appellate Body in *EC-Asbestos*, "evidence relating to the health risks associated with a product may be pertinent in an examination of 'likeness' under Article III:4",<sup>25</sup> this fact is not fully determinative of the 'likeness' analysis. First, there are other elements in the

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<sup>18</sup> Cancer Research UK, 'The Marketing of E-cigarettes in the UK', 2013, at 9, available online at: <[https://www.cancerresearchuk.org/sites/default/files/cruk\\_marketing\\_of\\_electronic\\_cigs\\_nov\\_2013.pdf](https://www.cancerresearchuk.org/sites/default/files/cruk_marketing_of_electronic_cigs_nov_2013.pdf)>

<sup>19</sup> Cancer Research UK, 'The Marketing of E-cigarettes in the UK', 2013, supra, note 15, at 9

<sup>20</sup> Andrew D. Mitchell, Tania Voon, *The Global Tobacco Epidemic and the Law*, 2014

<sup>21</sup> According to ASH Briefing, non-tobacco, non-smoked nicotine products are considered less harmful than cigarettes. ASH (Action on Smoking and Health) Briefing, E-cigarettes (also known as vapourisers), February 2016, available online at: <[http://www.ash.org.uk/files/documents/ASH\\_715.pdf](http://www.ash.org.uk/files/documents/ASH_715.pdf)>, at 2

<sup>22</sup> See for e.g. Prof. Stanton Glantz who claims that e-cigarettes are at least 1/3 as bad as cigarettes or higher. Stanton Glantz, Accumulating evidence suggests e-cigarettes are 1/3 to 1/2 as bad as cigarettes (maybe higher), Center for Tobacco Control, Research and Education, University of California, San Francisco, available online at: <<http://tobacco.ucsf.edu/accumulating-evidence-suggests-e-cigs-13-12-bad-cigs-maybe-higher>>

<sup>23</sup> Konstantinos E. Farsalinos, Riccardo Polosa, 'Safety evaluation and risk assessment of e-cigarettes as tobacco cigarette substitutes: a systematic review', *Therapeutic Advances in Drug Safety*, The National Center for Biotechnology Information, April 2014, 5(2) 67–86, <<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4110871/>> accessed on 5 September 2016. According to another study, e-cigarettes appear to be effective when used by smokers as an aid to quitting smoking and the hazard to health arising from long-term vapour inhalation from the e-cigarettes available today is unlikely to exceed 5% of the harm from smoking tobacco, Report of the Tobacco Advisory Group of the Royal College of Physicians "Nicotine without Smoke. Tobacco Harm Reduction", 2016, <<https://www.rcplondon.ac.uk/projects/outputs/nicotine-without-smoke-tobacco-harm-reduction-0>> 189, accessed on 18 August 2016

<sup>24</sup> Daniela Saitta, Giancarlo Antonio Ferro and Ricardo Polosa, 'Achieving appropriate regulations for e-cigarettes', *Therapeutic Advances in Chronic Disease*, The National Center for Biotechnology Information, March 2014, 5(2) 50-61, <<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3926346/>> accessed on 24 August 2016

<sup>25</sup> WTO Appellate Body Report, *EC – Asbestos*, supra, note 6, para. 113, where the AB disagrees with the Panel that disregarded the role of harm in establishing likeness in physical characteristics

'likeness' analysis which point to the fact that these products are 'like'. Second, as outlined below, e-cigarettes and cigarettes can be considered to be in a direct competitive relationship which will make up for the weakness of 'likeness' in their physical characteristics. Furthermore, the authors note the Appellate Body's approach in *Japan – Alcoholic Beverages*, which stated that "products that present certain physical differences may still be considered 'like' if such physical differences have a limited impact on the competitive relationship between and among products".<sup>26</sup> This suggests that the concept of 'likeness' has been designed to compare the degree of similarity between the products at issue, and not to establish 'identity' between them.

## 2.2 End-uses

The end-uses criterion is defined by the WTO as the extent to which the products are capable of serving the same or similar end-uses.<sup>27</sup> This definition was clarified by the Appellate Body in *EC – Asbestos*, which stated that the end-uses criterion "refers to the extent to which the products are capable to perform the same or similar functions."<sup>28</sup>

Both cigarettes and nicotine e-cigarettes are capable of performing the same end-use, which is delivering nicotine and producing the ritual experience of smoking, while the latter can be observed also with regards to the non-nicotine category (ENNDS). According to *The Tobacco Atlas* data, in Great Britain approximately 2.1 million adults use this category of e-cigarettes. Of these, approximately 700 000 are former smokers, while 1.3 million are both users of tobacco and e-cigarettes.<sup>29</sup>

The majority of e-cigarette consumers are former smokers, and an even a greater part use both types of products. This signals that e-cigarettes (at least in the nicotine category) are capable of serving a similar, if not the same, end-use and perform a similar function, which is delivering nicotine and creating the experience of smoking. The end-use criterion is highly connected with the consumers' tastes and habits criterion described below.

## 2.3 Consumers' tastes and habits

The consumers' tastes and habits criterion refers to the extent to which consumers perceive and treat products as alternative means of performing particular functions in order to satisfy a particular want. In other words, it represents the option of a consumer's choice of one product over another to perform the same end-use.

Some studies consider e-cigarettes a tool for gradually quitting smoking.<sup>30</sup> In addition, e-cigarettes are seen as playing a role for people who do not want to quit, offering a purportedly safer *substitute*

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<sup>26</sup> WTO Appellate Body Report, *Japan – Taxes on Alcoholic Beverages*, WT/DS8/AB/R, adopted 4 October 1996, (*Japan – Alcoholic Beverages II*) para. 120

<sup>27</sup> Peter Van den Bossche, Werner Zdouc, *The Law and Policy of the World Trade Organization* (Third edition, Cambridge University Press, 2014), 389

<sup>28</sup> WTO Appellate Body Report, *EC – Asbestos*, supra, note 6, para. 117

<sup>29</sup> The Tobacco Atlas, 'E-cigarettes should be regulated in such a way as to reduce smoking of combusted tobacco to the greatest extent possible, available online at: <<http://www.tobaccoatlas.org/topic/e-cigarettes/>> accessed on 16 October, 2016

<sup>30</sup> A third of former smokers who have tried e-cigarettes but no longer use them said they had used them as part of a quit attempt. Action on Smoking and Health (ASH) Fact Sheet, "Use of e-cigarettes (vapourisers) among adults in Great Britain", May 2016, <[http://www.ash.org.uk/files/documents/ASH\\_891.pdf](http://www.ash.org.uk/files/documents/ASH_891.pdf)> accessed on 8 September 2016. Moreover, a report on e-cigarettes commissioned by Public Health England finds that electronic cigarette use might be effective in relapse prevention and smoking cessation. John Britton, Ilze Bogdanovica, "A Report on E-cigarettes", Public Health England 2014, <[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/311887/E-cigarettes\\_report.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/311887/E-cigarettes_report.pdf)> 18 accessed on 25 August 2016

to cigarettes they would otherwise smoke.<sup>31</sup> A recent WHO survey on ENDS, of which e-cigarettes are the most common prototype, shows that users of such products are almost always smokers who intend quitting by consuming the nicotine delivery products and expect to reduce the risk to their health. In fact, bar one case, the survey shows that there are few exclusive users of e-cigarettes – those who have never smoked conventional cigarettes (around 1% of the population).<sup>32</sup>

Similarly, at least according to some consumer surveys, there is a significant *switching* by users of conventional cigarettes to e-cigarettes. For example, almost 40% of adult smokers in Italy had tried an e-cigarette by 2013, and 15% of those people had purchased such products on at least one occasion. Data published in the British Medicine Journal in 2014 shows that the use of e-cigarettes was especially high among smokers – with 32% of smokers in 2012 and 50% of smokers in 2013 reporting having tried e-cigarettes.<sup>33</sup> According to ASH 2016 data, there are currently 2.8 million adults in Great Britain using electronic cigarettes (6% of the adult population). Of these, approximately 1.3 million (47%) are ex-smokers while 1.4 million (51%) continue to use tobacco alongside their electronic cigarette use.<sup>34</sup> Tests conducted by the tobacco industry in Japan and Italy of heated tobacco products (a nicotine delivery category) showed, respectively, that 30% and 12% of adult smokers who tried the products adopted them.<sup>35</sup>

Not only are e-cigarettes used as a possible alternative to cigarettes, but some consumers are using both categories in tandem. Some e-cigarette consumers are focusing on long-term use, as a permanent alternative to tobacco; in situations where smoking conventional tobacco is not allowed, or simply as a lifestyle choice.<sup>36</sup> One e-cigarette brand is promoting dual use by selling a conventional cigarette and e-cigarette in one pack. The brand's 'smart plastic case' has been 'designed to fit snugly in the pocket, protect the e-cigarette, and even house one regular tobacco cigarette for those adult smokers who chose to vary between the two'.<sup>37</sup> It is estimated that by 2025 e-cigarettes could displace 30% of cigarette sales in wealthy markets.<sup>38</sup>

Thus, e-cigarettes may be perceived by their consumers as being a healthier alternative to satisfy their smoking habits, and some consumers even use the two products simultaneously. This would seem to show a high degree of substitutability between the products in order to satisfy the same habit, as required under the consumers' tastes and habits criterion of 'likeness' determination.

## 2.4 Tariff classification

From the physical characteristics analysis provided above in Section 2.1, it is obvious that e-cigarettes and cigarettes differ in composition and methodology used in their manufacturing.

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<sup>31</sup> Martin McKee, 'Evidence about e-cigarettes: a foundation built on rock or sand', The British Medicine Journal, BMJ 2015;351:h4863, <<http://www.bmj.com/content/351/bmj.h4863>> accessed on 27 August 2016

<sup>32</sup> WHO, Framework Convention on Tobacco Control, *Report on Electronic Nicotine Delivery Systems*, FCTC/COP/6/10 dated 21 July 2014, <[http://apps.who.int/gb/fctc/PDF/cop6/FCTC\\_COP6\\_10-en.pdf](http://apps.who.int/gb/fctc/PDF/cop6/FCTC_COP6_10-en.pdf)> accessed on 7 August 2016

<sup>33</sup> Jessica Pepper, Sherry L. Emery, Kurt Ribisl, Brian Southwell, Noel T. Brewer, 'Effects of advertisements on smokers' interest in trying e-cigarettes: the roles of product comparison and visual cues', Tobacco Control, The British Medicine Journal Publishing, Volume 23, 2014, <[http://tobaccocontrol.bmj.com/content/23/suppl\\_3/iii31.full#xref-ref-16-1](http://tobaccocontrol.bmj.com/content/23/suppl_3/iii31.full#xref-ref-16-1)> accessed on 23 July 2016

<sup>34</sup> ASH Report, Use of electronic cigarettes (vapourisers) among adults in Great Britain at [http://www.ash.org.uk/files/documents/ASH\\_891.pdf](http://www.ash.org.uk/files/documents/ASH_891.pdf) accessed on December 20, 2016

<sup>35</sup> Phillip Morris International, Investors Day, 26 June 2014, Presentation by Bertrand Bonvin, Manuel Peitsch and Frederic de Wilde, slide 92, <<http://investors.pmi.com/phoenix.zhtml?c=146476&p=irol-presentations>> accessed on 9 July 2016.

<sup>36</sup> Cancer Research UK, 'The Marketing of E-cigarettes in the UK', 2013, *supra*, note 17, at 8 <[https://www.cancerresearchuk.org/sites/default/files/cruk\\_marketing\\_of\\_electronic\\_cigs\\_nov\\_2013.pdf](https://www.cancerresearchuk.org/sites/default/files/cruk_marketing_of_electronic_cigs_nov_2013.pdf)> at 8, accessed on 6 September 2016

<sup>37</sup> *Ibid.*, at 8

<sup>38</sup> The Economist, 'Smoke Signals', 23 April 2016, <<http://www.economist.com/news/business/21697275-philip-morris-health-company-smoke-signals>> accessed on 10 August 2016

Unsurprisingly, e-cigarettes and cigarettes are classified under different tariff headings according to the Harmonized Commodity Description and Coding System (Harmonized System).

Cigarettes are classified under Harmonized System 2402, 2403.11, and 2403.19 – a Chapter dedicated to tobacco products. There is no unified approach to classifying e-cigarettes under the Harmonized System. They may be classified under Chapter 30 – Pharmaceutical products, heading 30.04 – “Other, including salts and concentrates obtained by evaporating natural mineral waters”, under Chapter 85 – “Electrical Machinery, Equipment and Parts, Telecommunications Equipment, Sound Recorders, Television Recorders”, with subsequent classification under the heading 8543 – “Electrical machinery and apparatus, having individual functions”.<sup>39</sup> According to Global Trade Solutions’ tariff commitments database, e-cigarettes are classified under the following subheadings by some WTO Members: China – 8543.70.9990 (Other unlisted electrical equipment and devices, having independent functions), India – 8543.70.99 (Electrical machines and apparatus, having individual functions, not specified or included elsewhere in this chapter), Japan – 8543.70.000 (Electrical machines and apparatus, having individual functions), the European Union – 8543.70.9099 (Other machines and apparatus), Switzerland – 8543.70.00 (Other machines and apparatus).<sup>40</sup>

Spare parts for e-cigarettes, which are designed for everyday use and maintenance of e-cigarettes, are likely to be classified under a Harmonized System code different to that of the product itself. Thus, cartridges for e-cigarettes are classified under the subheading 3824.90 “Other” of the heading 38.24 “Prepared binders for foundry moulds or cores; chemical products and preparations of the chemical or allied industries (including those consisting of mixtures of natural products), not elsewhere specified or included”.<sup>41</sup>

At least one category of nicotine delivery systems, namely heated tobacco products, can be classified in Tobacco Chapter 24 of the Harmonized System heading 2403.99 as “other manufactured tobacco, not for smoking”. Given the fact that this category contains tobacco leaf, it stands a higher chance of being regarded ‘like’ cigarettes compared to the remaining ENDS.

The analysis above is not however to suggest that other non-combustible nicotine delivering e-cigarettes will not be found ‘like’ cigarettes. Even if one argued that no e-cigarette falls under Chapter 24, there are good arguments in the WTO jurisprudence suggesting that Harmonized System classification criterion is going to bear only a limited impact on the ‘likeness’ analysis. This is because the classification is highly important in cases where the dispute arises from the way in which customs duties are applied. Provided however that WTO Members have some discretion in scheduling their tariff commitments, a high reliance on tariff classification criterion makes less sense with respect to cases involving internal regulatory measures, where restrictions may be applied to address health risks arising from consumption of these products.

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<sup>39</sup> See Global Trade Solutions, <<http://www.dutycalculator.com/hs-lookup/1072756/hs-tariff-code-for-electronic-cigarette/>> accessed on 3 August 2016

<sup>40</sup> *Ibid.*

<sup>41</sup> World Customs Organization Harmonized System Committee, *Amendments to the Compendium of the Classification Opinions*, <[http://www.wcoomd.org/en/topics/nomenclature/instrument-and-tools/hs\\_classification-decisions/~/\\_media/DBBA67A8D4A44E318508231A9F688BEA.ashx](http://www.wcoomd.org/en/topics/nomenclature/instrument-and-tools/hs_classification-decisions/~/_media/DBBA67A8D4A44E318508231A9F688BEA.ashx)> VI, accessed on 28 August 2016

## 2.5 The Cross-Price Elasticity of Demand

The cross-price elasticity of demand (CPED) measures the rate of response of quantity demanded of one product, due to a price change of another product.<sup>42</sup> In other words, it measures how the demand on one product changes if the price for its substitute product increases or decreases. In economic theory, if two products are substitutable, one should expect to see consumers purchase more of one product when the price of its substitute increases. The CPED is calculated by proportionating the percentage of change in quantity of demand for one product with the percentage of change in price of another product. If the coefficient of CPED obtained by such calculation is more than zero, then the two products are considered substitutes. If it equals zero, then the two products are independent, but, if the CPED is less than zero then the two products are considered complements.<sup>43</sup>

Although the test has been used in the WTO to determine the likeness between products, the mere economic analysis of the CPED for the products at issue will not suffice to determine whether these products are 'like'. The outcome of this exercise would have to be read together with the analysis of other tests referred in this Section, the 'likeness' remaining a matter of qualitative and quantitative judgment. As per other likeness criteria, this is simply a tool to assist with sorting and examining the relevant evidence.<sup>44</sup>

In a 2014 survey on estimating cross-price elasticity of e-cigarettes using a simulated demand procedure, 210 New Zealand smokers participated in a cigarette purchase survey to indicate their demand for tobacco at a range of prices. Participants indicated how many e-cigarettes and regular cigarettes they would purchase at the current market price for regular cigarettes, half the price of conventional cigarettes, and at double the price, assuming that the price of e-cigarettes remained constant.<sup>45</sup> The CPED in this case was estimated to be 0.16, indicating that e-cigarettes are perceived as substitutes to cigarettes. Another study conducted in the European Union shows similar results.<sup>46</sup> The WHO confirms substitutability by acknowledging that (although limited) available empirical research shows that:

22. b. ENDS/ENNDS and cigarettes are substitutes, with higher cigarette prices being associated with increased ENDS/ENNDS sales [fn omitted];....<sup>47</sup>

In the WTO jurisprudence, the concept of CPED was mainly addressed in *Japan–Alcoholic Beverages II*.<sup>48</sup> The Appellate Body noted that cross-price elasticity, while not being a decisive criterion for determining that two products are directly competitive or substitutable, may be used as one of the

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<sup>42</sup> Economics.about.com, <[http://economics.about.com/cs/micfrohelp/a/cross\\_price\\_d.htm](http://economics.about.com/cs/micfrohelp/a/cross_price_d.htm)> accessed on 5 September 2016

<sup>43</sup> *Ibid.*

<sup>44</sup> WTO Appellate Body Report, *EC-Asbestos*, supra, note 6, para 102

<sup>45</sup> Rondolph Grace, Bronwyn Kivell and Murray Laugessen, 'Estimating cross-price elasticity of e-cigarettes using a simulated demand procedure', *Nicotine Tobacco Research*, May 2015, 17(5) 592-598, abstract <<http://www.ncbi.nlm.nih.gov/pubmed/25548256>> accessed on 11 September 2016. Michal Stoklosa, Jeffrey Drope, Frank J. Chaloupka, 'Prices and E-Cigarette Demand: Evidence From the European Union', *Nicotine Tobacco Research* (April 16, 2016) accessed on 10 September 2016

<sup>46</sup> Michal Stoklosa, Jeffrey Drope, Frank J. Chaloupka, 'Prices and E-Cigarette Demand: Evidence From the European Union', *Nicotine Tobacco Research* (April 16, 2016) accessed on 10 September 2016

<sup>47</sup> See the FCTC Report prepared for the COP 7 meeting titled 'Electronic Nicotine Delivery Systems and Electronic Non-Nicotine Delivery Systems (ENDS/ENNDS)', Doc FCTC/COP/7/11 August 2016, available at [http://www.who.int/fctc/cop/cop7/FCTC\\_COP\\_7\\_11\\_EN.pdf](http://www.who.int/fctc/cop/cop7/FCTC_COP_7_11_EN.pdf), visited on November 20, 2016

<sup>48</sup> The Cross-Price Elasticity is also mentioned in WTO Appellate Body Report, *Korea – Taxes on Alcoholic Beverages*, WT/DS75/AB/R, adopted on 11 January 1999, (*Korea – Alcoholic Beverages*), paras. 109, 121, 134 and 152

criteria to be considered.<sup>49</sup> The Appellate Body agreed with the panel's finding that the analysis of 'likeness' includes looking not only at such matters as physical characteristics, common end-uses and tariff classifications, but also at the "market place".<sup>50</sup> The Appellate Body considered it appropriate to look at competition in the relevant markets as one among a number of means of identifying the broader category of products that might be described as "directly competitive or substitutable" and also to examine elasticity of substitution as one means of examining those relevant markets.<sup>51</sup> This is re-enforced by *EC – Asbestos*, where the Appellate Body noted that the list of criteria for determining 'likeness' is not exhaustive, and a WTO Panel examining a challenged measure would need to examine all relevant evidence in assessing whether the relevant products were 'like'.<sup>52</sup>

The above indicates that not only should the four traditional 'likeness' criteria be examined in order to determine the 'like products', but that all relevant criteria be taken into account. Thus, the CPED showing that the two products are substitutes, while not being a decisive criterion, can be taken into account as an additional criterion which speaks in favour of likeness between the two products.

## 2.6 The regulatory regime

In addition to the aforementioned conventional arguments on 'likeness', there are other factors which may suggest that e-cigarettes and cigarettes may be regarded as 'like'. In the end, the likeness criteria are there to help the panel make an objective assessment of the matter before it. Logically this list cannot be confined to the four criteria. A party to the case may argue for example that the 'likeness' should also be assessed based on how the regulator sees the measure. In the case of e-cigarettes such consideration would need to take into account whether e-cigarettes and cigarettes are placed under the same regulatory regime, that is, a situation where both are covered by the same set of laws and administrative institution.<sup>53</sup>

It is instructive to note the US approach on the issue where the US Food and Drug Administration (FDA) announced in May 2016 its decision to regulate e-cigarettes and other tobacco products (like premium cigars and hookahs) in the same way it regulates conventional cigarettes and smokeless tobacco. The relevant rule, referred to as the deeming regulations,<sup>54</sup> broadens the definition of tobacco products to include e-cigarettes, hookahs, pipe tobacco, premium cigars, little cigars and other products.

Another example of approaching the two categories through the same legislation is the newly introduced changes to the revised EU Tobacco Products Directive (which covers both cigarettes and e-cigarettes). Among other rules regarding tobacco products, this instrument focuses on harmonising the quality and safety of the products by introducing, among other things, comprehensive packaging and labelling requirements, maximum concentration of nicotine and a

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<sup>49</sup> WTO Appellate Body Report, *Japan – Alcoholic Beverages II*, supra, note 25, at 6

<sup>50</sup> *Ibid.*, at 25

<sup>51</sup> *Ibid.*, at 25

<sup>52</sup> Andrew Mitchell, Tania Voon, supra, note 11, 398 referring to the WTO Appellate Body Report, *EC – Asbestos*, supra, note 6, para. 102

<sup>53</sup> To be noted that the FCTC treats the two categories as separate types of goods

<sup>54</sup> See FDA announcement at <http://www.fda.gov/TobaccoProducts/Labeling/RulesRegulationsGuidance/ucm394909.htm> accessed on December 2016

ban on advertising e-cigarettes.<sup>55</sup> Unlike the US deeming regulation however, the EU TPD still approaches the two categories in a different – usually lighter – manner.

Although this gives an idea of State practice concerning the regulation of e-cigarettes, in light of the analyses emerging from the latest WTO jurisprudence described below, in the view of these authors this criterion bears only limited weight on the ‘likeness’ determination of two products. As shown below, the reason is precisely the consistent rejection by the WTO adjudicator of the regulatory purpose in determining ‘likeness’ under both the GATT (also known as the ‘aims-and-effect’ test) and TBT Agreement (known as regulatory purpose or distinction).<sup>56</sup>

### 3 The role of competitive relationship

The competitive relationship among products is not a listed criterion of ‘likeness’ determination; but it is the quintessence of this analysis. The importance of determining whether two products are in a competitive relationship emerged first in *EC–Asbestos*, where the Appellate Body came up with its famous interpretation that “a determination of ‘likeness’ under Article III:4 of the GATT 1994 is, fundamentally, a determination about the nature and extent of a competitive relationship between and among products.”<sup>57</sup> The Appellate Body emphasised that, in each case, all pertinent evidence, whether related or not to one of the traditional criteria of ‘likeness’, must be examined and considered to determine whether the products *are*, and, more importantly, *could be* in a competitive relationship in a particular marketplace.<sup>58</sup> In the absence of a competitive relationship between domestic and imported products, the internal regulation at issue cannot be applied as to afford protection to domestic products and thus cannot discriminate against imported and domestic products.<sup>59</sup> Therefore, a competitive relationship is a fundamental pillar of ‘likeness’ and therefore an essential element of non-discrimination obligation of WTO Members.

A competitive relationship is especially important in establishing ‘likeness’ between products that possess physical characteristics, which are not identical (as with cigarettes and e-cigarettes). The Appellate Body acknowledged that health risk inevitably influences the definition of physical properties of the products by stating that “[this] carcinogenicity, or toxicity, constitutes, as we see it, a defining aspect of the physical properties of chrysotile asbestos fibres”.<sup>60</sup> This tells that the different risks to health posed by these products will have some bearing on the likeness determination (apparently under the physical characteristics). This statement however does nothing more than placing a higher burden on the complainants to establish that, despite the pronounced physical differences, there is a competitive relationship between the products and does not otherwise detract from the pre-eminence of the competitive relationship approach.

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<sup>55</sup> See the *EU Tobacco Directive* containing requirements of introducing labelling and technical standards for e-cigarettes, European Commission, <[http://europa.eu/rapid/press-release\\_IP-16-1762\\_en.htm](http://europa.eu/rapid/press-release_IP-16-1762_en.htm)> accessed on 25 August 2016, *Directive 2014/40/EU of the European Parliament And of the Council of 3 April 2014 on the approximation of the laws, regulations and administrative provisions of the Member States concerning the manufacture, presentation and sale of tobacco and related products and repealing Directive 2001/37/EC*, <[http://ec.europa.eu/health/tobacco/docs/dir\\_201440\\_en.pdf](http://ec.europa.eu/health/tobacco/docs/dir_201440_en.pdf)> accessed on 30 August 2016

<sup>56</sup> On the aim and effect test see Robert E. Hudec, ‘GATT/WTO Constraints on National Regulation: Requiem for an “Aim and Effects” Test’, *The International Lawyer*, Vol. 32, No. 3, 1998, at 619-649. See also Amelia Porges and Joel P. Trachtman, ‘Robert Hudec and Domestic Regulation: The Resurrection of Aim and Effects’, *Journal of World Trade*, Vol. 37, No. 4, p. 783-799, 2003, who advocate in favour of ‘aim and effects’ test and claim that ‘aim and effects’ approach can be considered both in comparing the products themselves, or in comparing the treatment of the products’.

<sup>57</sup> WTO Appellate Body Report, *EC – Asbestos*, supra, note 6, para. 99

<sup>58</sup> WTO Appellate Body Report, *EC – Asbestos*, supra, note 6, para. 103

<sup>59</sup> Peter Van den Bossche, Werner Zdouc, supra, note 26, 388

<sup>60</sup> WTO Appellate Body Report, *EC – Asbestos*, supra, note 6, para. 114

According to the Appellate Body's findings in *US – Cotton Yarn*, what is decisive in understanding if two products are in competitive relationship is whether the “two products ... are commercially interchangeable, or if they offer alternative ways of satisfying the same consumer demand in the marketplace.”<sup>61</sup> We examine each of the two criteria below.

### 3.1 Commercial interchangeability

The nature of a competitive relationship is attached to the commercial interchangeability of two products or the capacity of the products at issue to satisfy the same consumer want. The Appellate Body in *Philippines–Distilled Spirits* clarified that “the requisite degree of competition is met where the imported and domestic products are characterised by a high, but imperfect, degree of substitutability. This will be the case where the imported and domestic products are “interchangeable” or offer “alternative ways of satisfying a particular need or taste.”<sup>62</sup>

As discussed above, e-cigarettes and cigarettes share some physical characteristics, such as the similarity in design (for some categories) and the ability to deliver nicotine as in the case of ENDS. Moreover, both categories are capable of performing the same end-use, which is to satisfy consumers' want for nicotine and provide an experience of smoking. The consumers' tastes and habits analyses showed that e-cigarettes are considered by consumers as an alternative to satisfy their smoking habits.

In addition, the Appellate Body in *US – Cotton Yarn* further clarified that ‘competitive’ is a characteristic attached to a product and denotes its *capacity* to compete with another product both in a current or future situation. The word ‘competitive’ must be distinguished from the words ‘competing’ or ‘being in actual competition’, with these terms having a wider connotation than ‘actually competing’ and includes also the notion of a potential to compete. It is not necessary that the two products compete or that they are in actual competition in the marketplace at a given moment in order for those products to be regarded as competitive.”<sup>63</sup> E-cigarettes are a relatively new invention compared to cigarettes, which have a long history. It is clear that consumer awareness of a product does not appear instantly, and this is why a certain amount of time will be needed for consumers to become acquainted with the product and regard it as a substitute.

The awareness and use of e-cigarettes has increased exponentially in recent years. Data obtained from a *HealthStyles* survey showed that the awareness of e-cigarettes in the US rose from 40.9% in 2010 to 57.9% in 2011. The use of e-cigarettes has also increased from 3.3% to 6.2% over the same period. In the United Kingdom, the use of e-cigarettes by regular smokers increased from 2.7% in 2010 to 6.7% in 2012. Similar findings were obtained from the International Tobacco Control Four-Country Survey.<sup>64</sup>

The statistics above show that some regular smokers switch to e-cigarettes in a relatively short period of time: 2.9% in one year in the US and 4% in two years in the UK – and this tendency persists. As mentioned, some surveys estimate that by 2025 e-cigarettes could displace 30% of cigarette sales

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<sup>61</sup> WTO Appellate Body Report, United States – Transitional Safeguard Measures on Combed Cotton Yarn from Pakistan, WT/DS/192/AB/R, adopted on 8 October 2001, (*US – Cotton Yarn*) para. 96

<sup>62</sup> WTO Appellate Body Report, *Philippines – Distilled Spirits*, supra, note 12, para. 205

<sup>63</sup> WTO Appellate Body Report, *Philippines – Distilled Spirits*, supra, note 12, para. 96

<sup>64</sup> Konstantinos E. Farsalinos, Riccardo Polosa, ‘Safety evaluation and risk assessment of e-cigarettes as tobacco cigarette substitutes: a systematic review’, supra, note 22, at 67–86,

in rich markets.<sup>65</sup> Therefore, the awareness of e-cigarettes as a substitute to cigarettes is growing, with an increasing number of consumers switching from cigarettes to e-cigarettes.

### 3.2 Alternative use

As cited, e-cigarettes offer an alternative means to satisfying a particular need or taste, which is the consumers' need to receive nicotine and the smoking experience. A UK 2015 study shows that sales of nicotine replacements such as patches and gum fell for the first time in years as consumers turned to vaping devices to kick the habit.<sup>66</sup> Although this does not necessarily show that e-cigarettes and regular cigarettes are substitutable, it does show that consumers consider e-cigarettes a substitute to products satisfying their nicotine intake.

The conclusion following from the analyses above is that e-cigarettes and cigarettes are commercially interchangeable and offer an alternative way to satisfy the same consumer demand. In addition, even if it could be argued that the percentage of consumers of e-cigarettes is lower than those of cigarettes, the studies show a clear tendency of an increasing number of consumers switching from cigarettes to e-cigarettes. This indicates that e-cigarettes and cigarettes could compete more in the future.

Thus, in spite of certain differences with cigarettes pointed above, the two products (i) share some physical characteristics, (ii) serve the same end-uses (at least in respect of ENDS), and (iii) are perceived as being alternative by the consumer (at least in respect of ENDS). The 'likeness' with cigarettes is higher in certain e-cigarette segments than in others. In particular, there is a very good 'likeness' case to be made for the entire nicotine delivery category (ENDS) segment, with an even higher chance for heated tobacco products, which, unlike other ENDS, are classifiable under the HS 24 Tobacco Chapter.<sup>67</sup>

We also argue that cigarettes and e-cigarettes on the ENDS segment are in a "competitive relationship" which is the determinant factor in the 'likeness' analysis of two products. Therefore, e-cigarettes and cigarettes may be considered 'like' for the purposes of Article I:1 (MFN) and III:4 (NT) of the GATT 1994.

## 4 Likeness under the TBT Agreement

The National Treatment (NT) and Most Favoured Nation (MFN) treatment obligations are contained in Article 2.1 of the TBT Agreement, according to which:

*Members shall ensure that in respect of technical regulations, products imported from the territory of any Member shall be accorded treatment no less favourable than that accorded to 'like' products of national origin and to 'like' products originating in any other country.*

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<sup>65</sup> The Economist, 'Smoke Signals', supra, note 37

<sup>66</sup> Lauren Davidson, 'Vaping takes off as e-cigarette sales break through \$6bn', The Telegraph, 23 June 2015, <<http://www.telegraph.co.uk/finance/newsbysector/retailandconsumer/11692435/Vaping-takes-off-as-e-cigarette-sales-break-through-6bn.html>> accessed on 3 July 2016

<sup>67</sup> It is more difficult to argue 'likeness' on non-nicotine delivery systems (ENNS) – currently a much smaller market, which would require more data and research.

As under the GATT 1994, the TBT Agreement's non-discrimination obligations apply only to 'like products', therefore the concept is an essential element in the analysis of whether a measure is discriminatory.<sup>68</sup>

#### 4.1 Traditional GATT 'likeness' elements in the TBT

Just as the 'likeness' criteria is not provided in the text of the GATT 1994, the text of the TBT Agreement does not explicitly specify which criteria should be used in order to determine whether the products at issue are 'like products'. Therefore, the question arises: should the concept of 'likeness' established under GATT Article III:4 WTO jurisprudence be considered for the determination of 'likeness' under Article 2.1 of the TBT Agreement?

The Appellate Body first responded to this question in *US – Clove Cigarettes*, stating that "the interpretation of the concept of 'likeness' in Article 2.1 has to be based on the text of that provision as read in the context of the TBT Agreement and of Article III:4 of the GATT 1994 (NT), which also contains a similarly worded national treatment obligation that applies to "technical regulations" of the WTO importing Members.<sup>69</sup> Thus, it was explicitly noted that the determination of 'likeness' under the TBT Agreement has to be made among others, in the context of Article III:4 of the GATT, which includes a non-discrimination obligation applicable to technical regulations (in spite of the fact that this provision addresses a broader scope of measures). Therefore, the traditional elements of the 'likeness' analysis under Article III:4 of the GATT 1994, such as (i) physical characteristics of the product, (ii) end-uses of the product, (iii) consumers' tastes and habits, and (iv) tariff classification of the products, are in principle relevant for determining 'likeness' under Article 2.1 of the TBT Agreement.

The Appellate Body in *US-Clove Cigarettes* also transferred the 'competitive relationship' test from Article III:4 of the GATT 1994 jurisprudence to determining 'likeness' under Article 2.1 of the TBT Agreement by stating that:

*In the light of this context and of the object and purpose of the TBT Agreement, as expressed in its preamble, we consider that the determination of 'likeness' under Article 2.1 of the TBT Agreement, as well as under Article III:4 of the GATT 1994, is a determination about the nature and extent of a competitive relationship between and among the products at issue.*<sup>70</sup>

Thus, the relevance of determining whether the two products at issue are in a 'competitive relationship' was emphasised in the WTO jurisprudence on TBT Article 2.1. This makes a lot of sense given that the products, which are in a competitive relationship, are precisely the ones which can be discriminated against through technical regulations.

#### 4.2 Regulatory purpose vs competitive relationship

The analysis of a measure's inconsistency with Article 2.1 of the TBT Agreement includes findings of (i) whether the measure at issue is a 'technical regulation' within the meaning of Annex 1.1 of the

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<sup>68</sup> As established by the WTO Appellate Body Report, *United States – Measures Affecting the Production and Sale of Clove Cigarettes*, WT/DS406/AB/R adopted on 4 April 2012, (*US – Clove Cigarettes*), para. 87, other elements of the analysis include the findings on (i) whether the measure at issue is a 'technical regulation', and (ii) whether the imported products are accorded 'treatment no less favourable' than like domestic products. These elements are not falling within the purview of this paper and are subject to further research.

<sup>69</sup> WTO Appellate Body Report, *US – Clove Cigarettes*, supra, note 69, para. 120

<sup>70</sup> WTO Appellate Body Report, *US – Clove Cigarettes*, supra, note 69, para. 120

TBT Agreement, (ii) whether the imported and domestic products at issue are 'like products' and (iii) whether the imported products are accorded 'treatment no less favourable' than 'like' domestic products and 'like products' originating in any other country.

Following this approach, first it is necessary to establish that the measure at issue is a 'technical regulation'. If so, then the panel needs to establish that the products at issue are 'like products'. Finally, the panel will have to determine whether the treatment accorded to the 'like' product under examination is no less favourable.

While as shown in the *EC-Asbestos*, it is not obvious that a general ban will be covered by the TBT Agreement<sup>71</sup>, for the sake of a more comprehensive discussion the measure is assumed to be a 'technical regulation' under the TBT Agreement. That a general ban may fall under this notion is confirmed by the same panel, which noted that:

*...its findings regarding the scope of the concept of technical regulation in the context of the TBT Agreement are linked to the specificities of the measure in question and in no way prejudice the conclusions that any other panel might reach concerning the same provisions of the TBT Agreement in other factual circumstances.*<sup>72</sup>

This means that an analysis would have to be undertaken by a panel on case-by-case basis in order to check whether a ban is covered by the TBT notion of technical regulation.

Since a technical regulation is a measure which usually has a particular regulatory purpose (e.g. ensuring the quality of its exports; protecting human, animal or plant life or health), it begs the question of whether the concept of 'likeness' under the TBT Agreement should be evaluated using the traditional GATT 'likeness' criteria or should be premised on the regulatory purpose of that measure.

A number of WTO cases discussed below are relevant for addressing this question, including the *EC – Asbestos*, *Japan – Alcoholic Beverages*, *US – Clove Cigarettes* and *US – Tuna II (Mexico)* cases, which generally conclude that the traditional likeness criteria approach will prevail. This approach has been criticised, however, by Prof Petros Mavroidis who claims that the three panels have applied the 'likeness' in the TBT (that is *US–Clove Cigarettes*, *US–Tuna*, and *US–COOL*) in a wrong manner.<sup>73</sup> In his view, it should not have been for the consumers (as used in the three cases) to decide whether two goods are 'like' under the TBT (described as 'market-likeness'). Instead, the panels should have understood the term 'likeness' in the TBT as denoting policy-likeness, meaning that the concept should have been assessed through the eyes of the regulator, who intervenes and corrects a specific market outcome.<sup>74</sup>

These authors do not object to this reasoning by any means believing that the argument has a lot of merit. This paper's task however is only assessing the law as it stands, not the direction in which

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<sup>71</sup> WTO Appellate Body Report, *EC – Asbestos*, supra, note 6, para. 24

<sup>72</sup> WTO Panel Report, *European Communities – Measures Affecting Asbestos and Asbestos Containing Products*, WT/DS/135/R adopted on 18 September 2000 (*EC-Asbestos*), para 8.35

For a detailed analysis on whether a measure qualifies as a technical regulation under the TBT Agreement see Lukasz Gruszczynski, 'The TBT Agreement and Tobacco Control Regulations', *Asian J. WTO & Int'l Health L & Policy*, 115 (2013)

<sup>73</sup> Petros Mavroidis, 'Drifting Too Far from the Shore - Why the Test for Compliance with the TBT Agreement Developed by the WTO Appellate Body is Wrong, and What Should the AB Have Done Instead', *World Trade Review*, Vol. 2, No. 3, 2013, at 509 – 531; See also Robert Howse and Phillip I. Levy, 'The TBT Panels: *US–Clove Cigarettes*, *US–Tuna*, and *US–COOL*', in Chad P. Bown and Petros Mavroidis (eds.), *The WTO Case Law of 2011*, The American Law Institute, 2012

<sup>74</sup> *Ibid.*, 529

the interpretation of 'likeness' under TBT should evolve. In the absence of such purpose, the authors are tasked rather with understanding how the TBT 'likeness' should be assessed based on existing case law and fairly assume that the TBT cases point to an approach which is likely to be witness again in the near future.

#### 4.2.1 US – Clove Cigarettes

In fact, we saw that the panel in *US – Clove Cigarettes* opted for the interpretation of 'likeness' under Article 2.1 of the TBT Agreement based on the objectives and purposes of the technical regulation (which allegedly overlaps with the aims-and-effect test of GATT). The panel reasoned that the weighing of the traditional evidence relating to 'likeness' should have been influenced by the fact that the measure at issue was a technical regulation, having the immediate purpose of regulating flavoured cigarettes for public health reasons.<sup>75</sup> It found that menthol cigarettes are 'like' clove cigarettes not so much because they compete, but because they both raise the same "regulatory concern" invoked by the United States, namely; they are both flavoured cigarettes that are particularly attractive to youth.<sup>76</sup>

But the Appellate Body did not support this approach. It did not believe that "the concept of 'like products' in Article 2.1 of the TBT Agreement lends itself to distinctions between products based on the regulatory objectives of a measure."<sup>77</sup> Otherwise, in the view of the Appellate Body, the outcome would have allowed for the 'likeness' analysis to include the products covered by a regulatory purpose but excluded those which are not. In such a case, the finding on 'likeness' would be questionable, as it would have inevitably distorted the less favourable treatment comparison. Accordingly, it considered that the very concept of "treatment no less favourable" influences the determination of 'likeness' "to the extent they have an impact on the competitive relationship between and among the products concerned."<sup>78</sup> This means that regulatory concerns underlying technical regulations (e.g. health risks) may play a role in the determination of 'likeness' to the extent that they are relevant to the examination of other 'likeness' criteria (e.g. product characteristics and consumer preferences) and are reflected in the products' competitive relationship.

Having rejected the regulatory purpose of the measure approach for determining 'likeness', the Appellate Body in *US – Clove Cigarettes* unambiguously expressed its common opinion that the determination of 'likeness' under both GATT 1994 and the TBT Agreement is about the "nature and extent of a competitive relationship between and among products".<sup>79</sup> It instructed panels to "discount any distortive effects that the measure at issue and its regulatory purpose may have on the competitive relationship, and reserve the consideration of such effects for the analysis of less favourable treatment" which is part of an additional legal test. Therefore, the regulatory purpose of the measure at issue may influence the finding on whether or not the treatment accorded is less favourable, but the finding of 'likeness' remains a finding about the nature and extent of a competitive relationship between the products concerned.

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<sup>75</sup> WTO Panel Report, *United States – Measures Affecting the Production and Sale of Clove Cigarettes*, WT/DS406/R adopted on 2 September 2011, (*US – Clove Cigarettes*) para. 7.119

<sup>76</sup> *Ibid.*, paras. 7.231 and 7.247

<sup>77</sup> WTO Appellate Body Report, *US – Clove Cigarettes*, *supra*, note 69, para. 116

<sup>78</sup> WTO Appellate Body Report, *US – Clove Cigarettes*, *supra*, note 69, para. 156. See also Arthur E. Appleton, 'National Treatment under the TBT Agreement. The Principle of National Treatment in International Economic Law' (2014), 110

<sup>79</sup> WTO Appellate Body Report, *US – Clove Cigarettes*, *supra*, note 69, para. 111

#### 4.2.2 US – Tuna II (Mexico)

Another good example here is *US – Tuna II (Mexico)* – a case dealing with a measure intended to protect dolphins while tuna is being fished. The panel found that Article 2.1 of the TBT Agreement contributes to avoiding unnecessary obstacles to trade arising from technical regulations as it seeks to preserve the competitive opportunities of products originating in any Member. Thus, the term “like products” under Article 2.1 of the TBT Agreement may be similarly understood as relating to “the nature and extent of a competitive relationship between and among products.”<sup>80</sup>

While in this case the concept of ‘like products’ is not the central part of the analysis, the two categories of tuna *are* found ‘like’ and the dispute focuses largely on other aspects of the GATT 1994 and the TBT Agreement. Had the regulatory purpose of the measure at issue – the dolphins’ welfare – been taken as a starting point of the ‘likeness’ analysis, the ‘dolphin-safe’ tuna and the tuna which was not ‘dolphin-safe’, would have automatically been considered ‘unlike’ products. This would have rendered it senseless to argue further on discrimination and inconsistency with the provisions of the GATT 1994 and the TBT Agreement.

This would be a rather strange finding given both types of tuna share the same product characteristics, identical end-uses, the same consumer tastes and habits (one type of tuna could easily substitute another) and are classified under that same tariff subheading. This theoretical example shows how distortive the regulatory purpose criterion might be for ‘likeness’ analysis when considered as its primary, rather than complimentary, part.

Let us assume that a regulatory measure aims at reducing the risk of adolescents trying e-cigarettes and then switching to cigarette smoking; and that this measure is applied only to e-cigarettes and not cigarettes. Under the pre-eminence of the regulatory purpose logic, the exclusion of cigarettes from the scope of the measure would have resulted in their non-inclusion in the ‘likeness’ analysis. This would have undermined the fact that cigarettes are in a competitive relationship with e-cigarettes, and that they are potentially perceived by consumers as substitutes. The exclusion of cigarettes from the ‘likeness’ analysis would make it near impossible in finding discrimination, as there would be no ‘like products’ being discriminated against.

In practice, regulations that distinguish between different types of products and accord one of them less favourable treatment are typically adopted precisely because the market does not make the distinction that the regulator considers necessary. Many regulations, if not most, are consequently applied to competing products and prohibit the placing on the market of one of them.<sup>81</sup> It is often the case that the measure is applied to a particular product or a group of products, and does not cover their direct competitors, explaining such distinction by its very regulatory purpose.<sup>82</sup>

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<sup>80</sup> WTO Panel Report, United States – Measures Concerning the Importation, Marketing and Sale of Tuna and Tuna Products, WT/DS381/R, adopted on 15 July 2011, (*US – Tuna II (Mexico)*), paras. 7.223–7.225 and WTO Appellate Body Report, United States – Measures Concerning the Importation, Marketing and Sale of Tuna and Tuna Products, WT/DS381/AB/R, adopted on 16 May 2012, (*US – Tuna II (Mexico)*), para. 235

<sup>81</sup> Frieder Roessler, ‘The Scope of Regulatory Autonomy of WTO Members under Article III:4 of the GATT: A Critical Analysis of the Jurisprudence of the WTO Appellate Body’, European University Institute, RSCAS PP 2015/04, Robert Schuman Centre for Advanced Studies Global Governance Programme, 1

<sup>82</sup> Unlike the exhaustive list of legitimate exceptions under Article XX of the GATT 1994, the scope of the measures’ regulatory purposes that are considered legitimate under the TBT Agreement is not very clear and therefore, the regulatory power of WTO Members under the TBT Agreements is potentially wider.

Therefore, placing the measure's regulatory purpose in the centre of the 'likeness' analysis would eliminate the potentially 'like products' from the analysis upfront.

## Conclusions

Given the novelty of e-cigarettes, their regulation will have to be addressed from various angles. This paper examines the implications of a general ban on e-cigarettes under the WTO discrimination provisions, in particular whether the two products are 'like'.

A major function of the WTO is to preserve the fundamental principles of free trade, while at the same time responding to changes in the contemporary world. The WTO may not be sufficiently agile to introduce norms to deal with novelties, but its judicial standards are sufficiently fit to assess discrimination. The concept of 'likeness' is one of the key WTO judicial standards, which, along with other criteria, is essential in finding whether a regulation is discriminatory and ultimately legal under the WTO Agreements. This first step would either pave a way for the panel to look at other elements (like whether e-cigarettes are granted less favourable treatment compared to cigarettes) or it would stop the inquiry into discrimination all together.

The WTO jurisprudence shows the importance in this exercise of establishing whether two products compete. Competition therefore is at the heart of the 'likeness' analysis, meaning that if two products are not in competition, they should not be considered 'like'. Surely, competition is not the only factor to be considered in this analysis. 'Likeness' cannot be assumed without looking into the traditional four-tier test or additional relevant criteria, including risks to public health. However, as confirmed by the Appellate Body, the regulatory concerns underlying a measure may only be relevant to a 'likeness' analysis (under both the GATT and TBT Agreement) to the extent that they have an impact on the competitive relationship between and among the products concerned.

Following this approach, the fact that products may pose different risks to health does not necessarily mean that they are not 'like' products in the WTO. Thus, the regulatory purpose of the regulation should be considered without altering the algorithm of the 'likeness' analysis *per se*. Otherwise this may result in the exclusion from the analysis of products that are not covered by the same regulation but would otherwise be found 'like'. Indeed, it is hard to imagine that a product can be treated less favourably compared to another product unless the two products are in some sort of competitive relationship.

This paper shows that there are good legal grounds in WTO to conclude that cigarettes and e-cigarettes may be found 'like', at least on the nicotine delivery systems (ENDS) segment. An even stronger case is to be made for heated tobacco products (an evaluation of 'likeness' of other e-cigarette classes and cigarettes would require additional research). This would clear the way for the WTO adjudicator for moving to the next step in the discrimination analysis, that is to examine whether the general ban treats e-cigarettes less favourably compared to cigarettes. Should this be accurate, and given the absence of solid evidence by the regulator to justify the measure under GATT Article XX, a general ban on e-cigarettes risks being found inconsistent with the WTO Agreements.

To be on the safe side in determining their regulation of e-cigarettes, governments will have to regard and apply international health and trade norms in a way that avoids tension and inconsistencies between them.

This paper's conclusions, which are only applicable to the 'likeness' analysis in the WTO, are not meant to suggest that e-cigarettes have to be generally regulated in the same way as cigarettes. These new products present their own risks to health and safety, different to cigarettes which have undergone decades of regulations on this front. The regulatory options to address these and other issues will have to be considered bearing in mind the objectives of the policy, the specific product at issue as well as the availability of sound scientific evidence to support chosen policies.

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