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**Committee on Market Access**

**THE HARMONIZED SYSTEM AND THE WORK OF THE  
WORLD TRADE ORGANIZATION**

**WCO CONFERENCE ON THE FUTURE OF THE HARMONIZED SYSTEM**

*Communication from the WTO Secretariat<sup>1</sup>*

**Executive Summary**

- The large majority of Members to the World Trade Organization (WTO) are contracting parties to the International Convention on the Harmonized Commodity Description and Coding System (HS) of the World Customs Organization (WCO). The HS has played a critical role in allowing WTO Members to define the product coverage or scope of certain agreements and has facilitated the conduct of negotiations on tariffs and rules of origin.
- Several WTO agreements make use of, or include, references to the HS, including thousands of pages of the Schedules of concessions that embody the results of tariff and other negotiations. These legal instruments define the treatment that each WTO Member agrees to "accord to the commerce of other WTO Members", including the so-called "bound duties", i.e. maximum tariffs that a Member is allowed to apply on a particular product, as well as other non-tariff concessions.
- The WTO Secretariat uses the HS as the standard nomenclature to identify tradeable goods in its databases on tariff and non-tariff measures, which has in turn allowed for their interconnection.
- WTO Members have used the HS to define the product coverage of certain agreements, including multilateral agreements (e.g. the Agreement on Agriculture) and plurilateral sectoral initiatives. Examples of the latter include the 1994 Agreement on Trade in Pharmaceuticals and its reviews (the so-called "Pharma"), the 1996 Information Technology Agreement (ITA) and the 2015 Expansion of the Information Technology Agreement (ITA Expansion). While the HS proved to be a strong basis on which to base these negotiations, there have also been instances in which Members had recourse to alternative or complementary product designation approaches, narrative product descriptions that may capture multiple HS codes, and even end-use type of criteria.
- Each time the WCO has amended the HS (i.e. 1992, 1996, 2002, 2007, 2012 and 2017), it has been necessary for WTO Members to take steps to review and update some of its legal instruments, to ensure that their legal obligations can be compared to the measures that are applied in practice. This has included transposing thousands of pages of Schedules of concessions, the transposition of draft harmonized non-preferential rules of origin, and negotiating protocols to update the product coverage of the Agreement on Trade in Civil Aircraft. This is a difficult, time and resource-intensive work. For instance, despite considerable progress over the last decade, the large majority of WTO Members' Schedules of concessions remain expressed in a version of the HS that lags behind HS2017, i.e. the one currently being applied by Members.

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<sup>1</sup> This document has been prepared under the Secretariat's own responsibility and is without prejudice to the positions of Members or to their rights and obligations under the WTO. Submitted to the WCO Conference on the Future Direction of the Harmonized System, Brussels, 2-3 May 2019.

- Amendments to the HS nomenclature are unavoidable due to the changing nature of trade and the fast pace of technological innovation, and they have an enormous potential in terms of facilitating trade and simplifying the day-to-day life for traders. However, given the impact that HS amendments have on WTO Members' applied trade regimes and the work of the WTO, it would be advisable for the Harmonized System Committee (HSC) of the WCO to endeavour to agree, to the extent possible, on exhaustive correlation tables that provide clear guidance on the nature of such changes each time such changes are introduced. The WTO Secretariat stands ready to strengthen the collaboration with the WCO on this issue.

## 1 INTRODUCTION

The WTO and its predecessor, the General Agreement on Tariffs and Trade (the GATT), have enjoyed a longstanding and close relationship with the Harmonized System Convention (HS) since it entered into force on 1 January 1988. Despite efforts by the League of Nations in the late 1920s and 1930s to harmonize the tariff nomenclature used around the world<sup>2</sup>, it was still common for countries to apply different nomenclatures at the national level when the GATT was negotiated in 1947. This situation progressively changed over the years with the wider adoption of the 1955 Brussels Tariff Nomenclature (BTN) and the introduction of the 1976 Customs Cooperation Council Nomenclature (CCCN).

The lack of a default international tariff nomenclature complicated tariff negotiations, in particular by made it difficult to quantify the scope of proposed concessions in terms that would be comparable across countries. In addition, trade negotiators often had a hard time developing negotiating positions because import and export data were usually recorded using a different nomenclature: the Standard International Trade Classification (SITC), a statistical nomenclature developed by the United Nations derived from previous work by the League of Nations.<sup>3</sup> Considerable resources were required to regroup these data in a manner that would allow for a comparison of the statistical and tariff nomenclatures. GATT contracting parties eventually concluded that a "harmonized" nomenclature, that could be used for organizing and applying tariffs as well as for recording trade statistics, was needed to enhance their ability to monitor and protect the value of tariff concessions, more accurately analyse international trade flows, and assess the level of "reciprocity" in trade negotiations.

GATT contracting parties welcomed the HS Convention as a positive development precisely because it met all these needs. In June 1983, only a few days after the HS Convention had been concluded in Brussels, GATT contracting parties adopted detailed procedures with a view to transposing their Schedules of concessions into the new HS nomenclature before it entered into force in 1988<sup>4</sup>. Later, in 1986, participants to the 1979 Agreement on Trade in Civil Aircraft decided to transpose the products coverage into the HS through a Protocol. Reliance on the HS as the go-to nomenclature continued to increase and, during the 1990s, trade negotiators involved in the Uruguay Round used it to establish new multilateral definitions and to hold tariff negotiations. Since then, and although 26 WTO Members are not contracting parties to the HS Convention<sup>5</sup>, it has continued to play an important role in the day-to-day work of the WTO.

This paper by the WTO Secretariat provides a general overview of the relationship between the Harmonized System (HS) and the World Trade Organization (WTO). The second section describes the way the HS was used to define certain aspects of the WTO agreements, Members' Schedules of concessions, and the collection of international tariff and trade statistics. The third section provides an overview of selected disputes which have interpreted WTO obligations expressed in terms of the HS nomenclature. The fourth section examines the role that the HS has played in the context of selected WTO multilateral and plurilateral negotiations. Finally, the last section describes how

<sup>2</sup> See League of Nations, Economic Committee, Sub-Committee of Experts for the Unification of Tariff Nomenclature, Draft Customs Nomenclature, document C.921 M.486, 28 December 1931.

<sup>3</sup> The SITC was based on the 1938 "Minimum List of Commodities for International Trade Statistics" by the League of Nations, which was in turn based on the 1937 "Draft Customs Nomenclature". See United Nations, Department of Economic and Social Affairs, Statistics Division, Standard International Trade Classification, Revision 4, document ST/ESA/STAT/SER.M/34/REV.4, 2006.

<sup>4</sup> See GATT document L/5470/Rev.1 of 30 June 1983.

<sup>5</sup> Antigua and Barbuda; Barbados; Belize; Dominica; El Salvador; the Gambia; Grenada; Guyana; Honduras; Hong Kong, China; Jamaica; Lao People's Republic; Liechtenstein; Macao, China; Nicaragua; Samoa; Seychelles; Solomon Islands; St. Kitts and Nevis; St. Lucia; St. Vincent and the Grenadines; Suriname; Chinese Taipei; Tonga; and Trinidad and Tobago.

different WTO legal instruments, and in particular Schedules of concessions, have been updated to take account of HS amendments.

## 2 THE HS AND THE WTO

### 2.1 References to the HS in WTO agreements and plurilateral sectoral initiatives

During the Uruguay Round of multilateral trade negotiations, which took place between 1986 and 1994, negotiators agreed to include several references to the HS into WTO agreements. For example, the HS was used to define the scope of some multilateral agreements in terms of product coverage, including the definition of agricultural products in Annex 1 of the Agreement on Agriculture<sup>6</sup> and the products covered by the Agreement on Textiles and Clothing (Article 2 and Annex). The methodology to convert non-tariff border measures into tariff equivalents (tariffication) employed by Members in the Uruguay Round and also included in Annex 5 of the Agreement on Agriculture required that such tariff equivalents "*shall primarily be established at the four-digit level of the HS*" or at a "*more detailed level of the HS*" as appropriate. Article 27.6 of the Agreement on Subsidies and Countervailing Measures provides that the definition of "*export competitiveness*" by a developing country should be calculated based on their participation in a "*section heading of the Harmonized System*". Article 9:2(c) of the Agreement on Rules of Origin envisaged that the work programme to harmonize non-reciprocal preferential rules of origin would be conducted on a product sector basis "*as represented by various Chapters or sections of the Harmonized System (HS) nomenclature*". Article 2(a)(i) of the same Agreement also makes an indirect reference to the HS by stating that, in cases where the criterion of change of tariff classification is applied "*such a rule of origin, and any exceptions to the rule, must clearly specify the subheadings or headings within the tariff nomenclature that are addressed by the rule*". More recently, Article 7.4.4 of the Trade Facilitation Agreement, which entered into force in February 2017, provides that one of the possible selectivity criteria for assessing risk includes the "Harmonized System code".

At the plurilateral level, the HS was used during the Uruguay Round to update the product coverage of some pre-existing plurilateral sectoral agreements, including the Agreement on Trade in Civil Aircraft, the International Dairy Agreement, and the International Bovine Meat Agreement. It was also used to negotiate a new Agreement on Pharmaceuticals and several other plurilateral sectoral initiatives, the results of which were included in the WTO Schedules of concessions.<sup>7</sup> Shortly after the Uruguay Round, in 1996, it was used to define many of the products covered by the Information Technology Agreement<sup>8</sup>.

Despite these references, the WTO agreements do not contain any obligation for its Members to use the HS nomenclature nor to implement its amendments. Rather, WTO provisions either assume that Members use the HS in practice or provide for actions to be taken in case HS amendments are introduced. For example, if a Member introduces an amendment to the HS at the national level, a series of Decisions by the WTO General Council provide that the Member in question must also transpose its Schedule of concessions to this new version.

### 2.2 Use of the HS in WTO Members' schedules of concessions

The HS is most visible in the WTO Schedule of concessions, which are legal instruments used to record the treatment that each WTO Member agrees to "accord to the commerce" of the other WTO

<sup>6</sup> Article 2 of the Agreement on Agriculture provides that provisions apply to agricultural products as defined by Annex 1, which in turn lists HS92 Chapters 1-24 (less fish and fish products), as well as a number of HS headings and subheadings in Chapters 29, 33, 35, 38, 41, 43, 50, 51, 52 and 53. The scope of the excluded category of "fish and fish products" has not though been defined using the references to the HS leaving some scope of a differing view among Members on the definitional scope of agricultural or non-agricultural products. More generally, the Agreement on Agriculture and subsequent agricultural negotiations refer to "agricultural products" in various instances. Although this Annex has not been updated since 1992, the distinction between agricultural and non-agricultural products in the Schedules of concessions has been as part of the general transposition of Schedules of concessions.

<sup>7</sup> For more on this issue, see TN/MA/S/13.

<sup>8</sup> The Information Technology Agreement was concluded by 29 participants at the Singapore Ministerial Conference in December 1996. Since then, the number of participants has grown to 82, representing about 97% of world trade in IT products. At the Nairobi Ministerial Conference in December 2015, over 50 Members concluded the expansion of the Agreement, which now covers an additional 201 products valued at over \$1.3 trillion per year.

Members<sup>9</sup>. They are an integral part of the GATT and include negotiated concessions such as the "bound duties", i.e. the maximum tariff level that a WTO Member commits to apply on imports from the other WTO members, as well as other non-tariff concessions. Since the Uruguay Round, Schedules also include commitments limiting the subsidization of agricultural products. They form part of the binding commitments made by WTO Members and only exist in one of the three WTO languages: English, French or Spanish.

Although there is no requirement to use a specific template or format, most WTO Schedules have a series of columns that include: the tariff item number, description of the product, rate of duty (base rate and bound rate), implementation period (period of time over which the tariffs are reduced), initial negotiation rights (INR) and other duties and charges (ODCs), as well as any special qualifications, usually in the form of footnotes and head notes, setting up "other terms and conditions" on the concession.

Practically all WTO Members have defined the first (tariff item number) and second (description of the products) columns of their Schedules in terms of the HS nomenclature, but at different levels of disaggregation. While some of the Members include concessions at an aggregated level, others list HS subheadings. It is also relatively frequent for Schedules to express concessions based on Members' regional or national HS-based nomenclature, e.g. at the 8, 9 or 10-digit level. With successive HS amendments adopted by the WCO throughout the years, it has become standard practice for Members to indicate the specific HS version used in the specific legal instrument (e.g. HS2007, HS2012, etc.), which provides useful context in interpreting the scope of those legal commitments.

## 2.3 The HS and WTO databases

### 2.3.1 A key component to identify tradable goods

The HS is also an important component of the two main sources of tariff and import data maintained by the WTO Secretariat, namely the Consolidated Tariff Schedule Database (CTS) and the Integrated Data Base (IDB). The **CTS**, which was established by the Committee on Market Access in 1998<sup>10</sup>, is an electronic database that compiles, in a standardized database format, the information in the Schedules of concessions. The term "consolidated" means that it contains all tariff concessions to date for a Member, in a single file and in the latest version of the HS nomenclature that has been approved by Members. It contains Members' tariff commitments (bound tariffs, other duties and charges and initial negotiating rights) and, if applicable, specific commitments in agriculture (domestic support, export subsidies and tariff quota information<sup>11</sup> as well as the identification of products in respect of which Special Safeguards (SSG) provision could be invoked).

The **IDB** is the main database used by the WTO Secretariat to compile official tariff and import data submitted by Members on an annual basis. While the GATT Secretariat had collected tariff and trade data since the 1970s<sup>12</sup>, and following the Punta del Este Declaration to launch the Uruguay Round, GATT contracting parties decided in 1987 to establish an "Integrated Data Base".<sup>13</sup> A "PC version" of the database was established by the WTO General Council in 1997.<sup>14</sup> One of the main advantages of the IDB versus other tariff and trade databases is that the tariffs and bilateral imports are matched at the national tariff line level, using the actual applied MFN tariff nomenclature for each year as the base data, which allows for improved analysis.

<sup>9</sup> Article II of the GATT, entitled "Schedules of concessions", requires WTO Members to accord to the commerce of other Members "treatment no less favourable than that provided for in the appropriate Part of the appropriate Schedule annexed to this agreement".

<sup>10</sup> See G/MA/63 of 27 November 1998.

<sup>11</sup> Schedules also include references to HS codes in the case of export subsidies and tariff rate quota commitments, which are typically used to define the scope of the commitments.

<sup>12</sup> The first data collection was entitled the "data study" and was used to assess the results of the Kennedy Round. Similar information was used by the GATT Secretariat to assess the result of the Tokyo Round, which was published in a four-volume publication entitled "Basic Documentation for a Tariff Study". See L/6073 of 27 October 1986.

<sup>13</sup> Decision of the GATT Council of 10 November 1987, GATT document L/6290.

<sup>14</sup> Decision of the WTO General Council of 16 July 1997, document WT/L/225.

Data collected by the WTO Secretariat is "pooled" and shared with a number of international organizations, including the International Trade Centre (ITC), UNCTAD, World Bank, etc.<sup>15</sup> Many of these organizations disseminate the data through their own websites and analytical tools (e.g. ITC's MacMap, World Bank WITS). By one estimate, approximately 78%<sup>16</sup> of the pooled tariff data have been collected and processed by the WTO Secretariat.

IDB and CTS data are widely used in the context of WTO negotiations, publications, reports and other activities by the WTO Secretariat, including:

- a. WTO Trade Policy Reviews.
- b. Simulations during the Doha Development Agenda (DDA), relating to Agricultural and non-agricultural market access negotiations.
- c. Assisting Members in the context of negotiations under Articles XXIV and XXVIII of the GATT (establishment of regional trade agreements and renegotiation of concessions).
- d. Support Members on plurilateral tariff negotiations, such as the ITA Expansion and the Environmental Goods Agreement (EGA).
- e. Prepare the World Tariff Profiles, an annual joint publication with ITC and UNCTAD.
- f. Provide information to Members for the HS transposition of their applied and bound schedules.
- g. Widely used by other international organizations and the academia to undertake research.
- h. Some national administrations use the WTO tools to access and analyse their own data.
- i. Provide market access statistics related to the indicators of the United Nations Sustainable Development Goals (SDGs).
- j. Serve a wide range of audiences including journalists, NGOs, students, business community, and the general public on tariff and trade information.

The WTO also maintains a number of other databases on specific non-tariff measures, such as anti-dumping duties, countervailing duties, government procurement, import licences, quantitative restrictions, sanitary and phytosanitary measures, technical barriers to trade, etc. most of which include information on the specific products on which they are applied. Largely thanks to the common identification of these products based on the HS, the WTO was able to develop an Integrated Trade Intelligence Portal (I-TIP), which provides a single-entry point for information compiled by the WTO on trade policy measures, including both tariff and non-tariff measures.

### 2.3.2 Challenges in analysing the data

In term of the tariff and trade-related databases, one frequent challenge faced by the WTO Secretariat in preparing analytical inputs is that tariff and import data are expressed in different HS versions and are, on occasions, not directly easily matched or aligned. Although informal correlations and other statistical methods could be used to overcome these limitations, it has, at times, proved challenging when Members expect and require a high degree of precision in the calculations (e.g. to determine whether a "critical mass" of trade value is covered or not in the context of a plurilateral tariff initiative).

The HS classification is used by economists and statisticians alike to compile information for monitoring and surveillance of trade agreements and economic development. For example, UNCTAD, UNSD, and WTO are in the process of harmonizing their methodology to produce HS-based trade statistics by product, origin and destination. In addition, the WTO Secretariat is currently in the process of trying to connect its different databases on tariff and non-tariff information, which will be

<sup>15</sup> See G/MA/238/Add.1/Rev.1.

<sup>16</sup> Estimate based on the data sources used in the World Tariff Profiles 2018.

partly done through the HS codes. The HS is also a building block for the SITC, currently available in its fourth version, but most trade flow statistics are still based on SITC Rev.3. In addition, the HS classification links up with the Central Product Classification (CPC) as a general-purpose classification. The CPC, in turn is a reference classification for the Extended Balance of Payments Classification (EBOPS).

In compiling trade statistics, especially in a digital context, the international community is increasingly facing issues related to the blurriness of goods and services within the national accounts. Not only has technological convergence led to multi-functional devices, but it has also led to new technologies being added and transforming ordinary goods. For example, sensors added to conventional products as part of the "internet of things" transforms them into "digital". However, the way in which the HS is structured does not make it possible to measure them separately.

### 3 THE HARMONIZED SYSTEM AND WTO DISPUTES

Even though the Harmonized System is not formally part of the WTO Agreement, some disputes under the Dispute Settlement Understanding (DSU) have dealt with concessions expressed using the HS. For example, in *EC – Chicken Cuts*<sup>17</sup>, the Appellate Body elaborated on the link between the WTO agreements and the Harmonized System by noting that, during and after Uruguay Round negotiations, Members had reached a "*broad consensus*" to use the Harmonized System as a basis for their goods schedules. In the same dispute, as well as in *China-Auto parts*<sup>18</sup> and *EC – IT Products*<sup>19</sup>, the Appellate Body acknowledged that the Harmonized System was relevant "*context*" for interpreting the WTO covered agreements, as well as the products covered by bound tariff rates expressed in HS terms in Members' Schedules.

The WTO dispute settlement has also had regard to the HS to assist in the interpretation of Members' Schedules of concessions. More generally, the Appellate Body in both *EC – Chicken Cuts* and *EC – Computer Equipment*<sup>20</sup> noted that, in order for the appropriate import duty to be levied, a Member would first need to determine the proper customs classification of the product at issue. In *EC – Computer Equipment*, the Appellate Body explicitly referred not only to the Harmonized System, but also to the Harmonized System's Explanatory Note ("HSEN") as a tool that could be used as part of the "*proper interpretation*" of a Schedule of concessions. In *EC – IT Products*, the Panel considered that the HSEN was relevant for understanding the ordinary meaning of the language used in a chapter or headings in a WTO Schedule of concessions.

### 4 THE HS AND WTO TARIFF NEGOTIATIONS

#### 4.1 The HS has been the standard used to define product coverage

Negotiations at the WTO can deal with different types of measures and take different forms in terms of their participation, i.e. multilateral agreements, where all WTO Members participate, and plurilateral agreements, in which only a subset of Members do. Two routine tasks in tariff negotiations include defining the product scope of the negotiation, as well as determining the specific tariff level applicable to each negotiated product. In a typical negotiation, products are defined in a list of relevant HS codes, which could be expressed in terms of chapters (2 digits), headings (4 digits), or subheadings (6 digits), or a combination of the three.

But what can be done if negotiators only want to cover some of the products falling within a particular HS subheading? In general terms, there are two possible techniques that could be used. A first possibility is to rely on the national tariff structure of the countries concerned, at the eight-digit level or higher. While this method is frequently used in the context of regional trade agreements, it is typically avoided at the WTO, precisely because those breakouts beyond the HS subheading level are not standardized across countries. Using national tariff codes in negotiations involving a large group of countries that implement vastly different national nomenclatures could easily lead to misunderstandings in the scope of the negotiation. Thus, in the context of WTO negotiations, the preferred method has been rather to use the so-called "ex-outs" to define a subset of products within a particular HS subheading.

<sup>17</sup> DS269, 2005.

<sup>18</sup> DS342, 2009.

<sup>19</sup> DS375, 2008.

<sup>20</sup> DS62, 1998.



For example, if HS subheading 0901.11 relates to "coffee, not roasted nor decaffeinated". an ex-out could be used by trade negotiators to indicate that only Arabica coffee beans are covered. This could be expressed as "ex0901.11 Arabica coffee beans." Although negotiating HS codes is relatively straightforward since these would either be "in" or "out" of the negotiation, negotiating the specific description of an "ex-out" could be a lengthy and technically difficult process. Not only must the description be commonly agreed by all the relevant parties, but it also has to be precise enough to allow customs officers to identify the products at the border based on their objective characteristics.

#### 4.2 But it has sometimes been necessary to complement it

There have also been situations in which parties to a negotiation have considered that the HS was insufficient to meet their objectives. The **Agreement on Trade in Pharmaceuticals ("Pharma")** is a good example. In 1994, representatives of 12 GATT contracting parties agreed to liberalize trade in pharmaceutical products, including some of the chemical substances used to produce them. Negotiators initially struggled to identify the "pharmaceutical products" to be covered by the Pharma because the HS definition was not detailed enough for the thousands of substances involved. Negotiators eventually agreed on a mixed approach that included a list of HS codes to be fully covered plus four specialized annexes listing a number of chemical compounds that should receive duty-free treatment "*wherever they are classified in the HS*". One of these annexes listed a number of pharmaceutical active ingredients that bear an "international non-proprietary name" (INN), i.e. generic names that facilitate the identification of pharmaceutical substances or active pharmaceutical ingredients. Each INN is a unique name that is globally recognized by the medical community, e.g. "paracetamol". This nomenclature has been coordinated by the World Health Organization (WHO) since 1953 and has resulted in at least one new INN list per year. Another annex included active ingredients identified using "CAS numbers", which are unique and widely used numerical identifiers for chemical compounds, polymers, biological sequences, mixtures and alloys, assigned by the Chemical Abstracts Service (CAS). To take account of this mixed approach, Pharma participants modified their WTO schedules in two ways. First, they bound the HS codes listed at duty-free levels in the "traditional" part of the Schedules of concessions. Second, they also included specialized annexes that defined thousands of specific chemical substances listed in the four annexes to the Pharma. Unlike other Uruguay Round sectoral initiatives, which were quite informal in nature and were not recorded, Pharma participants submitted a formal communication that provided details on the agreement reached, as well as the options for the national implementation. It also stated that each national customs authority may require importers to provide specific additional information to "certify" that the product is really covered by the Pharma.

A second example of a negotiation in which the HS codes were considered to be insufficient was the **Information Technology Agreement (ITA)**. This plurilateral sectoral initiative was announced on the margins of the Singapore Ministerial Conference in 1996 and was initially sponsored by 29 participants, which increased to 42 participants by the time of its implementation in 1997. Although the ITA negotiators were able to define most of the relevant "IT products" in terms of HS codes, they faced a peculiar problem for 55 of them: their customs experts could not agree where to classify them in the HS. The disagreement for some of these products stemmed from rapid technological convergence, whereby two or more single-function apparatus had been incorporated into a new "multi-function" device. At the time, the HS Committee of the WCO (HSC) had not reached an agreement on how to classify them. This problem affected products such as computers with multimedia capabilities. Some negotiators considered these to still be classified as computers (84.71) while others considered these to be classified as TV reception apparatus (85.28). This also affected LAN equipment which could be classified either as telecommunications or computer equipment. Other products, such as certain semiconductor manufacturing equipment, could also be used for the production of other goods, and it was not always clear where such equipment should be classified in the HS. Finally, some parts and intermediate products had dual use and could also be used to manufacture products not meant to be covered by the ITA. For example, an LCD screen could be used to produce a computer monitor, which negotiators wanted to include, but it could also be used to manufacture a television, which they did not want to be covered by the agreement.

Like the Pharma, ITA negotiators used a mixed approach which included defining some products in terms of HS codes and ex-outs, i.e. those in which the HS classification was clear, while others were defined with terms of narrative product descriptions, on the understanding that the tariffs would be eliminated "*wherever they are classified in the HS*". The second category of products is referred to in ITA jargon as the "Attachment B" products. Like in the Pharma, the results were incorporated in the WTO schedules of concessions using separate sections and including a specialized Attachment B section, which lists the national tariff lines in which the products are classified, plus a headnote

stating that duty-free treatment will be provided to those products wherever they are classified in the HS.

Mindful of the long-term importance of finding a common classification of these products, and narrowing down those classification differences over time, ITA participants committed to work in different fora, including the HSC. ITA Participants referred the classification of a number of products to the HSC, including that of "*set-top boxes which have a communication function*", which decided that they should be classified as a "reception apparatus for television" under HS1996 subheading 8528.12.<sup>21</sup> It later agreed that they were classifiable in HS2007 subheading 8528.71<sup>22</sup>. In another matter, the HSC also established HS2007 heading 84.86, where most of the semiconductor manufacturing equipment covered by the ITA is classified.

This mixed approach, i.e. defining some products in terms of HS codes and an "Attachment B" with narrative product descriptions, was used again in 2015 to define the products covered by the **ITA Expansion**. One of these Attachment B products involved certain advanced semiconductors, referred to multi-component integrated circuits (MCOs), for which the HSC amended Note 9 (b)(iv) to Chapter 85 in the 2017 version of the HS nomenclature. It is worth mentioning that the definition of MCOs was simultaneously negotiated in the WTO and the WCO.

The **Agreement on Trade in Civil Aircraft (TCA)** was initially negotiated during the GATT Tokyo Round (1973-79) and in 1995 became a plurilateral agreement under Annex 4 of the WTO Agreement, which requires participants to incorporate the relevant duty-free or duty-exempt treatment of the covered products into their respective Schedules. In other words, the TCA concessions are also incorporated in the WTO Members' Schedules of concessions. One challenge faced by TCA negotiators was that many products used in the production and maintenance of civil aircraft could also be used in the manufacture or maintenance of other goods (i.e. dual use). For example, products such as tubes, pipes and gaskets could have many uses besides using them to manufacture a plane. Although the product coverage annex of the TCA includes a list of HS codes with ex-outs to be covered, paragraph 2 of the annex makes it clear that products shall only be accorded duty-free treatment or be duty-exempted "*if such products are for use in civil aircraft or ground flying trainers and for incorporation therein, in the course of their manufacture, repair, maintenance, rebuilding, modification or conversion*" (emphasis added). The Agreement also clarifies that three categories of products will not be covered: 1) an incomplete or unfinished product, unless it has the essential character of a complete or finished part, component, sub-assembly or item of equipment of a civil aircraft or ground flying trainer (e.g. an article which has a civil aircraft manufacturer's part number); 2) materials in any form (e.g. sheets, plates, profile shapes, strips, bars, pipes, tubes or other shapes) unless they have been cut to size or shape and/or shaped for incorporation in a civil aircraft or a ground flying trainer (e.g. an article which has a civil aircraft manufacturer's part number), and 3) raw materials and consumable goods. Participants to the TCA seem to have adopted different ways to implement these tariff concessions with an end-use condition, including control systems based on import licensing schemes.

Participants to this agreement seem to have adopted different ways to implement these end-use concessions. For example, some of them use import licenses or a self-certification scheme complemented with post-clearance audits, while others do not seem to check the end-use requirement. It goes without saying that these end-use concessions might become difficult for customs to deal with if there is a large number of importers to control.

### 4.3 Review clauses

A final consideration that has been taken into account in some, but not all, of these agreements is the constantly changing nature of at least some of the covered products. No matter how well-informed negotiators are when they are defining the scope of an agreement, it is impossible for them to foresee all future changes in technology. While some key products will eventually lose relevance, or even disappear from the market, some completely new products may acquire an unforeseen importance. Mindful of this, negotiators have sometimes agreed to include "review clauses", where they agree to meet again in the future to review and possibly expand the product coverage. But this does not mean that an agreement will necessarily be reached.

The Pharma and the ITA provide an interesting point of comparison in this respect. While both sectoral initiatives were finalized within two years of one another and included review clauses, the

<sup>21</sup> The Classification Opinion was agreed during the 37th Session of the HSC (Annex O/21 to WCO document NC10592b).

<sup>22</sup> HSC Classification Opinion 8528.71/4 entered into force on 1 January 2017.



Pharma has been reviewed and updated on four occasions, whereas ITA participants were not able to do so until a sub-group of participants agreed on the "ITA Expansion".

## 5 IMPACT OF HS AMENDMENTS ON THE WTO AGREEMENTS

The preamble to the Harmonized System Convention places priority on *"ensuring that the Harmonized System is kept up-to-date in the light of changes in technology or in patterns of international trade"*. Since its entry into force on 1 January 1988, the Harmonized System has been partially amended on 1 January 1992 (HS1992), 1 January 1996 (HS1996), 1 January 2002 (HS2002), 1 January 2007 (HS2007), 1 January 2012 (HS2012) and 1 January 2017 (HS2017). In practice, not all WTO Members have implemented these amendments on those dates. Each of these amendments to the HS have required adjusting different aspects of WTO work, including the transposition of the Schedules of concessions, updating the work programme for the harmonization of non-preferential rules of origin and, for some of them, or preparing an Amendment Protocol to update the product coverage of the Agreement on Trade in Civil Aircraft.

### 5.1 Transposition of Schedules of concessions

Once a WTO Member has implemented an HS amendment at the national level, it is required to "transpose" its WTO Schedule of concessions into the new version of the HS nomenclature. This is a legal procedure that seeks to ensure that WTO Members' Schedules of concessions are up to date, thereby allowing a comparison of a Member's applied tariff regime with its WTO obligations. The latest Decision by the General Council for the HS2017 transposition explains that, *"to the extent possible, the scope of the concessions and other commitments shall remain unchanged"*<sup>23</sup>. The transposition of each Schedule is approved by consensus, which means that any Member can object to it. This exercise can be particularly difficult when HS amendments include structural changes in the way certain products are defined and classified. It is also worth noting that, given the legal nature of WTO Schedules, the transposition work at the WTO often requires a higher level of precision and accuracy.

Since each set of HS amendments has been partial, each of them affecting approximately 10% of the total number of subheadings, the WTO Schedules of concessions are also partially amended to accommodate those changes. There are two main types of changes faced in the process of transposition:

- "Clarifying changes", which are textual or editorial in nature. These are HS amendments that do not result in a change of the scope of the products classified within a particular subheading; and
- "Structural changes", which are amendments to the HS that change the scope of the coverage of products that could be classified within a particular subheading. These changes could be further subdivided in:
  - Renumbering: an HS code is renumbered in the new version of the nomenclature while maintaining same coverage;
  - Splits: one HS code is divided into several separate new HS codes;
  - Mergers: several HS codes are merged into a single HS code in the new version of the nomenclature; and
  - Complex changes: a combination of splits and mergers.

Examples of a one-to-one correlation (renumbering) of HS codes, a split and a merger are provided in the Appendix to this paper. Although they are considered non-binding guidance by the WCO and do not have legal status, the correlation tables that are regularly prepared by the HSC are a key component of the transposition work at the WTO. It is for this reason that, with the authorization of the WCO Secretariat, the relevant HSC documents are recirculated as WTO documents.

Over the years, the transposition work has proved to be particularly difficult in situations where the guidance by the HSC has been limited including, for example, situations where:

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<sup>23</sup> "Procedure for the Introduction of Harmonized System 2017 Changes to Schedules of Concessions Using the Consolidated Tariff Schedules (CTS) Database", Decision of the General Council of 7 December 2016, paragraph 4 (WT/L/995).

- No consensus has been reached by the HSC on certain correlations, e.g. the classification of apparatus with multiple functions in HS2007 heading 84.43 and the HS2012 classification of some hides and skins under 41.01;
- The HSC concordance table is limited to examples, e.g. the concordance for HS2017 note 9 (b)(iv) to Chapter 85 (MCOs) refers to "*in particular, but not limited to*" certain codes; and
- The HS amendment has involved a large number of complex changes, e.g. the creation of HS2012 heading 96.19 for "*sanitary towels (pads) and tampons, napkins and napkin liners for babies and similar articles, of any material*".

To retain Members' concessions precisely in the new nomenclature, the transposition process could sometimes result in an unnecessary topological structure with multiple breakouts, which virtually contain only *de minimis* scope of products. While some of the more complex situations have been handled on a case-by-case basis, in others, Members have agreed to simplified transpositions proposed by the WTO Secretariat. These simplifications have sought to avoid maintaining minor differences among newly created breakouts, including overly complicated structures or arcane descriptions that do not correspond to the existing national nomenclatures.<sup>24</sup>

Since the introduction of revised HS2002 transposition procedures in 2004, the WTO Secretariat has been tasked with undertaking the initial technical work for most Members and with reviewing the transpositions prepared by the remaining Members. Once the files have been discussed with the Member concerned, all other Members have the opportunity to review the draft transposition file in the context of "multilateral review" sessions of the WTO Committee on Market Access. In case any Member considers that its market access conditions have been affected by another Member's transposition, it can block the adoption of the file or request that the Member concerned enters into a re-negotiation under Article XXVIII of the GATT 1994. In the absence of any objections, and after the process of the multilateral review is completed, the newly transposed schedules are circulated for certification under the 1980 Procedures for Modification and Rectification of Schedules of Tariff Concessions<sup>25</sup>. The lack of an official transposition of the tariff concessions may result in uncertainty on the scope of the legal obligations by Members and has occasionally been the source of controversy among Members.

Despite a considerable investment of time and resources by Members since 2004, including the adoption of a new methodology mandating the Secretariat to undertake most of the technical work, practically none of the WTO Schedules of concessions are up to date with the latest version of the HS nomenclature. As of 10 April 2019, the status of the different transposition procedures that have been undertaken under the WTO framework are as follows:

- **HS1996:** One Schedule remain pending.
- **HS2002:** One Schedule remains pending and two are in the process of certification.
- **HS2007:** 15 Schedules remain pending.
- **HS2012:** 38 Schedules remain pending.
- **HS2017:** the technical work by the WTO Secretariat will begin later in 2019.

## 5.2 Transposition of the non-reciprocal rules of origin

Another major task which results from HS amendments involves updating the outcome of the Work Programme for the Harmonization of Rules of Origin. Under this work programme, Members negotiated draft harmonized rules of origin for non-preferential purposes, which were largely conducted by Members in the HS96 version of the nomenclature. As for Schedules of concessions, Members considered it necessary to transpose the technical work that had been undertaken into a newer version of the HS. The WTO Secretariat, with the assistance of the WCO Secretariat, conducted the transposition of draft harmonized non-preferential rules of origin into HS2002,

<sup>24</sup> See for example, "Transposition of Members' CTS Files to the HS2017 Nomenclature: Notes on Methodology", Adopted by the Committee on Market Access on 10 April 2017, document G/MA/366.

<sup>25</sup> Decision of 26 March 1980, GATT document L/4962.

HS2007 and HS2012, including recommendations for the simplification of the more complex cases resulting from the mechanical transposition exercises.

### **5.3 Transposition of the product coverage of the Agreement on Trade in Civil Aircraft**

The Agreement on Trade in Civil Aircraft (TCA) was initially negotiated during the GATT Tokyo Round (1973-79)<sup>26</sup> and its product coverage was expanded in 1984<sup>27</sup>. The product coverage was transposed into the HS through the Protocol (1986) Amending the Annex to the Agreement on Trade in Civil Aircraft<sup>28</sup>. During the Uruguay Round, the TCA became one of the plurilateral agreements under Annex 4 of the WTO Agreement. The product coverage was then transposed to the HS 2002 through the Protocol (2001) Amending the Annex to the Agreement on Trade in Civil Aircraft<sup>29</sup>, and into HS2007 through the Protocol (2015) Amending the Annex to the Agreement on Trade in Civil Aircraft<sup>30</sup>. At its meeting of 29 October 2018, the Committee on Trade in Civil Aircraft discussed the possibility of a combined HS transposition exercise to bring the TCA product coverage in line with HS 2012 and HS 2017.<sup>31</sup>

## **6 CONCLUSIONS**

The HS plays an important and inextricable role in the work of the WTO, whether through references in the different WTO agreements, the interpretation of certain legal obligations at the WTO, or by serving as the foundation for tariff negotiations and the collection of tariff and trade data. It is for this reason that every amendment to the HS inevitably leads to technical and legal work necessary to adapt and update a number of legal instruments. Despite significant progress in streamlining these procedures, work remains outstanding in some areas and WTO Members face the continued challenge of fully and accurately reflecting the changes stemming from the most recent HS amendments. A case in point is the transposition of WTO Schedules, which remains a particularly demanding and resource intensive task for both WTO Members and the WTO Secretariat.

Reviewing the HS in order to reflect the new commercial realities and the latest changes in technology could bring about an enormous potential in terms of facilitating trade and simplifying the day-to-day life for traders. It would, however, be necessary to do so in a way that bears in mind the adjustments that will be needed in the national and international legal frameworks. Given the profound impact that HS amendments have on WTO Members' applied trade regimes and the work of the WTO, it would be advisable for the HSC to endeavour to agree, to the extent possible, on exhaustive correlation tables that provide clear guidance on the nature of such changes each time such changes are introduced. The WTO Secretariat stands ready to strengthen the collaboration with the WCO on this issue.

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<sup>26</sup> See GATT BISD, 26S/162.

<sup>27</sup> See GATT BISD, 31S/281.

<sup>28</sup> See GATT BISD, 34S/22.

<sup>29</sup> WTO document TCA/4.

<sup>30</sup> WTO document TCA/9.

<sup>31</sup> See TCA/M/35.

## APPENDIX

Table 1: Example of a one-to-one relationship between HS2012 and HS2017 codes

2017 version	2012 version	Remarks in WCO's correlation table
2939.71 2939.79 2939.80	2939.91 2939.99 Applicable subheadings, such as subheadings of headings 29.33 and 29.34	<p>Expansion of the scope of heading 29.39 to include other alkaloids obtained, for example, from animal origin.</p> <p>At the same time, subheadings 2939.91 and 2939.99 have been <u>renumbered</u> for the creation of a new subheading 2939.80 for "Other". The new subheading 2939.80 covers all the alkaloids of non-vegetal origin.</p> <p>Expansion of the scope of heading 29.39 entails the transfer of certain products currently covered by other headings of the Nomenclature (for example, heading 29.33, heading 29.34) to the new subheading 2939.80.</p>

HS 2017	Product description
2939	Alkaloids, natural or reproduced by synthesis, and their salts, ethers, esters and other derivatives.
2939.1	- Alkaloids of opium and their derivatives; salts thereof:
2939.20	- Alkaloids of cinchona and their derivatives; salts thereof
2939.30	- Caffeine and its salts
2939.4	- Ephedrine and its salts:
2939.5	- Theophylline and aminophylline (theophylline-ethylenediamine) and their derivatives; salts thereof:
2939.6	- Alkaloids of rye ergot and their derivatives; salts thereof:
2939.7	- Other, of vegetal origin:
2939.71	-- Cocaine, ecgonine, levometamfetamine, metamfetamine (INN), metamfetamine racemate; salts, esters and other derivatives thereof
2939.79	- - Other
2939.80	- Other

HS 2012	Product description
2939	Vegetable alkaloids, natural or reproduced by synthesis, and their salts, ethers, esters and other derivatives.
2939.1	- Alkaloids of opium and their derivatives; salts thereof:
2939.20	- Alkaloids of cinchona and their derivatives; salts thereof
2939.30	- Caffeine and its salts
2939.4	- Ephedrine and its salts:
2939.5	- Theophylline and aminophylline (theophylline-ethylenediamine) and their derivatives; salts thereof:
2939.6	- Alkaloids of rye ergot and their derivatives; salts thereof:
2939.9	- Other:
2939.91	-- Cocaine, ecgonine, levometamfetamine, metamfetamine (INN), metamfetamine racemate; salts, esters and other derivatives thereof
2939.99	-- Other

**Table 2: Example of a split between HS2012 and HS2017 codes**

2017 version	2012 version	Remarks in WCO's correlation table
0805.21	ex0805.20	Creation of new subheadings 0805.21 and 0805.22 to provide separately for mandarins (including tangerines and satsumas) and clementines, respectively. Amendment adopted as a result of the FAO proposal to enhance the monitoring of the global food security.
0805.22	ex0805.20	
0805.29	ex0805.20	

HS 2017	Product description		HS 2012	Product description
0805	Citrus fruit, fresh or dried.		0805	Citrus fruit, fresh or dried.
0805.10	- Oranges		0805.10	- Oranges
	- Mandarins (including tangerines and satsumas); clementines, wilkings and similar citrus hybrids		0805.20	- Mandarins (including tangerines and satsumas); clementines, wilkings and similar citrus hybrids
0805.21	-- Mandarins (including tangerines and satsumas)	←		
0805.22	-- Clementines	←		
0805.29	-- Other	←		
0805.40	- Grapefruit, including pomelos		0805.40	- Grapefruit, including pomelos
0805.50	- Lemons ( <i>Citrus limon</i> , <i>Citrus limonum</i> ) and limes ( <i>Citrus aurantifolia</i> , <i>Citrus latifolia</i> )		0805.50	- Lemons ( <i>Citrus limon</i> , <i>Citrus limonum</i> ) and limes ( <i>Citrus aurantifolia</i> , <i>Citrus latifolia</i> )
0805.90	- Other		0805.90	- Other

**Table 3: Example of a merger between HS2012 and HS2017 codes**

2017 version	2012 version	Remarks in WCO's correlation table
3705.00	3705.10 3705.90	Subheadings 3705.10 and 3705.90 have been deleted because of the low volume of trade.

HS 2017	Product description		HS 2012	Product description
3705.00	Photographic plates and film, exposed and developed, other than cinematographic film	←	3705	Photographic plates and film, exposed and developed, other than cinematographic film.
			3705.10	- For offset reproduction
			3705.90	- Other