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Working Paper

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WTO Staff Working Paper, No. ERSD-2008-02

Provided in Cooperation with:

World Trade Organization (WTO), Economic Research and Statistics Division, Geneva

Suggested Citation: Yu, Dayong (2008) : The harmonized system: amendments and their impact on WTO members' schedules, WTO Staff Working Paper, No. ERSD-2008-02, World Trade Organization (WTO), Geneva,
<https://doi.org/10.30875/86f3becb-en>

This Version is available at:

<https://hdl.handle.net/10419/26723>

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World Trade Organization
Economic Research and Statistics Division

**THE HARMONIZED SYSTEM - AMENDMENTS AND THEIR IMPACT
ON WTO MEMBERS' SCHEDULES**

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WTO

Manuscript date

February 2008

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THE HARMONIZED SYSTEM - AMENDMENTS AND THEIR IMPACT ON WTO MEMBERS' SCHEDULES

Dayong Yu*

ABSTRACT

As an internationally standardized product nomenclature, the Harmonized System (HS) is used by WTO Members in their schedules of concessions and in the definitions of product coverage for a number of WTO agreements. The Harmonized System is normally amended by the World Customs Organization every four to six years. These amendments pose considerable challenges for the WTO and its Members. On the one hand, Members need to periodically update their historical schedules of concessions into the latest nomenclature. On the other hand, these amendments may have implications for the definition and thus also the implementation of some WTO agreements where the product coverage is defined in terms of the HS. In either case, the product codes and/or descriptions in the old HS version need to be transposed precisely into those in the new version of HS nomenclature in order to retain the historical concessions or the product coverage unchanged. Given the complexity of HS amendments, this process could be very technical and sometimes tricky.

This paper starts by providing an overview of the HS amendments and proposing a categorization of those HS changes in the context of transposition. It then looks back at the history of the introduction of the HS and its subsequent amendments into the WTO schedules and assesses the difficulties and problems which have been faced by WTO Members. On the basis of such analysis, it introduces the successful procedures and methodologies used by WTO Members and the WTO Secretariat to deal with the recent HS2002 transposition. The paper also discusses the implications of the HS amendments to three WTO agreements and the possible approaches to transpose their product lists into a new HS nomenclature.

Keywords: WTO, Schedule of Concessions, Harmonized System, Transposition

JEL Classifications: F10, F13

* The author would like to express his gratitude to Jürgen Richtering for encouraging the writing of this article and his invaluable comments on the various drafts. Special thanks to Hubert Escaith, Ronald Heller(WCO), Roy Santana, Julia De Verteuil, Alya Belkhodja and Mustapha Sekkate for very useful comments on an earlier draft.

I. INTRODUCTION

The Harmonized Commodity Description and Coding System – commonly known as the Harmonized System or HS - is an internationally standardized nomenclature for the description, classification and coding of goods. It is developed and maintained by the World Customs Organization (WCO), formerly known as the Customs Co-operation Council. As of 1 September 2007, there were over 200 countries and customs or economic unions (including 131 contracting parties to the HS Convention) representing about 98 per cent of world trade, that use the Harmonized System as the basis for customs tariffs and for the compilation of international trade statistics. Although 85 WTO Members are contracting parties to the HS Convention, practically all the remaining WTO Members apply it in spite of not being contracting parties to it.¹

Since entering into force on 1 January 1988, the HS has been partially amended every four to six years. The purpose of these amendments is to bring the HS nomenclature in line with the current international trade patterns, technological progresses and customs practices. Thus far, amendments have been introduced in 1992, 1996, 2002 and 2007. Each of these included several hundred changes on product codes or descriptions. The next set of amendments, which is currently being discussed in the HS Committee of the WCO, is planned to enter into force on 1 January 2012.

HS amendments pose considerable challenges for the WTO and its Members. On the one hand, WTO Members need to periodically update their historical schedules of concessions into the latest nomenclature. On the other hand, these amendments may have implications for the definition and thus also the implementation of some WTO agreements where the product coverage is defined in terms of HS codes. Although in theory it would be desirable for transparency purposes that these codes be updated into the new version of the HS nomenclature, it has not always been the case. Furthermore, the conversion may lead to ambiguities in the exact transposition of the codes into the new version of the HS. The transposition from old to new HS is normally complicated and time-consuming and it is often costly in terms of time and human resources.

This article is organized into four main sections. Section II introduces the structure of the HS, its amendments and how they should be interpreted in light of the correlation tables of HS changes. Section III looks back at the history of the introduction of the HS and its subsequent amendments into the WTO schedules of concessions. It also assesses the difficulties and problems which have been faced by WTO Members in this context. Section IV introduces the procedures and methodologies used by WTO Members and the WTO Secretariat to deal with the HS2002 transposition. Section V discusses the implications of the HS amendments on three WTO agreements. Lastly, Section VI provides summary and possible approaches for dealing with HS issues in the WTO context.

II. HARMONIZED SYSTEM AMENDMENTS

A. STRUCTURE, CODING AND DESCRIPTION

The HS provides a coding system that is based on a hierarchical structure, starting with the Section at the higher level and getting more specific at Chapter, heading and subheading levels. Chapters, headings and subheadings are coded according to their positions in the hierarchy². An HS code can be sub-divided into the next lower level to provide greater detail and definition of a product than the higher level. The HS consists of around 1200 four-digit headings and 5000 six-digit

¹ The 27 EU Members Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, and United Kingdom are counted as one WTO Member. Under Article 6 of the HS Convention, the 27 countries collectively have a single vote in the HS Committee of the WCO.

² Section, Chapter and sub-Chapter names are provided for ease of reference and are not part of the legal text for classification purposes (General Interpretative Rule 1).

subheadings, which are organized in 21 Sections and 97 Chapters, which theoretically cover all commodities in international trade.³ These headings and subheadings, along with the General Rules of Interpretation and Section and Chapter Notes comprise the legal text of the Harmonized System.⁴

As the basic building-blocks of the HS, subheadings are identified by six-digit codes. A six-digit subheading code comprises three parts which provide information on its three different levels of detail. The first two digits represent the Chapter in which the goods are classified, the next two digits identify the heading within the Chapter where the goods are described, and the last two digits represent the most detailed subdivisions of the HS. For instance, the code 0102.10 in the *Figure 1* indicates that it belongs to Chapter 01, under heading 0102. An undivided heading has a six-digit code ending in “00”.

In this hierarchical structure based on subsets, the scope of each level is dependent on the descriptions of the higher levels, which provide the context and need to be read in conjunction with the lower level descriptions. It is therefore often necessary to look at the complete structure to identify the specific product(s) classified therein. For example, the subheading description for 0102.10 in *Figure 1* only indicates the product as "Pure-bred breeding animals". The specific kind of breeding animal is specified by the higher level heading description "Live bovine animals". Although this kind of descriptive system effectively avoids redundancy and duplication of descriptive text at lower levels, it requires that users look at the hierarchical context in order to understand the meaning of the lower levels.

Figure 1: Example of the Harmonized System

SECTION I		
LIVE ANIMALS; ANIMAL PRODUCTS		
Notes.		
1.- Any reference in this Section to a particular genus or species of an animal, except where the context otherwise requires, includes a reference to the young of that genus or species.		
2.- Except where the context otherwise requires, throughout the Nomenclature any reference to “dried” products also covers products which have been dehydrated, evaporated or freeze-dried.		
Chapter 1		
Live animals		
Note.		
1.-This Chapter covers all live animals except :		
(a) Fish and crustaceans, molluscs and other aquatic invertebrates, of heading 03.01, 03.06 or 03.07;		
(b) Cultures of micro-organisms and other products of heading 30.02; and		
(c) Animals of heading 95.08.		
Heading	H.S. Code	
01.01		Live horses, asses, mules and hinnies.
	0101.10	- Pure-bred breeding animals
	0101.90	- Other
01.02		Live bovine animals.
	0102.10	- Pure-bred breeding animals
	0102.90	- Other

An HS subheading at six-digit level is the most detailed level of the HS. However, in order to fulfil national needs, the HS Convention allows contracting parties to subdivide the HS classification into even more specific levels by inserting additional national codes.⁵ For instance, it is common for

³ Chapter 77 is currently empty and reserved for possible future use.

⁴ The General Rules of Interpretation and Section and Chapter Notes provide rules for classifying goods and determining a single HS code for each product.

⁵ Article 3 of the HS Convention.

many countries to use two additional digits for tariff duties and another two digits for more specificity in their trade statistics. These additional breakouts beyond the six-digit codes are referred to as national tariff lines, or national breakouts. It should however be stressed that different countries often create different breakouts and national codes under the same HS subheading, except for customs unions, which normally tend to use identical tariff structures.

At the Section level, the Harmonized System groups products largely according to the sector of the economy, starting with agricultural products and ending with industrial and technological products⁶. It attempts to group together all goods of a single industry in a single Chapter or group of Chapters. Within the same Chapter, headings and subheadings are generally arranged by the stage of processing, starting with raw materials and progressing to finished products.

B. THE FOUR SETS OF HS AMENDMENTS

At its First Session in 1988, the HS Committee of the WCO agreed, under Article 16 of the Harmonized System Convention, to an interval of four to five years between each amendment of the HS. Since then, the HS Committee has undertaken periodic reviews of the HS to take into account changes in technology and patterns in international trade, and has approved four sets of amendments since the introduction of the HS.

The first set of amendments came into force on 1 January 1992 with mainly editorial changes. The second set came into effect on 1 January 1996. This set contained almost 400 amendments and the number of HS six-digit codes increased from 5,018 to 5,113. The third list of amendments came into force on 1 January 2002. Although the number of amendments was slightly less than that of the amendments in 1996, the number of HS codes increased again, from 5,113 to 5,224. Most recently, a fourth set of amendments entered into force on 1 January 2007. Around 360 set of amendments were included, including a series of mergers, which resulted in a decrease of HS codes from 5,224 to 5,052.

When a Recommendation to amend the HS is approved by the HS Committee and subsequently by the Council (the highest decision-making body of the WCO, which meets annually at the end of June), the HS contracting parties are obliged to implement these changes in their national nomenclatures for customs tariffs and international trade statistics. As discussed later, WTO Members also need to introduce these changes into their schedules of concessions.

C. TYPE OF HS CHANGES AND CORRELATION TABLES

A Recommendation to amend the HS constitutes a set of revisions of the legal text of Harmonized System. Each revision is called "a change" (in WCO jargon, an individual "amendment"). As shown in *Figure 2* and *3*, the record of each change indicates how the texts in the new HS version are modified, compared with the previous version. Although all changes are expressed in the form of textual revisions, they are actually different in terms of whether the revision will alter the product coverage of one or more related subheadings. Based on this criterion, the HS changes can be divided into two major categories: clarifying changes and structural changes.

A *clarifying* change does not relate to any change of scope of the concerned HS subheadings. Such changes normally take the form of a revision of Section/Chapter notes or product descriptions, or just a correction of typographical errors (*Figure 2*). Therefore, the applications of *clarifying* changes are straightforward and can be realized by simply substituting the old texts with the new texts as specified in the HS amendment.

⁶ One important point to stress here is that the HS definition of agricultural products (normally, Chapters 1-24) differs from that used in the WTO context, as defined in Annex 1 of the Agreement on Agriculture.

Figure 2: Example of textual changes from HS2002 Amendment

Heading 40.15. Heading text.
Delete “gloves” and substitute “gloves, mittens and mitts”.

SECTION XVI. Note 2 (a).
Delete “Chapters 84 or 85” and substitute “Chapter 84 or 85”.

A *structural* change always relates to changes of product coverage of one or more HS subheadings. It normally takes the form of creating or deleting HS subheadings, or changing the codes or descriptions of HS subheadings. In some cases, it could also be a revision of Section or Chapter notes as long as the revision leads to a change of product coverage of the concerned HS subheadings. *Structural* changes can be categorized as (1) splitting one existing subheading into two or more new subheadings, (2) merging two or more subheadings into one new subheading, or (3) in some more complex cases, involving both splitting and merging of parts of different subheadings. *Figure 3* shows an example of *structural* change, which will be analyzed in detail in the following paragraphs.

Figure 3: Example of structural changes from HS2002 Amendment

Subheadings 0101.1 to 0101.20.
Delete and substitute :
“ 0101.10 - Pure-bred breeding animals
0101.90 - Other”.

Figure 4 summarizes the different types of changes and more detailed examples are given in Annex 1.

Figure 4: Types of HS Changes

Clarifying changes: { Textual revision
Typographical correction

Structural changes: { Split
Merger
Complex

A fundamental principle of HS changes, which should be noted here, is that the overall product coverage of the whole HS nomenclature is never changed by any amendments. It always comprehensively covers all traded products. Any change of coverage of a specific subheading is related to a change of another subheading or other subheadings. In other words, the products removed from one subheading have to be relocated to one or more other subheadings.

Compared with textual changes, *structural* changes are more implicit and sometimes difficult to implement, because how exactly the product coverage changes in the related subheadings is not explicitly defined by the HS amendment itself. For instance, when applying the *structural* change in *Figure 3* to a HS1996 tariff schedule on the left side of *Figure 5*, the three HS1996 subheadings will be condensed into two HS2002 subheadings on the right side. It is obvious that the products covered by the three subheadings are now classified in the two new HS2002 subheadings. However, it is not very obvious how these five subheadings are correlated with each other. Moreover, it is not so clear how to transfer the three duties in HS1996 schedule to the new HS2002 schedules. This depends on

how to interpret the change in terms of the relationships between the three HS1996 and two HS2002 subheadings. Such anomalies result from HS changes for which a former line(s) does not clearly relate to a new line(s) by a one-to one, many-to-one or one-to-many relationship.

Figure 5: A tariff schedule before and after the HS2002 Amendment

HS1996 Schedule			HS2002 Schedule		
Code	Description	Duty	Code	Description	Duty
01.01	Live horses, asses, mules and hinnies.		01.01	Live horses, asses, mules and hinnies.	
	- Horses :		0101.10	- Pure-bred breeding animals	??%
0101.11	- - Pure-bred breeding animals	10%	0101.90	- Other	??%
0101.19	- - Other	20%			
0101.20	- Asses, mules and hinnies	5%			

In order to facilitate the implementation of the Harmonized System amendments and to ensure common interpretations, the WCO Secretariat publishes correlation tables for each HS amendment to be used as a guideline. Although these correlation tables are not to be regarded as classification decisions nor have legal status, they were examined by the Harmonized System Committee of the WCO and were followed by most contracting parties in their implementation of the amendments. They are one of the most important pieces of information for countries in implementing HS transpositions.

The correlation tables establish the correlation between the previous HS version and the new HS version by showing the relationships between subheadings from the two HS versions. They normally consist of two tables. Table I starts from the new subheadings and indicates how new subheadings are composed in terms of old subheadings. It contains also remarks associated with certain correlations that briefly specify the nature of the goods transferred. In many cases, reference has also been made to the amended legal provisions. Table II establishes the correlation starting from the previous HS version. It is simply a mechanical transposition of Table I and therefore includes no remarks. It should be noted that in the correlation tables, some codes may be preceded by "ex", which indicates that only part of that subheading corresponds. This prefix is called an "ex-out", and indicates, in the example of *Figure 6* below, that the corresponding destination code entry contains only part of the referenced source subheading. *Figure 6* shows the correlations for the amendments discussed earlier. It indicates that the HS2002 subheading 0101.10 is composed of the whole HS1996 subheading 0101.11 and part of HS1996 subheading 0101.20, and the HS2002 subheading 0101.90 is composed of the whole HS1996 subheading 0101.19 and part of HS1996 subheading 0101.20. Therefore the corresponding duties should be 10% and 5% for HS2002 subheading 0101.10 and 20% and 5% for subheading 0101.90.

Figure 6: Example of Correlation tables

Table I - Correlating the 2002 version to the 1996 version of the Harmonized System

2002 Version	1996 Version	Remarks
0101.10	0101.11 ex0101.20	Subheading 0101.20 has been deleted because of the low volume of trade. At the same time, pure-bred breeding animals and other horses, asses, mules and hinnies have been classified in new subheadings 0101.10 and 0101.90, respectively.
0101.90	0101.19 ex0101.20	

Table II – Correlating the 1996 version to the 2002 version of the Harmonized System

1996 VERSION	2002 VERSION
0101.11	ex0101.10
0101.19	ex0101.90
0101.20	ex0101.10 ex0101.90

D. OVERVIEW OF HS AMENDMENTS

Among the four sets of HS amendments, the first amendments in 1992 included mainly *clarifying* changes, while the other three consisted mainly of *structural* changes. As indicated in Table 1, each of the last three amendments included around 400 sets of changes and about half of them were *structural* changes. Since each *structural* change could relate to more than one HS subheading, the numbers of affected subheadings were around 500 each time, which accounted for around 10 per cent of all HS subheadings.

The product categories related to each amendment varied. The HS1996 amendments included some major *structural* changes on food, tropical woods, steel and electronic products. HS2002 changes were mainly related to wood, paper, waste of chemicals and pharmaceuticals and metals. The HS2007 amendment focused on information technology and communication products. In addition to these major changes, each amendment also included many small changes scattered over different HS Chapters. The purpose of these smaller changes was mostly related to simplification by deleting low trade subheadings, collecting trade statistics related to environment protection, monitoring trade flows of restricted chemicals and drugs, and correcting errors of previous HS versions.

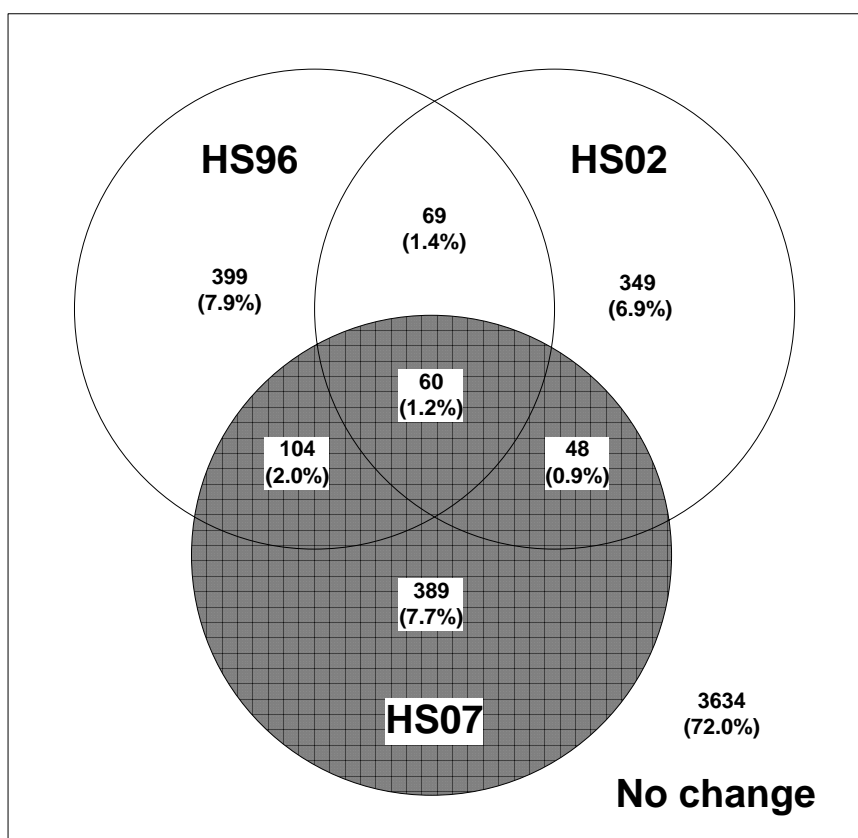
Table 1: Overview of HS amendments

	HS1996		HS2002		HS2007	
	Before	After	Before	After	Before	After
Number of sets of amendments	around 400		373		360	
Number of <i>structural</i> changes	-		172 (46%)		182 (51%)	
Number of correlations	884		900		1223	
Major products of changes	Steel, chemicals, woods, electronics and machinery		Papers, leather, chemicals woods and metals		Chemicals, woods, IT products	
Total number of subheadings	5018	5113	5113	5224	5224	5052
Affected by amendments	481 (10%)	576 (11%)	401 (8%)	512 (10%)	773 (15%)	603 (12%)
Unaffected by amendments	4537	4537	4712	4712	4449	4449

It should be noted that although the three sets of amendments had covered a wide range of products, the majority of HS subheadings remained unchanged. *Figure 7* shows the scope of these three HS amendments by consolidating them into the HS2007 nomenclature. Of all subheadings, 72 per cent have never been changed by any amendment. For the remaining 28 per cent subheadings, each amendment has changed around 10 per cent of subheadings and there has been some overlapping with other amendments. There are 60 subheadings related to all three amendments, which are residual

subheadings of chemical, wood, paper, and electronic products.⁷ Most of these subheadings are related to different changes in the same product categories. Due to the nature of residual subheadings, some products were transferred out of these subheadings in all three HS amendments.

Figure 7: Coverage of HS amendments



III. HARMONIZED SYSTEM AND GATT/WTO SCHEDULES

A. SCHEDULES OF CONCESSIONS

The GATT/WTO negotiations result not only in the adoption of general rules that apply to all Members, but they also cover specific commitments made by individual Members. For trade in goods, the specific commitments are listed in documents called "schedules of concessions", and they reflect specific tariff concessions and other commitments that Members have made in the context of trade negotiations, such as the Uruguay Round.⁸ In the case of agricultural products, these concessions and commitments also relate to tariff quotas, limits on export subsidies, and domestic support.

Each WTO Member has a schedule of concessions, which is annexed either to the Marrakech Protocol to the GATT 1994 or to a Protocol of Accession. Some Members have also schedules pre-dating the Uruguay Round, which reflect concessions granted previously. Furthermore, the content of schedules may change over time to take into account modifications and rectifications made afterwards through GATT Article XXVIII procedures or to reflect HS amendments and technical corrections.

⁷ Residual subheadings or "trash-bin" subheadings refer to the subheading with a description of "Other" and contain all products other than the products defined in previous related subheadings within headings.

⁸ For trade in services, Members' commitments and exemptions are contained in their services schedules.

The main part in a schedule of concessions is Part I Most-Favoured-Nation Tariff, which contains the so-called "bound tariffs".⁹ Bound tariffs, or bindings, are the maximum tariff levels that a WTO Member committed to others Members. Once a tariff is bound, the Member may not increase the level of its applied tariff, which is the tariff actually levied on an imported good, beyond the level of the bound tariff without compensating the affected parties.

Bound tariffs are normally recorded on line-by-line basis in accordance with national nomenclatures of the time when the concessions were made. They have been based on the Harmonized System since the Uruguay Round. For each tariff line, the following information is included in the schedule of concession: tariff line number, description of the product, base rate duty (rate before any tariff cut is made) rate of bound rate duty, implementation period, initial negotiation rights (INRs) and other duties and charges (ODCs).

B. INTRODUCTION OF THE HARMONIZED SYSTEM

Prior to the introduction of the Harmonized System, Contracting Parties to the GATT used different nomenclatures to schedule their concessions, such as the Brussels Tariff Nomenclature (BTN) and later on the Customs Cooperation Council Nomenclature (CCCN). The divergences in the nomenclatures used by the Contracting Parties posed several difficulties for monitoring the implementation of existing GATT concessions and for conducting further negotiations, mainly because there was limited comparability.

Shortly after the adoption of the Harmonized System by the Customs Co-operation Council in June 1983, Contracting Parties to the GATT decided to introduce the HS in their schedules of concessions, with an understanding that "in addition to the benefits for trade facilitation and analysis of trade statistics, from the GATT point of view, the adoption of the Harmonized System would ensure greater ability for countries to monitor and protect the value of tariff concession."¹⁰

A decision adopted by the Contracting Parties in July 1983 laid down the main principles and procedures in connection with the introduction of the Harmonized System in national tariffs and schedules of concessions. In this context, the main principle to be observed was that the existing GATT bindings should be maintained unchanged.¹¹

At the same time, GATT Contracting Parties also recognized the technical complexity involved in this exercise and therefore provided some flexibilities for handling some cases: "...the alteration of existing bindings should only be envisaged where their maintenance would result in undue complexity in the national tariffs and should not involve a significant or arbitrary increase of customs duties collected on a particular product." For these cases, specifically, "where the introduction of the Harmonized System resulted in tariff lines with different duties being combined or bound rates being combined with unbound rates, renegotiations under Article XXVIII would be necessary."¹² The decision also specified detailed requirements for submissions and procedures for Article XXVIII negotiations which need to be followed in cases where Members had to change their tariff bindings.

Following the entry into force of the Harmonized System on 1 January 1988, a certain number of pre-UR schedules were transposed following the above-mentioned procedures and some

⁹ Each schedule consists of four parts: Part I : Most-favoured-nation or MFN concessions, which is further divided into: Section 1A — tariffs on agricultural products, Section 1B — tariff quotas on agricultural products, Section II — Other products; Part II: Preferential concessions (tariffs relating to trade arrangements listed in the GATT Article I); Part III: Concessions on non-tariff measures (NTMs); Part IV: Specific commitments on domestic support and export subsidies on agricultural products.

¹⁰ L/5470/Rev.1.

¹¹ L/5470/Rev.1.

¹² Anwarul Hoda: Tariff Negotiations and Renegotiations under the GATT and the WTO pp 124.

Contracting Parties undertook to renegotiate their schedules in connection with the implementation of the HS. As of 14 October 1994, 28 GATT Contracting Parties and the European Communities of 12 had their Harmonized System schedules annexed to various Protocols.¹³

C. ADOPTION OF HS AMENDMENTS

Following the introduction of the Harmonized System to their schedule of concessions, the GATT Contracting Parties and later on WTO Members have adopted each HS amendment with a view towards keeping the authentic texts of the GATT schedules up-to-date and in conformity with the national customs tariffs as much as possible.

In 1991, the Committee on Tariff Concessions of the GATT adopted a simplified procedure to implement the HS1992 amendment and "any future changes relating to the HS".¹⁴ Since this amendment was rather simple, the implementation of the 1991 decision went relatively smoothly. Eleven GATT Contracting Parties followed these procedures and submitted the required documentation and ten of these notifications were certified.¹⁵

Members made use of the same procedures for introducing modifications resulting from HS1996 changes. However, due to the complexity of this amendment, only 49 Members submitted HS1996 documentation, of which only 46 have been certified thus far. The remaining Members have not yet made their submissions.

In 2001, the General Council established new procedures for the introduction of HS2002 changes.¹⁶ Although the HS2002 nomenclature had been applied by most WTO Members in their national tariffs, only 35 of them submitted the modifications to their schedules of concessions as required by these procedures.¹⁷ The complexity and huge amount of work related to the introduction of HS2002 proved to be very challenging for Members, both, in respect to the preparation of their own submissions and as concerned the verification of the changes in other Members' schedules.

Originally, the WTO Secretariat played a marginal role in all these procedures, as they were intended to be Member-driven. Its role was often limited to providing informal counsel and technical assistance to Members.

D. NEW PROCEDURES FOR THE HS2002 AND HS2007 AMENDMENTS

In the light of the slow progress in the HS2002 transposition, and with a view to further facilitating and simplifying the HS2002 transposition of the schedules of concessions, the General Council adopted on 15 February 2005 a series of amendments to the procedures. The most important changes in this respect are, on the one hand, a more prominent role by the Secretariat in preparing and reviewing the proposed modifications and, on the other, the use of the Consolidated Tariff Schedule (CTS) database as a working tool. In this context, the files required for the transposition of the schedules of concessions of developing countries are prepared by the Secretariat, in consultation with the relevant Member. A detailed procedure has been agreed by Members for the preparation of HS2002 transposition files, multilateral reviews and certification.¹⁸

According to this new procedure, the Secretariat would transpose Members' commitments included in the CTS database to the HS2002 nomenclature following a standard methodology. The Members concerned are given a certain period of time to review the Secretariat's work and to provide

¹³ See the GATT doc. TAR/W/67/Rev.15 and TAR/W/74/Rev.12.

¹⁴ Decision of 8 October 1991, Annex to L/6905, the GATT BISD 39S/300.

¹⁵ See the GATT docs. Let/1793, TAR/M/34 and 35.

¹⁶ WT/L/407.

¹⁷ See G/MA/TAR/4/Rev.8.

¹⁸ WR/L/605.

comments. After this period, the files including possible modifications by the Members are submitted to a process of multilateral review, where all Members have a say on the proposed HS2002 changes to the schedule. Developed Members are expected to prepare their own HS2002 files, but these files are also reviewed by the Secretariat against the results of standard transposition before they are presented for the multilateral review. If there are no objections to the changes at the multilateral review, the files are considered approved and the HS2002 changes are issued under the 1980 procedures for modification and rectification of schedules (document symbol G/MA/TAR/RS). These amendments are formally certified by the Director-General as the legally binding modifications after a three-month period of time.

The new procedure has proved very effective in particular in ensuring universal coverage of all Members. As of the end of 2007, 80 schedules have been transposed by the WTO Secretariat and 22 of them have been certified. In light of the success of the new procedure for HS2002, the General Council has adopted the same procedure for HS2007 transposition.¹⁹ The work started at the beginning of 2008.

IV. METHODOLOGY FOR THE HS2002 TRANSPOSITION

A. CONSOLIDATED TARIFF SCHEDULES DATABASE

The Consolidated Tariff Schedules (CTS) database contains all WTO Members' concessions on goods in a standardized format. It currently includes all 123 schedules representing more than 700,000 tariff lines.²⁰ The CTS was created under the auspices of the WTO Committee on Market Access in November 1998. The database has been established as a working tool only, without implications as to the legal status of the information contained therein.

The CTS is a consolidation of various legal documents, such as Uruguay Round Schedules, pre-Uruguay Round Schedules, accession schedules, commitments for the Ministerial Declaration on Trade in Information Technology Products (Information Technology Agreement, or ITA), and Article XXVIII modifications. Some of these schedules or documents were based on different versions of HS or earlier nomenclatures such as the CCCN. When the CTS was established, commitments in different nomenclatures were converted to HS1996 by the Secretariat following a standard methodology.²¹

The core of the CTS is the "Concession table" which records the most important concession elements of the schedule of concessions such as bound duties, product descriptions, implementation period, INRs and other duties and charges (ODCs). Those concessions are compiled at the tariff line level together with the standard HS heading and subheading hierarchy structure. The CTS transposition exercise mainly focused on transposing the Concession table to HS2002 nomenclature.

B. OVERVIEW OF THE TRANSPOSITION DONE BY THE SECRETARIAT

Among the 123 schedules, five schedules of newly acceded Members were already in the HS2002 nomenclature and did not require a transposition. The schedules of 9 developed country Members and also a number developing country Members were transposed by the Members themselves under the first set of HS2002 procedures. For the remaining, about 80 per cent of the schedules, the Secretariat did the transposition. As mentioned above, the Secretariat was also requested to verify and review the schedules transposed by the developed country Members and those developing country Members who did their own transposition.

¹⁹ WT/L/673.

²⁰ The 27 EU Members share one schedule. Switzerland and Liechtenstein also share one schedule.

²¹ For eight Members, the CTS files were established in HS1992. Those files have been converted to HS1996 and HS2002 in the HS2002 transposition exercise.

As indicated previously, the main principle followed in introducing the nomenclature amendments was that the scope of the concessions should be kept unchanged. Otherwise, lengthy negotiations would have been required for settling potential differences among Members concerning the transposition of specific products. In order to avoid additional Article XXVIII procedures, and as agreed upon by Members, the Secretariat followed a methodology that would keep all commitments strictly unchanged in terms of specific concessions.

The transposition dealt with all concession information, including other elements besides the bindings, such as the initial negotiating rights (INRs) and Special Safeguards (SSGs), as well as concessions for specific commitments in agriculture contained in other parts of the schedule, such as tariff quotas and export subsidies.

As mentioned in Section II, *clarifying* changes can easily be implemented by replacing old texts with the new ones. These changes can be introduced automatically by a computer program. Therefore, the major task in the HS transposition consists in implementing all the *structural* changes, which is discussed in the following paragraphs.

C. BASIS OF TRANSPOSITION AND REFERENCE DOCUMENTS

In addition to the CTS database, the transposition was based on information provided by the World Customs Organization, including the texts of HS amendments, correlation tables and the HS Explanatory Notes.

The corner stone for such a transposition is the detailed correlation table between the HS1996 and the HS2002. As discussed previously, the correlation table provides the relationships between the new and old subheadings and it is these relationships that actually define the *structural* changes. The correlations determine how concessions in the existing nomenclature will be relocated in the new nomenclature in terms of codes and product descriptions.

The transposition by the Secretariat strictly followed the correlation tables published by the WCO, although these correlation tables are not legally binding to the WCO members and only serve as a guideline for implementing the HS amendments. In practice, many countries have deviated from these correlations while applying the HS amendments to their national applied tariffs according to their national interpretations. However, the Secretariat needed to apply a uniform interpretation of the amendments. Therefore to follow the WCO standard correlation tables was the only pragmatic choice in this respect.

D. OUTPUT OF THE TRANSPOSITION

As a requirement of the HS2002 procedures, the transposition exercise generated two tables as final output: a new CTS Concession tables in HS2002 and a correlation table between the HS1996 and HS2002 Concession tables.

In the Concession table in HS2002, the scope of concessions for each tariff line should be exactly the same as those recorded in the original Concession table in HS1996. Although codes and/or descriptions of tariff lines affected by the HS amendments have changed in HS2002, the original concessions should remain unchanged.

The relationships between tariff lines in HS1996 and HS2002 were recorded in a correlation table. The correlation table was used to verify the transposition and ensure that the original concessions were being correctly reflected in the new nomenclature. These country-specific correlations are not the same as the correlations published by the WCO. The difference is that the WCO correlation tables correlate the standard subheading codes at HS 6-digit level, while the correlation between new and old CTS could be at the more detailed national tariff line level. It could

be seen as an extension of the WCO standard correlation table to the national tariff line level, just like the national tariff nomenclature is an extension of standard HS.

E. THE TRANSPOSITION PROCESS

As discussed in Section II, *structural* changes can take the form of a split, merger or complex cases involving both splits and mergers. An intuitive approach of transposition is to identify the pattern of changes according to the WCO correlation table, and to apply them to HS1996 tariff lines and change them into HS2002 tariff lines. This approach starts with the HS1996 tariff lines and identifies the corresponding HS2002 codes and descriptions. In the case of a split, the national tariff lines under an HS1996 subheading need to be distributed into different HS2002 subheadings; for a merger, all tariff lines under different HS1996 subheadings need to be consolidated into one HS2002 subheading. If the change involves both splits and mergers, all related subheadings and the tariff lines under them need to be analyzed one-by-one to determine under which HS2002 subheading(s) they need to be relocated.

Another approach is to start with the new HS2002 subheadings and then to look back at the product descriptions and concessions in HS1996. As already discussed, the fundamental principle related to HS changes is that the overall product coverage of the HS shall not be altered by any HS amendments. Products removed from one subheading have to be relocated to another subheading, or other subheadings. Therefore, no matter how tariff lines are affected by the patterns of splits, mergers or complex changes, each new subheading/tariff line in the new nomenclature must be composed of one or more tariff lines or parts of these lines of the old nomenclature.

Based on these observations, a uniform methodology was developed and some semi-automatic procedures were used to standardize and simplify the transposition process. The following three-step procedure was used in the HS2002 transposition by the WTO Secretariat:

1. All the HS2002 subheadings that are related to *structural* changes are identified. For each of these HS2002 subheadings, all corresponding HS1996 subheadings and their related national tariff lines are identified in the CTS Concession table and allocated to their respective HS2002 subheadings. The result of this step is a table which lists all HS2002 subheadings and corresponding HS1996 national tariff lines that could potentially be relocated under this HS2002 subheadings. A pair of HS2002 and HS1996 subheadings should be the same as that in the WCO standard correlation tables. One pair may correspond to more than one national tariff lines. And one national tariff line may correspond to more than one pair of HS six-digit correlations or HS2002 subheadings. All tariff lines corresponding to an HS2002 code are called "candidate lines" for this HS2002 subheading.
2. A computer program evaluates all candidate lines for each HS2002 subheading to determine whether they can be simplified. Specifically, if all candidate lines corresponding to a HS2002 subheading have identical concessions (if they present the same bound duty, INRs, ODCs and instruments), these candidate lines could be simplified or collapsed to one HS2002 line. As it is no longer necessary to distinguish between those candidates with identical concessions, the different "origins" of these candidate lines can be ignored. The HS2002 subheading code and description becomes the new tariff line code and description.²²
3. When the program finds that the concessions of candidate lines are different from one another, these HS2002 subheadings and candidates will be put aside for manual transposition. In the manual processing, these candidate lines will be examined one-by-one to determine whether they should be retained for this HS2002 subheading or should be dropped. Since one HS1996 subheading can be split into more than one HS2002 subheadings, a national tariff line under this HS1996 subheading could, in theory, be assigned to each corresponding

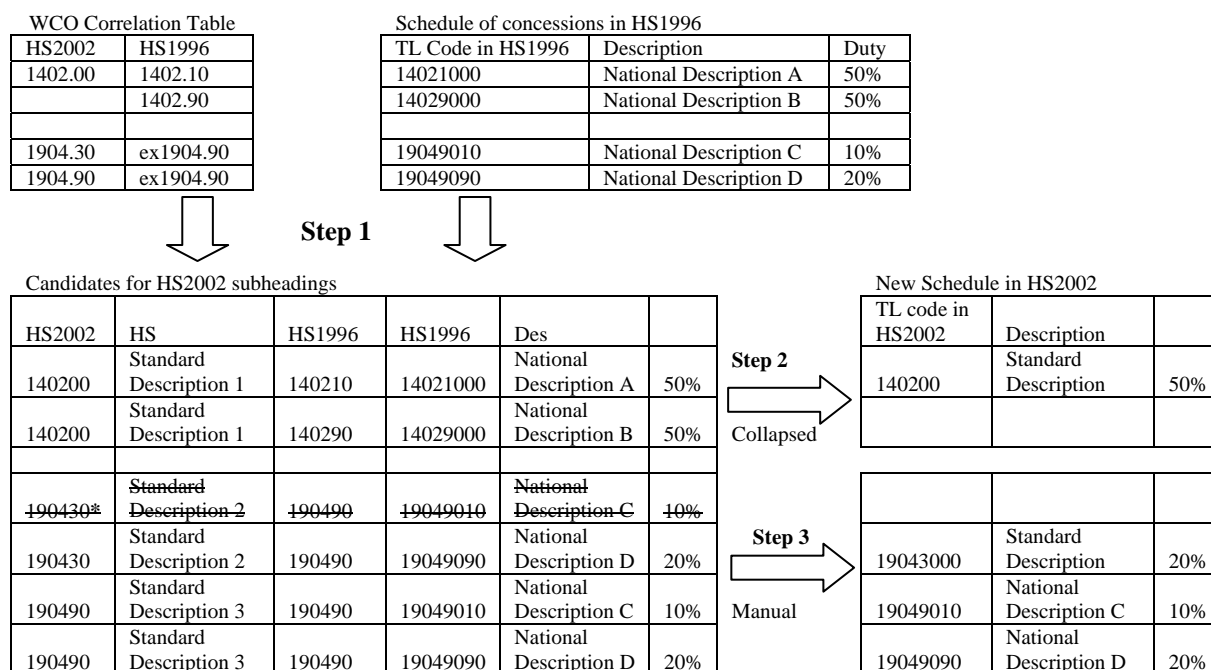
²² Zeros ("0"s) may be added to make the code with the same length as other national tariff line codes.

HS2002 subheading as a candidate line. Depending on the product coverage of this national tariff line, it may be retained or be dropped for a specific HS2002 subheading, but it should appear under at least one HS2002 subheading. For all candidate lines that are kept, tariff line codes and descriptions may need to be re-defined accordingly based on the national product descriptions. These new codes and descriptions become part of the new CTS in HS2002 and the pairs of tariff line codes in HS1996 and HS2002 are recorded in the correlation table.

Since a large number of lines can be collapsed in Step 2, this process can significantly reduce the workload and help focus the resources only on the manual work. However, it should be noted that the manual work is still quite extensive and requires a considerable amount of time from highly-skilled tariff experts.

The following chart illustrates how this process is applied for processing two HS changes of a mock schedule with four national tariff lines. The first change related to heading 1402 is processed automatically since the two national tariff lines have the same duties. The second change on heading 1904 involves different duties for candidate lines. It has to be processed manually in consideration of national descriptions and duty rates. Three more examples from actual WTO schedules can be found in Annex 2. They illustrate how the codes and descriptions are re-defined in the new HS2002 schedules.

Figure 8: Example of transposition procedures



* It is assumed that as a candidate, HS1996 national tariff line 19049010 is not relevant to HS2002 subheading 190430, so it was dropped for 190430, but was kept for 190490.

F. PROBLEMS FACED AND POSSIBLE SOLUTIONS

In the HS2002 transposition exercise, a significant amount of manual work actually focused on a limited number of changes to chemical wastes in HS Chapter 38 and paper in HS Chapter 48. These changes affected many subheadings and implied very complicated correlations between HS1996 and HS2002. For these subheadings, complex coding structures and sometimes very abstruse technical descriptions had to be introduced in order to retain all the details of concessions. Some of the resulting descriptions turned out to be quite complicated and difficult to understand. They

deviated also from those found in national applied tariff schedules and could cause difficulties when making links between bound and applied tariffs.

The reason for these problems is that the methodology followed by the Secretariat is a pure technical transposition without altering any concessions. As discussed in the previous sections, the advantage of this methodology is that it is technically correct, and it thus helps Members avoid potential disputes and lengthy negotiations. The disadvantage is that it may result in unduly complicated product codes and descriptions. And a proliferation of 1996 rates in 2002 lines which may in fact represent somewhat theoretical allocations, covering little or no actual trade. It may thus contradict the original purpose of these HS changes, namely, a simplification of the HS structure.

Actually, several simplification methods were provided for the former HS transpositions procedures. For instance, when two tariff lines with different duties were combined, the simple or trade weighted average could be assigned as a single duty to a new tariff line, which otherwise would need to be split into two in correspondent to the two different duties. These measures can considerably simplify the transposition work. However, they may potentially cause two problems: 1) it is problematic when applied to clarifying concessions, specifically for non-ad valorem duties and INRs, because this information cannot be used to calculate averages and sometimes it is incompatible; 2) the change of any concession may cause opposition when other Members' interests are impaired and the transposition process may be blocked. Such opposition would need to be settled by negotiations or renegotiations which may take a long time. Actually this was one of the reasons why the old procedures were not working well for the HS1996 and HS2002 transpositions.

Nevertheless, a number of possible simplification methods have been reintroduced in the HS2007 procedures in order to provide more options for difficult changes. The WTO Secretariat is working on practical solutions to take advantage of these simplifications through the least controversial way to avoid potential future oppositions. A possible approach is to develop simplified correlation tables for complicated changes based on the nature of the change and trade statistics. These simplified correlations should be made available to Members in advance of the transposition exercise.

V. HARMONIZED SYSTEM AND WTO AGREEMENTS

The HS has also been used by WTO Members to define the product coverage for various agreements, in the form of product lists with HS codes and/or product descriptions. As a common language of international trade, the use of the HS makes those agreements more precise, more transparent, easier to implement and monitor, and less controversial. However, HS amendments may affect the product lists when HS codes in the lists involve a merger of subheadings previously covered by the agreement with subheadings previously not covered. Therefore for each amendment, an assessment needs to be made whether the product list of an agreement is affected and if yes, how it can be incorporated. Some efforts have been made to introduce HS amendments to these lists.²³ Compared with the transposition of schedules, revising these lists proves to be even more complicated, because any changes to these agreements need to be approved by all parties and this may require more consultations or negotiations. Moreover, a technical transposition is likely to end up with (more) ex-outs in order to indicate that only part of the HS codes are covered. These ex-outs could undermine the clarity and usability of the product lists. Three such agreements are discussed in this section: the Agreement on Agriculture, the Information Technology Agreement (ITA) and the Agreement on Trade in Civil Aircraft (CTA).

²³ Some work has been conducted in aim of transposing the product lists of a number agreements into the latest HS nomenclature. However, only the list of the Agreement on Trade in Civil Aircraft has been transposed into HS2002. The product lists of the Information Technology Agreement and Uruguay Round pharmaceutical agreement have not yet been formally transposed into any new HS nomenclatures.

A. DEFINITION OF AGRICULTURE AND NON-AGRICULTURAL PRODUCTS

The list of agricultural products was established during the Uruguay Round and was defined as shown in Annex 1 of Agreement of Agriculture. All Members used this list as basis for their offers on agricultural and other products.

In this list, most products were defined in terms of HS Chapters, headings and subheadings in the 1992 version of the Harmonized System except for the definition of "fish and fish products", which was not specified in terms of HS codes.²⁴ This posed a challenge in the context of the HS amendments, as a number of these HS codes were affected.

For example, as a result of the HS1996 amendment, the subheading 3302.10 in the HS1996 nomenclature merged parts of HS1992 subheadings ex2106.90 and ex2208.10, which is agricultural product, with HS1992 subheading 3302.10, which is non-agricultural product. Likewise, in the HS2002 amendment, subheadings 2939.11, 3822.00 and headings 41.01 to 41.03 in the HS2002 nomenclature also combined parts of subheadings where agricultural and non-agricultural products were classified.

Members dealt with these changes differently in their submissions for HS1996 and HS2002 transpositions. While some assigned the complete subheadings as agricultural or non-agricultural products, others broke down these subheadings into two breakouts with one of them classified as agricultural and the other as non-agricultural. Both approaches may raise certain problems. As agricultural products and non-agricultural products normally have different duties (bound and applied), normally with higher duties for agricultural products, simply combining them without reflecting all different duties may potentially breach the bindings if the higher duties are selected. On the other hand, keeping the distinctions with new breakouts could result in more complicated tariff structures and different national breakouts across Members may undermine the uniformity of the definition and increase the difficulty for verification. More importantly, the legal consequence of these modifications remains unclear, in particular in the absence of GATT Article XXVIII negotiations.

Since agricultural and non-agricultural products are treated differently in WTO agreements and since they are recorded in different parts of the schedules of concessions, the unclear distinction could also cause problems in the negotiations. One obvious question is in which part of the schedule the subheadings with a mixture of agricultural and non-agricultural products should be classified. Therefore, the ideal solution is for Members to agree on an updated product list in the latest nomenclature.

During the on-going Doha Round negotiations, this issue has been discussed in the Negotiating Group on Non-agricultural Market Access (NAMA). In that group, Members assessed the current divergences in Members' schedules and discussed a proposal by the Chairman for a common product list in HS2002.²⁵ There is, however, no agreement so far on this issue.

B. PRODUCT COVERAGE OF THE INFORMATION TECHNOLOGY AGREEMENT (ITA)

The ITA was concluded by 29 Participants at the Singapore Ministerial Conference in December 1996. Since then, the number of participants has grown to 70, representing about 97 per cent of world trade in information technology products. The ITA eliminates Participants' duties on

²⁴ This has resulted in some Members using different definitions of fish and fish products in their Uruguay Round schedules. Some of these divergences have not yet been resolved. See WTO internal document (Job(05)/154/Rev.8).

²⁵ "http://www.wto.org/english/tratop_e/markacc_e/markacc_chair_texts07_e.htm" or WTO internal document JOB(07)/126.

the products covered by the Agreement by binding them at duty-free levels in their schedules of concessions.

These products were specified in two attachments of the Ministerial Declaration: Attachment A and Attachment B. Attachment A consists of two lists of categories of products legally defined by their HS1996 codes. Attachment B is a list of legal product descriptions without reference to their HS codes; restrictions on these products shall be liberalized "wherever they are classified". Although these lists have provided a good guidance in terms of product coverage, there are still some ambiguities due to the lack of clear HS classifications. Furthermore, the ITA schedules of the participants often differ because of differing national interpretations, in particular with regard to the products in Attachment B (see below).

During the negotiation of the ITA, Participants tried to define the product coverage at HS 6-digit level, but it proved impossible to reach an agreement at this level for all products. Therefore, for a number of subheadings, the ITA covers only part of the subheadings where "ex-outs" have been added in front of these subheading codes and more detailed descriptions provided. In the implementation of the ITA, the participants are obliged to create their own national breakouts for these ex-out items in their applied tariffs and the submission of ITA Schedules, but these national tariff lines may be different in terms of codes among participants.

In addition to these ex-outs, for the products listed in Attachment B and a number of items in Section 2 of Attachment A, consensus was reached only on the textual description of the products, but not on the corresponding HS codes. The ITA participants need to designate national codes based on their own interpretations and classifications. That means that there is no uniform classification for these products and participants could assign these products under different subheadings. Shortly after concluding the agreement in 1996, ITA participants decided to continue discussions on those products, the so-called Attachment B items, aiming at reaching uniform HS classifications. However, due to the complexity of the products, no agreement has been reached yet on many of these products.

HS2007 Amendment

In spite of the rapid technological development, the HS classification on information technology (IT) products had not changed much since the Harmonized System's entrance in force in 1988. Although there were some marginal changes on IT products in the HS2002 amendment, their impact on the ITA product list was very limited.²⁶ The WCO Members agreed as a primary goal of the third HS review to conduct an overhaul of the provisions in the technology area in the HS2007 amendment. Among the 354 sets of HS2007 changes, about 70 sets relate to IT products, which are mainly classified in HS Chapters 84, 85 and 90. In terms of HS subheadings, 200 of the 773 subheadings affected are from these three Chapters and 110 of them are related to products covered by the ITA. The most important product categories affected by the HS2007 amendment included printers, computers, monitors, equipment for manufacturing semiconductors, and some telecommunication products. Drafting the revisions in the technology area was enhanced by the creation of a separate working group of major trading countries and by the receipt of substantial technical advice from the trade. The new classifications for these products are based on current product specifications with clearer definitions and more easy-to-use structures.

During the discussion of the HS2007 amendments, the WCO HS Committee took into account some classification issues of the ITA²⁷. However, since the primary purpose of HS amendments is to clarify the customs classification problems, it has not perfectly addressed the needs of ITA. Furthermore, some of the modernizing changes in the technology area may well have made

²⁶ G/IT/W/22.

²⁷ For example, in 2007 the expression "still image video cameras" was eliminated from the part of the text of heading 85.25 that had read, "...still image video cameras and other video camera recorders; digital cameras"

the HS more up to date than the 1996 text of the ITA.²⁸ In order to assess the impact of HS2007, and to serve as guidelines in transposing the schedules of concessions, the ITA participants asked the Secretariat to prepare a model list in HS2007 through a technical transposition which, like the methodology used for schedules of concessions, maintains the actual product coverage of the new list strictly identical to the original one.²⁹ However, it goes without saying that several of the above-mentioned divergences in classification would not be solved through this technical exercise.

Such a list has shown an increased complexity of the ITA product coverage due to the introduction of HS2007. If ITA participants decide to strictly adhere to the original product coverage, the list in HS2007 cannot take advantage of the improved HS structure on IT products. In many cases, the new HS2007 subheading cannot be directly included in ITA lists because these subheadings normally combine previous "ITA" with some "non-ITA" subheadings. In order to exclude these non-ITA parts, many ex-outs and complicated descriptions need to be introduced by the Secretariat in the HS2007 model list, even though those non-ITA parts sometimes consist of only a minor part of the subheading and represent a very small amount of trade.

For instance, five new subheadings were introduced in HS2007 aiming at covering all equipment for the manufacture of semiconductor and flat panel displays, which are defined in Section 2 of Attachment A of the ITA. However, the coverage of these five subheadings defined in the WCO correlation table is not exactly the same as the one presented in Attachment A Section 2. There are several subheadings that were not previously covered by the ITA which were transferred to these five subheadings. To follow the original ITA coverage, ex-outs have to be added to exclude the non-ITA parts.

A rigid technical transposition of the ITA product list retaining the original coverage could be pragmatic. However, as discussed above, the new lists cannot benefit from the new classification for IT products and many new ex-outs would increase the difficulty of implementing this solution, monitoring and maintenance. Another solution could be to re-define the product list directly on the HS2007 nomenclature and ignore some of the unavoidable and unimportant enlargement of product coverage. Even though some negotiations would be needed, it could be worthwhile to have a clear product coverage with the fewest possible ex-outs.

C. PRODUCT COVERAGE OF THE AGREEMENT ON TRADE IN CIVIL AIRCRAFT

The Agreement on Trade in Civil Aircraft (TCA) is a plurilateral agreement negotiated by 30 signatories. It eliminates import duties on all civil aircraft and ground flying trainers, as well as their parts and components.

These products are specified in the Annex of the TCA, which covers a wide range of products, including plastics, rubber, glass and metal products, mechanical, electronic and electrical machinery and instrument. Among those products, most can be used as parts or components for not only aircraft industry but also many other sectors. Therefore, the product list was defined by standard HS subheading codes and descriptions with an "ex-out" added for each subheading code, indicating that only part of the subheading is covered by the TCA. To ensure correct classification, a general criterion for eligibility was defined as "such products are for use in civil aircraft or ground flying trainers (For the purpose of Article 1.1 of this Agreement 'ground flight simulators' are to be regarded as ground flying trainers as provided for under 8805.29 of the Harmonized System.) and for incorporation therein, in the course of their manufacture, repair, maintenance, rebuilding, modification or conversion."³⁰ For instance, the list includes HS subheading 3917.21 "Tubes, pipes and hoses, rigid, of polymers of ethylene, with attached fittings", but, according to this criterion, only

²⁸ See previous footnote.

²⁹ WTO internal document JOB(07)/96.

³⁰ TAC/4.

those tubes for use in civil aircraft and ground flying trainers are eligible for duty-free treatment. Tubes for other use are still subject to normal duties.

When the TCA entered into force in 1980, the product list was defined by the Customs Cooperation Council Nomenclature (CCCN) codes. Following the introduction of the Harmonized System and subsequent HS amendments, the Secretariat, as requested by the signatories, transposed the product list into HS1988, HS1992, HS1996 and HS2002 respectively.³¹ The list in HS2002 was formally agreed by the TCA signatories as the new TCA product list in 2001. Technically, the transpositions of TCA product list were not very difficult. Since all subheading codes and descriptions were standard and they were "ex-outs", or not full subheadings, a transposition could simply substitute the subheadings related to HS changes with the new subheadings by following the WCO correlation tables, then remove any new subheadings that contains nothing related to the civil aircraft products. Although the HS codes may be changed, the actual coverage will remain the same because the general criterion can ensure that only the products used by civil aircraft be covered.

VI. CONCLUSION

The Harmonized System plays an important role in the WTO, in terms of providing a uniform structural framework for recording Members' tariff concessions and ensuring clarity of product coverage of WTO agreements. However, it should be recognized that HS amendments have posed certain difficulties for the WTO. Some solutions have been found and certain methodologies have been established based on experience during the past decade.

The transposition of WTO schedules of concessions to HS1996 and HS2002 have proved to be very difficult for many WTO Members. Even when Members had completed their own transpositions, the verification and certification processes could persist because of the complexity of the HS changes and lack of a standard methodology for conducting the transposition exercise. The new approach used by WTO Members since 2005 for dealing with the HS2002 transposition has proved superior in this respect. It pooled the difficult technical work in the hands of the Secretariat and freed Members' resources to focus on the verification and certification part of the transposition. Part of its success can also be attributed to economies of scale and specialization, as the same group of people worked on several schedules, each with different challenges. The methodology developed by the Secretariat and its implementation has been well recognized and appreciated. The success of the new procedures can be seen in the very high percentage of files going through the multilateral review process without reservations from the other Members, and the relatively high number of files which have been certified. In this context, this approach appears to be an efficient way of dealing with the transposition of Members' schedules of concessions. Nonetheless, the complexity of the work should not be underestimated, and at the time of writing this report, a number of difficult cases remained to be solved.

The implication of HS amendments on certain WTO agreements is also an issue of importance. For instance, the HS2007 amendment on ITA products could result in some confusion since the divergence between Members' HS2007 applied schedule and ITA product list in HS1996 could become very large. This would lead to certain difficulties in the verification of implementation of ITA commitments. A purely technical transposition as used for the HS2002 transposition may not perfectly solve these problems since it could potentially make the list even more complicated by proliferating many low-trade or theoretical allocations of part of former HS categories into large numbers of new HS categories. The ITA participants should recognize the situation and address it accordingly.

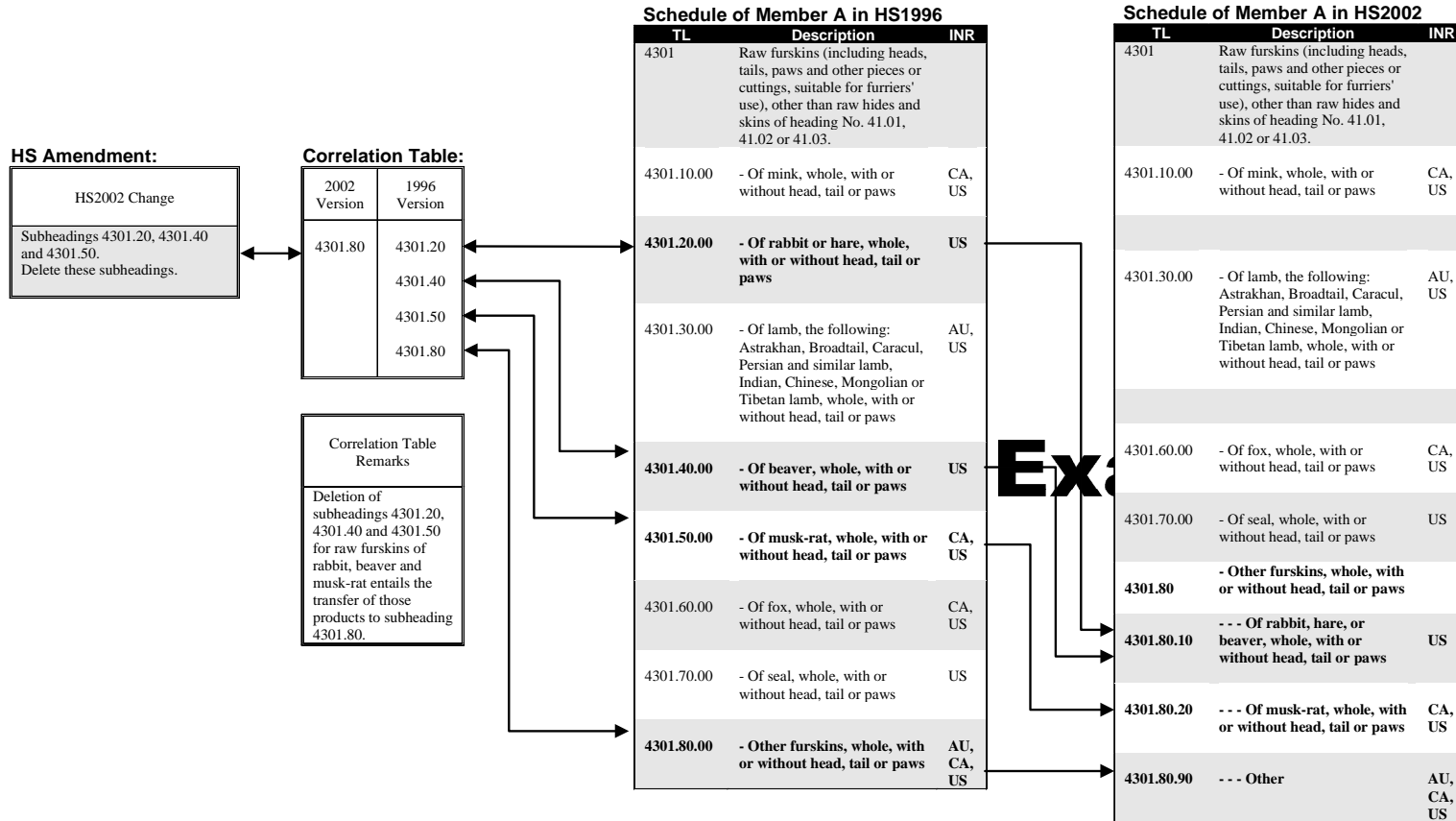
³¹ TCA/W/5, TCA/W/5/Rev.1, TCA/W/5/Rev.2, TCA/W/5/Rev.3, TCA/W/5/Rev.4.

A final point is that the participation of the WTO and its Secretariat into the WCO HS amendment process should be reinforced. Such participation would allow the WTO and its Members to anticipate possible future problems that might result from proposed HS amendments, to better reflect their views in meetings of the WCO committees, and hopefully to avoid unnecessary confusion and difficulties in the implementation of future amendments.

Annex 1

Type of Changes		Amendments	Early version of HS	New version of HS
Textual changes:	Textual changes	Heading 40.15. Heading text. Delete “ gloves ” and substitute “ gloves, mittens and mitts ”.	Articles of apparel and clothing accessories (including gloves), for all purposes, of vulcanised rubber other than hard rubber.	Articles of apparel and clothing accessories (including gloves, mittens and mitts), for all purposes, of vulcanised rubber other than hard rubber.
	Typographical	SECTION XVI. Note 2 (a). Delete “Chapters 84 or 85” and substitute “Chapter 84 or 85”.	(a) Parts which are goods included in any of the headings of Chapters 84 or 85	(a) Parts which are goods included in any of the headings of Chapter 84 or 85

		Early version of HS		New version of HS	
		<i>HS Code</i>	<i>Product description</i>	<i>HS Code</i>	<i>Product description</i>
Structure changes:	Split	0603	Cut flowers and flower buds ...	0603	Cut flowers and flower buds ...
		060310	- Fresh	06031	- Fresh
		060390	- Other	060311	-- Roses
				060312	-- Carnations
				060313	-- Orchids
				060314	-- Chrysanthemums
				060319	-- Other
				060390	- Other
Merge		0910	Ginger, saffron, turmeric ...	0910	Ginger, saffron, turmeric ...
		091010	- Ginger	091010	- Ginger
		091020	- Saffron	091020	- Saffron
		091030	- Turmeric (curcuma)	091030	- Turmeric (curcuma)
		091040	- Thyme; bay leaves	09109	- Other spices:
		091050	- Curry	091091	-- Mixtures referred to in Note 1 (b) to this Chapter
		09109	- Other spices:	091099	-- Other
		091091	-- Mixtures referred to in Note 1 (b) to this Chapter		
091099	-- Other				
Complex		0101	Live horses, asses, mules and hinnies.	0101	Live horses, asses, mules and hinnies.
		01011	- Horses :		
		010111	-- Pure-bred breeding animals	010110	- Pure-bred breeding animals
		010119	-- Other	010190	- Other
		010120	- Asses, mules and hinnies		



Example Merge - C

HS Amendment:

HS2002 Change
Heading 95.08. Delete and substitute : “ 95.08 Roundabouts, swings, shooting galleries and other fairground amusements; travelling circuses and travelling menageries; travelling theatres.
9508.10 - Travelling circuses and travelling menageries
9508.90 - Other”.

Correlation Table:

2002 Version	1996 Version
9508.10	ex9508.00
9508.90	ex9508.00

Correlation Table Remarks
Creation of a new subheading 9508.10 for travelling circuses and travelling menageries.

Schedule of Member A in HS1996

TL	Description	Bound Duty
9508	Roundabouts, swings, shooting galleries and other fairground amusements; travelling circuses, travelling menageries and travelling theatres.	
950800	Roundabouts, swings, shooting galleries and other fairground amusements; travelling circuses, travelling menageries and travelling theatres.	
95080010	- - - Roundabouts, swings, shooting galleries and other fairground amusements	10
95080090	- - - Other	20

Schedule of Member A in HS2002

TL	Description	Bound Duty
9508	Roundabouts, swings, shooting galleries and other fairground amusements; travelling circuses, travelling menageries and travelling theatres.	
9508.10.00	- Travelling circuses and all menageries	20
950890	- Other	
9508.90.10	- - - Roundabouts, swings, shooting galleries and other fairground amusements	10
9508.90.90	- - - Other	20

Example of Split

Example Of Complex Cases: Change Item 135 Subheading 2939.10 Category: Chemical Products

