

IV. Special topic

2017 version of the Harmonized System

On 1 January 2017, customs administrations around the world will shift to the 2017 version of the Harmonized Commodity Description and Coding System (HS). Amendments in HS 2017 will affect the classifications of around 15 per cent of goods traded in the world.

This new version includes 233¹ sets of amendments to the 2012 version of the HS. Approximately a third of these amendments are “typological changes”² clarifying terms used in product descriptions and chapter notes, while the rest are “structural changes”, involving modifications to the product scopes of headings or subheadings.

As with the previous HS amendments, the majority of changes in HS 2017 have been introduced to address environmental and social issues.

The largest set of changes was proposed by the Food and Agricultural Organization (FAO) of the United Nations. These involve fishery, fertilizers, agricultural machinery and forestry products. For example, the classifications of species and product forms for fish and fishery products have been further subdivided to enhance the monitoring of trade in these products for food security purposes. Crustaceans, molluscs and

other invertebrates have been split into more detailed product classifications due to the importance of trade in these products and consumption of these species. Forestry products have been classified into a wider range of wood species (tropical, temperate), with a distinction between coniferous and non coniferous species.

The second largest set of amendments relate to environmental and social concerns. The amendments have resulted in more detailed classifications for certain chemical products, such as chemical weapons, persistent organic pollutants, hazardous chemicals, pesticides and narcotics to address the need for monitoring trade in these products, as required by international conventions (see Annex A).

Apart from addressing environmental and social concerns, HS 2017 has also introduced new product classifications to reflect changes in manufacturing processes and technological advances. Subheadings have been modified to accommodate products such as light-emitting diode (LED) lamps, multi-component integrated circuits (MCOs), and hybrid, plug-in hybrid and all-electric vehicles. The evolution of industry practices has been captured through changes that include modification of the size criteria for

newsprint (heading 4801), eliminating the distinction between glazed and unglazed ceramics (heading 6907) and redrafting subheadings for certain types of machine tools (heading 8460) in the light of current technology.

To reflect the changing pattern in trade, the 2017 modifications include several new subheadings. Chapter 44 (wood), for example, has been subdivided to capture the increased volume of international trade in these products.

HS 2017 contains a total of 5,386 subheadings; the largest number since the HS was introduced in 1988 (see Table 1). Compared with the 2012 version, 263 new subheadings have been created and the product coverage of 211 subheadings has been changed. Relatively few subheadings have been deleted. About a third of the affected subheadings relate to chapter 3 (fish), 15 per cent to chapter 29 (organic chemicals) and around 8 per cent to chapter 44 (wood) and chapter 84 (machinery and mechanical appliances). The 2017 amendments will affect the classifications of around 15 per cent of goods traded in the world. This is significantly more than the 2012 modifications but below the changes due to the 2007 version.

Table 1: Overview of changes in versions of the Harmonized System

	HS 2017	HS 2012	HS 2007	HS 2002	HS 1996
Total number of subheadings	5,386	5,205	5,052	5,224	5,113
Number of subheadings created	263	329	260	338	348
Number of subheadings with changes in product scope ^a	211	130	335	173	145
Deleted subheadings	82	176	432	227	255
Percentage of world imports ³ affected by change in HS version	14.5	9.3	19.7	12.5	16.0
Number of pairs of correlation from one version to the other	667	617	1191	833	801

a: 6-digit code exists in both versions of the HS, i.e. code is reused with different product coverage (expanded or reduced).

1. Complementary amendments to the HS Nomenclature 2017 Edition were accepted at a later stage to make further corrections and amendments to headings 03.02, 03.03, subheading 6304.20 and to chapter 44. These would enter into force on 1 January 2018, although HS contracting parties are encouraged to apply those amendments already in 2017.
2. Typological changes aimed at correcting typos or clarifying text to ensure uniform application of the HS. In some cases, the typological change can apply only to the English or French version. For more details, see Yu, Dayong: “*The Harmonized System – amendments and their impact on WTO Members’ schedules*”, WTO, 2008.



Alongside the HS 2017 amendments, the Secretariat of the World Customs Organization has published correlation tables between HS 2012 and HS 2017.⁴ These tables constitute very important guidelines for implementing the amendments to the HS. The tables are not to be regarded as classification decisions nor as having

any legal status but they were examined by the HS Committee. The tables display the structural amendments through 667 pairs of correlations between HS 2017 and HS 2012 subheadings (see Table 2). Not surprisingly, a large number of these correlations concern fish and fish products. In particular, over 80

pairs of correlation cover the new subheadings 0302.99 and 0303.99, which were expanded to cover fish fins, heads, tails, maws and other edible fish offal. A total of 80 pairs of correlation have been listed to reflect the transfer of fish offal. In total, about 160 pairs of correlation related to amendments to 0302.99 and 0303.99.

Table 2: HS 2017, number of affected subheadings and pairs of correlation (sorted by number of affected subheadings and HS chapter)

Chapter	Number of		Chapter	Number of	
	Affected subheadings in HS 2017	Pairs of correlations		Affected subheadings in HS 2017	Pairs of correlations
03	154	247	54	4	4
29	71	73	55	4	4
44	51	57	08	3	3
84	35	50	40	3	8
87	25	40	48	3	5
38	19	24	13	2	2
30	18	18	31	2	2
85	14	21	57	2	2
28	12	13	63	2	2
39	7	7	14	1	1
90	6	7	20	1	1
94	6	6	37	1	2
12	5	11	68	1	1
60	5	8	73	1	1
69	5	20	76	1	1
16	4	5	92	1	1
22	4	4	96	1	16

Another significant change in HS 2017 is the creation of a subheading for "monopods, bipods, tripods and similar articles thereof", transferring these products under subheading 9620.00 to ensure uniform application of the nomenclature. This transfer is quite complex as it concerns 16 pairs of correlation and involves a large and

diverse number of chapters: chapter 39 (plastics), 44 (wood), 68 (stone, including graphite and carbon fibres), 72 (iron and steel), 76 (aluminium), 84 (machinery and mechanical appliances), 85 (electrical machinery), 90 (optical, photographic, cinematographic, measuring instruments, etc.) and 92 (musical instruments). It is also

striking that 15 of the 16 HS 2012 subheadings are typical "residual" subheadings, with product descriptions such as "other", "parts and accessories" or "not-elsewhere specified". The scope of these subheadings depends on the preceding subheadings in these chapters. Hence, it is not straightforward.

3. Percentage of world imports classified under subheadings affected by change in version of HS on the year before the HS amendments take place, except for HS 2017. E.g. for HS 1996, the share of world imports relate to HS 1992 subheadings affected by changes to HS 1996 for 1995 world imports. For HS 2017, 2015 world imports were used.
4. The WCO refers to these correlation tables as interconnection tables.

In addition, the correlations of five subheadings are not clearly defined in the HS 2012, HS 2017 correlation tables (see Table 3). Alkaloids of non-vegetal origin (2939.80) could originate, for example, from a number

of the 27 subheadings under headings 29.33 and 29.34. Also, 8542.31 in HS 2017 has the same coverage as HS 2012 plus the inclusion of MCOs which were classified under several of the 965 subheadings of chapters

84, 85, 90, 93 and 95 in HS 2012. Lack of clearly defined correlations for these changes could be an issue for users that need to construct time series on trade data or reflect tariff commitments in the new nomenclature.⁵

Table 3: Correlations which are not clearly defined

2017 Version	2012 Version	Remarks
2939.71	2939.91	Expansion of the scope of heading 29.39 to include other alkaloids obtained, for example, from animal origin.
2939.79	2939.99	
2939.80	Applicable subheadings, such as subheadings of headings 29.33 and 29.34	At the same time, subheadings 2939.91 and 2939.92 have been renumbered for the creation of a new subheading 2939.80 for «Other». The new subheading 2939.80 covers all the alkaloids of non-vegetal origin. 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.
8542.31	8542.31	Expansion of the scope of heading 85.42 to include multi-component integrated circuits (MCOs). These MCOs have been defined in new Note 9 (b) (iv) to Chapter 85. Expansion of the scope of heading 85.42 entails the possible transfer of certain products currently covered by other headings of the nomenclature (in particular, but not limited to, headings 84.22, 84.31, 84.43, 84.50, 84.66, 84.73, 84.76, 85.04, 85.17, 85.18, 85.22, 85.29, 85.30, 85.31, 85.35, 85.36, 85.37, 85.38, 85.43, 85.48, 90.25, 90.26, 90.30, 90.31, 90.32, 90.33, 93.05, 93.06 and 95.04) to subheading
8542.32	Applicable subheadings, in particular in Chapters 84, 85, 90, 93 and 95	
8542.32	8542.32	Expansion of the scope of heading 85.42 entails the possible transfer of certain products currently covered by other headings of the nomenclature (in particular, but not limited to, headings 84.22, 84.31, 84.43, 84.50, 84.66, 84.73, 84.76, 85.04, 85.17, 85.18, 85.22, 85.29, 85.30, 85.31, 85.35, 85.36, 85.37, 85.38, 85.43, 85.48, 90.25, 90.26, 90.30, 90.31, 90.32, 90.33, 93.05, 93.06 and 95.04) to subheading
8542.33	Applicable subheadings, in particular in Chapters 84, 85, 90, 93 and 95	
8542.33	8542.33	Expansion of the scope of heading 85.42 entails the possible transfer of certain products currently covered by other headings of the nomenclature (in particular, but not limited to, headings 84.22, 84.31, 84.43, 84.50, 84.66, 84.73, 84.76, 85.04, 85.17, 85.18, 85.22, 85.29, 85.30, 85.31, 85.35, 85.36, 85.37, 85.38, 85.43, 85.48, 90.25, 90.26, 90.30, 90.31, 90.32, 90.33, 93.05, 93.06 and 95.04) to subheading
8542.39	Applicable subheadings, in particular in Chapter 85	
8542.39	8542.39	Expansion of the scope of heading 85.42 entails the possible transfer of certain products currently covered by other headings of the nomenclature (in particular, but not limited to, headings 84.22, 84.31, 84.43, 84.50, 84.66, 84.73, 84.76, 85.04, 85.17, 85.18, 85.22, 85.29, 85.30, 85.31, 85.35, 85.36, 85.37, 85.38, 85.43, 85.48, 90.25, 90.26, 90.30, 90.31, 90.32, 90.33, 93.05, 93.06 and 95.04) to subheading
	Applicable subheadings, in particular in Chapters 84, 85, 90, 93 and 95	

As in previous rounds of Harmonized System amendments, the introduction of HS 2017 will trigger a challenging process for WTO members. Apart from using the new tariff nomenclature for applied tariff regimes, a similar process will take place at the WTO because WTO members have to transpose their

tariff commitments on goods to the latest nomenclature. For the technical part of this process, WTO members can count on the assistance of the WTO Secretariat. The Secretariat team has gained substantial experience in assisting WTO members in updating their tariff concessions and verifying

other members' transposed lists. A well-established automatic procedure has been set up to deal with the large number of schedules to be processed and to minimize the number of tariff lines that have to be handled manually.⁷

5. In former changes to versions of the HS, whenever consensus could not be reached, the HS Committee would still list a correlation table (e.g. 4101.20 for HS 2012 or for some HS 2007 changes due to technological progress in the high technology sector) and indicate that there was no consensus on those correlations.

6. To facilitate the forthcoming HS 2017 change, the WTO Secretariat will issue a paper to summarize the technical details, with specific suggestions on HS 2017.

7. If an HS 2017 new or reused subheading is linked to HS 2012 national tariff lines (more detailed than six digits) with different levels of commitments, product descriptions in both versions of the HS have to be compared to examine which national tariff lines should be retained and whether "break-outs" in HS 2017 have to be created to reflect different levels of commitments. This process cannot be done automatically and requires manual intervention.

Annex A

The second largest set of amendments in HS 2017 relate to chemicals, following requests from several organizations.

- The Organization for the Prohibition of Chemical Weapons requested that the 33 most traded scheduled chemicals (i.e. chemicals which can either be used as chemical weapons or used in the manufacturing of chemical weapons and which have no, or very limited, uses outside of chemical warfare) be included in HS 2017.
- The Secretariat (United Nations Environment Programme) for the Stockholm Convention on Persistent Organic Pollutants requested the identification of some persistent organic pollutants (i.e. toxic organic compounds that resist degradation and accumulate in the food chain; they can be transported over long distances in the atmosphere, resulting in widespread distribution across the earth).
- The United Nations International Narcotics Control Board (INCB) requested a better monitoring of raw ephedrine, pseudoephedrine and norephedrine since there has been an increase in pharmaceutical products containing these substances.
- The Rotterdam Convention Secretariat proposed new HS codes for several compounds that were added to Annex III.

International conventions	HS 2017 subheadings added
Organization for the Prohibition of Chemical Weapons	2811.12, 2812.11, 2812.12, 2812.13, 2812.14, 2812.15, 2812.16, 2812.17, 2853.10, 2904.91, 2918.17, 2920.21, 2920.22, 2920.23, 2920.24, 2920.29, 2921.12, 2921.13, 2921.14, 2922.15, 2922.16, 2922.17, 2922.18, 2930.60, 2930.70, 2931.31, 2931.32, 2931.33, 2931.34, 2931.35, 2931.36, 2931.37, 2931.38, 2931.39, 3824.91
Stockholm Convention on Persistent Organic Pollutants (POPs)	2903.83, 2903.93, 2903.94, 2904.31, 2904.32, 2904.33, 2904.34, 2904.35, 2904.36, 2910.50, 2914.71, 2920.30, 3824.84, 3824.85, 3824.86, 3824.87, 3824.88
UN International Narcotics Control Board	1211.50, 1302.14, 1302.19, 3003.41, 3003.42, 3003.43, 3004.41, 3004.42, 3004.43
Rotterdam Convention	2904.31, 2904.32, 2904.33, 2904.34, 2904.35, 2904.36, 2920.30, 2923.30, 2923.40, 2924.25, 2930.80, 2933.92, 2935.10, 2935.20, 2935.30, 2935.40, 2935.50, 3808.52, 3824.84, 3824.85, 3824.86, 3824.87, 3824.88