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### The Harmonized Commodity Description and Coding System

(Prepared by the National Law Center for Inter-American Free Trade and the UNIDROIT Secretariat)

Summary Analysis of the Harmonized Commodity Description and Coding

System (HS System)

Action to be taken Discussion.

Related documents UNIDROIT 2015 - Study 72K - SG2 - Doc. 3

#### Introduction

1. The Harmonized Commodity Description and Coding System (HS System) is utilized by more than 200 countries for the main purposes of establishing customs tariffs and compiling trade statistics. The HS System covers about 98% of all international trade. Countries also use it to monitor controlled goods and quota controls, calculate and collect internal excise and sales taxes, compile transport statistics, etc. The earliest uniform and international statistical nomenclature, a predecessor to the HS System, was adopted at the Brussels Second International Conference on Commercial Statistics, in 1913.

#### **Users and Regulation**

- 2. There are three categories of users of the HS System:
  - Governments
  - International Organizations
  - The Private Sector
- 3. Governments use the HS System for the purposes stated above. Among international organizations, the World Trade Organization (WTO) uses the HS System for trade negotiations and communication with its member countries. The HS System covers 98% of all

<sup>&</sup>lt;sup>1</sup> Most information included in this Report is based on the 2013 WCO Handbook on the HS System.

international trade. From the private sector, the primary users of the HS System are shipping conferences (Far East, ANZEC, GULF and ISC) that apply the HS classification to calculate freight tariffs and prepare freight manifests. The World Customs Organization (WCO) also suggests to exporters that they describe the merchandise in their invoices by a reference to an HS code.

4. The HS System is governed by an international treaty, the Harmonized System Convention, which entered into force on January 1, 1988. Currently, the Convention has 150 contracting countries, including the European Union and it is the WCO's most successful convention. The project to draft the Convention was undertaken based on a policy decision of the United Nations Statistical Commission to harmonize economic classifications by using HS subheadings. The HS System itself constitutes an Annex to the Convention, as set forth in its Article 2. According to the Convention, contracting countries have an obligation to make their import and export trade statistics publicly available down to the 6-digit sub-headings.

#### Organisation of the HS System (Classification of Assets)

- 5. The HS System is divided into 21 Sections which contain a total of 97 Chapters. The Chapters are further sub-divided into 1,224 headings identified by 4-digit codes. Most headings are further subdivided into 5 and 6-digit subheadings. The 2012 version, currently in effect, is divided into 5,205 groups identifiable by a 6-digit code. The previous 2007 version contained 5,051 groups.
- 6. The four digits that identify a heading have a particular significance the first two digits identify the Chapter in which the heading appears and the latter two indicate the position of the heading within the Chapter. If a heading has not been subdivided, it is identified as follows: 0707.00 with the fifth and sixth digits indicating that there is no subheading. For headings that are further subdivided, the sequence of digits may read as follows: (heading) 20.08 Fruits and nuts; (sub-heading) 2008.30 Citrus fruit. The Preliminary List of HS Codes for Inclusion under the MAC Protocol (List) includes only 6-digit subheadings in which the last two digits are not separated by a full stop.
- 7. According to Article 3 of the Convention, countries are allowed to create subdivisions based on their needs. As a result, it may be the case that a country's 6-digit HS codes may have been further subdivided. In the European Union, the Combined Nomenclature of the EU integrated the HS System but also included additional 8-digit subheadings to address its own needs. In the United States' implementation of the HS System, 8424.81 (Other Appliances: Agricultural and Horticultural) is subdivided into 8424.81.10 (Sprayers) and 8424.81.90 (Others). The subdivision 8424.81.90 is further subdivided into 8424.81.90.10 (Self-propelled, center pivot), 8424.81.90.20 (Other), 8424.81.90.40 (Sprayers, self-contained having a capacity not over 20 liters) and 8424.81.90.90 (Other). Since the 8424.81 code has been included in the List, it is assumed that any items identified by countries in their 8 or 10-digit subheadings would be automatically included within the scope of the MAC Protocol. Since the codes for 8 and 10-digit subheadings may vary, country-by-country, the 6-digit classification which is prescribed by the Convention itself should remain the basis for the MAC Protocol.
- 8. Chapter 77 is reserved for possible future use. Chapters 98 and 99 are not part of the HS at all, but they may be used by member countries. Only a handful of countries utilize Chapters 98 and 99 for special purposes, including Canada, the EU, India and the United States.
- 9. Chapters are organized according to the degree of manufacture, starting with raw products, then unprocessed products and semi-finished goods, and ultimately finished products. For instance, live animals belong under Chapter 1, animal skins under Chapter 41, and leather footwear under Chapter 64.

#### Structure of the HS System

- 10. The HS system is composed of:
  - (i) General Rules for the Interpretation of the System
  - (ii) Section and Chapter Notes, including Subheading Notes

#### (iii) A list of headings

- 11. The General Rules contain 6 guidelines that apply hierarchically i.e., Rule 1 takes precedence over Rule 2. For instance, Rule 3 provides classification guidelines applying to goods that seemingly fall under more than one heading. According to Rule 3(a), goods should be classified in the heading giving them the most specific description. Rule 4 applies to goods that have not been previously classified because, for instance, they are new on the world market. This Rule dictates that such goods be classified under the heading appropriate to the goods to which they are most akin. From the perspective of the MAC Protocol, if a new item of equipment enters the market and has not been previously classified under an HS code, applying this interpretation rule, it may fall under the scope of the MAC Protocol if it is classified under a code that already falls under the scope of the MAC Protocol. Accordingly, the scope of the MAC Protocol may be expanded through this mechanism even before a new edition of the HS System enters into force.
- 12. The main function of the Notes is to delineate the scope and limits of each heading and subheading. Contracting states may include additional (national) notes for their domestic use. The EU has done so and included a number of legal notes in its HS nomenclature.

#### Amendment Process and the Harmonized System Committee

- 13. The current 5<sup>th</sup> edition of the HS System became effective January 1, 2012. It replaced the 2007 version, incorporating 234 amendments which reflected primarily social and environmental issues. The majority of amendments were included based on the recommendations of the Food and Agriculture Organization of the United Nations (FAO). For instance, FAO suggested revisions with respect to the codes relating to fish and fishery products in order to enhance their monitoring for food security purposes. Some amendments also resulted from changes in international trade patterns (e.g., the separate headings 69.07 for unglazed ceramic products and 69.08 for glazed ceramic products in the 2007 version were merged into a single heading in the 2012 version).
- 14. In order to facilitate the implementation of the HS amendments and to ensure common interpretations, the WCO Secretariat publishes correlation tables for each HS amendment that are to be used as a guide to facilitate the implementation of new editions of the HS System<sup>2</sup> In some circumstances, rather than amending the Convention and, thus the entire HS System, merely the Explanatory Notes are modified.
- 15. The WCO Council, at its 123<sup>rd</sup>/124<sup>th</sup> Sessions in June 2014, adopted a Recommendation that includes a list of proposed amendments to the 2012 HS nomenclature. This Recommendation was issued under Article 16 of the Convention that regulates the amendment process. At its March 11-20, 2015 meeting, the Harmonized System Committee (HS Committee) considered the scope for the 6<sup>th</sup> edition and adopted a draft Article 16 Recommendation relating to the 2017 edition.
- 16. The HS Committee is responsible for amending and updating the HS System. Established pursuant to Article 6 of the Convention, the Committee includes a representative from every member country. The Committee is vested with the power to continuously update the HS System reflecting the changes in and emergence of new technologies as well as new patterns of international trade. The HS Committee has established the HS Review Sub-Committee to systematically and regularly review the HS System.
- 17. Amendments to the Convention, including the HS System, may be adopted pursuant to Article 16 of the Convention upon recommendation of the WCO Council. First, the Council will make the amendment available for public comment. Second, member countries will be given a period of six months within which they may file objections. If, at the end of the six-month period, no objections have been filed, the amendment will deem to be adopted. After an

<sup>&</sup>lt;sup>2</sup> See <a href="http://www.wcoomd.org/en/topics/nomenclature/instrument-and-tools/hs">http://www.wcoomd.org/en/topics/nomenclature/instrument-and-tools/hs</a> nomenclature 2012/correlations-tables.aspx.

amendment has become effective, no country may accede to the Convention without adhering to the amendment. However, because of the changes that countries will need to implement to reflect the amendment, amendments enter into full force about two years after their adoption. Accordingly, the entire procedure to amend the HS System takes at least two and a half years from the moment the Council adopts an amendment Recommendation.

18. In general, the nature of the amendments reflected in the previous editions was two-fold: i) clarifications and ii) structural reorganization. For instance, different codes for similar goods that are not traded heavily on a cross-border basis have been merged or when an asset gains importance, the relevant code has been split. The product categories related to each amendment vary. The HS 1996 amendments included some major structural changes to food, tropical woods, steel and electronic products; the HS 2002 amendments were mainly related to wood, paper, waste of chemicals and pharmaceuticals, and metals; and the HS 2007 amendments focused on information technology and communication products. In addition to the clarifying and structural changes, amendments typically include a number of less significant changes, such as the deleting of subheadings that cover products with low trade volumes and the correcting of errors in previous HS editions. Of all subheadings, 72 percent have never been changed by any amendment.

#### Value of Exports

- 19. Information on the values of individual types of MAC equipment considered for inclusion under the MAC Protocol is not publicly available. Such prices, including the lows, medians and highs, may be obtained only by contacting manufacturers and dealers. However, a few databases exist that compile the aggregate values for particular HS codes.
- One such database has been built by the World Bank. It is known as the Exporter Dynamics Database and it uses datasets based on six main variables including: i) year of exports; ii) HS 6-digit code; and iii) value of exports in \$USD.<sup>3</sup> The data contained in the database was provided by customs agencies from 38 developing and 7 developed countries. An update of the Database should be issued in 2015.
- 21. Other publicly available sources of information also do not include the individual values of equipment. The trade data in the 2013 International Trade Statistics Yearbook, published by the UNSD's Department of Economic and Social Affairs, includes the aggregate export/import values for many kinds of equipment from the Private Sector Recommendations but is calculated on a global basis. For instance:
  - For **SITC Code 713** Internal combustion piston engines and parts thereof, that corresponds to the **8407 HS Code**, the 4 four subheadings of which were included in the Private Sector Recommendations, the total value of global exports was US\$ 163.
  - For SITC Code 721 Agricultural machinery excluding tractors, that corresponds to the 8432 and 8433 HS Codes, the 17 subheadings of which were included in the Private Sector Recommendations, the total value of global exports was US\$ 39.5 billion.
  - For **SITC Code 722** *Tractors* that corresponds to **8701.90 HS Code**, the total value of global exports was US\$ 23.3 billion.

#### The HS System as the basis to determine the scope of the MAC Protocol

22. The List includes items of equipment from Chapters 82, 84, 85 and 87 of the HS System. The WCO Handbook notes that Section XVI, that includes Chapters 84 and 85 covering machinery, mechanical appliances and electrical equipment, is one of the most important in terms of the number of headings and subheadings.

<sup>&</sup>lt;sup>3</sup> See further Cebeci, T., Fernandes, A., Freund, C. and M. Pierola, "Exporter Dynamics Database" <u>World Bank Policy Research Working Paper 6229</u> (2012).

- 23. The Study Group considered the HS System as the basis to establish the scope of the MAC Protocol identifying the relevant codes from an edition of the HS System. As a baseline to determine the scope of the MAC Protocol, the 2017 edition may be chosen. The List was prepared according to the nomenclature of the currently effective 2012 edition and will need to be verified, and if necessary adjusted, to correspond to the 2017 edition.
- 24. Since the HS System is periodically revised, a question arises as to whether and how the scope of the MAC Protocol should be initially established and then periodically adjusted, if necessary.
- One approach would be for the MAC Protocol to include a list of HS codes that could not be altered. The advantage of this approach would be the initial certainty it provides to the users and elimination of the risks and costs associated with adjusting the scope. However, the disadvantages of this approach seem to outweigh the advantages. Such a rigid approach would essentially foreclose the possibility of new types of equipment being added to the MAC Protocol. Furthermore, with new editions of the HS System, the codes identified in the MAC Protocol may no longer correspond to the codes actually utilized in export/import transactions and the MAC Protocol would then refer to obsolete items of equipment that are no longer being manufactured, etc. Accordingly, the MAC Protocol may have to include a mechanism for the periodical revisiting of its scope in light of potential changes in the patterns of international trade, emergence of new technologies and items of equipment, amendments to the HS System, etc.
- 26. At least two approaches for the adjustments of the scope of the MAC Protocol may be considered: i) automatic adjustments based on future amendments to the HS System itself, or ii) adjustments made independently from the periodic amendments to the HS System. The first approach may entail a mechanism included in the MAC Protocol itself for its automatic updates based on amendments to the HS System. Accordingly, the MAC Protocol may initially identify a list of HS codes from a particular edition and then automatically incorporate any changes to those codes from future editions of the HS System.
- 27. If this approach to adjust the scope of the MAC Protocol is not adopted, there will be a need to appoint an Authority to: i) determine whether the new edition of the HS System has affected the scope of the MAC Protocol, and ii) to actually implement the changes reflected in the new edition. The logical solution in regards to appointing an Authority would be to have the Supervisory Authority established under Article 17 of the Cape Town Convention (responsible for the establishment of the International Registry, appointing Registrars, making Regulations etc) perform this role. However, this will ultimately depend on whom is appointed to be the Supervisory Authority of the MAC Protocol. Since the scope of any international instrument is one of its most important aspects, ceding the authority to determine the scope of the MAC Protocol to an international organization (i.e., the WCO that has no interest in facilitating access to credit secured with MAC equipment) may not be practical or politically infeasible. It is also possible that Contracting States may want the Authority to be a diplomatic body of Contracting States. As such, the formation and constitution of the 'Authority' will require further consideration.
- 28. Once such body is established, the functions of the Authority may go beyond simply determining whether the new edition affects the scope of the MAC Protocol and implementing those changes. Instead, this body could be tasked with a function to assess the changes in the HS System from the perspective of the users of the MAC Protocol and determine whether, and to what extent, the changes should be implemented.
- 29. This Authority established under the MAC Protocol may review the scope periodically when the HS System itself is revised or do so independently of the WCO process (e.g., every three years). The advantage of this approach is that the interested parties themselves, appointed to the Authority, will retain control over the scope of the MAC Protocol. This approach may reduce the need to adjust the Annex to the MAC Protocol every time the HS System is amended, if, for instance, the new edition of the HS System has not affected the list of MAC codes.
- 30. If the Authority is given expansive functions which go beyond simply determining whether the new HS System affects the list of HS codes, it might have the power to reject

changing the scope of the MAC Protocol even if some of the HS codes have changed. Accordingly, this Authority rather than the WCO would dictate and determine which assets should fall under the scope of the MAC Protocol. These powers may be useful given the nature of the HS System amendment processes whereby the WCO does not, and is not expected to, take into account the interests of those involved in the financing of MAC equipment. For instance, the WCO may hypothetically delete a particular HS code or merge it with some other code which would take an asset previously covered by the MAC Protocol outside its scope. The Authority may disagree with this approach if it determines, from the standpoint of the MAC equipment financiers and users, the code should not have been deleted or merged. The disadvantages of this approach may be the relative detachment of the scope of the MAC Protocol from an objectively determinable, reliable and widely-accepted nomenclature and the potential confusion as to the difference between the codes that form the scope of the MAC Protocol and those presently used for other purposes, as well as the potential risk in questioning the decisions of the Authority.

- 31. This Authority may also be given the power to identify certain codes for elimination from or addition to the MAC Protocol independently of the HS System amendments. For instance, in the first five years of operation of the International Registry, no notices relating to transactions covering a particular HS code have been recorded which may indicate that those items of equipment have become obsolete, are not traded internationally or are acquired without any form of financing. Based on input from the industry, the Authority could then decide that another code should be added to the List because the items of equipment covered by the relevant HS code, at that time, satisfy the relevant requirements for inclusion under the MAC Protocol.
- 32. Any measures allowing for the elimination of codes covering certain types of equipment must be treated with extreme caution, as users of the system must be able to have confidence that their international secured interest under the Protocol will not be jeapordized by future alterations made by the Authority. Further, any decision to eliminate an existing code from the system should only have prospective effect in preventing new registrations in that type of equipment (i.e. prior security interests created under the Protocol in the type of equipment covered by the eliminated code would continue to have effect).
- 33. Overall, there does not appear to be a viable alternative to establishing the scope of the MAC Protocol according to a List of HS codes covering different types of MAC equipment. However, since these HS codes may change in the future, the MAC Protocol should also contemplate a procedure for periodical review of and changes to the scope. Affixing the scope to the future editions of the HS System that would be automatically incorporated into the MAC Protocol presents a number of risks, the chief of which is the ability of an international organization to essentially dictate the scope of the MAC Protocol.
- 34. A preferable approach may be to appoint an Authority to assess the need to revise the scope of the MAC Protocol, either concurrently with or independently from the taking effect of a new HS System.

#### Effect of HS Amendments on the MAC Protocol

- 35. The Study Group considered designing the scope articles of the MAC Protocol to refer to an Annex which would contain a list of HS codes covering individual types of MAC equipment. In connection with this consideration, several questions, particularly of drafting nature, would need to be addressed.
- 36. First, should the list of HS codes refer to a particular edition of the HS System? Referring to a specific edition (e.g., the 6<sup>th</sup> edition) may have the disadvantage that every time the HS System is amended, the Annex would need to amended as well. Including just the list of HS codes may not require an amendment to the Annex because the HS nomenclature for the MAC equipment may not be modified. Annex I to this document summarizes the effect of the last three HS System amendments on the List of HS codes preliminary selected by the industry to predict how significant the future changes to the Annex could be.

- An amendment deletes a code that covers some MAC equipment: codes are deleted only when the assets covered thereunder have become obsolete and no longer trade internationally. The question is whether the Annex should be revised to delete the relevant code(s). The advantage of deleting the code(s) from the Annex, the deletion being effective only prospectively, is clarity for the users who will be able to readily identify that the MAC Protocol no longer covers certain codes. The disadvantage of this approach is that in the case that a new edition of the HS System affects the MAC Protocol only by deleting a single code, depending upon how cumbersome the procedure to amend the Annex is, it might not be practicable to revise the entire Annex to delete a single code which has anyway become obsolete.
- An amendment adds a new code that covers some new MAC equipment. The first question is whether the new code does in fact cover some MAC equipment and whether that equipment satisfies the requirements of the Cape Town Convention. In other words, an Authority will need to determine whether the scope of the MAC Protocol should be expanded. Such determination could be done by the Authority against a set of pre-established minimum criteria, the satisfaction of which would justify the addition of the new code to the Annex of the MAC Protocol. Setting forth such criteria rather than leaving the decision entirely up to the Authority would minimize the arbitrariness and subjectivity elements from the decision-making process.
- An amendment merges two pre-existing codes. Such amendments potentially affect the scope of the MAC Protocol in at least two ways. First, a code that was included in an Annex to the MAC Protocol is merged with a non-MAC Protocol code (this is very unlikely to happen). If the MAC Protocol adopts the first approach for its adjustments, which is to automatically reflect the changes from a new edition of the HS System, complications could arise with respect to the implementation of these new "merged codes." The second approach, under which adjustments to the scope of the MAC Protocol are made by an Authority, has the advantage of the Authority deciding that the previous code should be retained rather than replaced with this new merged code. The second kind of merger that could affect the scope of the MAC Protocol may happen when two MAC Protocol codes are merged. The implementation of this change would raise the same questions as with the previous type of merger.
- An amendment that splits an existing code. Again, at least, two possible situations affecting the scope of the MAC Protocol could arise. First, an existing MAC Protocol code could be split into two separate codes, both covering MAC equipment. This kind of amendment does not seem to present any complications with implementation, and the two new codes could replace the existing single code. Second, an existing code is split into two codes, only one of which covers MAC equipment. This is very unlikely to happen as long as the codes selected initially to establish the scope of MAC equipment do not inadvertently include non-MAC equipment. Second, how should changes be implemented if a new edition of the HS System does effect the MAC equipment previously included within the scope of the MAC Protocol? To answer this question, the nature of amendments needs to be addressed first.
- 37. A related issue is presentation of deletions and merged codes. The Study Group may want to consider how the deleted, new and merged codes will be presented in the Annex itself. At least, two approaches are possible: i) every time the HS System is revised the Annex would be opened and all the relevant codes from the new edition restated; or ii) only the changes from the new edition that affect the MAC Protocol would be included. Both approaches have their advantages and disadvantages. The disadvantage of the second approach is the need for an Authority to identify the changes in the new edition which may entail some cost and present a risk

that certain changes may not be restated accurately. The disadvantage of the first approach is that the user would need to determine on its own what has been changed. However, since the user will most likely be the creditor, who considers extending secured credit to the borrower, they might not be concerned with the previous status of HS codes and their modifications. The only interest of such a creditor may be in the present status of the HS System to determine whether an asset it is considering financing falls under the scope of the MAC Protocol.

#### **Alternative Classification Systems**

- 1. There are a number of goods classification systems that are utilized globally by international organizations for a variety of purposes. The following paragraphs briefly describe the most internationally significant classification systems that could potentially be considered alternatives to the HS System for the purpose establishing the scope of the MAC Protocol.
- 2. The United Nations Statistics Division (UNSD) uses the following commodity classification systems: SITC, ISIC and  ${\rm CPC.}^4$  All three of these systems have been fully correlated to the 6-digit level of the HS System. Accordingly, one can easily convert an SITC code to the relevant HS code. UNSD has also made the conversion and correlation tables available at its website.  $^5$
- 3. SITC stands for the Standard International Trade Classification. Currently, the 4<sup>th</sup> revision of SITC is in effect, adopted in 2006. SITC is divided into 10 sections which are further sub-divided into 67 two-digit divisions. The main difference between the SITC and the HS System is that the SITC is focused more on the economic functions of products at various stages of development, whereas the HS System deals with a precise breakdown of the products individual categories.
- 4. CPC stands for the Central Product Classification. Currently, the 2<sup>nd</sup> revision of CPC is in effect, adopted in 2008. CPC presents categories for all products that can be the object of domestic or international transactions. It includes products that are an output of economic activity, including transportable goods, non-transportable goods and services. CPC was developed to serve as an instrument for assembling and tabulating all kinds of statistics requiring product details. Such statistics may cover production, intermediate and final consumption, capital formation, foreign trade and prices. They may refer to commodity flows, stocks or balances and may be compiled in the context of input/output tables, balances of payments, and other analytical presentations. The scope of CPC exceeds that of the HS and SITC systems in that it is intended to cover the production, trade and consumption of all goods and services.
- 5. SITC as well as CPC use the HS headings and sub-headings to structure their own categorizations. The main difference among the HS, SITC and CPC systems is the purpose for which they were created.
- 6. ISIC stands for the International Standard Industrial Classification of All Economic Activities. Many countries have utilized the ISIC to develop their own national classification systems. Currently the 4<sup>th</sup> revision adopted in 2006 is in effect. ISIC is used primarily to collect statistics that are subsequently utilized to analyze the country's economic activity. Unlike the HS, SITC and CPC, ISIC is not a product classification system.
- 7. The European Union uses the Combined Nomenclature (CN), according to which imported and exported goods must be classified. The CN has incorporated the HS System in full but the EU has included further 8-digit subheadings. The CN is governed by *Council Regulation No.* 2658/87 of 23 July 1987 on the Tariff and Statistical Nomenclature and on the Common Customs

<sup>5</sup> See <a href="http://unstats.un.org/unsd/trade/conversions/HS%20Correlation%20and%20Conversion%20tables.htm">http://unstats.un.org/unsd/trade/conversions/HS%20Correlation%20and%20Conversion%20tables.htm</a>.

http://ec.europa.eu/taxation customs/customs/customs duties/tariff aspects/combined nomenclature/index en.htm.

<sup>&</sup>lt;sup>4</sup> The COMTRADE database of the UNSD also uses the HS System.

See http://ec.europa.eu/tavation\_customs/customs/customs\_duties/tariff\_aspects/combined\_nomenclature/index

Tariff, which in its Annex, reproduces the CN.<sup>7</sup> The EU Commission updates the Annex every year and publishes it in the form of a Regulation.

- 8. The International Union of Railways has developed its own commodity code (NHM), which is based on the 4-digit level of the HS System. It includes a deviation from the HS System with respect to heading 27.10 that relates to petroleum products. NHM facilitates compilation, comparison and analysis of data exchanged between customers, railway undertakings and administrative bodies.
- 9. Overall, alternative classifications systems to the HS nomenclature do exist but all of them are either entirely based on the HS System or correlated to it. The largest international organizations, including the UN and the WTO, as well as the EU, all utilize the HS System as the basis for their respective nomenclatures. There does not appear to be a viable alternative to the HS System that should be considered as the benchmark when establishing the scope of the MAC Protocol.

<sup>&</sup>lt;sup>7</sup> The Regulation is available at <a href="http://eur-lex.europa.eu/legal-content/en/ALL/?uri=CELEX:31987R2658">http://eur-lex.europa.eu/legal-content/en/ALL/?uri=CELEX:31987R2658</a>.

# ANNEX I – SUMMARY OF CHANGES TO HS SYSTEM IN RELATION TO MAC PROTOCOL RELATED-CODES AS ASSOCIATED

	Six-Digit HS Codes Selected by Private Sector	Changes 2002 - 2007	Change s 2007 - 2012	Changes 2012 - 2017
1	<b>820713</b> RCK DRLNG EARTH BORNG TLS WRKNG PT CERMETS, & PTS	NC = NO CHANGE	NC	NC
2	<b>820719-</b> -INTERCHANGEABLE TOOLS FOR HAND OR MACHINES; & PARTS	NC	NC	NC
3	<b>840731</b> SPRK-IGN PISTON ENG F VEH EX RAILWY NOT OVR 50 CC	NC	NC	NC
4	<b>840732</b> SPARK-IGNTN RECPRCTNG PISTN ENGINE ETC NOV 250CC	NC	NC	NC
5	<b>840733</b> SPARK-IGNTN RECRCTNG PISTN ENG ETC >250 NOV1000CC	NC	NC	NC
6	<b>840790</b> SPARK-IGNTN RCPRCTNG/ROTARY INT COMBSTN ENG, NESOI	NC	NC	NC
7	<b>840810</b> MARINE COMPRESS-IGNIN COMBUSTION PISTON ENGINE ETC	NC	NC	NC
8	<b>840820</b> COMPRESSION-IGNTN INT COMBUSTION PISTON ENGINE ETC	NC	NC	NC
9	<b>840890-</b> -COMPRESSION-IGNTN INT COMBUSTION PISTON ENG, NESOI	NC	NC	NC
10	<b>840991</b> SPARK-IGNITION INT COMBUSTION PISTON ENG PTS NESOI	NC	NC	NC
11	<b>840999</b> SPARK-IGNITION RECIPROCATING INT COM PISTN ENG PTS	NC	NC	NC
12	<b>841221</b> HYDRAULIC POWER ENGINES AND MOTORS, LINEAR ACTING	NC	NC	NC
13	<b>841229</b> HYDRAULIC POWER ENGINES & MOTORS EX LINEAR ACTING	NC	NC	NC
14	<b>841231</b> PNEUMATIC POWER ENGINES AND MOTORS, LINEAR ACTING	NC	NC	NC
15	<b>841239</b> PNEUMATIC POWER ENGINES & MOTORS EX LINEAR ACTING	NC	NC	NC
16	841280ENGINES AND MOTORS, NESOI	NC	NC	NC
17	<b>841290</b> ENGINE AND MOTOR PARTS, NESOI	NC	NC	NC
18	<b>841330</b> FUEL, LUB/COOLING MED PUMPS FOR INT COMB PISTN ENG	NC	NC	NC
19	841340CONCRETE PUMPS	NC	NC	NC
20	<b>841350</b> RECIPROCATING POSITIVE DISPLACEMENT PUMPS, NESOI	NC	NC	NC
21	<b>841360</b> ROTARY POSITIVE DISPLACEMENT PUMPS, NESOI	NC	NC	NC
22	<b>841391</b> PARTS OF PUMPS FOR LIQUIDS	NC	NC	NC
23	<b>841459</b> FANS, NESOI	NC	NC	NC
24	<b>842481</b> AGRICULTURAL OR HORTICULTURAL MECH SPRAYERS ETC	NC	NC	NC
25	842620TOWER CRANES	NC	NC	NC
26	<b>842641</b> DERRICKS ETC SELF-PROPELLED ON TIRES, NESOI	NC	NC	NC
27	<b>842649</b> DERRICKS ETC SELF-PROPELLED NOT ON TIRES, NESOI	NC	NC	NC
28	842699LIFTING OR HANDLING	NC	NC	NC

	MACHINERY, NESOI			
20	•	NC	NC	NC
29	<b>842890</b> LIFTING, HANDLING, LOADING & UNLOADING MACHY NESOI	NC	NC	NC
30	<b>842911</b> BULLDOZERS AND ANGELDOZERS, SELF-PROP, TRACK LAY	NC	NC	NC
31	<b>842919</b> BULLDOZERS AND ANGLEDOZERS, SELF-PROP NESOI	NC	NC	NC
32	<b>842920</b> GRADERS AND LEVELERS, SELF-PROPELLED	NC	NC	NC
33	<b>842930</b> SCRAPERS, SELF-PROPELLED	NC	NC	NC
34	<b>842940</b> TAMPING MACHINES AND ROAD ROLLERS, SELF-PROPELLED	NC	NC	NC
35	<b>842951</b> MECH FRONT-END SHOVEL LOADERS, SELF-PROPELLED	NC	NC	NC
36	<b>842952</b> MECH SHOVELS EXCAVATORS ETC W 360 DEGREE SPRSTRUC	NC	NC	NC
37	<b>842959</b> MECH SHOVELS, EXCAVATORS AND SHOVEL LOADERS NESOI	NC	NC	NC
38	<b>843010</b> PILE-DRIVERS AND PILE-EXTRACTORS	NC	NC	NC
39	843020SNOWPLOWS AND SNOWBLOWERS	NC	NC	NC
40	<b>843031</b> COAL OR ROCK CUTTERS & TUNNEL MACH, SELF-PROPELLED	NC	NC	NC
41	843039COAL OR ROCK CUTTERS & TUNNEL MACH, NESOI	NC	NC	NC
42	<b>843041</b> BORING OR SINKING MACHINERY, NESOI, SELF-PROPELLED	NC	NC	NC
43	<b>843049</b> BORING OR SINKING MACH NESOI, NOT SELF-PROPELLED	NC	NC	NC
44	<b>843050</b> MOVING, GRADING ETC MACHINES ETC NESOI, SELF-PROP	NC	NC	NC
45	<b>843061</b> TAMPING OR COMPACTING MACHINERY, NOT SELF-PROPELLED	NC	NC	NC
46	<b>843069</b> MOVING, GRADING ETC MACHINES ETC NESOI, NO SELF-PR	NC	NC	NC
47	<b>843110</b> PTS FOR PULLEY TACKLE, HOIST EX SKIP, WINCHES, ETC	NC	NC	NC
48	843139PTS FOR LIFTING, HNDLNG, LOADING/UNLDNG MACH NESOI	Affected by a structural amendment (i.e. does not modify the content of subheading nor does it modify the structure of the subheading); new headings were added to HS 2007 and subheading 843139 (HS 2002) ("other") was "divided" and included as part of new subheading 848690 of HS 2007.	NC	NC
49	<b>843141</b> BUCKETS, SHOVELS, GRABS & GRIPS FOR DERRICKS ETC	NC	NC	NC
50	<b>843142</b> BULLDOZER OR ANGLEDOZER BLADES	NC	NC	NC

51	<b>843143</b> PARTS FOR BORING OR SINKING MACHINERY, NESOI	NC	NC	NC
52	<b>843149</b> PARTS AND ATTACHMENTS NESOI FOR DERRICKS ETC.	NC	NC	NC
53	843210PLOWS FOR SOIL PREPARATION OR CULTIVATION	NC	NC	NC
54	843221DISC HARROWS	NC	NC	NC
55	<b>843229</b> HARROWS EX DISC, SCARIFIERS CULTIVATORS HOES ETC	NC	NC	NC
56	<b>843230</b> SEEDERS, PLANTERS AND TRANSPLANTERS	NC	NC	NC
57	843240MANURE SPREADERS AND FERTILIZER DISTRIBUTORS	NC	NC	Affected by a structural amendment - Subheading 843240 ("Manure spreaders and fertilizer distributors") was replaced by two new subheadings: 843241 ("Manure spreaders") and 843242 ("Fertiliser distributors").
58	<b>843280</b> AGRIL,HORT,FORSTY MACH FOR SOIL PREP OR CULTIVATE	NC	NC	NC
59	<b>843290</b> AGRIC HORT/FOREST MACHY & LAWN/GROUND ROLLER PARTS	NC	NC	NC
60	<b>843311</b> MOWERS FOR LAWNS, PARKS ETC CUT DEVICE HORIZ PLANE	NC	NC	NC
61	<b>843319</b> MOWERS FOR LAWNS EXC PWRD W HORZNTL ROTATING CUTTR	NC	NC	NC
62	<b>843320</b> MOWERS, NESOI, INC CUTTER BAR FOR TRACTOR MOUNTING	NC	NC	NC
63	<b>843330</b> HAYING MACHINES OTHER THAN MOWERS	NC	NC	NC
64	<b>843340</b> STRAW OR FODDER BALERS, INCLUDING PICK-UP BALERS	NC	NC	NC
65	<b>843351</b> COMBINE HARVESTER-THRESHERS	NC	NC	NC
66	<b>843352</b> THRESHING MACH, EXC COMBINE HARVESTER-THRESHERS	NC	NC	NC
67	843353ROOT OR TUBER HARVESTING MACHINES	NC	NC	NC
68	<b>843359</b> HARVESTING MACHINERY, NESOI	NC	NC	NC
69	<b>843390</b> PARTS FOR HARVESTER, GRASS MOWERS, SORTING EGG ETC	NC	NC	NC
70	843610MACHINERY FOR PREPARING ANIMAL FEEDS	NC	NC	NC
71	<b>843680</b> AGRIC, HORT, FOREST, BEE- KEEPING MACHINERY NESOI	NC	NC	NC
72	<b>843699</b> PTS FOR AGRIC, HORT, FOREST, BEE-KEEP MACH NESOI	NC	NC	NC
73	846711PNEUMATIC ROTARY TYPE TOOLS FOR WORK IN THE HAND P	NC	NC	NC

74	<b>846719</b> PNEUMATIC EX ROTARY TYPE TOOLS FOR WORK IN HAND	NC	NC	NC
75	<b>847420</b> CRUSHING/GRINDING MACH FOR EARTH STONE MNERL SUBS	NC	NC	NC
76	<b>847490</b> PARTS OF MACH FOR SORTING ETC EARTH STONE ORES ETC	NC	NC	NC
77	<b>847910</b> MACHINERY FOR PUBLIC WORKS, BUILDING OR THE LIKE	NC	NC	NC
78	847989MACH & MECHANICAL APPL W INDIVIDUAL FUNCTION NESOI	Affected by a structural amendment - Subheading 847989 ("other") was divided.	NC	NC
79	<b>847990</b> PTS OF MACH/MECHNCL APPL W INDVDUL FUNCTION NESOI	Affected by a structural amendment - Subheading 847990 ("Parts") was "divided."	NC	NC
80	<b>848310</b> TRANSMISSION SHAFTS (INC CAM-&CRANK-SHAFT), ETC.	NC	NC	NC
81	<b>850161</b> - ELECTRIC MOTORS AND GENERATORS OF AN OUPUT NOT > 75 KVA	NC	NC	NC
82	<b>850162</b> - ELECTRIC MOTORS AND GENERATORS OF AN OUPUT > 75 KVA BUT NOT > 375 KVA	NC	NC	NC
83	<b>850163</b> - ELECTRIC MOTORS AND GENERATORS OF AN OUPUT > 375 KVA BUT NOT > 750 KVA	NC	NC	NC
84	<b>850164</b> - ELECTRIC MOTORS AND GENERATORS OF AN OUPUT > 750 KVA	NC	NC	NC
85	<b>850211</b> - ELECTRIC GENERATING SETS AND ROTARY CONVERTERS, OUTPUT NOT > 75 KVA	NC	NC	NC
86	<b>850212</b> - ELECTRIC GENERATING SETS AND ROTARY CONVERTERS, OUTPUT > 75 KVA BUT NOT > 375 KVA	NC	NC	NC
87	<b>850213</b> - ELECTRIC GENERATING SETS AND ROTARY CONVERTERS, OUTPUT > 375 KVA	NC	NC	NC
88	850220 - GENERATING SETS WITH SPARK-IGNITION INTERNAL COMBUSTION PISTON ENGINES	NC	NC	NC
89	<b>850300</b> - PARTS FOR USE WITH MACHINES OF 8501 OR 8502	NC	NC	NC
90	<b>870130</b> TRACK-LAYING TRACTORS	NC	NC	NC
91	870190TRACTORS, NESOI	NC	NC	Structural amendment - Subheading 870190 ("Other") of HS 2012 was replaced with five new sub- headings: "Other, of an engine power: a) 870191 - Not exceeding 18 KW; b) 870192 - Exceeding 18 kW

				but not exceeding 37 kW; c) 870193 - Exceeding 37 kW but not exceeding 75 kW; d) 870194 - Exceeding 75 kW but not exceeding 130 kW; e) 870195 - Exceeding 130 kW;"
92	<b>870410</b> DUMPERS DESIGNED FOR OFF-HIGHWAY USE	NC	NC	NC
93	<b>870423</b> TRUCK, DIESEL ENG, GVW > 20 METRIC TONS	NC	NC	NC
94	870510MOBILE CRANES	NC	NC	NC
95	870790BODIES F ROAD TRACTORS AND MOTOR VEH(PUB TRAN,ETC)	NC	NC	NC
96	870850DRIVE AXLES WITH DIFFERENTIAL FOR MOTOR VEHICLES	Clarifying amendment - Subheading 870850 was amended to include the following underlined sentences: "Drive- axles with differential, whether or not provided with other transmission components, and non-riving axles; parts thereof."	NC	NC
97	870870ROAD WHEELS & PTS & ACCESSORIES FOR MOTOR VEHICLES	NC	NC	NC