



Brussels, 24 September 2018.

PRODUCT IDENTIFICATION

- o Update on the work in the area of Product Identification

(Item X on the Agenda)

I. Introduction

1. Product identification systems provide the means through which goods can be identified uniquely. In global trade, different industry sectors are gradually supplementing or replacing plain language descriptions of products with product identification numbers. Several critical business functions are fulfilled when unique identifiers used to refer to commodities in trade documents.
2. The distinction between commodity classification and product identification is vital. Classification schemes are designed to assign commodities to specific categories that are significant for industrial or regulatory decision-making. Identification schemes, on the other hand, provide the means to uniquely and distinctly identify goods and trace them through the supply chain.
3. By using product identification systems, traders improve the level of trust, granularity of information and certainty in commercial transactions. Complete product traceability is achieved by including product identifiers in records of all materials used in the manufacture of finished goods.
4. Though not normally required, Customs and other government agencies may ask for product identification information for some commodities to identify shipments subject to import, export or transit processes. Industry operated schemes of product identification have proved to be useful to Customs and border authorities in a variety of ways in managing risks and ensuring compliance with cross-border regulations, apart from furthering simplification of regulatory information and documentation.
5. Product Identification Numbers provide a convenient way for traders to organize compliance information on commodities; they are already being used extensively by stakeholders in international supply chains.

6. The Harmonized System (HS) is the primary basis for tariff classification, trade negotiations and statistical reporting. However, various regulatory requirements and concerns can be effectively met with deeper level of details and better insights into product features. For some product lines (e.g., pharmaceuticals, chemicals and medical supplies), regulators need production batches to be identified as well, and therefore batch numbers and serial numbers could be added as additional requirements. These requirements can be met by numerous product identifications and categorizations.

II. Strategic Value of Product Identification Number

7. Product Identification Numbers are developed for commercial purposes, but they can be easily used by Customs and other government agencies for applying regulatory controls, risk assessment, and speeding up the release and clearance of goods. The ability of these numbers to provide access to predefined information about the product constitutes the value proposition for the use of these numbers. Although not all products have Product Identification Numbers, these numbers are being used increasingly by trade and industry. For example, the Global Trade Item Numbers (GTINs) issued by GS1 are applied to the majority of the goods encountered in trade. Additionally, Global Product Classification (GPC) is GS1 classification system for goods. It is a four tier system – Segment, Family, Class, and Brick. These roughly correlate to the Section, Chapter, Heading and Sub-heading system in the Harmonized System (HS). There are approximately 4,000 bricks (8-digit) in the GPC.
8. Besides GTINs and GPC, there are other schemes applied by companies and by industries. These are used by large industry value chains (for example, in the automotive industry) for communication between upstream suppliers, manufacturers, distributors, retailers and service providers. In the world of plants and animals, there is the Taxonomical Serial Number (TSN), a unique number assigned to a taxonomic entity, commonly a species of plants or animals, which provides information on their hierarchical classification, scientific name, taxonomic rank, associated synonyms and vernacular names where appropriate, data source information and data quality indicators.
9. For the identification of chemical substances, there are several directories, including for example the International Union of Pure and Applied Chemistry (IUPAC) International Chemical Identifier (InChI). In the pharmaceuticals industry, which is facing the challenges of counterfeiting, codes and markings are key. In addition to facilitating product recall, product identification helps in preventing errors in administering drugs to patients. It is for such reasons that the transmission of information on Product Identification Numbers is vital in the international supply chain.
10. Product Identification Numbers may provide benefits to Customs and other cross-border regulatory agencies in their objective of protecting public health and safety, while ensuring the integrity of international trade data.
11. The use of Product Identification Numbers can be of strategic value to Customs and other cross-border regulatory agencies in improving, inter alia, the effectiveness of risk management, combating of counterfeit goods and the control of strategic and regulated goods. Customs can benefit significantly from the use of product identification techniques that have been developed and are commonly relied upon by trade and industry
12. The use of Product Identification Numbers in the cross-border E-Commerce environment could help Customs tackle the challenges stemming from the exponential

growth in E-Commerce shipments. The use of Product Identification Numbers could enable Customs to utilize automated commodity risk assessment and data analytics based on a more reliable and high-quality data to identify safety, security and fiscal risks and facilitate legitimate shipments.

13. Product Identification Numbers can help in accessing further information on products; verifying product compliance and product safety; establishing identity of goods; improving data quality for better risk assessment and more effective Customs controls; reducing the volume of data that need to be supplied by traders by relying more on a concise identifier instead of lengthy product description; bringing down errors in the provision of product description by traders; and enabling the use of automatic data capture devices, such as barcode reader or Radio-frequency identification (RFID); as well as opening up new opportunities on a more convenient use of mobile devices or mobile apps.
14. With Product Identification Numbers, there is a great potential for simplifying and reducing the regulatory information to be reported by trade. This is the primary benefit for both Customs and trade. If goods can be assigned unique identification codes, databases can store information about the classification of each good under different schemes of classification, allowing the trader to retrieve and readily use the information as and when required. When a Product Identification Number is present in data held in Customs databases, this will help to identify the goods and pinpoint their exact nature long after they have been released into general circulation.
15. Product Identification Numbers can be combined with the HS and “end-use codes”¹. This combination is of interest in general for several types of commodities, especially strategic goods, hazardous goods, food and pharmaceuticals. In addition, a mapping database between Product Identification Number and HS could help increase the accuracy of product classification based on HS.
16. Product Identification Numbers in regulatory declarations are currently not used on a global scale, but are already in use for some purposes, including Single Window environments. The Product Identification Number has been introduced as a data element in WCO Customs Data Model Version 2.0, suggesting that it is not just a requirement of Customs but also of other government agencies, and that it has more critical applications for other government agencies.

III. Potential Considerations

17. It is not common practice for Customs to require Product Identification Numbers in goods declarations. However, for some commodities, other cross-border regulatory agencies do require these Numbers for the more effective application of controls.
18. The Harmonized System has normally been sufficient for Customs in dealing with commodities for calculating tariff duties, quotas and for generating trade statistics. Product Identification Numbers can be used, along with HS codes, for improving the efficiency and effectiveness of Customs controls. The Product Identification Number is

¹ GS1 is planning to map the GPC to the HS. This means that they will examine each of GPC Bricks and work out which HS code or codes goods it covers would fall under. The HS Code would become a new attribute of bricks. They are planning to get GS1 Advisory Council endorsement in September to begin a study project in October 2018 (finishing in January 2019) to assess the value and method of mapping. Under the GS1 plan, it is primarily foreseen that the GTIN's brick HS attribute, provided the mapping is correct, would be used by traders to automatically populate the HS field on Customs documentation and other border forms.

a commercially developed and used Number that can also be used for regulatory purposes. Of course, it should entail associated facilitation benefits to traders.

19. There is a variety of applications for Product Identification Numbers that can be used by Customs and other government agencies for effective and efficient control activities, thus speeding up release and contributing to the facilitation of legitimate trade. Given the potential benefits of Product Identification Numbers, it is worth considering their inclusion as an optional or conditional item of information in goods declarations and supporting documents.
20. In implementing Product Identification Systems, Customs would need to use services that are made available by Product Identification Number Providers. The service provider normally offers service to retrieve underlying product master data. When there are more than one service providers associated with different product identification schemes, Customs may need to be able to identify appropriate solutions, and at the same time accommodate the use of different product identification service providers. In order to make the implementation of Product Identification Systems efficient, harmonization of information, such as the format of the identification number, product master data structure, product master data retrieval method and protocol used in the systems might also be needed.

IV. Way Forward

21. The Information Management Sub-Committee, at its May 2018 meeting, discussed the topic of Product Identification Numbers based on the work done thus far and heard a presentation by GS1. Noting the value proposition of the use of product identification in Customs and other border regulatory processes, it agreed to continue further work in this area.
22. To this end, more experiences of Members and traders including their initiatives/pilots need to be collected and analyzed including through a potential survey, as well as latest industry measures and systems concerning product identification need to be studied in detail.

V. Action Required

23. The PTC is invited to:
 - discuss the value proposition of the use of product identification in Customs and other border regulatory processes, noting various products identifiers and industries' experiences in this domain;
 - provide policy guidance on future work in this area from the point of view of its applicability in Customs processes; and
 - encourage Members to share their experiences and initiatives in this domain.
