



GS1 Standards in Customs

Helping to Make Customs Operations
Safer and More Efficient



In November 2007, the World Customs Organization and GS1 signed a Memorandum of Understanding in recognition of the wide range of business interests shared by the two organisations and to provide a framework for further cooperation.



The two organisations agreed to cooperate and maintain a systematic exchange of information on matters of interest which will include the designation of contact persons to facilitate efficient cooperation, reciprocal invitations to meetings of common interest, joint training activities, exchange of experts,

and support for initiatives that continue to harmonise standards in the Customs sector.

The objective of this publication is to explain the work done so far to local GS1 and Customs representatives and to outline the next steps.

World Customs Organization: enhancing security and facilitating global trade

The 171 Members of the World Customs Organization (WCO) are responsible for processing about 99% of global trade as it travels across borders.

Previously mainly concerned with collecting duties and taxes, across the past several years the WCO and national Customs administrations have put a high priority on **enhancing security** of global supply chains and **facilitating global trade**. A number of policy initiatives, agreements and guidelines have been created in order to better meet

the challenges of today's borders, including the SAFE Framework of Standards, the Kyoto Convention, the Data Model, the "Single Window" concept and others.

The SAFE Framework, for example, is a global supply chain security initiative developed by WCO-member Customs administrations and the international trade community. It details the principles of Customs operations of today and tomorrow, which include:

- the harmonisation of electronic cargo information,
- consistent risk management,

- non-intrusive inspection of cargo when reasonably requested,
- a "partnership" attitude toward the businesses with which Customs administrations interact.

The WCO plans to achieve these objectives through a two-pillar approach: Customs-to-Customs network arrangements, and Customs-to-Business partnerships.



GS1 Standards in the context of safe and efficient trade

GS1 is a neutral, not-for-profit organisation dedicated to the design and implementation of global standards and solutions to improve the efficiency and visibility of supply and demand chains globally and across sectors. GS1 is present in 108 countries, and operates in more than 20 industries.

GS1 Standards include an array of Identification (ID) Keys: special numbering systems used by tens of thousands of manufacturers, producers, retailers, logistics companies and other businesses around the world.

GS1 ID Keys help clearly identify items, locations, and logistics units; and connect these physical things and logical things to information or business messages related to them.

In fact, GS1's 2008 General Specifications include an Identification Key specially adapted for use by international trade and Customs administrations. The creation of this GS1 ID Key grew out of a successful cooperation between GS1, the WCO and several other companies in 2006 and 2007 on a proof-of-concept pilot project.



GS1 Standards can contribute to Customs' role to secure the trade supply chain, protect society, facilitate international trade, and increase the efficiency and predictability of Customs procedures at national borders.

GS1 Standards can provide Customs organisations in every country of the world with the time-tested and widely-used solutions that will help them achieve safe and secure borders and enable them to work even better with each other and in partnership with businesses.



Successful Proof-of-Concept Pilot

In 2004, the WCO officialised the recommendation to create a Unique Consignment Reference (UCR) to identify cross-border shipments. The goal of the UCR was to facilitate international trade and to provide Customs with a means for effective risk assessment and audit-based controls.

The wine and spirits industry knew there was already a GS1 ID Key called the Serial Shipping Container Code (SSCC) that could serve as the WCO's UCR. The GS1 SSCC is a unique key for identifying logistics units. A non-proprietary and fixed-length number, it is generated when a logistics unit is prepared. It is widely used and supported by thousands of companies worldwide.

The hypothesis was that by extending the use of a GS1 ID key already used in the manufacturing process to the realm of international operations, the WCO could avoid "reinventing the wheel" and engender other benefits as well.

Several companies in this industry expressed their willingness to launch a test with GS1, and as a result, in Q1 2006, a group of wine and spirit producers, Customs authorities and GS1 Member Organisations undertook a high level proof-of-concept pilot. The objective was to test whether the GS1 SSCC ID Key was suitable for Customs purposes in international transactions.

The results were very conclusive in demonstrating that the GS1 SSCC

can be used as an "electronic staple," linking all key elements in the supply chain and enabling appropriate information on the movement of goods cross-border to be submitted to Customs administrations.

Indeed, it was quite clear that using a GS1 ID Key as the WCO's

Pilot participants included HM Revenue and Customs (UK), Australian Customs Service, Constellation, the Hardy Wine Company, Diageo and Trans Ocean Distribution. The WCO, the Wine and Spirit Trade Association (WSTA), GS1 Global Office, GS1 UK and GS1 Australia joined forces with these parties to support the project.



UCR provided exporters, carriers, Customs agencies, and importers with **better predictability of information, enhanced security, reduced compliance costs and overall improved traceability** in international supply chains. Furthermore, pilot participants noted that extending the use of an already-existing standard from GS1 to the Customs area is both easier and more sensible than the creation and management of a new numbering sequence.

Perhaps most importantly, the project showed that Customs and trade can successfully work together to find solutions to issues concerning security and trade facilitation. It was clear from this pioneering collaborative work that wider use of GS1 Standards by Customs organisations around the world will greatly facilitate trade.



From SSCC to GSIN...

One immediate result of the agreement between GS1 and the WCO was the adaptation of an existing GS1 Identification Key to create the **Global Shipment Identification Number (GSIN), specifically made for the identification of shipments in international trade and Customs.**

The pilot project demonstrated that the GS1 SSCC can identify any individual transport unit travelling from origin to destination in a unique and unambiguous manner. However, it also showed that this level of identification is too detailed for today's Customs operations, which

day after day process thousands of national and international transactions, most composed of multiple transport units containing a number of containers, pallets, and more, all travelling under one single purchase order.

In light of this learning, the GS1 teams, faithful to their mission of working not for profit but for the benefit of the community, propose the GS1 GSIN to identify such grouped transport units travelling under one commercial order. The GS1 GSIN is, as a result, perfectly suited to the needs of Customs organisations.

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GS1 can help make Customs operations safer and more efficient

The work GS1 and the WCO have done together so far has clearly demonstrated that many of the challenges faced by Customs organisations in every country in the world can be met by using GS1 Standards.

- GS1 Standards are **global, proven, and time-tested**. The GS1 System of Standards is, in fact, the most widely implemented supply chain standards system in the world. For over thirty years, more than one million companies representing dozens of sectors and industries doing business across 145 countries have trusted our user-driven approach to collaborative work.

- GS1 Standards are **neutral and non-proprietary**. So-called “standards” that are proposed by ‘for-profit’ companies may hide a strategy to lock customers into proprietary technology, if only to generate ongoing revenues.
- GS1 Standards are **already widely used** by the most well-known manufacturers, retailers, and logistics firms – the same companies that the WCO is identifying as its Authorised Economic Operators (AEOs). In other words, **our biggest users are also your biggest users**.
- GS1 Identification Keys such as the GSIN are allocated to transport units **early in the supply chain process**, usually right after manufacturing or during the packaging process; as a result they can serve as the “passport” of a shipment, identifying a transport unit during its **entire life cycle**.
- GS1 Standards are entirely **bearer-independent** and will work with both **barcodes** and **RFID tags**.
- GS1 Standards create the possibility of a simple and immediate **“single window”**. With standardised data, one submission (e.g.: Customs declaration) can smoothly and easily be accessed by many parties (e.g.: ministry of agriculture, tax & duties department...).
- Using GS1 Standards across the end-to-end transit of a logistics item contributes to **safe and secure border protection** by providing quick and easy access to all data related to shipment via a single reference.
- Using GS1 Standards can contribute to **greatly reduced costs** by simplifying internal procedures, eliminating duplicate data submissions and significantly reducing the need for manual data entry – and thus reducing labour and the risk of human error.
- GS1 Standards open the door to a wide variety of **traceability** applications, which themselves contribute to **border security** and **anti-fraud applications**.



What does the GS1 System include?

As a not-for-profit organization, GS1's role consists in leading communities to develop solutions benefiting all parties. More specifically:

Identification refers to GS1 standards enabling to identify products, services, physical and legal entities, assets, logistics units, etc. It includes the GS1 system keys (GTIN, SSCC, GLN, etc) and the standard definitions of attributes. It also includes the classification systems (GPC, UNSPSC).

An essential element of Identification is the global uniqueness management that GS1 provides.

Communications refers to EDI standards called GS1 eCom based on UN/EDIFACT and on XML. They provide a comprehensive set of standard business transactions that can be exchanged electronically between computer applications of different parties. These exchanges are typically done in batch mode.

Visibility refers to the EPCglobal vision of providing access to information related to events occurring to objects as they move through the supply chain. The core standard supporting this vision is EPCIS (EPC Information Services). It will enable accessing data from multiple companies in real time or in batch mode.

What next?

We encourage national Customs organisations to get in contact with the GS1 Member Organisation of their country and local GS1 MO's to contact National Customs administrations to find out how they can begin to use GS1 Standards to make their operations safer and more efficient.

For more information on GS1, our standards, our work with the WCO and to find the contact information of the GS1 Member Organisation in your country, visit our website at www.gs1.org





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