



WHITE PAPER

FROM PORT TO PORT: MOVING PRODUCTS ACROSS BORDERS WITH GREATER VISIBILITY AND EFFICIENCY

Pilots Show Significant Returns for Implementing Business-to-Business e-Commerce Standards at International Borders

e-Commerce information can improve product visibility across borders, improve consumer security, and deliver significant cost savings to industry, government, national regulators, and customers alike.¹

Industry can be a leader in transforming global commerce.

Imagine two ports.

The first port is able to release 30% of consumer-product line entries in advance of arrival. Forty-two percent are targeted as potentially high-risk and about 5% of product exams are deemed “non-compliant” and flagged for further examination and inspection.

The second port releases 85% of consumer-product line entries in advance of arrival. Four percent are targeted as potentially high-risk and the port conducts fewer exams and finds more non-compliant products than the first port.

Which port do you want at your border? Which port do you want as part of your supply chain?

By implementing global e-commerce standards, the second port can be a reality—a port with greater visibility into your product, which equates to improvements in efficiency and reliability. As a business leader, port number two gives you security in knowing your product will get to its destination, and distribution point, on schedule and as planned.

THE SITUATION TODAY

In 2011, the FDA reported that in the United States alone, the number of shipments of FDA-regulated goods passing through the nation’s 300 ports of entry was expected to hit 24 million. Just one decade ago, the number was six million.²

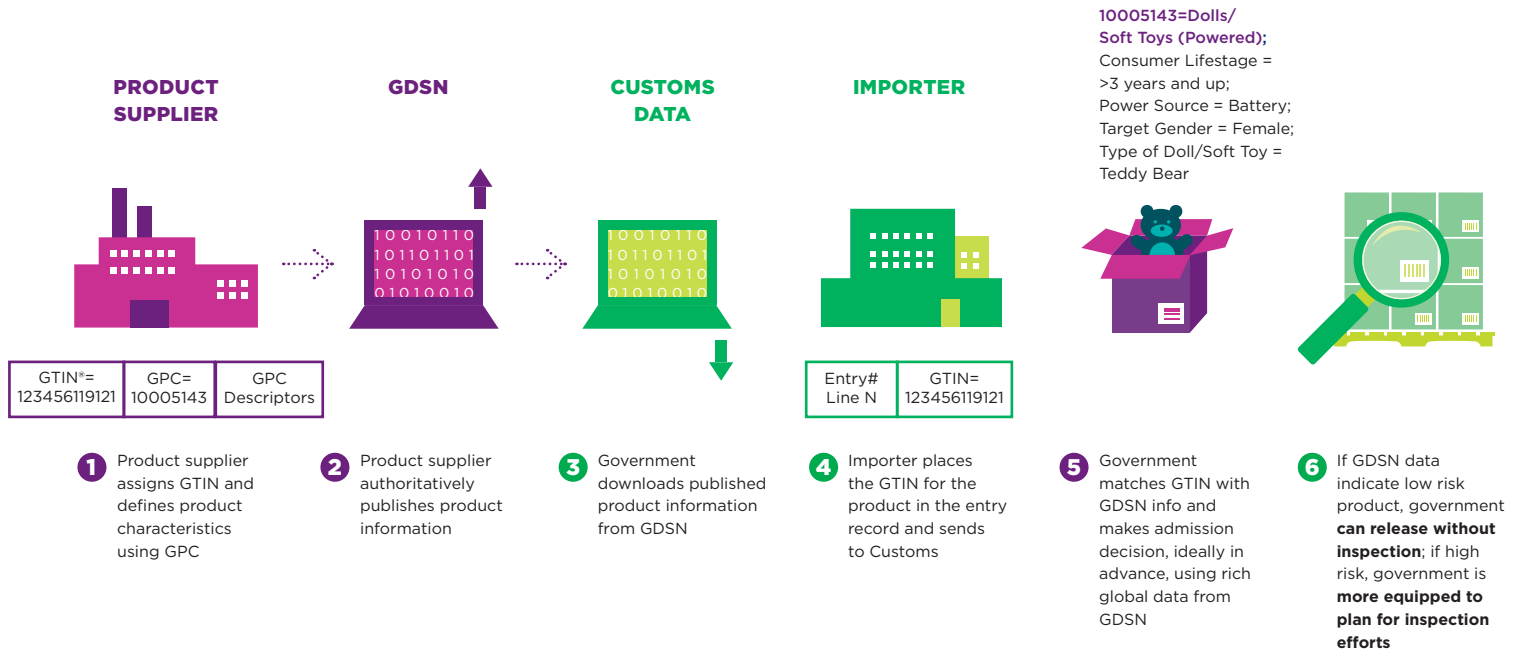
Today, the inspection process at international borders is a time consuming, costly, and often manual process. With limited global classification standards in place, governments are hard pressed to quickly and easily understand safety risks that may be associated with product shipments, and industry players are challenged to import and export goods securely and cost effectively.

Take the toy and game industry for example. In 2010, more than 850,000 entry lines of toys and games with a declared entry value of \$14.5 billion were imported into the U.S. Today, when a shipment arrives at a port of entry, the Consumer Product Safety Commission (CPSC) reviews written documents to make an assessment of product safety, and a determination to hold or release product. The written documents include the Harmonized Tariff Schedule (HTS), and sometimes additional narrative describing the toy and game product. Visibility into product shipments is limited, and with an ever-increasing number of goods to inspect, risk of error is increased.

¹ “The Business Case for Using e-Commerce Data to Manage Product Admissions at International Borders,” ITDS Product Information Committee, December 2011.

² “Pathway to Global Product Safety and Quality,” U.S. Food and Drug Administration, Special Report, 2011.

USING GS1 STANDARDS FOR BETTER PRODUCT ADMISSIONS



Other industries face similar challenges. The cut flower industry deals in perishable product. In 2010, 127,042 entries of cut flowers, composed of over eight billion stems and valued at over \$1.3 billion, were imported into the U.S. HTS codes group many flower species together under a single code, and in 2010, there were no other global classification codes that identified each cut flower species. For this reason, sampling reports have to be manually prepared and on average it takes two hours to prepare reports and examine each shipment. Imagine the benefit of accelerating those inspections and moving pest-free, perishable product out of the airport and into the retail channel more quickly.

The risks associated with limited visibility, and sometimes inaccurate product data, are significant. Having shipments mistakenly detained at port can potentially result in your consumer goods product not making it to the shelves in time for a seasonal sales push. More alarming is the shipment that misguidedly gets cleared, releasing a high-risk product into the public market. This can endanger citizens across

Product examinations could be reduced by 80% using GTINs and GPC codes in the first year alone.³

the globe, as well as corporate brands and reputations, with the potential for publicized product recalls, or worse, human illness, injury, or death.

Exports face risks as well. Take the U.S. meat and poultry export industry, a vast export business that in 2010 saw 236,000 export certificates, valued at over \$12.9 billion, issued by the USDS Food Safety and Inspection Service (FSIS). In 2008, shipments of bone-in product were authorized to a trading partner that restricted imports to boneless products only. This resulted in a temporary ban on imported U.S. red-meat products—a significant hit to the U.S. meat industry.

THE SOLUTION

The use of global e-commerce standards as part of a rigorous IT strategy can improve product visibility across international borders, improve consumer security, and deliver cost savings to government and industry.

Three principal strategies can improve the global commerce supply chain:

1. Create a Global Language for Product Categories

An international language for grouping and characterizing products can be achieved through global standards such as the GS1 Global Product Classification (GPC) and United Nations Standard Products and Services Codes (UNSPSC). Importers and governments can classify products using these standards to improve product visibility to governments and speed up the supply chain.

2. Identify Products by “Model” Using Global Product Identification Numbers and Reuse Admission Information

GS1 Global Trade Item Numbers (GTINs) can be used whenever possible to identify incoming products by brand owner and model. This allows targeting systems to reuse the previous admissions history for that model, something not possible with only the HTS code, and enables governments and customs agents to more accurately distinguish low-risk from high-risk products.

3. Leverage Industry-Standard Product Catalogs

Governments can download global product data from existing e-commerce catalogs that comply with Global Data Synchronization Network™ (GSDN®) standards. The GTINs of incoming products can be used to tap into rich, authoritative product information published by the brand owner to make informed customs decisions about potentially high-risk products with complex characteristics.

GS1 Standards are already used by hundreds of thousands of businesses around the world, and are supported by legacy ERP, inventory management, point-of-sale, and other enterprise systems. This paves the way to a faster, more cost-effective deployment with a quicker ROI and decreased cost and risk.

Using GS1 Standards also supports single-window trade facilitation systems, which enable international traders to submit regulatory documents at a single location and/or single entity, a concept recognized and supported by members of the World Customs Organization (WCO).

PILOTS WITH PROVEN RESULTS

Pilot Overview

From July 2010 to September 2011, the U.S. International Trade Data System (ITDS) Product Information Committee (PIC)⁴ conducted pilots to test the three principal strategies put forth above. The Committee selected a sample of diverse product sets: toys and games (trade partner: Hasbro), cut flowers (trade partner: Association of Floral Importers of Florida), and meat and poultry (trade partner: Tyson Foods). Each product set presented a unique set of challenges to study.



The toy and game pilot examined the import of leisure, sports and educational products intended for children. Hasbro provided product information for 30 containers shipped into the U.S., and containers were selected to provide a variety of typical products, and multiple products per container. Consumer Product Safety Commission (CPSC) investigators at different locations were given a three-part worksheet to evaluate product classification codes and asked to record, given the information on the sheet, whether in their judgment a product must be examined, preferred to be examined, or did not need examination. Two key questions were asked: To what extent can Global Trade Identification Numbers (GTINs) improve efficiency? Can GPCs improve product targeting?

⁴ PIC, or Product Information Committee, was created by the International Trade Data System to explore ways to utilize additional information to improve the efficiency and effectiveness of product admissions at international borders.

⁵ “The Business Case for Using e-Commerce Data to Manage Product Admissions at International Borders,” ITDS Product Information Committee, December 2011.

“We now know that by industry working together with government to become fully informed supply chain agents, we can dramatically improve product visibility and cargo release efficiency at all international borders.”

Douglas Bailey

Chairman

U.S. ITDS Product Information Committee



The cut flowers pilot examined import of flowers for distribution wholesalers, florists, mass markets, and retail grocery stores. A complex shipment of flowers was studied, including 169 invoice lines and 626,178 stems. Before the pilot, the import sampling and reporting process was totally reliant on paper. To replace the paper system, the pilot team created a trial spreadsheet that allowed for the addition of a global classification code and GTINs. The pilot asked: Can global classification codes automate sampling breakdown worksheet generation? Can global classification codes automate cut flower reporting?



The third pilot, meat and poultry, was unique in that it examined the export process. The pilot examined product typically exported by U.S. suppliers and traders. This export business is complex, and export requirements vary by country. The USDA Food Safety and Inspection Service (FSIS) issues an Export Health Certificate for each exported shipment. Different countries often have different and sometimes unique health requirements that must be certified for each meat or poultry product. Thus, FSIS needs to ensure that government-issued certificates document the necessary compliance on a country-by-country and product-by-product basis. Today, the process of creating and issuing certificates is manual. Two key questions were studied: Can an electronic, global product catalog be used to provide complex classification data? Can a data flow be established between the global product catalog and the FSIS Public Health Information System (PHIS)?

Pilot Results

Based on the pilot studies, the Committee found that the use of GTINs, global product classification codes, and industry-standard e-commerce product catalogs **offer clear mission benefits for industry, government, national regulators, and customers.**⁵

Using e-commerce standards supports single-window trade facilitation systems.

The return on investment, as demonstrated by the pilots, has the potential to be dramatic.

- The use of Global Trade Item Numbers (GTINs), combined with Global Product Classification (GPC) codes, can reduce product examinations by 80% in the first year alone—a game changing advantage. The business case reported an ROI of \$8 to \$1. (Toy and Game Pilot)
- The use of Global Product Classification (GPC) codes can reduce the average time required to inspect flower shipments by 50%, paring a two-hour inspection down to one hour. The business case reported an ROI of \$7 to \$1. (Cut Flower Pilot)
- Connections to global, standard product catalogs can be created and cost effectively used to manage imports of complex products. Exporters could save \$1.6 million over the first five years. The business case reported an ROI of \$5 to \$1. (Meat and Poultry Pilot)

Use of global classification codes reduced the average paperwork time for physical inspections of cut flower shipments by 50%, paring it from 2 hours to 1 hour.

INDUSTRY AS A CATALYST

Industry can be a leader, and a catalyst, in transforming global commerce.

The infrastructure to move more product freely across international borders, with greater visibility and efficiency, is maturing, providing a valuable opportunity for industry to adopt standards. In the fall of 2012, U.S. Customs will complete the addition of a new data record set, allowing importers to electronically pass product e-commerce data for each entry line to government agencies, providing a clear place for the use of global classification codes and GTINs. Other governments are adding this same capability to their infrastructures.

Business-to-business commerce, and consumers, have been benefiting from the use of GS1 Standards since the adoption of the UPC in 1973 as a uniform grocery product identification code. Working together, industry, government, and customs can bring e-commerce standards to our ports, and make port two—a port where 85% of consumer product line items are released as low-risk goods in advance of arrival—a reality.



NET VALUE OVERVIEW FOR EACH PILOT BUSINESS CASE

Timeline in years with bars representing net value in dollars

- Toy and Games Pilot
- Cut Flower Pilot
- Meat and Poultry Pilot

Source: "The Business Case for Using e-Commerce Data to Manage Product Admissions at International Borders," ITDS Product Information Committee, December 2011.

To make this happen, industry, government, and world customs leaders can:

- **Learn more** by reading the report, "The Business Case for Using e-Commerce Data to Manage Product Admission at International Borders," December 2011. This report is available at www.itds.gov.
- **Share these concepts** with your company's e-business manager, Customs manager, product safety/compliance manager—and with Customs agencies at the borders where you do business.
- **Discover the potential value** for your company. Contact Douglas Bailey, Chairman of the U.S. ITDS PIC at (douglas.bailey@ams.usda.gov), for additional insight into the pilot studies, or Al Garton at GS1 US™ (agarton@gs1us.org), to find out more about how GS1 Standards can improve supply chain efficiency for industry and government.



THE GLOBAL LANGUAGE OF BUSINESS

CORPORATE HEADQUARTERS
 Princeton Pike Corporate Center
 1009 Lenox Drive, Suite 202, Lawrenceville, New Jersey 08648 USA
 T +1 937.435.3870 E info@gs1us.org
www.gs1us.org

