GS1 Industry & Standards Event 2017
09-13 October 2017 – Brussels, Belgium

*Transforming business together*

Session: GS1 standards in CPG – Creating Value for trading partners and consumers

**Time:** Wednesday 11 October, 13.30 – 15.00

Who may attend: Everyone

Speaker(s): Ms. Linda Vezzani – GS1 Italy, Mr. Patrik Jonasson – GS1, Ms. Elena Tomanovich – GS1
Anti-trust caution

• GS1 operates under the GS1 anti-trust caution. Strict compliance with anti-trust laws is and always has been the policy of GS1.
• The best way to avoid problems is to remember that the purpose of the group is to enhance the ability of all industry members to compete more efficiently.
• This means:
  - **There shall be no discussion of prices, allocation of customers, or products, boycotts, refusals to deal, or market share.**
  - If any participant believes the group is drifting toward impermissible discussion, the topic shall be tabled until the opinion of counsel can be obtained.
• The full anti-trust caution is available via the link below, if you would like to read it in its entirety: [http://www.gs1.org/gs1-anti-trust-caution](http://www.gs1.org/gs1-anti-trust-caution).
Meeting etiquette

• **Meetings will begin promptly as scheduled**
• **Be present – avoid multi-tasking**
• **Avoid distracting behaviour:**
  - Place mobile devices on silent mode
  - Avoid sidebar conversations
• **Be considerate**
  - Avoid monologues
  - Keep comments concise
• **Respect work group decisions**
  - Avoid re-opening decisions unless there is a significant quality impact

• **Collaborate** in support of meeting objectives
  - Ask questions
  - Be open to alternatives
• **Be representative**
  - Avoid personal remarks
  - Do not speak for your company or community if you do not clearly understand their needs
  - Votes should reflect the needs of your company or community
GS1 Standards Event App – How to get it

1. Get the App by searching your App store for "GS1 Global Events" (If you already have the Global App due to attendance at the Global Forum or Standards Event, you do not need to do this)

Once you have the Global App on your mobile device, type GS1IS17 in the search box. Please click the orange (+) to activate the event within your application.

2. Login with the email address you used to register for the event:

Username: (your registered email)
Password: 2017
WiFi internet access

- Select “Crowne-Plaza-Free-Internet” and connect
- Password: 2017
Agenda

- GS1 Anti-trust caution, session administration and welcome
- Meetings this week at the GS1 Industry & Standards Event
- GS1 standards in CPG – creating value for trading partners and consumers
  - Pantry Trainer: enabling traceability and sustainability with GS1 standards, Ms. Linda Vezzani – GS1 Italy
  - Traceability and Cross-Border e-commerce: A Public Policy Perspective from Asia-Pacific, Mr. Patrik Jonasson – GS1
- Group discussion
  - Deployment of Global Traceability Standard version 2 (GTS2)
- Meeting close
Consumer Packaged Goods (CPG)

Also referred to as: Fast Moving Goods (FMG), Fast Moving Consumer Goods (FMCG), Food & Beverage or Grocery
Consumer Packaged Goods (CPG)

CPG (non-perishable)

A type of packaged product that is consumed or used every day. Shelf stable food and beverage (e.g. baby-food, rice, canned beans, soft drinks, confections, organics), frozen food and beverage (e.g. gelato, concentrated fruit juice, heat-and-eat entrees), beauty and personal care (e.g. cosmetics, skin care, toothpaste, baby care) and home care (e.g. fabric and air care, paper towels, cleaning products) and pet care. In this sector, food and beverage products are kept a room-temperature (referred to as ambient temperature/"shelf-stable" - e.g. crisps, canned soup, bottled water, pet food) or are intended to be refrigerated or stored frozen until consumption (e.g.-18 degrees C or below).

These products are commonly available in Grocery, Drug, Mass, Convenience and Club stores, as well from on-line retailers.
GS1 Industry & Standards Event

CPG programme of meetings and discussions
CPG – Monday & Tuesday

- GSMP Consumer Product Variant in the Global Data Synchronisation Network (GDSN) Mission Specific Working Group (MSWG)*
- Lunch & Learn: Traceability
- New EU Data Protection Package
- Supply Chain 4.0: Innovative Technologies Relevant to Logistics Operations
- Mobile Ready Hero Images Workshop
- Plenary
- GSMP Mobile Ready Hero Images Mission Specific Work Group
- Standardisation in Last Mile: Improving the Customer Experience
- Global Standards in Maritime and Ports: Improving the Customer Experience
CPG – Wednesday & Thursday

• Wednesday
  - Last Mile: Promoting Parcel Standards and GS1 ID keys
  - This session 😊
  - Barcode Identification Futures – OPEN TO ALL
  • Or: GS1 CPG Member Organisation (MO) Interest Group – GS1 only

• Thursday
  - GS1 Innovation: Blockchain, Consumer focused Internet of Things (C-IoT) & GS1 Standards
  - The Growing Importance of International Food Trade and the Role GS1 can Play
GS1 standards in CPG – creating value for trading partners and consumers
The vital role of GS1 standards for the CPG sector - then

• CPG brand owners and retailers were the pioneers who identified the need for and established a common language of business. They were among the earliest adopters of GS1 standards, enabling the efficient physical flow of products - and the information about those products - throughout their supply chains.

• Over the last 40 years, consumers, brand owners and retailers have changed. Yet, the need to collect, manage and exchange **quality data** has remained unchanged. **Better data has meant better service.**
The vital role of GS1 standards for the CPG sector - now

• Companies in the CPG sector understand the importance of meeting the needs of consumers and providing a modern shopping experience.
  - Over time, these companies have come to increasingly rely on quality data, and insights from that data, more than ever before in order to meet the needs of consumers, manage increasingly complex supply chains, and make smart business decisions.

• GS1 standards offer a common foundation for identification, data capture and information-sharing across their supply chains – creating value for themselves, their trading partners and consumers.
CPG industry needs

1. Industry must meet the needs of consumers for trusted information about the products they purchase - no matter how or where they shop.

2. Industry needs to manage increasingly complex supply chains and collaborate with trading partners to ensure the right product is at the right place, at the right time.

3. Industry increasingly relies on quality data to grow, reduce costs, leverage insights and manage risk.
How GS1 standards help the CPG sector

1. Industry must meet the needs of consumers for trusted information about the products they purchase - no matter how or where they shop.

- The use of GS1 standards for unique, persistent identification and accurate, complete data work together to provide trusted product information.
How GS1 standards help the CPG sector

2. Industry needs to manage increasingly complex supply chains and collaborate with trading partners to ensure the right product is at the right place, at the right time.

- The use of GS1 standards delivers supply chain efficiencies and supports agility and responsiveness.
How GS1 standards help the CPG sector

3. Industry increasingly relies on quality data to grow, reduce costs, leverage insights and manage risk.

- The use of GS1 standards results in higher-quality data at a lower overall cost and a better shopping experience for consumers.
Pantry Trainer: enabling traceability and sustainability with GS1 standards

Ms. Linda Vezzani, GS1 Italy
Pantry Trainer: enabling traceability and sustainability with GS1 standards
Linda Vezzani

GS1 Italy
October 11, 2017
Agenda

• Background
• Enabling Traceability and Sustainability – the Pantry Trainer Project
  • Proof of Concept
  • Benefits
  • Application - Smart Store: the store of the future
  • Video
• Questions
Background

GS1 Italy and its Lab
GS1 Italy

- **1978**: we began with 60 member companies
- **2017**: we have more than **35,000 members**!
- Headquarters: Milan
  - One of the world’s fashion capitals. Milan offers MANY opportunities for chic shopping
  - Home to the world's first 7 star hotel [Town House Galleria](#) and one of the leading opera and ballet theatres in the world ([Teatro Alla Scala](#))
  - **Are you ready for a holiday?** **Visit Milan 😊**
GS1 Italy’s work with the CPG sector

• Membership base
  - > 45% of companies belong to **Food Industry**
  - > 16% of companies belong to **Beverage Industry**

• **Our objective is to be considered vital for the continuing success of our members’ business**
GS1 Italy Lab objectives

- Opened as an EPC Lab in 2007, in partnership with Politecnico of Milan University, to promote the EPC and involving companies, hardware vendors, solution providers
  - In 2010, our focus was expanded to all the GS1 standards and became the GS1 Italy Lab

Spreading knowledge

- Visitors: more than 5,000 people (more than 3,000 companies)
- Public reports and documents summarise the activities
- A ROI tool available to assess the impacts and benefits

Activities

- Hands-on tests, pilots, prototypes
- Training sessions, Demonstrations
- Assessments and technical/process analysis

Pilots

- Food, Wine, Textile & Apparel, Logistics, Consumer Electronics, Railway, Automotive, Heating Industry
Enabling Traceability and Sustainability

The Pantry Trainer Project
Example of previous work: Global Wine Supply Chain Visibility via EPCIS Network

More information:
https://www.gs1.org/docs/tl/2012_05_GS1HKItaly_WinetraceabilityCase.pdf
http://www.rfidjournal.com/articles/view?9665/
Proof of Concept: Background

• GS1 Italy was asked to participate in a special project organised by Deloitte Italy to develop a new consumer app using GS1 standards.
  • The project team also included members of academia, service and solution providers

Partner
• Main partner
  - Deloitte

The team
• IoT Lab - Politecnico of Milan
• Antecs
• Gulliver
• Zebra Technologies
Proof of Concept: Overview

• **Project Goal:** Develop a lab **prototype** to evaluate the **BENEFITS**, **COMPLEXITY**, **PERFORMANCE** (including **LIMITS**) for use of RFID technology along the entire supply chain

• **Summary:** The consumer app, called «Pantry Trainer» provides precise information about products, identified with **EPC/RFID tags**
  • **EPC/RFID labels** applied to items
  • Using an **EPCIS-based scaleable platform** able to manage information about the product history (including batch and expiration dates)
  • **A mobile app** that connects consumers with retailers and producers
    • It is a personal advisor of daily consumption
    • It supports the monitoring of one’s own food expiration dates

• **GS1 standards used in the solution:**
  • GS1 identifiers, GS1 EPC, GS1 barcodes, GS1 GDSN, GS1 EDI, GS1 EPCIS
Proof of Concept: the GS1 standards involved
GS1 Italy activities on the Pantry Trainer project

• Technical analysis, checking the technical feasibility of solutions
  - technological scouting
  - HW provider selection
  - Performance tests
• Process analysis, optimizing logistic processes with GS1 standards
  - Use case definition
  - Process reengineering with GS1 standards
• Report editing
• Advise on experience and best practices of users who have already implementing related GS1 standards
• GS1 Italy also was one of the 2 Project manager
Proof of Concept: Results and Outcomes

Results – The numbers
- **10** products tested: **3,034** items and **416** cases tagged
- **15** types of RFID labels tested: tests with and without products
- **5** RFID gates
- **3** readings configurations analysed
- About **1,500 tests** performed

Outcomes
- **Detailed report**
- **Prototype demo** at GS1 Italy Lab

“In the Pantry Trainer Project, we leveraged the benefits of all GS1 standards related to product identification and data exchange (master data, transactional data, event data), as well as business processes such as order-payment cycle documents management and enabled real-time products track & trace with RFID technology.” - Massimo Bolchini, Standards Development Director, GS1 Italy
Proof of Concept: Benefits for the whole supply chain

• Increased **operations efficiency**
• Product **traceability** and **visibility** in the supply chain
• **Sharing information** among the supply chain players
• **Easier recall** of batches or serial numbers
• **Chain of custody** precise monitoring
• Enhancing **consumer engagement**
• **Food waste reduction** with discounts on expiring items at check out for better sustainability
Smart Store: the supermarket of the future

- Deloitte Italy and GS1 Italy worked together to implement the last step of the Proof of Concept Supply Chain
- With the support of a multinational retailer, a new concept of supermarket based on RFID technology has been designed and tested

RFID tags on products

Customer Check-In

RFID-based Check-Out

Efficiency in store operations

Improvement in Customer Experience

Every product offered in the Smart Store has a RFID label attached

Consumers enter the store through a gate opened via app

RFID labels interact with digital cash registers in a few seconds

- Inventory time saving
- Expiry date monitoring
- Out of Stock reduction

- Faster shopping
- Product data digitalization
- Digital interaction with consumers
Video
More information

- Pantry Trainer Video: https://www.youtube.com/watch?v=Zj-z5sGS4gc
  English subtitles available

- Articles:
Questions?
Contacts

Linda Vezzani
Lab manager & EPC specialist
T  +39 02 777 212 316
T  +39 02 5477 22210
E  linda.vezzani@gs1it.org

www.gs1it.org
Traceability and Cross-Border e-commerce: A Public Policy Perspective from Asia-Pacific

Mr. Patrik Jonasson, GS1
Traceability and Cross-Border e-commerce
A Public Policy Perspective from Asia-Pacific

Patrik Jonasson
The Context and Key Trends of Today’s Food Supply Chain

• Lack of Trust
Food safety incidents are leading to new customer behavior and stricter requirements from Government

• Food Trade Facilitation
Food supply chains are internationalized with increased complexities, lower tariffs but increase in NTBs

• Data – Enabled Technologies
Technology is more accessible and affordable, driving change in how the food system operates
China Food Safety Regulatory Landscape is Evolving

Food trade is regulated in China by the Food Safety Law

- The Law came into effect in October 2015 and is still evolving through various implementing regulations

- The Law and its implementing regulations will impact traditional food trade, retailing

- But also e-commerce food trade, including cross-border e-commerce

SOURCE: McKinsey, Survey, April 2016: How savvy, social shoppers are transforming Chinese e-commerce, By Kevin Wei Wang, Alan Lau, and Fang Gong
Direct Results of the Implementation of the new Food Safety Law

Stricter requirements and enforcement from Chinese Government

- Requirement for Chinese Labelling
- Enforcement
- Infant Formula
- China Food Safety
- E-commerce platforms under scrutiny
- Domestic Monitoring
- Implementing Regulations
Article 42 in Food Safety Law Outlines Stricter Traceability Requirements

“Country to establish food safety traceability system: Food producers and operators should establish food safety traceability system ...to ensure the food traceability.”

• Traceability system(s) is required to be established throughout China, with farm to fork traceability to guarantee food safety

• A fragmented implementation of traceability systems run by local governments is taking place

• GS1 China is working with local governments in 11 regions to support GTIN and GTIN+batch number as the key of local traceability platforms, to get access to product information, producer, specification and product flow
GS1 standards for government supervision in Jiangsu Traceability Platform

Jiangsu FDA established food safety platform supports GTIN, GTIN+LOT, GTIN+Serial number, products includes liquor, meat, etc. more than 1000 enterprises use the platform to track and trace
GS1 standards for government supervision in Guangdong Traceability Platform

Guangdong FDA food safety traceability platform support “GTIN+Produce date/lot”; Including Dairy products, infant milk powder, edible oil, aquatic products, etc.
GS1 standards for government supervision in Shanghai Traceability Platform

Shanghai FDA food safety traceability platform enables consumers to inquiry on traceability information through inputting GTIN (商品条) and lot/batch number (批次号) to get access to product information, producer, specification and product flow.

http://www.shfda.org/public/query.do
New Chinese Regulation Referencing GS1 for Supply Chain and Traceability Improvements

Ministry of Commerce and Ministry of Finance statement 337:2017* aiming to standardize logistics and construct product traceability system

• 17 regions/cities in China will start supply chain standardization development, to improve supply chain efficiencies and implement the traceability system.

• Focusing on meat and vegetable, Chinese medicine, drugs, e-commerce products, FMCG products

• Statement clearly referencing GS1 Standard, GS1 China is cooperating with Government on development and implementation

Introduction of APEC pilots
What are the supply chain issues we have tried to address in APEC region?

Poor visibility and traceability of goods moving along international supply chains are counter to the APEC principles of trade facilitation

- Five pilot projects aimed to show how the use of GS1 for seamless data sharing between trading partners could ensure:
  - supply chain **integrity** (anti-counterfeit and product quality)
  - **visibility** of product ensuring traceability and
  - removal of manual processes to ensure improved **efficiencies**

- These are all crucial for improving trade facilitation in the APEC region, especially when goods are traded across borders
Pilot Findings

Boxed Beef Australia-US:
Automation saved 1,000 hours of manual work

Tequila Mexico-US:
100% Supply Chain Visibility Achieved

Wine Australia-Hong Kong:
Improved tracking achieving 100% delivery in full on time

Durian Malaysia-China/Hong Kong:
Time Spent on Tracking Goods Reduced by 98%

Asparagus Peru-US:
Logistics Processing time Reduced by 20%

- Final report to be published by APEC with research findings
- Asia-Pacific MOs want to accelerate work and commercialise use of GS1 standards at the border
Key Strategic Opportunities in the Asia-Pacific context

- E-commerce
- Food trade increasing
- Food trust deficit
- Recall readiness
- Border Compliance
- Single window
What is next?
We need to generate real value...

GDS 2.0 aims to achieve the broad adoption of GS1 standards at the border by Government agencies.

This can be achieved by matching GS1 members’ business needs to regulatory requirements.
Proposed bilateral trade routes and products

- Australia - China
- Thailand – Hong Kong
- New Zealand - China
- New Zealand - Malaysia
Patrik Jonasson

Patrik.Jonasson@gs1.org
Group discussion

Your input to improve deployment of Global Traceability Standard version 2 ("GTS2")
Global Traceability Standard version 2

• Developing standards is a significant investment of industry’s time.
  - GS1 partners with industry in the process (GSMP).

• At GS1, we also partner to deploy standards and drive adoption and use of standards with existing users and new users.
  - Today, we would like to obtain input from industry on topics related to WHAT and HOW we deploy GTS2 to the Fresh Foods industry globally.
Use cases (scenarios, reasons) - traceability

Validate and identify others that may be missing

1. Provide product information – “freshness”, best-before date, expiry date across the physical and digital shelves
2. Provide product information – enable unique, persistent product information including ingredients (what, source) and potential allergens across the physical and digital shelves
3. Recall – locate where unsafe product may be in the supply chain
4. Recall – support activities (communicate- internally and across companies, locate, return/ destroy) to remove unsafe product from the supply chain including post-purchase
5. Comply with regulations - communicating to the consumer
Use cases (scenarios, reasons) - traceability

Validate and identify others that may be missing

6. Comply with regulations – demonstrate/validate “doing business” meets requirements of regulations
7. Anti-counterfeit – product authentication
8. Anti-counterfeit - brand protection
9. Supply chain – vision to sources of supply, information about the supplier(s)
10. Supply chain – visibility to the physical flow and the information flow of a product or shipment
11. Supply chain – cold chain integrity (e.g. food storage, temperature control)
12. Supply chain – expedite cross-border trade (customs, product/shipment/transport documents match physical product and electronic information, validate chain-of-custody)
Use cases (scenarios, reasons) - traceability

Validate with MOs and identify others that may be missing

13. Comply with trading partner requirements – demonstrate/validate “doing business” meets requirements

14. other?
Group discussion- traceability use cases

• Please review the list of traceability use cases that we have identified. (5 minutes)
• As a group, please discuss this list with the goal of identifying if there is something important that is missing? (15 minutes)
  - Write down any use case that you think is missing.
• Share what you identified as missing.
Concluding remarks
How GS1 standards help the CPG sector

- The use of GS1 standards for unique, persistent identification and accurate, complete data work together to provide trusted product information.

- The use of GS1 standards delivers supply chain efficiencies and supports agility and responsiveness.

- The use of GS1 standards results in higher-quality data at a lower overall cost and a better shopping experience for consumers.
GS1 standards to meet the needs of industry in the future

- According to senior industry executives interviewed for the 2013 “The Future of Standards in the Consumer Goods & Retail Industry” report:

“The near-future of standards will focus on going back to the basics to leverage the existing standards and improve data quality, with the ultimate goal of providing enhanced service to consumers in a more complex world.”

This includes a need for new standards than enable more complete, more granular identification and sharing of consumer information.
GS1 standards to meet the needs of industry in the future

• In addition to recently ratified GS1 standards such as GS1 UniqueID - GTIN Management Standard, GS1 SmartSearch, GTS2 and new Mission Specific Working Groups (MSWG) for GS1 UniqueID - Consumer Product Variant and Mobile Ready Hero Images, we are working together across GS1 on key strategic initiatives to build the future of GS1.

• As CPG companies look to the future, they must consider complete and accurate data as an asset for their business. Better data still means better service.
Thank you!

Please complete the session survey in the Event App
Contact Information

Elena Tomanovich
Senior Director, Retail Industry Engagement

+ 1 609 557 4577
+ 1 585 613 1647
Elena.tomanovich@gs1.org
**GS1 Xchange:** Where collaboration meets community

**GS1 Xchange** is your new home for a variety of existing and future GS1 user communities.

This new meeting space includes established communities such as the *GS1 Community Room* and *GS1 WeShare* portals, as well as new communities like the *GS1 Daily Scan*—your fresh source for up-to-date recent GS1 news and industry information.

**User benefits include:**
- Single sign-on
- Easy navigation between different communities
- Improved experience

Join today!
[Xchange.gs1.org](http://xchange.gs1.org)
The Daily Scan: News you can use

Did you know? The Daily Scan is the new welcome page on the GS1 Xchange platform, providing you with up-to-date GS1 news and information.

Join us! Experience this modern approach to news, with cutting-edge features such as:

- Timely retail & standards’ news for GS1 members
- Quick access to your GS1 portals
- News sorted & tagged by category
- Shareable & downloadable content through social media
- Translation function
- Weekly digest…and more!

Xchange.gs1.org