



Enabling Source-to-Consumer Visibility
with GS1 Standards in
**APPAREL & GENERAL
MERCHANDISE**



THE GLOBAL LANGUAGE
OF BUSINESS



GS1 STANDARDS IN APPAREL/GENERAL MERCHANDISE

Together, we're making it possible for apparel and general merchandise companies to follow their products from the source to the consumer — ensuring that the right product is in the right place at the right time regardless of the channel or path to purchase.

Challenges Facing the Industry Today

IMPROVING INVENTORY ACCURACY AND SUPPLY CHAIN VISIBILITY

In today's omni-channel retail world, consumers are in control. They expect accurate, immediate product information and access to products. They will move on if they can't find the products they want when they want them. The apparel and general merchandise industries are most concerned with improving inventory accuracy and supply chain visibility capabilities to satisfy consumer demands, while still addressing expectations around product safety.

Developing omni-channel fulfillment capabilities is another area of focus for brands and retailers looking to further streamline their business processes from sourcing products to getting them in the hands of consumers everywhere.



“Current barcode technology prevents retailers from frequent inventory counts. Our experience at Macy’s is that item-file accuracy deteriorates 2-3 percent per month.

RFID technology is approximately 20 times faster than counting with barcodes, enabling frequent inventory counts and significant improvement in inventory accuracy.

RFID is the next big supply chain transformation for the retail industry—its time has come.”

Tom Cole, Chief Administrative Officer, Macy's, Inc.
NRF - Retail's Big Show, January 16, 2012

GS1 STANDARDS IN APPAREL/GENERAL MERCHANDISE

Moving Forward Together with the GS1 US Apparel and General Merchandise Initiative

The GS1 US Apparel and General Merchandise Initiative is an industry group that is committed to defining business challenges and opportunities and organizing members to explore solutions and create adoption plans. The members of our initiative represent a broad cross-section of industry trading partners, each of whom has agreed to adopt and implement global GS1 Standards to improve inventory accuracy and supply chain visibility.

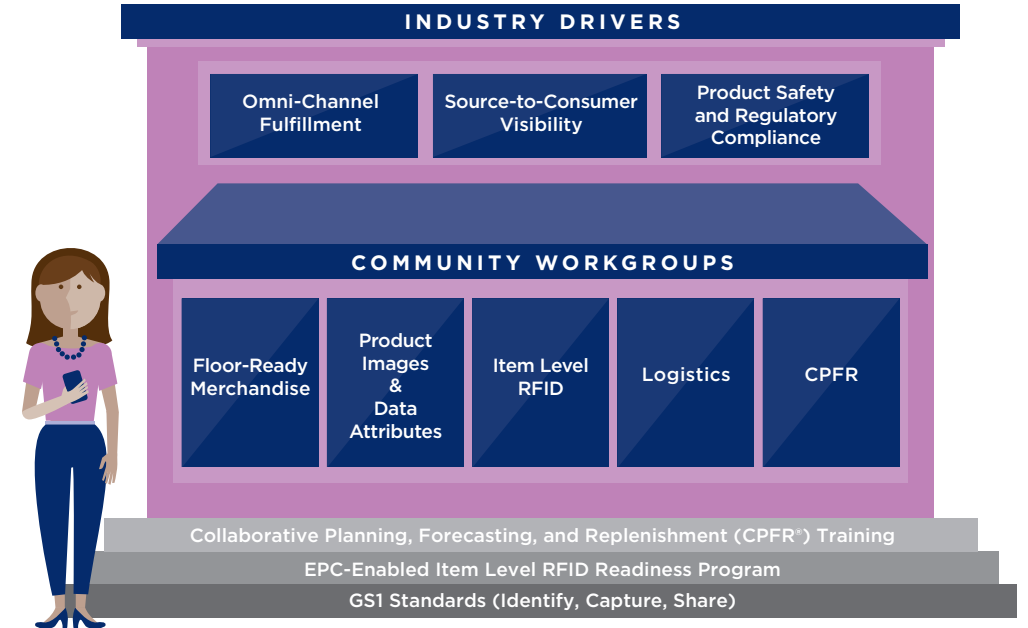
KEY FOCUS AREAS

- Location identification using GS1 Global Location Numbers (GLNs)
- Product identification using GS1 Global Trade Item Numbers (GTINs)
- Identification of logistic units using GS1 Serial Shipping Container Codes (SSCCs)
- Encoding GS1 Standard identifiers into RFID tags with Electronic Product Codes (EPCs)
- Sharing product descriptions through the Global Data Synchronization Network™ (GDSN®)
- Sharing physical event information and status with Electronic Product Code Information Services (EPCIS)

Get involved! Go to www.gs1us.org/apparelgm

KEY BENEFITS

- Increasing inventory accuracy
- Enhancing shipping accuracy and confidence
- Creating and sharing accurate, standardized product data
- Building better trading-partner and customer relationships
- Improving speed-to-market





THE GLOBAL LANGUAGE
OF BUSINESS



IDENTIFY



CAPTURE



SHARE

GS1 Standards for
identifying, capturing,
and sharing information —

*about products, business
locations, and more —*

make it possible for
companies to speak the
same language, connect
with each other, and move
their business forward.



IDENTIFY GS1 IDENTIFICATION NUMBERS

GS1 Standards begin with GS1 Identification Numbers used to uniquely distinguish all products (trade items), logistic units, locations, assets, and relationships across the supply chain from manufacturer to consumer.

These numbers provide the link between the item and the information pertaining to it.

GS1 STANDARDS IN APPAREL/GENERAL MERCHANDISE

COMPANY

Global GS1 Company Prefix
GLN
 Global Location Number

LOCATION

GLN
 Global Location Number

PRODUCT

GTIN®
 Global Trade Item Number®
EPC®/SGTIN
 Serialized Global Trade Item Number

LOGISTICS

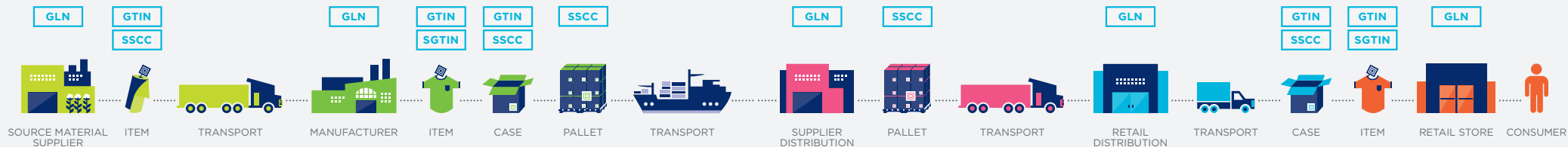
SSCC
 Serial Shipping Container Code
GSIN
 Global Shipment Identification Number

ASSETS

GIAI
 Global Individual Asset Identifier
GRAI
 Global Returnable Asset Identifier

SERVICES AND OTHER

GSRN
 Global Service Relation Number
GDTI
 Global Document Type Identifier





CAPTURE GS1 DATA CARRIERS

GS1 Data Carriers are capable of holding varying amounts of data to accommodate different needs such as Batch/Lot information and expiration dates.

EAN®/U.P.C. and GS1 DataBar® barcodes are examples of barcodes scanned at retail point of sale. ITF-14 and GS1-128 barcodes are used to uniquely identify units of product at the case and pallet level to help manage fast and accurate tracking of inventory. The EPC (Electronic Product Code) encodes GS1 Identification Numbers like GTINs, GLNs, and SSCCs, and allows them to be carried on RFID tags.

The data encoded in GS1 Data Carriers uniquely identifies products (and units of product) and improves inventory accuracy.



GS1 STANDARDS IN APPAREL/GENERAL MERCHANDISE

ITEM

EAN/UPC

Carries a Global Trade Item Number (GTIN)



OR

EPC-ENABLED RFID

Carries a Serialized GTIN (SGTIN)

UHF RFID



HUMAN READABLE SGTIN

061414198765314157

Radio Frequency Identification (RFID) tags are read quickly and easily without requiring line of sight and carry data that can be added to or modified as the tagged item moves.



CASE

ITF-14

Carries a GTIN



Used to uniquely identify bulk units such as cartons, cases, or pallets, and help manage fast and accurate tracking of inventory. This barcode only encodes a GTIN and is not intended to pass through retail point of sale.

OR

GS1-128

Carries a GTIN or a Serial Shipping Container Code (SSCC)



SSCC in a GS1-128 barcode enables quick and accurate receipt of product.

OR

EPC-ENABLED RFID

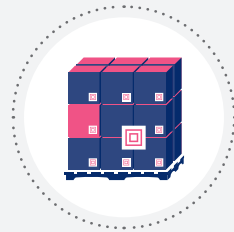
Carries an SGTIN or SSCC

UHF RFID



HUMAN READABLE SGTIN

061414198765314157



PALLET

ITF-14

Carries a GTIN



OR

GS1-128

Carries a GTIN or an SSCC



OR

EPC-ENABLED RFID

Carries an SGTIN or SSCC

UHF RFID



HUMAN READABLE SSCC

006141410000987658



SHARE

GS1 DATA EXCHANGE

MASTER DATA

GDSN

Global Data Synchronization Network

The GDSN connects trading partners to the GS1 Global Registry® via GS1-certified data pools, enabling the immediate electronic sharing of standardized, up-to-date, accurate information.

WHAT GOES INTO IT

GTINs

GLNs of Brand Owner
Product Descriptions
Product Classification

GS1 STANDARDS IN APPAREL/GENERAL MERCHANDISE

TRANSACTIONAL DATA

EDI

Electronic Data Interchange

EDI enables the computer-to-computer exchange of business documents between companies using a standardized format.

WHAT GOES INTO IT

GTIN
GLN
SSCC

EDI DOCUMENT TYPES

Purchase Order
Advance Ship Notice
Invoice
Payment

PHYSICAL EVENT DATA

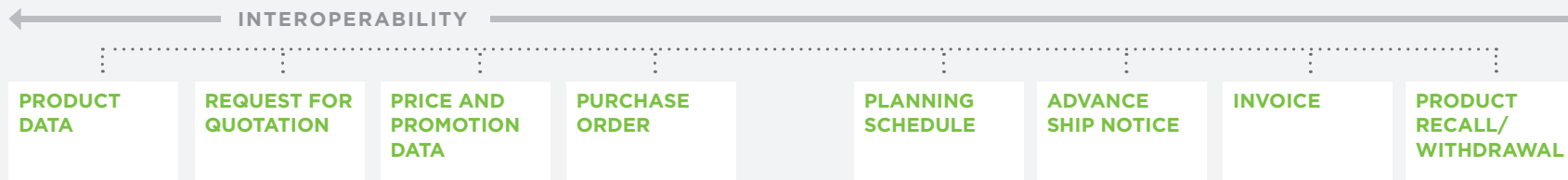
EPCIS

Electronic Product Code Information Services

EPCIS is the standard for sharing information about the movement and status of goods in the physical world.

WHAT GOES INTO IT

What SGTIN
Where SGLN
When Date & Time Stamp
Why Business Setup & Product Disposition





Across the supply chain, trading partners are connecting with each other and leveraging the power of information by using GS1 Standards as the foundation of their business processes.

LOCATION IDENTIFICATION

GLN Global Location Number
061414100005



LOCATION IDENTIFICATION
GLN Global Location Number
061414200004

Source Material Supplier

IDENTIFY

- Company GLNs are assigned and managed for field/raw material/processing plants
- GTINs are assigned to pre-production raw materials and items, SSCCs are assigned to cases

CAPTURE

- Barcodes or EPCs are matched to the field to validate location
- Barcode or EPC technology is used to capture inventory of raw material

SHARE

- The GDSN is used to exchange product information
- EDI is used for transactional data
- EPCIS is used to exchange physical event data

BENEFITS

Enables materials to be traced back to their point of origin

Allows raw materials to be traced to their point of origin

Enables product to be traced to the manufacturing line

LOCATION IDENTIFICATION

GLN Global Location Number
0614143000003

ITEM IDENTIFICATION

GTIN Global Trade Item Number
614141000012



Manufacturer

IDENTIFY

- GTIN or SGTIN is assigned to the finished product
- GTIN or SSCC is assigned to the case

CAPTURE

- Barcodes or EPCs are used to capture inventory of finished products
- Barcodes or EPCs are used to validate pack-out quantities

SHARE

- The GDSN is used to exchange product information
- EDI is used for transactional data
- EPCIS is used to exchange physical event data

BENEFITS

Decreases shipping and receiving costs

Reduces errors and lowers labor costs

Results in fewer deductions and chargebacks

Decreases return costs

Provides better information flow to trading partners

Enables work-in-progress monitoring



Transportation, Logistics, and Customs

CAPTURE

- Barcodes or EPCs are scanned to ensure accuracy of products in cases/pallets
- EPC physical events (arrival/departure scans) are captured

SHARE

- The GDSN is used to exchange product information
- EDI is used for transactional data
- EPCIS is used to exchange physical event data

BENEFITS

Speeds up and improves customs clearance

Results in labor/expense savings for both customs agencies and businesses

Allows for easier identification and understanding of risks

LOCATION IDENTIFICATION

GLN Global Location Number
061414600000

ITEM IDENTIFICATION

GTIN Global Trade Item Number
61414100012



Supplier Distribution

IDENTIFY

- SSCC is assigned to case/pallet after pick/pack process

CAPTURE

- Barcodes or EPCs are scanned to ensure accuracy of products in cases/pallets
- SSCC is encoded into GS1-128 or EPC on case/pallet

SHARE

- The GDSN is used to exchange product information
- EDI is used for transactional data such as Advance Ship Notice (ASN) and is sent to retail distribution center
- EPCIS is used to exchange physical event data

BENEFITS

Tracks and validates shipping processes, reducing counterfeits and ensuring brand protection

Provides accurate, automatic inventory counts

Increases audit capability (visibility into case contents)

Validates receipt of goods (electronic proof of delivery)

LOCATION IDENTIFICATION

GLN Global Location Number
061414500001



CASE / PALLET IDENTIFICATION

SSCC Serial Shipping Container Code
(00)614141123456789017



Retail Distribution

IDENTIFY

- SSCC is assigned to case/pallet after pick/pack process

CAPTURE

- Barcodes or EPCs are scanned to ensure accuracy of products in cases/pallets
- SSCC is encoded into GS1-128 or EPC on case/pallet

SHARE

- The GDSN is used to exchange product information
- EDI is used for transactional data such as ASN or payment information
- EPCIS is used to exchange physical event data

BENEFITS

Improves inventory labor productivity by 96%

Reduces cycle count time by 96%

Lowers inventory risks and costs

Enables electronic proof of delivery

LOCATION IDENTIFICATION

GLN Global Location Number
0614144000002



Retail Store

CAPTURE

- Barcodes or EPCs are scanned to ensure accuracy of products in cases/pallets
- EPC is scanned at Point of Sale (POS)
- EPC is scanned for Electronic Article Surveillance (EAS)

SHARE

- EDI is used for transactional data such as sales activity or inventory reporting
- EPCIS is used to exchange physical event data

BENEFITS

Reduces time to locate products by 18%

Raises inventory accuracy from 63% to 95%

Cuts out-of-stocks by 50%

Increases inventory count rates from 200 to over 12,000 items per hour

GS1 STANDARDS IN APPAREL/GENERAL MERCHANDISE

Now is the time to get involved!

Join one of the GS1 US Apparel and General Merchandise Initiative Workgroups

Become part of our targeted workgroups in the GS1 US Apparel and General Merchandise Initiative. The workgroups are made up of industry stakeholders, to develop standards-based guidelines, best practices, case studies, thought leadership, and alignment on future opportunities for unlocking further value from the use of GS1 Standards.

- **Product Images and Data Attributes**
- **Collaborative Planning, Forecasting, and Replenishment (CPFR)**
- **Item Level RFID**
- **Floor-Ready Merchandise**
- **Logistics**

Sign up for the GS1 US EPC Item Level Readiness Program

The Item Level Readiness Program provides the education, training, tools, and community support that the apparel and general merchandise industries need to implement EPC-enabled item level tagging into day-to-day operations. It allows businesses to leverage their existing technology investments such as ERP, inventory management, point of sale, and other enterprise systems, which translates to a more cost-effective deployment with less risk and a shorter return on investment.



JOIN TODAY BY EMAILING:

apparelgm@gs1us.org

START IMPLEMENTING

Visit www.gs1us.org/apparelgm to access:

- Information on relevant GS1 Standards
- Workgroups
- Tools and Resources
 - Implementation Guidelines
 - White Papers and Case Studies
- Education and Webinars
- Members, Advocates, and Partners





CONTACT US TO FIND OUT HOW GS1 US
CAN HELP MOVE YOUR BUSINESS FORWARD.



THE GLOBAL LANGUAGE
OF BUSINESS

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