



New GS1 supply chain developments

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Agenda

- About us
- GS1 DataBar
- Advanced Shipping Notices (ASNs)
- GDSN





About us





About us

- Established in 1976
- Independent, profit neutral association
- Owned by its 22,000+ members
- 50+ staff based in central London
- Part of the worldwide GS1 network
 - 108 member organisations
 - 1.2 million+ companies using GS1 standards to do business
 - 20 industry sectors
 - Over 5 billion transactions every day



**The global
language of
business**



Our mission

We aim to make it **faster**,
cheaper and **safer** for our
members to serve their
customers.....

..... by the *industry wide*
adoption of global **GS1**
standards and locally
delivered **services**



Promote, develop & deliver - the global language of business



Global standards for automatic identification
Rapid and accurate item, asset or location identification



Global standards for electronic business messaging
Rapid, efficient and accurate business data exchange



The environment for global data synchronisation
Standardised, reliable data for effective business transactions



Global standards for RFID-based identification
More accurate, immediate and cost effective visibility of information

(Common, unique, global) **Identification**

Keys (e.g. product, location, assets) and Attribute data (e.g. best before date)



The bar code and the GTIN





GS1 Identification Keys

GS1 Keys are **non-significant**, secure and **globally unique** numbers which support the identification of:

- Trade Items (**GTIN**)
- Locations (**GLN**)
- Returnable Assets (**GRAI**)
- Shipping Containers (Logistical Units) (**SSCC**)
- Assets (**GIAI**)
- Service Relationships (**GSRN**)
- Documents (**GDTI**)



GS1 BarCodes





GS1 BarCodes

- The GS1 System provides several types of bar code for use by GS1 members depending on the application



EAN-13

- Designed for use throughout the supply chain
- It is most often seen on items sold at the retail point of sale



EAN-8

- Used on items too small to carry EAN-13 bar codes
- It is only ever used at the retail point of sale.



GS1 DataBar

- A new bar code that delivers enhanced product identification at retail POS



GS1-128

- Carries all GS1 identifiers and additional information for products, locations, assets and pallets/ logistics units



ITF-14

- Can be printed directly on corrugated cartons for identification of outer cases, boxes etc



GS1 DataMatrix

- The only 2D symbol specified for use by GS1
- Becoming the symbol of choice for many healthcare applications



What is GS1 DataBar?

GS1 DataBar is a new GS1 bar code that can deliver enhanced product identification at retail point-of-sale





Less space or more data

- By taking up *less space* GS1 DataBar enables the automatic identification of small or hard-to-mark consumer products such as:
 - Cosmetic or beauty items
 - Pharmaceutical products
 - DIY hardware
 - Jewellery
 - Fresh produce
- More space on packaging for branding and messaging





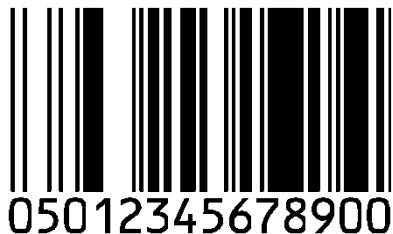
Less space or more data

- By carrying *more data* GS1 DataBar allows greater information to be scanned at the retail point-of-sale, such as weights, expiration dates, batch numbers, serial numbers etc
- New opportunities to solve retail business problems:
 - Product authentication
 - Traceability
 - Stock control
 - Product replenishment
 - Variable measure product identification
 - Shrink control
 - Category management





The GS1 DataBar symbols



GS1 DataBar Omnidirectional



GS1 DataBar Stacked Omnidirectional



GS1 DataBar Expanded



GS1 DataBar Expanded Stacked

Note, three other symbols are not for use at retail point-of-sale:
GS1 DataBar Truncated, GS1 DataBar Limited, GS1 DataBar Stacked



The launch strategy

- By 2010:
 - GS1 DataBar standards will be available for bilateral agreement between trading partners for all trade items
 - Specific focus will be on fresh products scanned at point-of-sale

- By 2014:
 - GS1 DataBar symbols and GTIN attribute information (using AIs) can be used by all trading partners in an open environment
 - At a minimum, retailers should be able to scan GTINs in a GS1 DataBar



Advanced Shipping Notices (ASNs)





The case for ASNs

- Receiving suppliers' goods is a demanding and complex process
 - Understanding which goods are about to arrive
 - Resolving delivery and receiving errors
 - Reconciling deliveries against orders and invoices
 - Time consuming and costly to business
- Human intervention and resources are required
 - Impacts on product availability throughout the supply chain
- Automating the process, using GS1 standards, results in:
 - A more efficient supply chain
 - Improved trading partner relationships
 - Greater product availability
 - Reduced costs



The goods receiving process

Supplier



Production

Produce goods and pack into cases

1 Picking and despatch

Pick goods into pallets to create the delivery



Generate and send an ASN



Despatch goods

Update systems

Receive and process information and prepare invoice

Customer



Generate and send an order

Ordering

Receive and process the ASN (and check against the order)

2 Receiving goods

Receive and check the goods (and check against the ASN)



Confirm the receipt of goods



Put the goods away or cross-dock

Electronic message

Electronic message



Physical goods

Electronic message



GS1 standards in the goods receiving process

- GS1 Logistics Label
 - Standard way to incorporate all required information about a pallet or other logistics units
 - SSCCs are encoded in GS1-128 bar codes and included on GS1 Logistics Labels
- Standard GS1 electronic messages
 - A despatch advice message is used as the ASN to provide details of each delivery
- GS1 Identification Keys
 - SSCCs identify each logistics unit
 - GTINs identify the products within the logistics unit
 - GLNs identify the trading partners and the relevant addresses

THE COMPANY LIMITED		
ANY ADDITIONAL INFORMATION		
SSCC 050123450001234563		
Content 15012345678907		Count 110
Use by 25.12.04	Variant 05	Batch No. 1234AB
		
		

The use of GS1 Identification Keys enables the data that is captured during the scanning of products and logistics units to match the data received through electronic business messages, for example, ASNs



The benefits of automating the goods receiving process

1. A more efficient supply chain

- Faster receiving and storing of goods
- Fewer delivery and receiving errors
- Cross-docking capabilities
- Greater data accuracy

2. Reduced costs

- Reduced labour costs when receiving goods
- Less manual keying of data
- Lower storage and warehousing costs
- Less delivery errors to resolve

3. Improved trading partner relationships

- Fewer disagreements
- Easier three-way reconciliation between orders, goods received and invoices

4. Greater product availability

- Automated checks for under or over deliveries
- Cross-docking capabilities



Quantifiable time-savings

Time required Savings

PER PALLET

Paper-based	120 seconds	
Using GS1 Logistics Label and ASN	25 seconds	80%
Spot checks using GS1 Logistics Label and ASN*	10 seconds	92%

TRUCK WITH 26 PALLETS

Paper-based	52 minutes	
Using GS1 Logistics Label and ASN	11 minutes	42 minutes
Spot checks using GS1 Logistics Label and ASN*	4 minutes	48 minutes

Source: GS1 Netherlands and ECR Working Group study 2005 with leading retailers and manufacturers

*Based on one spot check per delivery



GS1 GDSN





GS1 GDSN

- Every company has a database filled with master data about the products they make, or sell, or buy
- But when one company needs to change any bit of information in their database or add a new item to it, another database may not be up to date anymore...
- That's where synchronising data through the GDSN comes in





Data Crunch Report



- Opportunity for retail sector to realise savings of £1 billion over the next five years
- Opportunity to enhance consumer experience through improved product information
- GDSN standards will help manage the demand for four-fold increase in retail product information

www.gs1uk.org/datacrunch



Questions?





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