



GDSN Education and GPC-UNSPSC Integration

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GDSN and Global Registry Background

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Current Communications Process

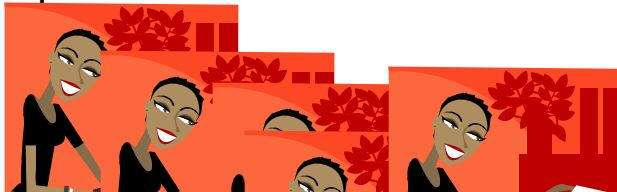
Manufacturer sells product to Retailer and sends product information to Retailer via EDI, fax, paper form



Retailer inputs product information into computer (POS, etc) systems



Manufacturer makes change to product and sends changes to Retailer via EDI, fax, paper form



Retailer inputs changes into computer



Numerous interactions leads to numerous errors





GDSN Communications Process

Manufacturer sells product to Retailer and inputs product information into GDSN

Retailer automatically receives product information into computer (POS, etc) systems



Manufacturer makes change to product and inputs the change into GDSN

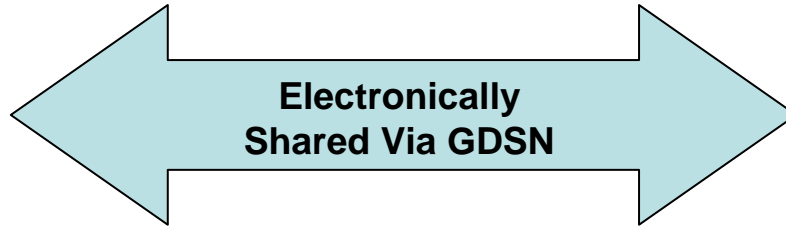
Retailer automatically receives product changes into computer (POS, etc) systems

**No Human Error between Manufacturer and Retailer
Product information ALWAYS matches**



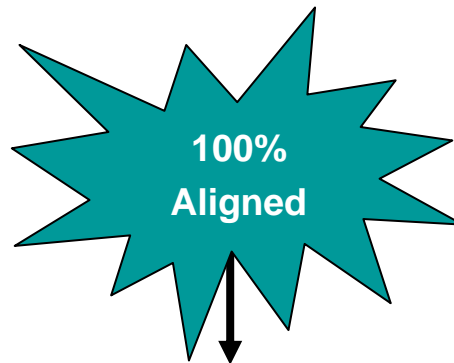
Data Sync Overview

Retailer



Manufacturer

GTIN Case Code
GTIN Package Code
Package dimensions
Product Weights
TI/HI



GTIN Case Code
GTIN Package Code
Package dimensions
Product Weights
TI/HI

Ongoing Practices

- New Items/New Authorizations
- Product Changes/Updates
- Special Packs, Modules

Objective:

Improved Transaction Accuracy

- Invoice, Payment, Orders

Improved Speed to Market

Better Consumer Value



Data Synchronization is....

- Electronic transfer of standardized item and location information AND the continuous harmonization of that data over time
- Involves sharing standardized information
 - Item information (GTIN) including attributes controlled by the brand owner/data source (e.g. net content, dimensions, weights)
 - Location information (GLN) including locations involved in trade (e.g. headquarter, billing, ship to)
- Facilitates communication among trading partners
- Creates efficiencies across supply chains



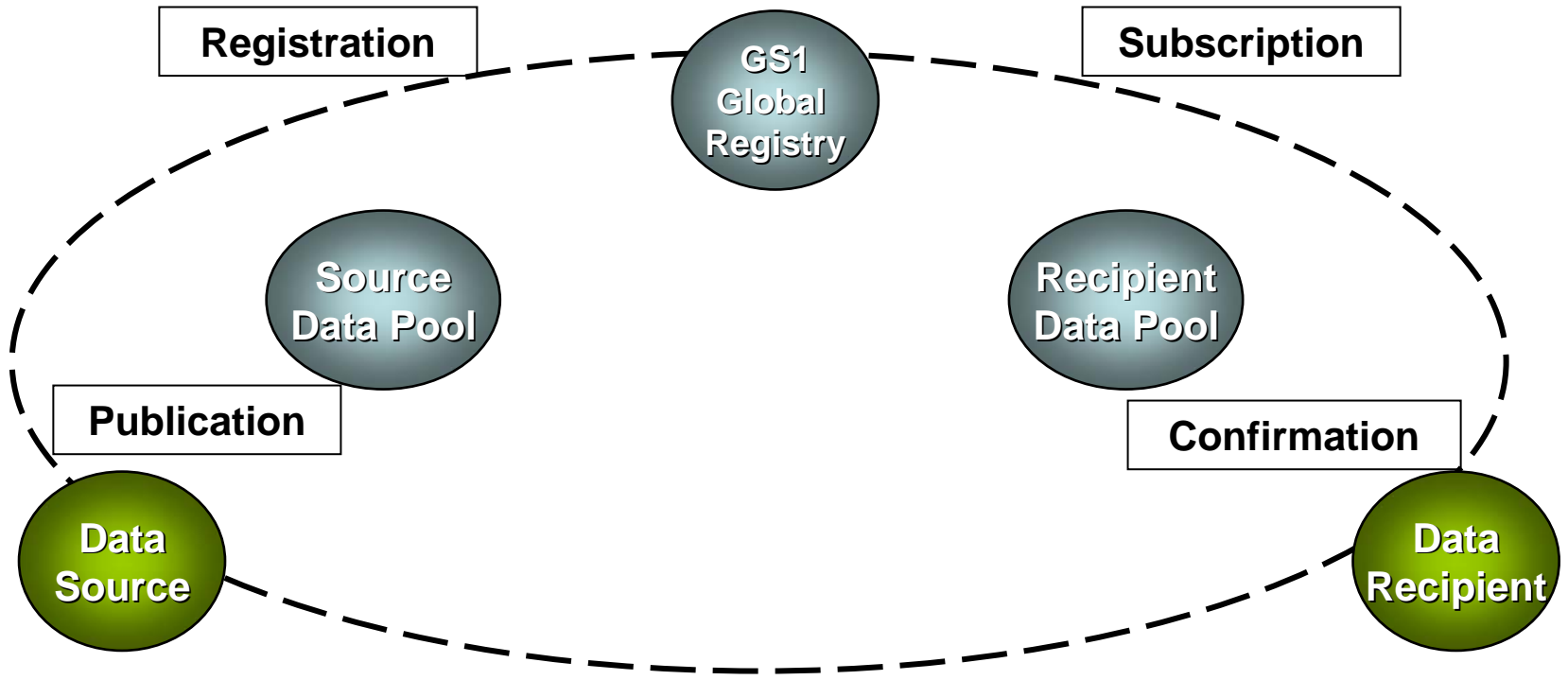
Global Data Synchronisation Network

- Registry for Registration of Items and Parties, and Global Search
- Retailers and Suppliers have single point of access via Certified Data Pools
- Standards compliant data and messages



Global Data Synchronization Network (GDSN)

The GDSN is comprised of a single registry (GS1Global Registry), Data Pools, and trading partners working together to establish technology solutions, business processes, and standards to support data synchronization.





GDSN Benefits and ROI

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Industry Studies Quantify the Opportunity



Catalog Disparities



- Incorrect - 30% of Item Data
- To Correct - \$60-\$80 per Error
- Cleanse - 25 minutes per SKU per year



Invoice Errors



- Incorrect - 60% have Errors
- Costs - 43% have Deductions
- To Correct - \$40-\$400 to Reconcile



Lost Sales Opportunity



- Product Roll-In - 4 Weeks on Average
- Lost Sales - 3.5% due to Inaccurate data



Benefits of GDSN

GDSN:

- Provides **standardised, reliable data** for effective business transactions in both local and global markets, **driving costs of the supply chain**
- Ensures that **trading partners work in a standardised way** thereby reducing duplicate systems and processes
- Ensures that **item data is updated and consistent** between trading partners
- **Validates accuracy of data** against standards and business rules



Benefits of GDSN

GDSN:

- Ensures that trading partners **classify their products in a unique, standardised way** (Global Product Classification - GPC)
- Provides a **single point of entry** for retailer and supplier trading partners (their chosen Data Pool), so reducing the cost of operating multiple vendors
- **Guarantees uniqueness** of item (product, case, pallet), party and location through the GS1 Global Registry
- **Certifies** that Data Pools and the GS1 Global Registry comply with GDSN rules



The Steps to Collaborative Commerce



Source: GS1 US™ and AT Kearney



GDSN Participants

Retailers

- AAFES
- Ahold
- Albertson's
- Best Buy
- Carrefour
- Coop Italia
- Dairy Farm Group
- Exito
- Home Depot
- Kohl's
- Lowe's
- Safeway
- Staples
- Supervalu
- Target
- Walgreens
- Wal*Mart
- Wegmans

Suppliers/Manufacturers

- Alberto Culver
- Alcon
- Bayer
- Cadbury Schweppes
- Coca-Cola
- Colgate Palmolive
- ConAgra
- Clorox
- Danone
- Del Monte
- Eastman Kodak
- Energizer
- Eveready
- General Mills
- Gillette
- Glaxo Smith Kline
- Heinz
- Jergens
- Johnson & Johnson
- Kellogg Company
- Kimberly Clark
- Kraft
- Intuit
- Mattel, Inc.
- Nestle
- Memorex
- Neutrogena
- Parmalat
- Pepsi
- Philips Cons. Electronics
- Procter & Gamble
- Revlon
- J.M. Smucker
- Sony
- Unilever
- Zenith



Implementation

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Implementation Facts

- Internal readiness
 - Internal systems and business process change
 - Lacking executive sponsorship
 - Data accuracy and alignment activities
 - Competing priorities and resource constraints
 - Dependency on legacy systems
- Investment of time and resources → data synchronization takes time
- GDSN functionality can be added swiftly
 - Takes time to gather requirements
 - Develop the standard support through Fast Track
 - Build support in GDSN for new item attributes and validation rules



Healthcare Attribute Support Today

agreedMaximumBuyingQuantity
agreedMinimumBuyingQuantity
brandName
consumerAvailabilityDateTime
deliveryToDistributionCenterTemperatureMaximum
deliveryToDistributionCenterTemperatureMinimum
deliveryToMarketTemperatureMaximum
deliveryToMarketTemperatureMinimum
depth
descriptionShort
diameter
endDateMaximumBuyingQuantity
endDateMinimumBuyingQuantity
endDateTimeOfExclusivity
firstdeliverydatetime
firstOrderDate
firstShipDate
functionalName
genericIngredient
genericIngredientStrength

goodsPickUpLeadTime
grossWeight
handlingInstructionsCode
hasBatchNumber
height
importClassificationType
importClassificationValue
ingredientStrength
invoiceName
isnetContentDeclarationIndicated
isNonSoldTradeItemReturnable
isPackagingMarkedReturnable
isPackagingMarkedWithIngredients
isTradeItemAnOrderableUnit
isTradeItemReorderable
lastOrderDate
lastShipDate
linktoexternaldescription
materialSafetyDataSheet
materialSafetyDataSheetNumber
maximumBuyingQuantity



Healthcare Attribute Support Today

minimumTradeltemLifespanFromTimeOfArrival
minimumTradeltemLifespanFromTimeOfProduction
netContent
netWeight
orderingLeadTime
orderingUnitOfMeasure
orderQuantityMaximum
OrderQuantityMinimum
orderQuantityMinimum
orderQuantityMultiple
orderSizingFactor
organicClaimAgency
organicTradeltemCode
packageMarksDietAllergen
packageMarksEnvironment
packageMarksEthical
packageMarksFreeFrom
packagingMarkedExpirationDateType
productRange
replacedTradeltemIdentification
retailPriceOnTradeltem

returnablePackageDepositAmount
returnablePackageDepositCode
securityTagLocation
securityTagType
sellingUnitOfMeasure
startDateMaximumBuyingQuantity
startDateMinimumBuyingQuantity
storageHandlingHumidityMaximum
storageHandlingHumidityMinimum
storageHandlingTemperatureMaximum
storageHandlingTemperatureMinimum
subBrand
suggestedRetailPrice
tradeltemCountryOfAssembly
tradeltemCountryOfOrigin
tradeltemFeatureBenefit
tradeltemFormDescription
tradeltemMarketingMessage
tradeltemUnitDescriptor
variableTradeltemType
variant
width



Develop Implementation Plan

Step 1: Establish a core business team

- Executive/business sponsor (commitment and business perspective)
- Technical resource (day-to-day functionality)

Step 2: Gather Implementation information

- Technical documents and implementation information
- Get involved in the GDSN User Group to drive standards into GSMP

Step 3: Identify an implementation team

- Choose a Certified Data Pool
- Has successful implementations - ask for references
- Addresses your business needs



Develop Implementation Plan

Step 4: Locate your data

- Clean your data!
- Ensure you have a Global Location Number (GLN) and Global Trade Item Numbers® (GTINs®)
- Do NOT underestimate this step!

Step 5: Migrate to Production

- Add clean product information into the Data Pool
- Establish a relationship with a your trading partners
- Add any required (industry or retailer specific) additional data attributes
- Roll out item information to other trading partners



GPC and UNSPSC

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Current Healthcare Classification Coverage at GS1

1. Global Product Classification (GPC)

- Over The Counter (OTC) Products:
 - Family Planning
 - Health Enhancement
 - Health Treatments and Aids
 - Home Diagnostics

2. United Nations Standard Product and Services Code (UNSPSC)

- Medical Equipment and Accessories and Supplies (Segment 42)
- Drugs and Pharmaceutical Products (Segment 51)
- Healthcare Services (Segment 85)



GPC – UNSPSC are Complementary

1. GPC

- GPC has well-proven, robust business rules
- GPC is managed through Global Standard Management Process (GSMP)
- GPC has support from GCI, GS1 community and solution providers, data pools and the global registry

2. UNSPSC

- UNSPSC already covers 55 segments, including products and services
- UNSPSC is a globally recognised brand
- Both will be maintained by GS1



Integration Rationale

Objective: Develop long-term **strategy that embraces the need for interoperability; one that is sustainable, clearly communicated, and supported with education**

Different business functions have different business needs and these are delivered through the use of different **classification systems**

- **GPC** enables global search and reference, category analysis and global data synchronisation
- **UNSPSC** (traditionally used for company-wide visibility of spend analysis; cost-effective procurement optimization and exploitation of electronic commerce capabilities) can be used **to extend GDSN to new industry sectors**



Business Functions Addressed By GS1 Classification Systems

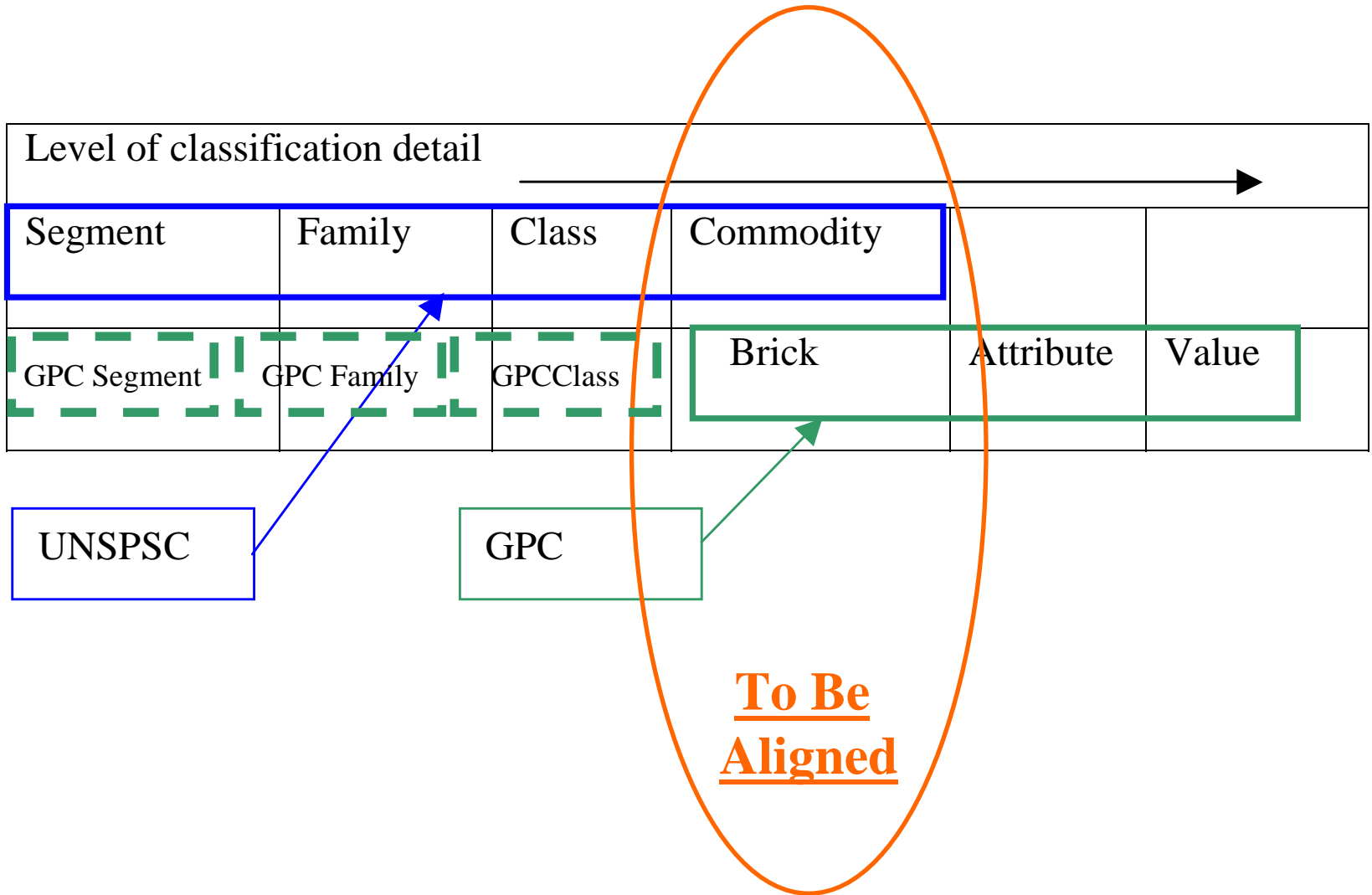
Business Functions	GPC Alone	UNSPSC Alone	Integrated GPC & UNSPSC
Global Data Synchronisation (GDSN)	Yes		Yes
Drive Product Attributes (Properties)	Yes		Yes
Category Analysis	Yes	Yes	Yes
Interoperate Products to Multiple Internal Classifications	Yes		Yes
Spend Analysis	Yes	Yes	Yes
Extend GDSN to New Sectors			Yes
Cost-effective Procurement Optimization	Yes	Yes	Yes
Statistics and Reporting		Yes	Yes



How to Integrate?

- Classification as a hierarchical tree structure is a continuum from general to granular
- The alignment of GPC and UNSPSC enables this entire continuum, which enables “drill-down” and “roll-up” analysis
- Align Segment-Family-Class-Commodities portion of UNSPSC for the Bricks and Attributes and Values defined by GPC

What Will Alignment Look Like?





Vitamin Example: Integrated UNSPSC / GPC System Extention to Commodity Atributes and Product Attributes

UNSPSC SEGMENT: **51 00 00 00 Drugs and Pharmaceutical Products**
 UNSPSC FAMILY: **51 19 00 00 Agents affecting water & electrolytes**
 UNSPSC CLASS: **51 19 19 00 Dietary Supplements & nutritional therapy**
 UNSPSC COMMODITY/
 GPC BRICK : **51 19 19 05 Vitamin supplements**

*UNSPSC/GPC
Hierarchy*

Commodity / Brick Attributes & Values: Consumer Life stage: **ADULT**
 Source: **BOTANICAL**
 Target Gender: **UNISEX**
 Admin Method: **ORAL**
 Vitamins/Minerals: **COMBINATION**

*Commodity/Brick
Attributes and
Values*

Product Description: **Super Vitamin**
Net Weight: **100 gram**
Price: **Euro 12.00**
First Order Date: **23 September 2006**



*GS1 Product
Attributes and
Values*

GTIN: **4567890123456C;**
GLN: **321012987654C**
Target Market: **France**

*GS1 Product
Identification*



Integration Benefits for Healthcare

Healthcare sector could:

- Further improve the spend visibility and analysis
- Optimise cost-effective procurement and strategic sourcing
- Improve decision making with better statistics and reporting
- Be linked to a broader global GS1 standard package
- Join the Global Data Synchronisation Network and EPC
- Interoperate their products to existing multiple internal and external classification systems
- Provide users with greater granularity for “drill-down” and “roll-up” for commodities
- Extend their classification system to commodity attributes and product attributes



Where to Find GS1 Classification Information?

1. GPC

- GPC Website: <http://www.gs1.org/productssolutions/gdsn/gpc/>
- Contact: Zoltan Patkai - Zoltan.Patkai@gs1.org +32.2.788.78.29

2. UNSPSC

- UNSPSC Website: <http://www.unspsc.org/>
- Contact: Steve R. Arens – SArens@gs1us.org +1. 609.620.4511



Thank you!

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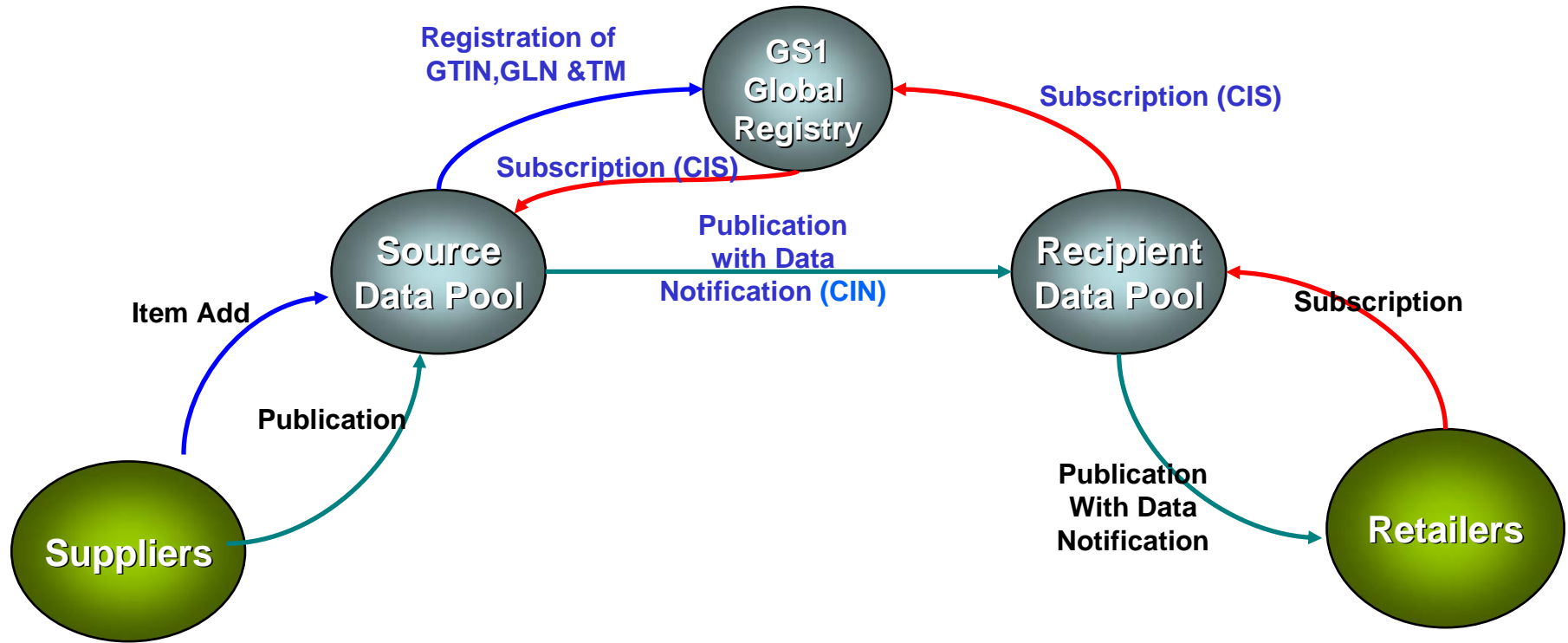
Backup Slides

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GDSN Overview





Acronyms

GTIN[®] – Global Trade Item Number

GLN – Global Location Number

GPC- Global Product Classification Code

CIS – Catalogue Item Subscription

CIN – Catalogue Item Notification

CIC – Catalogue Item Confirmation



Acronyms

GDSN – Global Data Synchronization Network

- The GS1 Global Registry™ and a network of interoperable certified data pools that enable data synchronization per GS1 System standard

GSMP – Global Standards Management Process

- The procedures, methods, and practices that develop and maintain the GS1 System standards. GS1 manages the Global Standards Management Process.



Acronyms

GS1 –Based in Brussels, Belgium, is an organization of GS1 Member Organizations that manages the GS1 System and Global Standards Management Process (GSMP)

GS1 US –Formerly the Uniform Code Council, Inc.® (UCC®). GS1 US™ is a not-for-profit organization dedicated to the adoption and implementation of standards-based, global supply chain solutions.



Additional Information on GDSN and GSMP

For more information on GDSN

- www.gs1.org/productsolutions/gdsn/

For more information on GSMP

- http://www.gs1.org/global_smp/gsmg_smp.htm/



GDSN Organization and Activity

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What is GDSN, Inc.?



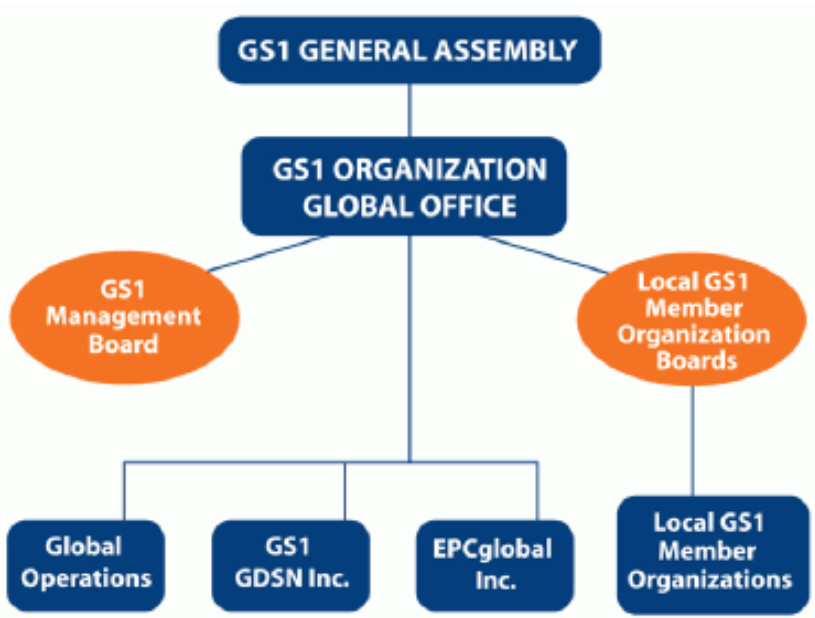
Not-for-profit business chartered to promote and guide standards-compliant GDS activity across the globe via the GDSN

Provides oversight of the Global Registry, GDSN Community collaboration, Global Product Classification (GPC) and the industry Data Accuracy Protocol

Business unit of GS1 Global Office



GDSN Within GS1



Board of Directors





GDSN is a *reality*.....

Foundation of GS1 System Standards in place

- Standards-compliant data synchronisation for local and global markets

Global User Group established to drive needed functionality in GDSN

- Retailers, manufacturers, GS1 MOs, and Data Pools

Strong network of 22 GDSN certified Data Pools

- Supporting data sync in over 30 countries



GDSN Supports Key Functionality

Extended Attributes (**Flexible Fields**)

Standard **New Item Introduction Form**

Global Data Dictionary supports **450+ attributes**

- **Fast Track Process** for rapid introduction of new local and global standard attributes

Price Sync available to in early 2007

Global Product Classification (GPC) – 29 categories



GDSN Growth Jan 2005 – August 2006

	Jan 2005	Feb 2006	25 August 2006
Active Data Pools	7	7	12 (20 Certified)
Subscribers / Users	200	3,778 <i>110 retailers</i> <i>3,668 suppliers</i>	10,071 <i>116 retailers</i> <i>9,955 suppliers</i>
GTINs (Items) Registered	180,000	479,000	833,000+