



Complementary GS1 Solutions for Collaborative Supply Chains

**Global Data Synchronisation Network (GDSN)
& the EPCglobal Network™**

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1 Overview

The GS1 portfolio provides a complementary suite of compatible, standards-based solutions for improving the efficiency and visibility of global supply chains. All of the standards and service offerings in the GS1 portfolio were created in response to a business need identified by trading partners in the global supply chain in their effort to collaborate with each other. Two of the solutions in the GS1 portfolio are the Global Data Synchronisation Network (GDSN) and the EPCglobal Network™. Both are currently being implemented by many companies seeking to improve their business processes and global supply chains.

STATIC INFORMATION conveys core data consistent for all instances of a certain object class (i.e. information applicable to all cans of Acme Baked Beans).

DYNAMIC INFORMATION conveys data applicable to a specific instance of a certain object class (i.e. information applicable to this can of Acme Baked Beans).

The GDSN responds to the business need for reliable STATIC INFORMATION among trading partners to support business processes related to collaborative trading.

The EPCglobal Network responds to the business need for DYNAMIC INFORMATION about individual items as they move through the supply chain in order to support business processes related to supply chain visibility.

As with all solutions in the GS1 portfolio, the GDSN and the EPCglobal Network are built on the strong foundation of the GS1 System and reflect the overarching vision of GS1 to provide compatible, standards-based solutions for resolving distinct business needs, as well as complementary solutions for companies seeking a comprehensive approach to sophisticated collaborative commerce.

The term “collaborative commerce” refers to the processes, technologies, and the supporting standards that allow the continuous and automated exchange of trade item information between trading partners. It describes how businesses communicate with one another to drive down the cost of the supply chain.

2 Scope of this Paper

This paper is intended to provide a high level understanding and a broad view of the GDSN and the EPCglobal Network initiatives from the perspective of the Fast Moving Consumer Goods (FMCG) sector exclusively. The business needs, processes, and examples may or may not apply to other sectors.

3 The GS1 Portfolio

The GS1 portfolio is a compatible, interoperable suite of solutions for improving the efficiency and visibility of global supply and demand chains both today and tomorrow. GS1 approaches its portfolio and all of the individual solutions with a forward-thinking philosophy that supports compatibility, interoperability and integration, with a focus on business needs and business processes. Pursuant to the GS1 philosophy, the GDSN and the EPCglobal Network were built on the strong foundation of BarCodes and eCom. By integrating GS1's global identifiers and emphasizing architectural compatibility and interoperability, these solutions are inherently linked and provide compelling business value propositions attributable to the many business processes they improve, including:

- Invoice Reconciliation
- Electronic Proof of Delivery
- Track & Trace
- New Item Introduction
- Promotions Management
- Out of Stock
- Inventory Management
- Product Recall

4 GDSN: Ensuring Quality Core Data for Commercial Transactions

Today's complex business world of multi-regional operations, global trading and e-commerce, requires dependable STATIC INFORMATION for commercial transactions. Without it, trading partners face high, unnecessary costs due to supply chain information inefficiencies and inaccurate data in transactions. Moreover, the globalisation of trade has generated an accelerated need for the efficient and effective inter-company flow of information and better control of supply chain business processes. The GDSN solves these supply chain information needs with a robust foundation upon which the full benefits of electronic collaboration can be achieved and scaled.

“Static Information” represents the core data about products and commercial entities (e.g., trading unit, selling unit, item dimensions, warehouse location information, store location information, etc.).

4.1 Static Information

In the world of global commerce, STATIC INFORMATION can be defined as high level, homogeneous data about product groups and commercial entities. It represents the core data about products and commercial entities. STATIC INFORMATION about *products* conveys data consistent for all instances of a certain object class (i.e. information applicable to all widgets), including trading unit, selling unit, item dimensions, etc. STATIC INFORMATION about *commercial entities* includes location information about a warehouse, store, distribution centre, sales office, etc. STATIC INFORMATION about products and commercial entities provides the basis for commercial transactions.

4.2 GS1 Global Identifiers: GTIN® & GLN

The GS1 System provides globally accepted identifiers, standards and a common language for the communication of STATIC INFORMATION regarding products and locations for numerous vertical sectors. There are two GS1 System identifiers utilised by most GS1 member companies to communicate information about themselves and/or their product lines: the Global Location Number (GLN) and the Global Trade Item Number®

(GTIN). Each company defines and maintains their own GLNs and GTINs, based on GS1 System standards and assignment rules that ensure consistent and proper usage of these globally unique identifiers (i.e. *how to assign a GLN?; when to change a GTIN?; etc.*). The company then defines the STATIC INFORMATION (*also known as “attributes”*) required for that identifier pursuant to GS1 System standards [e.g. description, price, size, pack, name, address, etc.], and stores the identifier with the corresponding STATIC INFORMATION in a product catalogue and/or Data Pool to be used for commercial transactions. Because the STATIC INFORMATION defined for GLNs and GTINs provides the basis for commercial transactions, the quality and accuracy of that information is vitally important to collaborative trading.

NOTE: *There are numerous attributes defined for each GLN and GTIN, and some attributes are updated/changed more often than others. The frequency at which a company needs to update a GTIN/GLN is dependent on the frequency of update for each of the individual attributes defining that GTIN/GLN - underscoring the need for and value of data synchronisation.*

The GDSN ensures the reliability of STATIC INFORMATION utilized by trading partners for commercial transactions.

4.3 Business Need

Each GS1 member company not only defines and maintains its own GLNs and GTINs, but is also responsible for sharing this information with its trading partners, which can be a daunting task in complex supply chains with hundreds of trading partners. In the event that a product attribute changes or a new product is introduced, that new information needs to be communicated across the supply chain to all affected parties to ensure that all partners are trading with the same information. Thus, there is a pressing need for accurate, real-time, standards-based information for companies to trade. The GDSN provides a solution for these business needs.

4.4 The Network Components

The GDSN is an Internet-based network of interoperable Data Pools that facilitates the movement of standards-based STATIC INFORMATION among trading partners within the Network. The GDSN consists of GS1 GDSN-certified Data Pools, and the GS1 Global Registry™:

GS1 GDSN-CERTIFIED DATA POOLS	<ul style="list-style-type: none"> ▪ Store GLN and GTIN STATIC INFORMATION; ▪ Validate all registered STATIC INFORMATION for compliance to GS1 System standards; and ▪ Synchronise STATIC INFORMATION between supply and demand side partners to ensure that all trading partners are using identical, updated, standards-compliant data.
GS1 GLOBAL REGISTRY	<ul style="list-style-type: none"> ▪ Directory of the GTINs and GLNs stored in each GS1 GDSN-certified Data Pool. ▪ Resource for GS1 GDSN-certified Data Pools to locate data sources and manage on-going data synchronisation relationships between trading partners.

4.5 The Network in Action

GDSN participants publish their accurate and standardised STATIC INFORMATION to a GS1 GDSN-certified Data Pool. The Data Pool validates all registered information for compliance with GS1 System standards, and then registers the corresponding GTINs and GLNs with the GS1 Global Registry. Because all certified Data Pools register their GTINs and GLNs with the GS1 Global Registry, the GS1 Global Registry is the authoritative directory for the Data Pool location of each GTIN and GLN in the GDSN.

In order to synchronise information, GDSN participants subscribe to their trading partners' information. Data Pools consult the GS1 Global Registry to identify the source Data Pool(s) for the information to which their participants subscribed, and then process the exchange of information between those trading partners via the respective Data Pools. Then, whenever STATIC INFORMATION changes, GDSN participants simply send the updated information to their Data Pool. The Data Pool validates the information for compliance with GS1 System standards, and then ensures that all GDSN participants that subscribe to this information are notified of the update via their recipient Data Pools. This process ensures that all trading partners are using identical, updated, GS1 System standards-compliant data.

The GDSN is a GS1 solution for data registration, standards compliance and data synchronization of STATIC INFORMATION.

4.6 Benefits

Continuous and reliable data synchronisation ensures that STATIC INFORMATION vital to commercial transactions is identical among local and global trading partners, increasing data accuracy and driving costs out of the supply chain for suppliers and retailers alike. In addition, data synchronisation enables the automation of product lifecycle processes, such as product information maintenance and new item introduction, supporting valuable objectives such as increased speed to market. Consequently, the GDSN improves the many business processes related to commercial transactions, providing significant benefits and savings for all trading partners.

	MANUFACTURER	RETAILER
CATEGORY/PROMOTION MANAGEMENT	Reduces time spent on complaints/disputes	Corporate sourcing price transparency
	Simplifies and enhances category reporting	Reduces time spent on complaints/disputes
	Reduces product information lead time	Simplifies and enhances category reporting
	Reduces product promotion lead time	Reduces product information lead time
	Reduces time for new item introduction	Reduces product promotion lead time
ADMINISTRATIVE DATA HANDLING		Reduces time for new item introduction
	Eliminates the need for cross-reference tables	Reduces category maintenance
	Reduces invoice disputes	Eliminates the need for cross-reference tables
	Reduces write-offs	Reduces invoice disputes
	Reduces accounts receivable	Reduces order defects
CORPORATE MANAGEMENT	Reduces sales order defects	Improves fill rate
	Simplifies corporate reporting	Simplifies corporate reporting
	Eliminates IT System redundancy	Corporate transparency/sales synergy
	Opportunity for shared service creation	Eliminates IT System redundancy
		Opportunity for shared service creation

5 The EPCglobal Network: Sharing Dynamic Information for Supply Chain Visibility

Today's complex supply chains require the ability to collect and communicate DYNAMIC INFORMATION in order to support full supply chain visibility for global trading. Without it, trading partners face high, unnecessary costs related to lost or missing shipments, product recall and order fulfilment errors. Moreover, many opportunities for improved warehouse management and inventory tracking are lost without the necessary supply chain information to identify and capitalise on those opportunities. The EPCglobal Network solves these information

needs by providing companies with more detailed knowledge about their supply chain so that the full benefits of collaborative logistics can be achieved.

“Dynamic Information” represents data about individual items as they move through the supply chain (e.g., *when was this widget manufactured?; what is its current temperature?; where is it now?; where has it been?; etc.*).

5.1 Dynamic Information

In the world of global commerce, DYNAMIC INFORMATION can be defined as heterogeneous data that is specific to and variable for individual items, whether the item be a pallet, case or individual unit. As opposed to STATIC INFORMATION that conveys data consistent for all instances of a certain object class (i.e. information applicable to all widgets), DYNAMIC INFORMATION conveys data specific to an individual instance of an object (i.e. information about this particular widget). There are two types of DYNAMIC INFORMATION: *History Data* related to track and trace (i.e. where is this widget and where has it been?) and *Instance Data* related to events & states (e.g. when was this particular widget manufactured and what is its current temperature?). Access to real time data about an individual item as it moves through the supply chain makes the entire shipping route for that item transparent. Consequently, DYNAMIC INFORMATION is essential for supply chain visibility.

5.2 GS1 Global Identifier: EPC

The Electronic Product Code™ (EPC) is the standardised GS1 globally unique identifier for the EPCglobal Network. The EPC utilises a structured, hierarchical numbering scheme in which the EPC is a numerical string comprised of several distinct segments. The structured hierarchy of EPC numbers nests standards-based identifiers onto distinct segments of the EPC string utilising GS1 System standards and integrating various GS1 STATIC INFORMATION identifiers, like the GTIN. The nested segmentation of the EPC string is not only important for managing serialisation and ensuring the uniqueness of EPCs, but also for facilitating the tiered, distributed approach to storing and locating EPC read event data in the Network. Moreover, for the FMCG industry, the integration of GS1 System standards and STATIC INFORMATION identifiers ensures that the EPCglobal Network is fully integrated with the GS1 System, and enables users to go to the GDSN to locate STATIC INFORMATION about the object to which the EPC is attached using the GTIN embedded in the EPC.

The EPCglobal Network enables a community of trading partners to engage in the secured collection and communication of DYNAMIC INFORMATION about individual items as they move through the supply chain in order to support supply chain visibility.

5.3 Business Need

Logistical planning and track and trace capabilities for missing or partial shipments are constrained without information about the progress of items as they move through the supply chain. In addition, shipping and receiving processes are prone to errors due to failure to correctly identify products (i.e., confusing two items), failure to correctly count items, and/or failure to correctly associate items with the originating purchase order. Moreover, product recalls in the global marketplace present onerous challenges due to the limited audit trail for isolating the cause of the problem and assessing the extent of the product population to be recalled. Consequently, there is a pressing need for access to DYNAMIC INFORMATION about individual items as they move through the supply chain. The EPCglobal Network provides the solution for those information needs.

5.4 The Network Components

The EPCglobal Network provides the standardised method by which trading partners can capture, share and discover EPC related data. By using standards-based, EPCglobal certified hardware and software components and interfaces, the EPCglobal Network enables a community of trading partners to engage in the secured collection and communication of DYNAMIC INFORMATION about individual items as they move through the supply chain. There are seven standards-based hardware and software components that comprise the EPCglobal Network:

Electronic Product Code (EPC)	Globally unique number that identifies a specific item in the supply chain. This number may be used to identify a container, pallet, case or individual unit.
EPC Tag	Radio frequency tag attached to an item consisting of a microchip that contains the EPC for that item, and an RFID antenna to reflect the EPC back to an EPC reader.
EPC Reader	Radio frequency reader that detects EPC tags and communicates their associated EPC numbers to the EPC Middleware.
EPC Middleware	Software that sorts and manages data coming in from the EPC readers.
Object Naming Service (ONS)	Network resolution services that direct EPC queries to the location where information associated with that EPC can be accessed by authorised users.
EPC Information Services (EPC-IS)	Information services necessary for the storage, communication and dissemination of EPC data in a secure environment.
Discovery Service	IN DEVELOPMENT - Mechanism for securely locating all read events and information for a given EPC, regardless of the data owner.

5.5 The Network in Action

The components defined above provide the ability to capture and share DYNAMIC INFORMATION in the EPCglobal Network. To capture DYNAMIC INFORMATION, EPC tags carrying a globally unique EPC identifier are affixed to containers, pallets, cases and/or individual units. Then, EPC readers at strategic points throughout the supply chain will read each tag as it passes and communicate the EPC number with the time, date and location of the read to the EPC Middleware, which will sort and filter all of that data coming in from the EPC readers. Each EPC number with the time, date and location of the read event is forwarded to the local EPC Information Services (EPC IS) at the read site, which stores that information. This will provide unprecedented visibility beyond that which BarCodes and EDI provide today. (NOTE: If advanced functionality like a temperature sensor is also on the tag, this information will also be passed to the EPC reader.)

Once the DYNAMIC INFORMATION is captured as described above, the EPCglobal Network then utilises Internet technology to create a network for sharing that DYNAMIC INFORMATION among authorised trading partners in the global supply chain. When a trading partner queries the Network for information about an EPC, the ONS directs the query to the appropriate EPC IS. From there, the EPC IS performs the necessary identification and authentication services before granting access to the requested EPC information.

Ultimately, each of the participants along the supply chain (e.g., manufacturer, distributor, logistics provider, buyers/sellers, etc.) will have EPC readers that read EPCs as they move through their facilities, and an EPC IS that catalogues those read events in their system. As a result, multiple entities along the supply chain will have DYNAMIC INFORMATION related to an EPC. Consequently, EPC query searches will require a mechanism capable of securely locating all read events for a given EPC, regardless of the data owner. That mechanism has been named the Discovery Service, and GS1 is working with industry to develop end user requirements to develop a Discovery Service that meets their needs.

The EPCglobal Network is a GS1 standards solution that enables trading partners to engage in the capture, sharing and discovery of EPC related data through the use of standards-based hardware and software components.

5.6 Benefits

Complete supply chain visibility drives costs out of the supply chain for all trading partners. The removal of the line of sight requirement for reading product identification numbers facilitates the automation of inventory tracking, improving warehouse operations by reducing order fulfilment errors, speeding up sorting, and reducing inventory and labor costs. Moreover, the creation of a globally unique identifier for individual items enables the communication of item-specific DYNAMIC INFORMATION, optimising track and trace capabilities, reducing shrinkage, and providing an invaluable resource in product recall situations. Consequently, the EPCglobal Network improves both supply-side and demand-side business processes related to logistics, providing significant benefits to all trading partners seeking sophisticated collaborative models to support their supply chain.

	MANUFACTURER	RETAILER
SHIPPING & RECEIVING	Reduces freight deductions	Reduces errors in product identification
	Increases information for claims reconciliation leading to greater recovery of funds	Increases accurate association of product to originating purchase order
	Expedites reconciliation leading to decreased Days Sales Outstanding	Reduces errors in product counting
	Reduces order fulfilment errors	Reduces out of stock due
DEMAND & REPLENISHMENT PLANNING	Volume planning	Automates inventory tracking
	Automates capital asset management (e.g. trucks, containers, etc.)	Improves demand planning
	Improves capital asset tracking & utilisation	Improves replenishment operations
PROMOTIONS EXECUTION		Improves assortment management
	Quickens replenishment cycles during the promotional period	Improves utilisation of working inventory and capital
	Increases sales as promised by the promotion	Manifests expected sales lifts and store profit
	Improves forecasting and execution measurement learning for future promotions	Ensures on-shelf in-stock levels to secure modular shelf inventory
		Increases sales as promised by the promotion

6 Leveraging the Power of the GS1 Portfolio

As with all solutions in the GS1 portfolio, the GDSN and the EPCglobal Network are built on the strong foundation of the GS1 System and reflect the overriding vision of GS1 to provide compatible, standards-based solutions. To that end, both solutions implement the GS1 integrated approach to global identifiers and emphasize architectural compatibility and interoperability.

6.1 Integrated Hierarchical Approach to Identifiers

The GS1 System provides globally accepted standards and a common language for the identification and communication of information regarding products and locations for numerous vertical sectors. These standards provide a compatible, integrated approach to identifiers which connects identifiers in a hierarchical scheme. This hierarchical scheme optimises linkages to additional information, but avoids duplication of information where unnecessary for the targeted business needs and business processes. In the case of the GDSN and the

EPCglobal Network, integrating GS1 global identifiers like GTINs into EPCs ensures that the EPCglobal Network is fully integrated with the GS1 System in general and the GDSN in particular.

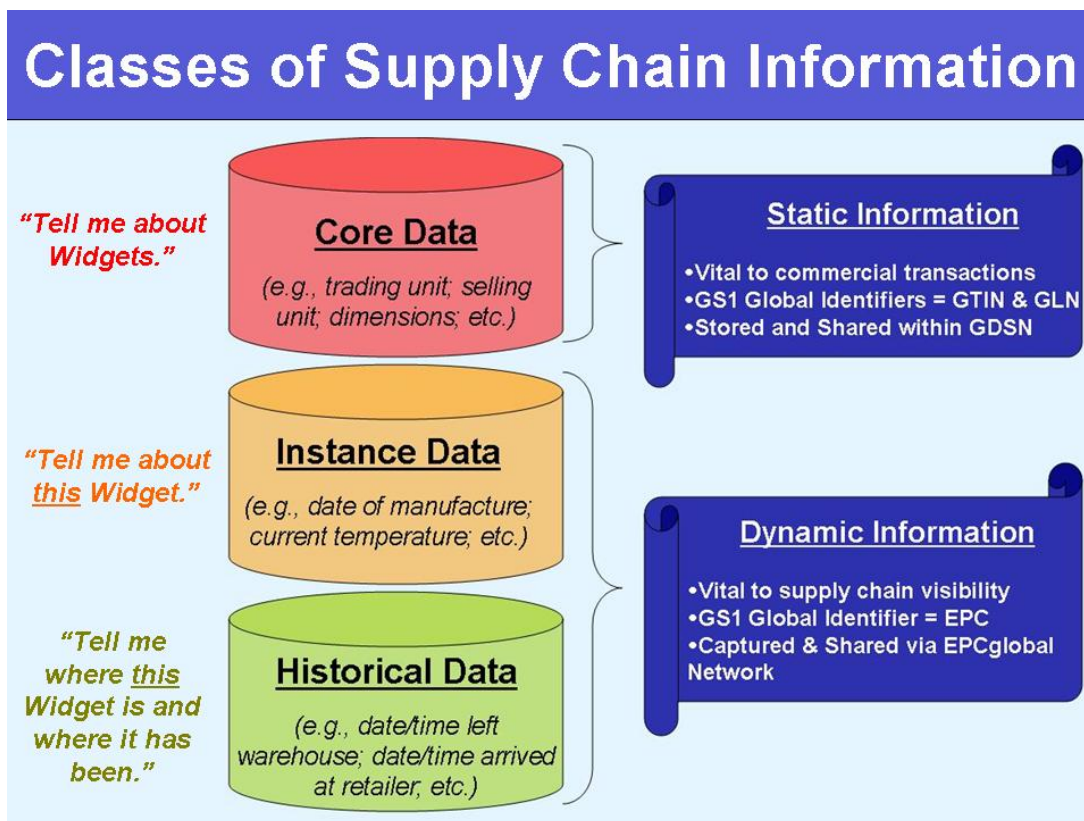
It is important to note that although the EPCglobal Network integrates STATIC INFORMATION identifiers into EPCs, it does not collect and/or communicate STATIC INFORMATION (i.e. the GTIN is integrated into the EPC, but the STATIC INFORMATION corresponding to that GTIN is not maintained in the EPCglobal Network).

6.2 Architectural Compatibility & Interoperability

In addition, there are technical teams at GS1 focused on compatibility and interoperability in the architecture of the two networks. Ensuring the compatibility and interoperability of the architecture in both networks optimises underlying technologies and ensures the compatibility and interoperability necessary to support integrated solutions where business processes require.

7 Understanding the Differences

The GDSN and the EPCglobal Network provide compatible, standards-based solutions for resolving distinct business needs. The GDSN responds to the business need for reliable, standards-based STATIC INFORMATION among trading partners to support business processes related to collaborative trading. The EPCglobal Network responds to the business need to collect and share DYNAMIC INFORMATION about individual items as they move through the supply chain in order to support business processes related to supply chain visibility.



Those business needs and business processes are different, as are the underlying technologies required to support them. The operating environment and underlying technologies required to support the GS1 Global Registry and the GS1 GDSN-certified Data Pools are different from the operating environment and underlying technologies required to support the EPCglobal Network. The GDSN utilises a tight coupling of Data Pools facilitated by the GS1 Global Registry to ensure the quality of STATIC INFORMATION and to enable data synchronisation among trading partners. The EPCglobal Network utilises a highly distributed model with maximum scalability to enable the collection and exchange of DYNAMIC INFORMATION about individual items at various points throughout the supply chain. These differences are due to the fact that the technology necessary to support depth of information (i.e., the depth of the core data corresponding to each GTIN and GLN in the GDSN) is different from the technology necessary to support breadth of information (i.e., the breadth of the DYNAMIC INFORMATION in the EPCglobal Network for all of the individual EPCs as they travel through numerous points along the supply chain). Although they utilise different registries and underlying technologies, both solutions are built on the strong foundation of the GS1 System in order to provide a comprehensive framework for trading partners to do business-to-business commerce.

	GDSN	EPCglobal Network
BUSINESS USE	Collaborative e-commerce	Supply chain visibility
MISSION	Ensure information quality between trading partners.	Track physical movement of items.
PRIMARY FUNCTIONS	Data synchronisation and GS1 System compliance validation. <ul style="list-style-type: none"> ➤ Foundation for collaborative transaction management (B2B electronic commerce). 	Records supply chain history with events and states changes. <ul style="list-style-type: none"> ➤ Real-time supply chain visibility over the Internet.
TYPE OF INFORMATION	Static Information <ul style="list-style-type: none"> ➤ Object class and party core data ➤ GTIN and GLN 	Dynamic Information <ul style="list-style-type: none"> ➤ Item-specific history, events and states data ➤ EPC

8 Complementary Solutions

GS1 approaches its portfolio and all of the individual solutions with a forward-thinking philosophy that supports compatibility, interoperability and integration. Maintaining the GS1 standards and identifiers, and ensuring the compatibility of the architecture used in all GS1 solutions keeps the portfolio interoperable and complementary. As part of the GS1 portfolio, the GDSN and EPCglobal Network are complementary solutions fulfilling the GS1 vision for a comprehensive approach to sophisticated collaborative commerce. In fact, several vital business processes have already been identified as benefiting from both solutions. These are not duplicate benefits; rather, they are distinct, cumulative benefits derived from the additional information and capabilities provided by each solution. The GDSN benefits the business processes in terms of handling the associated data, and the EPCglobal Network benefits the business processes in terms of handling the associated physical products.

One example of a business process benefited by both solutions is new item introduction. For new item introduction, the GDSN increases speed to market by ensuring the accuracy and streamlining the distribution of STATIC INFORMATION that retailers and manufacturers need to process orders and get the new item into stores. In addition, using the EPCglobal Network for new item promotional displays provides DYNAMIC INFORMATION to track that the display is moved to the sales floor and is properly stocked in order to optimize the promotional period for the new item. Another example is invoice reconciliation. If a retailer receives different quantities than expected, that discrepancy could be due to misidentification of items, miscounting of items, and/or an attempt to reconcile with wrong invoice. The GDSN assists with administrative and data handling issues in reconciling the invoice, and the EPCglobal Network assists with issues associated with the physical items like identification and counting.

In looking to the future, GS1 will continue to provide leadership to trading partners seeking to optimize their business processes with the benefits of these two complementary solutions. To that end, GS1 will be working with the FMCG industry to help them identify even more opportunities for where the GDSN and the EPCglobal Network can converge from a synergistic business processes perspective to improve supply chain operations (e.g. Product Recall, Food Safety, etc.). In addition, GS1 will be working with End Users and Solution Providers to examine where these solutions may converge in End User business processes and how to best provide for those points of convergence in the future.

9 Implementations Today

Implementation of the GDSN and the EPCglobal Network are moving forward. Trading partners implementing the GDSN are preparing internal data systems to incorporate GS1 System standards and publishing their accurate and standardised data to a GS1 GDSN-certified Data Pool. In addition, they are pilot testing with key items and select trading partners, and monitoring the results to make the necessary work flow, business process and technical adjustments necessary for full production. Over 3000 local and multi-national companies are currently synchronising data in the GDSN worldwide and are realising the business benefits. Likewise, implementation of the EPCglobal Network is also advancing. Trading partners implementing the EPCglobal Network are beyond pilot testing at the pallet and case level to learn about the technology, and are seeing business benefits today. In addition, many are coordinating pilot tests with select trading partners to better understand the Network by sharing information, and learning how DYNAMIC INFORMATION can improve their logistical operations and business processes, providing increased supply chain visibility.

Today, as always, the GS1 Member Organisations are supporting trading partners in their implementations of these solutions by providing implementation support services, including education, training and best practices guidelines. In addition, GS1 is also providing forward-thinking leadership in order to optimise these GS1 solutions and investments now and in the future.

10 Conclusion

The GDSN and the EPCglobal Network are compatible, standards-based solutions for improving the efficiency and visibility of global supply chains. As the GS1 solution for data registration, standards compliance and data synchronization of STATIC INFORMATION, the GDSN improves the many business processes related to commercial transactions. By ensuring continuous and reliable data synchronisation, the GDSN ensures that STATIC INFORMATION vital to commercial transactions is identical among local and global trading partners, increasing data accuracy and driving costs out of the supply chain for suppliers and retailers alike. As the GS1 solution for capturing and sharing DYNAMIC INFORMATION, the EPCglobal Network improves the many business processes related to supply chain visibility. By enabling trading partners to capture, share and discover EPC data about individual items as they move through the supply chain, the EPCglobal Network significantly reduces costs related to lost or missing shipments, product recall and order fulfilment errors, and provides many opportunities for improving warehouse management and inventory tracking. The GDSN and the EPCglobal Network improve both supply-side and demand-side business processes, providing significant benefits and savings to all trading partners.

As with all solutions in the GS1 portfolio, the GDSN and the EPCglobal Network are built on the strong foundation of the GS1 System and reflect the overarching vision of GS1 to provide compatible, standards-based solutions for resolving distinct business needs, as well as complementary solutions for companies seeking a comprehensive approach to sophisticated collaborative commerce. As part of the GS1 portfolio, these solutions optimize local and global trading relationships, and enable trading partners to reach even more sophisticated levels of collaboration in order to improve the efficiency and visibility of their supply chain. As a result, the GDSN and the EPCglobal Network are complementary solutions for companies seeking innovative, forward-thinking solutions that manifest robust benefits for how they do business today, and that pave the way how they can their improve business processes in the future.



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