

GDSN Overview

The Global Data Synchronization Network™ (GDSN™) is an automated, standards-based, global environment that enables secure and continuous data synchronization, allowing all partners to have consistent item data in their systems at the same time.

The GS1 Global Data Synchronization Network connects trading partners (manufacturers, retailers, distributors, hospitals, wholesalers and group purchase organizations) to the GS1 Global Registry®. This connection is made via a network of interoperable **GDSN-certified data pools**.

In order to identify the trade items – within this network – the GS1 Identification Keys come into play. Their role is to support the identification of items, services, locations, logistic units, returnable containers, etc.

Specific to GDSN are three ID keys. These keys are used to help identify the trade items: the **Global Trade Item Numbers** (GTIN), the **Global Location Numbers** (GLN) and the **Global Product Classification** (GPC).

Definitions

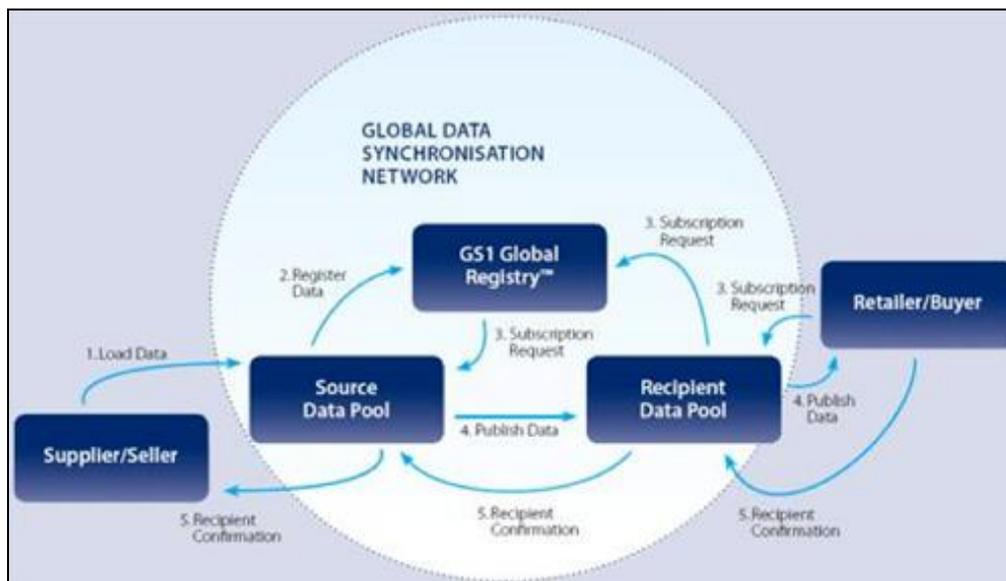
The **GS1 Global Registry**® is the GDSN's "information directory" that details who has subscribed to trade item or party data, guarantees the uniqueness of the registered items and parties, and ensures that all data pools in the network are complying with a standards-based set of validation rules.

GS1-certified data pools are electronic catalogs of standardized item data. They serve as a source and/or a recipient of master data. Data pools can be run by a GS1 Member Organization or by a solution provider.

The **Global Location Number (GLN)** is a 13-digit unique location number mandatory within the GDSN to identify data owners/information providers, such as distributors, brokers, and manufacturers, as well as legal entities and physical locations.

The **Global Trade Item Number (GTIN)** is a 14-digit number used to uniquely identify a products where there is a need to retrieve pre-defined information. The product may be priced, ordered or invoiced at any point within the supply chain.

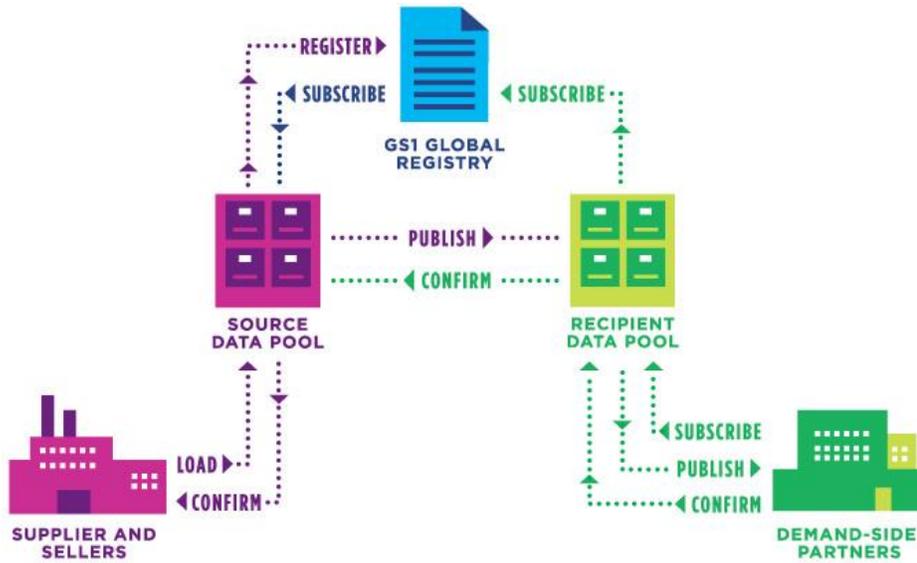
Global Product Classification (GPC) is the chosen GS1 standard mandatory classification system for the GS1 Global Data Synchronisation Network (GDSN). Sellers and buyers need to group products the same way globally to ensure effective data synchronisation in the GDSN, to enable product search, view, and validation, as well as publication and subscription match. Only products classified according to GPC will be registered in the GS1 Global Registry. The foundation of GPC is called a "Brick;" GPC bricks define categories of similar products. Using the GPC brick as part of GDSN ensures the correct recognition of the product category across the extended supply chain, from seller to buyer. Bricks can be further characterised by Brick Attributes.



There are five simple steps that allow trading partners to synchronize item, location and price data with each other:

1. **Load data:** the seller registers product and company information in its data pool.
2. **Register data:** a small subset of this data is sent to the GS1 Global Registry.
3. **Request subscription:** the buyer, through its own data pool, subscribes to receive a seller's information.
4. **Publish data:** the seller's data pool publishes the requested information to the buyer's data pool.
5. **Confirm & inform:** the buyer sends a confirmation to the seller via each company's data pool, which informs the supplier of the action taken by the retailer using the information.

1WorldSync Overview



Data Synchronization enables you and your trading partners to share standard product and location information. This ongoing electronic exchange of information eliminates manual processes. It provides the tools you need to share item and price information automatically. And, ultimately, it greatly increases your organization's contribution to the global value chain.

The Global Data Synchronization Network (GDSN) connects suppliers and retailers, operators, providers, distributors, and other recipients to the GS1 Global Registry via selected Data Pools. As a GS1 GDSN-certified Data Pool, 1WorldSYNC offers powerful solutions for implementing Data Synchronization and supporting user needs over time. Working with 1WorldSYNC, you can get products on shelf faster, reduce logistics costs, and enhance customer relationships.

