GDSN Trade Item Implementation Guideline for Transport and Logistics

GS1 Implementation Guideline

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Log of Changes in Issue

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1	9-Jan-2014	Mark Van Eeghem	Initial Draft
3	23-Jan-2014	Mark Van Eeghem	Cleanup of text post comments of workgroup members.

Table of Contents

1. Introduction

1.1. Purpose of this Document

This document is an annex to the regular Trade Item Implementation Guide (TIIG) for GDSN 2.8. It assumes familiarity with the Global Data Synchronization Network (GDSN) is and what it does (See: http://www.gs1.org/gdsn). It also assumes familiarity with the Logistics Interoperability Model (LIM). (http://www.gs1.org/sites/default/files/docs/sectors/transportlogistics/LIM_Foundation_Report.pdf)

1.2. Is this the standard to refer to documents or should they be listed at the bottom of the document?

The purpose of this document is to provide guidance to clients of Transport & Logistics (T&L) companies on how to utilize GDSN to pass product (trade item) information from the Client to Transport & Logistics partners in T&L scenarios as defined in the LIM.

1.3. Benefits of this document

Transport & Logistics partners can benefit from the availability of authoritative, structured, globally relevant product information to facilitate T&L processes as defined in the LIM. This product information would be utilized to more efficiently recognize repetitive products and evaluate risks of products. The GDSN has the ability to assist in providing the information needed to these trading partners. The GDSN has the ability to provide product information electronically from the supplier of the item to a recipient. This information is traditionally supply chain logistical data, a subset of these data elements describe or classify products and satisfy the T&L use case. T&L partners would become new recipients of GDSN data. They would access GDSN information via a GDSN Data Pool about products of interest to them to make this information available to targeting systems.

For this use case to be made functional, there are a few challenges, which need to be resolved to provide the ease of use needed for suppliers and T&L partners to readily adopt this solution. These challenges may be hard to overcome, particularly for trading partners looking to get a solution for spare parts. This use case will outline those challenges and identify appropriate resolutions for them.

This is only for warehousing activities! Not for transport!

> **Note:** This document provides guidance (not standards) for trading partners to gain a better understanding of the use of GDSN by T&L partners. Each partner has the ability to specify the attributes which will support its own processes.

1.4. Who should use this document

■ **Client** - This actor is the supplier of product information. This may be the actual manufacturer, brand owner, or a supplier/importer of the item. For the Agencies, this actor would be the manufacturer and/or brand owner that oversees product creation and is responsible for placing it into the supply chain, as they know the product best. For some items, such as private-label retail products, the private label brand owner may have to publish the data through the GDSN to have their items available to Governmental Agencies.

■ **GDSN Certified Data Pool** - This is the technology provider who operates a solution whereby product information is shared using the GDSN standards. This actor role would have service contracts with the

Suppliers and Agencies.

Note: Some data pools are operated by a GS1 Member Organization (MO) and others are not. There is no functional difference between GDSN data pools with or without a GS1 member organization association.

■ **Logistic Service Client** - An umbrella term for entities that purchase logistics services from another entity. It can be a retailer, manufacturer, material supplier, freight forwarder, distribution centre.

■ **Logistic Service Provider (LSP) -** An umbrella term for entities that provide logistics services for another entity. It can be a carrier, freight forwarder or distribution centre. \

■ **Shipper** - In a shipment scenario, a party who engages in shipping goods.

2. Implementation Procedures

For this use case to be functional, there are a number of challenges that need to be resolved to provide the ease of use expected by T&L partners and clients. These challenges may be hard to overcome; their challenges and potential resolutions are outlined here.

While the use of the GDSN works for Transport & Logistics within the framework of FMCG (Fast Moving Consumer Goods), and can be applied as described in the rest of the Trade Item Implementation Guide, there are a number of scenarios and use-cases that currently are not as easily implementable, and of which T&L partners need to be aware.

Traditionally, the choreography of GDSN assumes a buyer and seller approach. Logistic Services Providers are, however, the man in the middle. This especially holds true for Warehousing scenarios. GDSN 2.8 currently lacks most of the Warehousing specific item master data information.

At this moment the following challenges for implementing GDSN 2.8 in a Warehousing environment, have been identified:

- In Warehousing, it is often the LSP who needs to physically build the different levels of a product hierarchy. This implies that the client needs to inform the LSP on materials to be used for packaging, but also instructions on how to compose these levels.
- In a Warehousing environment, the higher units may have no GTIN; indeed, they often have no identification at all, contrary to what is applicable in GDSN. Using GTIN to identify the different levels is best practice. It is recognized, however, that in a Warehousing environment, this may not be the case, esp. if the manufacturer does not provide the cases and pallets labeled with a separate GTIN.
- Hierarchy in warehouses may have only 1 single GTIN for the different levels of packaging.
- The main identifier used in a warehouse is the one the client shares with the LSP; this is not necessarily the GTIN.
- Pallets are not necessarily sales units.
- Only 1 pallet-type can be identified per hierarchy. A work-around could be to send a Despatch Advice if specific additional pallet-types are needed. The other way to provide multiple pallet types would be to publish different hierarchies, i.e. 1 per different pallet type.
- The pallet type code as currently defined in GDSN is insufficient for a Warehousing scenario.
- GDSN 2.8 does not provide handling instructions for the scanning of serialized items in a warehousing environment.
- Client Material Description in GDSN 2.8 is inadequate for use in the T&L Warehousing scenario: In the receiving process, the LSP needs to know the supplier code of the product (e.g. on boxes). The supplier material code is more important to them than the supplier material description. In the Warehousing scenario any tangible goods are considered to be materials, not necessarily just the packaging.
- Spare parts are excluded from the scope as they may be very small units that go into a box ("roll"), and not every roll may contain the same number of items. At this point in time, spare parts are not in

GDSN, yet.

Members of the T&L sector also need to be careful when reading the GDSN documentation, as there are a number of cases where the terminology used is different from the use in their sector, so it is advisable to always refer to the definition of the data elements of GDSN 2.8 in the GDD or the other GDSN documentation as published on the GS1 website.

In summary, GDS 2.8 in its current form has limited scope for applicability at this time for T&L Warehousing scenarios, as described in the above use cases.