

GS1 Standards for Transport and Logistics

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GS1: Vision and Mission

 At GS1, Our Vision is a world where goods and related information move efficiently and securely for the benefit of businesses and people's lives

 Our Mission is to be the <u>neutral leader</u> enabling <u>communities</u> to <u>develop</u> and <u>implement</u> global standards



GS1 in a nutshell

 GS1 is a global organization dedicated to the design and implementation of <u>global standards</u> <u>services and solutions</u> to improve the efficiency & visibility of the <u>supply chain</u>

 The GS1 system of standards is the <u>most</u> <u>widely used</u> supply chain standards

system in the world





GS1 is a fully integrated global organization

- More than 30 years of history
- Over 108 Local GS1 Organizations representing all points in the supply chain
- Over 1.3 Million companies doing business across 150 countries

GS1 operates in multiple sectors & industries

 Over 20 represented sectors ranging from Fast Moving Consumer Goods to Healthcare, Transport, Aerospace...



- GS1 is a <u>not-for-profit</u> organization
- GS1 is <u>neutral</u> from the business partners
- GS1 is user-driven and governed
- GS1 serves all companies, both
 - multinationals and SMEs





GS1 Customers



Retail

Healthcare



Customs, transport & logistics



Under Discussion: Aerospace & Defense, Automotive, Postal,

Financial Services



Our Global Standards



Global standards for automatic identification

Rapid and accurate item, asset or location identification



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



The network 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



GS1 Activities in Transport & Logistics







- ✓ GS1 Logistics Forum
 - ✓ STILL Recommendation on GS1 Logistics Label
 - ✓ Logistics Interoperability Model (LIM) eCom message standards developments for T&L
- **✓ EPC TLS Industry Action Group**
 - ✓ Contribute to the EPC RFID Standards developments
 - ✓ EPC RFID Pilot Projects using EPC standards including EPCIS
- ✓ Number of MO's already active in the T&L Sector
- ✓ Activities with WCO & local Customs
- ✓ Contributions to the int'l standards development (ISO, UN/CEFACT)



GS1 in Transport and Logistics

- Use of GS1 eCom messages streamlined communication between Unilever and DHL
- GS1 North Americas and VICS launched Service for less empty miles runs of trucks that contributes to more sustainable Transport
- German Dachser uses GS1 IDs to improve the logistics processes
- Swedish Bring Frigoscandia uses GS1 Standards to meet requirements of the EU Food traceability
- In Peru EPC/RFID brings visibility and better quality data to Korean multinational LG and partners











Increased Visibility of GEFCO thanks to GS1 Standards

GEFCO, one of leading logistics companies in Europe, uses **GS1** standards in identification and communication

Benefits:

- increased visibility of the flow of goods and shipments for each supplier and store
- Increased quality of service and client satisfaction
- Optimisation of physical and information flows and associated logistics costs





Logistics Interoperability Model (LIM)

Visibility and interoperability in transportation and warehousing: these are goals long sought by supply chain stakeholders, and ones which can only be achieved through business process alignment and improvement

LIM is the framework of common business processes and related data communication interchanges (EDI).



For all levels of the interoperations in **Transport and Warehousing**,

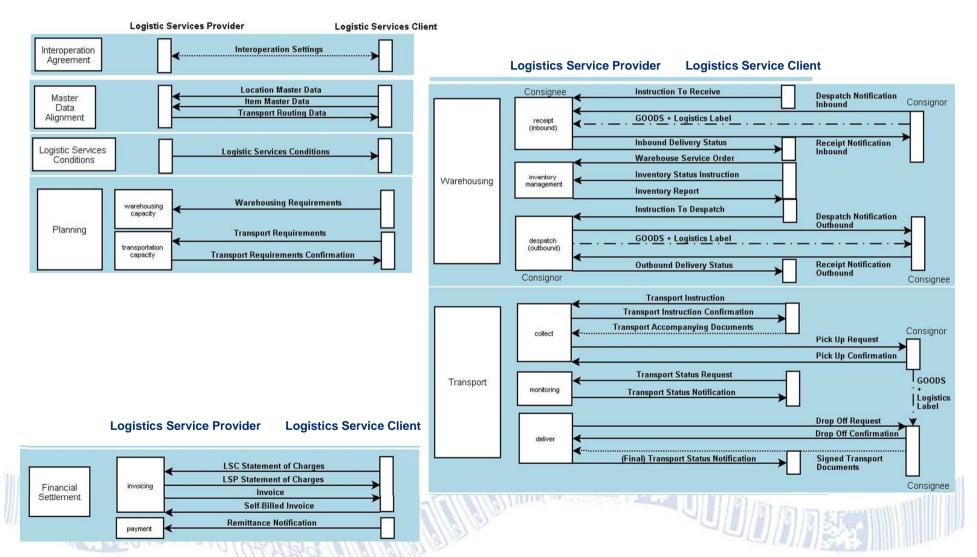
From master data alignment to financial settlement



- an interchange standard for information based on global GS1 standards, GS1 data keys (GSIN, GRAI, SSCC) and GS1 EANCOM and GS1 XML
- intended to scale from large corporations down to SMEs
- focused on visibility
- a collaborative approach around the key players, the logistic service providers
- The LIM can support the vision of the Sustainable Transport especial regarding the reduction of the environmental impact of transport
- The LIM will give the parties in the supply chain the opportunity for scalability



LIM at a glance



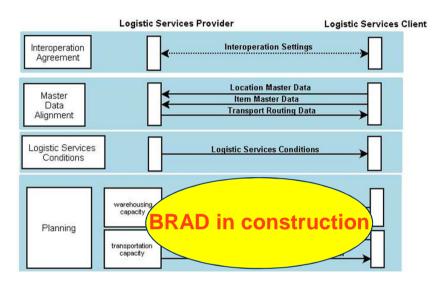


Scope of LIM I

- Continental transport (so basically road transportation)
- Planning and Execution:
 - Master data alignment
 - Conditions
 - Planning
 - Execution
 - Financial Settlement
- UNCEFACT alignment
- GS1 eCom: EANCOM and XML, alignment of the use of messages by message guidelines and business transaction rules on top.
- GS1 logistics label enhanced for Transport use



Status LIM 1



Receipt Notification Inbound **BRAD** to start inventory Warehousing management Despatch Notification Outbound GOODS + Logistics Label despatch (outbound) **Receipt Notification Outbound Delivery Status** Consignor Consignee Transport Instruction Transport Inst Consignor collect **BSD** to start TI & TIR,

(Final) Transport Status Notification

Instruction To Receive

Logistics Service Client

piloting beta versions

Despatch Notification Inbound

Signed Transport

Consignee

Consignor

Logistics Service Provider

Consignee

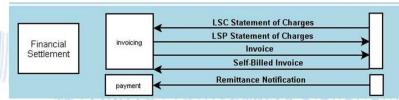
receipt (inbound)

monitoring

deliver

Transport

Logistics Service Provider Logistics Service Client





LIM II







LIM version II (already announced in version I report)

- more comprehensive version of LIM Scope to be:
- Inter-modal transport: maritime, rail, air
- cross continental (inter continental)
- customs





LIM II – also + EPC and +eFreight

The physical flow of the goods identified by EPC Global identification technology. More specific to include the work of the EPC Global Transportation and Logistics Services Industry Action Group.

Also in line with the description of other GS1 data keys like especial the GS1 logistics label.

Utilisation of the ePC/RFID standards in transport as well as warehousing

e-Freight

Multi modal (air-land-sea) and extension/enhancement of roles.



LIM II – more relationships

- ✓GS1 and eFreight started collaboration to mutually benefit from standards development and implementation in the industry
- ✓ eFreight participate in the LIM I developments
- √ Focus to further strenthern collaboration for LIM II developments
- √To achieve the extension of the current LIM collaboration with other organisations and communities like WCO, UNCEFACT-groups and the e-Freight initiative has to be continued and strengthened



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