Shipment versus Consignment

Definitions

Colophon

Shipment versus Consignment definitions
Definitions

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Summary

A semantic model for data sharing specifies all relevant concepts and their properties for data sharing in supply and logistics. The definitions in this semantic model, also called ontology, are key to ensure smooth communication among the supply chain.

Shipment and consignment are fundamental concepts in supply and logistics.

The Topsector Logistiek (TSL) Adoption Support Team (AST) researched definitions of shipment and consignment in various industry standards, e.g. UN/CEFACT SHIP/MMT-RDM - P1024, GS1 XML standards 3.5.1, ISO/PRF 24533-2, ISO/DIS 23355:2022 (E), IATA ONE Record, and the definitions in the FEDeRATED semantic model.

The key findings of this definition analysis are:
- Definitions are not crisp and clear;
- Hard to determine the real difference between a shipment and a consignment;
- Some standards only contain the shipment concept;
- Some standards reverse the role of shipment and consignment in respect to other standards;
- All definitions converge basically to two views.

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1 Definition analysis

The definition analysis identified that the standards can be divided into two groups, each with a different view on what the definition of shipment and consignment in essence should entail. The UN/CEFACT definition complies with the first view. Because UN/CEFACT MMT is multi-modal (road, water, rail, air) and a global standard, AST adopts the definition in the first view.

First view

A shipment is an administrative identifiable collection of one or more Trade Items (available to be) transported between the Seller (Original Consignor/Shipper) and the Buyer (Final/Ultimate Consignee). A shipment can be transported as a whole, or in parts.

Shipment synonym: trade delivery.

A consignment is a physical (and administrative) identifiable collection of one or more Consignment Items (available to be) transported from one Consignor to one Consignee via one or more modes of transport as specified in one single transport service contractual document. A consignment can be made up of some or all Trade Items (aggregated into Consignment Items) from one or more shipments. A consignment stays a physically and administrative identifiable unique collection per transport leg.

Consignment synonym: transport service order.

Second view

A consignment is an administrative identifiable collection of one or more Consignment/Trade Items (available to be) transported between the Seller (Original Consignor/Shipper) and the Buyer (Final/Ultimate Consignee). A consignment can be transported as a whole, or in parts.

Consignment synonym: trade delivery.

A shipment is a physical (and administrative) identifiable collection of one or more Shipment Items (available to be) transported from one Consignor to one Consignee via one or more modes of transport as specified in one single transport service contractual document. A shipment can be made up of some or all Consignment/Trade Items (aggregated into Shipment Items) from one or more consignments. A shipment stays a physically and administrative identifiable unique collection per transport leg.

Shipment synonym: transport service order, Trade Delivery.

2   Shipment definitions

All reviewed definitions which formed the basis for the two views are included here for reference.
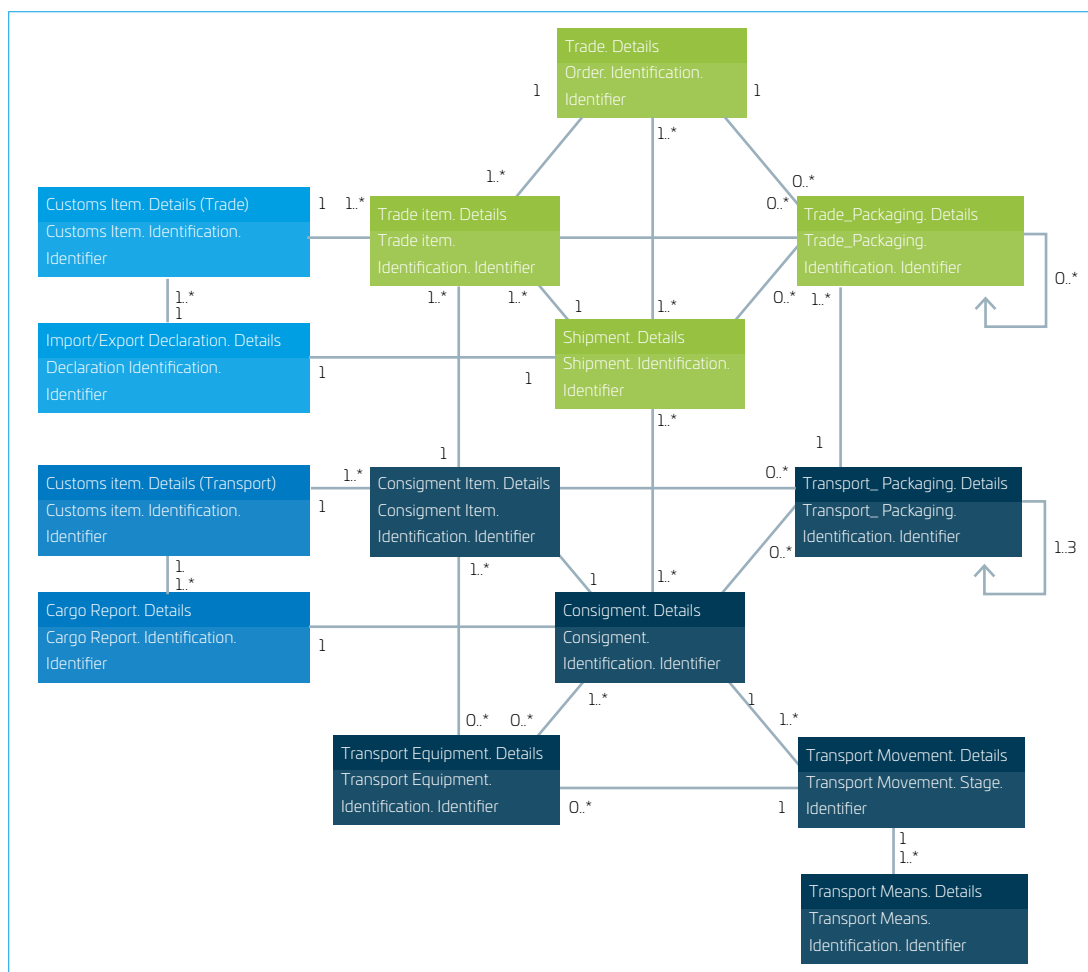
GS1

A shipment is an identifiable collection of one or more Trade Items available to be transported together from the shipper (Original Consignor/Shipper), to the receiver (Final/Ultimate Consignee). Typically the shipment is the entity communicated between trading partners in the Despatch and Receiving Advice.

- A shipment may contain several shipment items.
- A shipment may have one defined transport movement.
- A shipment may refer to another (parent) shipment of which it is part during (part of) the transport.

UN/CEFACT

A shipment is an identifiable collection of one or more Trade Items (available to be) transported together from the Seller (Original Consignor/Shipper), to the Buyer (Final/Ultimate Consignee).

- A Shipment can only be destined for one Buyer.
- A Shipment can be made up of some or all Trade Items from one or more Sales Orders.
- A Shipment can have only one Customs UCR.
- A shipment may form part or all of a Consignment or may be transported in different Consignments.

UN/CEFACT HTML index
Here is the concept Shipment lacking, instead the concept Trade Delivery is used.

UN/CEFACT XML
No definition found for Shipment or Trade Delivery, but various properties of Trade Delivery are mentioned.

UN/CEFACT document
The United Nations Centre for Trade Facilitation and Electronic Business (UN/CEFACT) defined a Cross-Industry Supply Chain Track and Trace Project in 2018, which was initiated in early 2020. The project's primary focus is on tracking and tracing during transportation covering the movement of trade deliveries (shipments) from seller to buyer via one or more transport contracts (consignments) and one or more transport modes.

IATA ONE Record
A shipment is one or more pieces accepted or to be accepted under the terms of a single/correlating transportation contract. The shipment is therefore a physical object, where e.g. the weight refers to the actual weight of the total set of pieces that are linked to the shipment.

FEDeRATED
A shipment is a business transaction with a carrier for the transport of goods or containers from one location to another, where all goods and containers have to arrive in a given time period. This is similar to a consignment; however, it is always a carrier acting as service provider.

ISO/PRF 24533-2
Shipment: Identifiable collection of one or more goods items, available to be transported together from the original shipper to the ultimate consignee.
Note 1 to entry: More than one shipment can be combined into one consignment.

ISO/DIS 23355:2022 (E)
Appears to have no definition for Shipment.

3 Consignment definitions

GS1
A consignment is a logical grouping of goods (one or more physical entities) that is intended to be transported as a whole from a consignor to a consignee by a carrier or freight forwarder via one or more modes of transport, subject to one single transport contract.
- A consignment can contain several consignment items, which can be contained in several pieces of transport equipment.
- During transport a consignment can make several transport movements. A consignment may refer to another (parent) consignment of which it is part during (part of) the transport.
- A consignment may refer to one or more shipments that are contained within.

UN/CEFACT
UN/CEFACT (https://unece.org/fileadmin/DAM/cefact/Standards/MMT/BRS_T_L-MMT.pdf)
A consignment (Transport Service Order) is a separately identifiable collection of Consignment Items (available to be) transported from one Consignor to one Consignee via one or more modes of transport as specified in one single transport service contractual document.
- A Consignment can only have one Transport Service Buyer
- A Consignment can only have one Transport Service Provider
- A Consignment can only have one Consignor
- A Consignment can only have one Consignee
- The Transport Service Buyer can be either the Consignor or the Consignee
- A Consignment is made up of one or more Consignment Items
- A Consignment can be made up of some or all Trade Items (aggregated into Consignment Items) from one or more Shipments
- A Consignment is made up of one or more Customs Items for reporting to Customs
- A Consignment can have one or more Customs UCRs

UN/CEFACT HTML index
A separately identifiable collection of goods items to be transported or available to be transported from one consignor to one consignee via one or more modes of transport where each consignment is the subject of one single transport contract.

UN/CEFACT XML
Misses the Consignment concept, but has a Supply Chain Consignment concept. It is for now unclear what the relationship is.

Definition in the HTML index
A separately identifiable collection of goods items to be transported or available to be transported from one consignor to one consignee in a supply chain via one or more modes of transport where each consignment is the subject of one single transport contract.

IATA ONE Record

Seems to lack the concept Consignment.

FEDeRATED

A consignment is a business transaction of a shipper as customer with a service provider (e.g. a carrier or forwarder) for the transport of goods or containers from one location to another, where all goods and containers have to arrive in a given time period. The time period indicates that the goods or containers can arrive with different transport means at different times, but they all have to present after the period has ended.

ISO/PRF 24533-2

Consignment: Separately identifiable number of goods items (available to be) transported from one consignor to one consignee via one or more modes of transport and specified in one single transport document.

ISO/DIS 23355:2022(E)

This standard has the concept Consignment, but lacks a textual definition, only properties and related objects are documented. The properties are based on WCO and UNCL.

4   References

GS1

https://www.gs1.org

GS1 XML standards 3.5.1

https://www.gs1.org/standards/gs1-xml/3-5-0

UN/CEFACT

https://unece.org

UNECE, Trade, Transport and Logistics, Multi Modal Transport (MMT) - Reference Data Model (RDM)

https://unece.org/trade/uncefact/mainstandards#accordion_17_0_37_38_51_61_65_66

UN/CEFACT SHIP/MMT-RDM – P1024

https://unece.org/fileadmin/DAM/cefact/Standards/MMT/BRS_T_L-MMT.pdf

IATA ONE Record

https://www.iata.org/en/programs/cargo/e/one-record/

IATA ONE Record Data Model, Design Principles

https://github.com/IATA-Cargo/ONE-Record/blob/master/March-2020-standard-COTB-endorsed/

Data-Model/IATA-1R-DM-Design-Principles-Document-vCOTB-Apr2020.pdf

FEDeRATED

http://www.federatedplatforms.eu/

Semantic model (search for Shipment and Consignment)

https://federated-node-1.westeurope.cloudapp.azure.com/documentation

ISO/PRF 24533-2

https://www.iso.org/standard/79905.html

ISO/DIS 23355:2022 (E)

https://www.iso.org/standard/75308.html

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