UNITED NATIONS ECONOMIC COMMISSION FOR EUROPE

UNITED NATIONS CENTRE FOR TRADE FACILITATION
AND ELECTRONIC BUSINESS (UN/CEFACT)

BUSINESS REQUIREMENTS SPECIFICATION
(BRS)

INTERNATIONAL FORWARDING AND TRANSPORT MESSAGES

International Forwarding and Transport

FINAL AFTER PUBLIC REVIEW

Approved: UN/CEFACT Bureau on 19 October 2020

Version: 2.0

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Document History

Phase	*Status*	*Date Last Modified*
Draft development	Initial	16-JUL 2020

Figure 1: Document History

Change Log

Date of Change	Version	Summary of Changes
July 2020	0.1	Initial Creation
July 2020	0.2	Following Internal review on call, updating the document to use the BRS template for T&L and to circulate on Cue.
July 2020	0.3	Resolves comments on the structure, removed some unnecessary sections from the BRS that do not work for an overall BRS, references to the subset BRS. Editorial Changes for internal project review prior to sending for Public Review.

Figure 2: Document Change Log

1.0 Preamble

The current practice of the exchange of electronic messages for transport and logistics using UN/EDIFACT has provided a trusted and stable environment to communicate efficiently between actors in the supply chain since its introduction in 1990. The ongoing digitalization of supply chains, introduction of IoT devices such as smart containers, eCMR, and adoption of data pipeline principles in the transport and logistics domain processes raises new data requirements and migration path between these UN/EDIFACT messages and the Multi Modal Transport Reference Data Model (MMT RDM) is a key move to support future requirements.

2.0 References

- UN/CEFACT Multi Modal Transport Reference Data Model (UN/CEFACT – SHIP/MMT-RDM)
- UN/CEFACT Buy-Ship-Pay Reference Data Model BSP-RDM Version 1.0 (2019)
- International Forwarding and Transport Version 1.0 BRS of (2008)
- UN/EDIFACT messages (IFTMBP, IFTMBF, IFTMBC, IFTMIN, IFTMCS, IFTSTA, IFTSTQ)
- ITIGG Global Guidelines for the IFTM** P&R messages
- ITIGG Global Guidelines for the IFTSTA/Q P&R messages

3.0 Objective

To standardise the business processes, the business transactions and the information entities for the multimodal international transport and logistics domain by producing a syntax neutral business process model and a corresponding data model covering forwarding and transportation message exchange.

Only the high-level process descriptions are described in this BRS in order that the detailed process analysis of the subset scenarios can provide the detailed process requirements in further subset Business Requirements Specifications (BRS's).

The subset BRS's for forwarding and transportation consist of;
- Booking of Transport
- Shipping Instruction
- Waybill
- Status Reporting

4.0 Scope

4.1 Description

This BRS aims to describe the processes which are aligned to the global guidelines for the following message UN/EDIFACT structures and to the MMT RDM;

- IFTMBF – Firm Booking Message
- IFTMBC – Booking Confirmation
- IFTMIN – Shipping Instructions
- IFTMCS – Waybill
- IFTSTA – Status Report

The scope aligns with the MMT Reference Data Model to support digitalization in the Transport and Logistics whilst remaining data exchange syntax agnostic.

This section describes the aspects of the international purchase and supply chain covered by the MMT project and relates them to the UN/CEFACT Reference Model of the International Supply Chain (ISCRM).

It is recommended that each mode of transport and or each industry sector should base the development of their more specific forwarding and transportation BRS on this multimodal multi-sectoral BRS in order to satisfy their particular business requirements.

It is also strongly recommended that this BRS should be used as a key reference point during the development of any transport related BRS especially the data model subsets.

4.2 Context

Context Category	Description
Business Process	International Forwarding and Transportation
Product Classification	Provision of transport and transport related services to all industry sectors
Industry Classification	Domestic and International multimodal transport
Geopolitical	Global
Official Constraints	International cargo transport conventions & regulatory instruments
Business Process Role	Transport Service Buyer, Transport Service Seller, Consignor, Consignee, Carrier, Transport Service Provider
Supporting Role	Seller, Buyer, Freight Forwarder, Carrier Agent, Customs, Customs Broker, Ship From Party, Ship To Party

Context Category	Description
System Capabilities	No Limitations

Figure 3: Context Categories

5.0 Business Requirements Elaboration

5.1 Definition of Business Terms

The main terms are defined in the MMT RDM apply and this BRS is fully compliant with all of these definitions.

This BRS refers to the following additional terms:

Term	Definition
Transport Service Buyer (Consignor or Forwarder)	The buyer of transport services as stipulated in a Transport Service Contract.
Transport Service Provider (Carrier or Forwarder)	The provider i.e. seller of transport services as stipulated in a Transport Service Contract.
Freight Forwarder	The party undertaking the forwarding of goods by provision of transport, logistics, associated formalities services etc.
Consignment	A consignment 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.
Shipment	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).
Means of Transport	Particular aircraft, vehicle, vessel or other device used for the transport of goods or persons.

Figure 4: Definition of Terms

5.3 Business Requirements View

5.3.1 Overall Business Use Case, Partner View and Conceptual Model

The BRS for International Forwarding and Transport is included in the 'Ship' part of the International Supply Chain Model (see below).
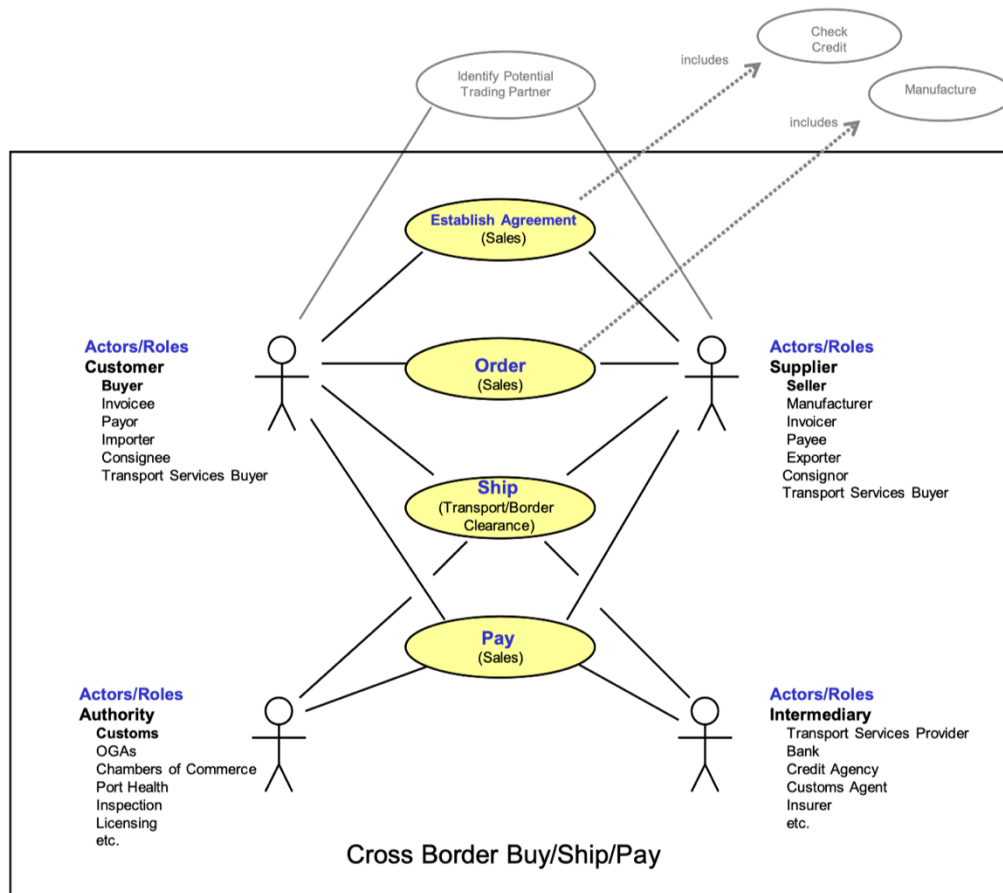

Figure 5: Use Case Diagram for International Supply Chain Model

Figure 5 illustrates the scope of the forwarding and transport processes. This diagram shows that only the Ship use case is within the scope of this BRS.
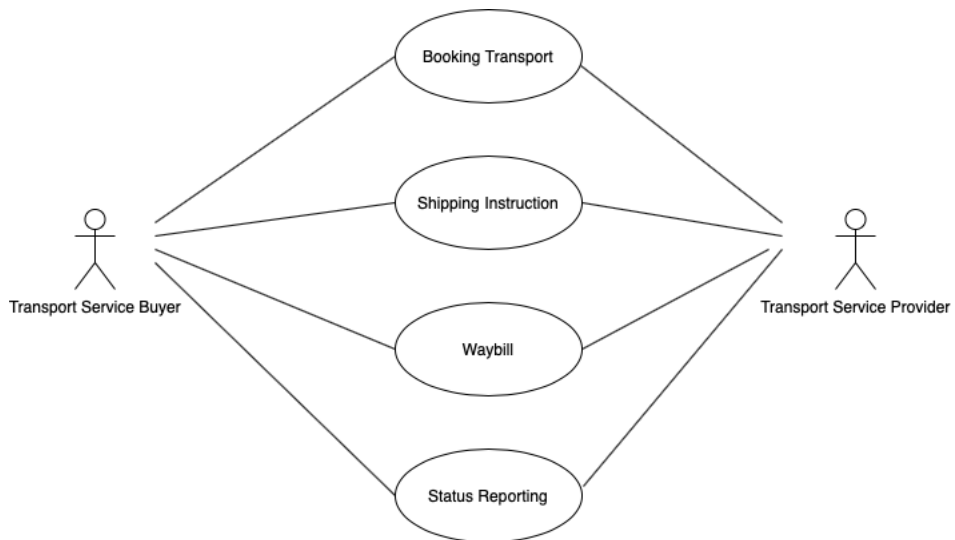
Figure 6: Overall Use Case International Forwarding and Transport

Between Transport Services Buyer and Transport Services Provider a number of processes can be performed, these are shown in Figure 6:

- Booking transport for a consignment
- Providing Shipping Instructions
- Issuing of the Waybill as evidence of the transport contract
- Reporting the status of the consignment during the transport

The following diagram describes the relationships between the highest-level Business Information Entities which are reused across the UN/CEFACT Buy/Ship/Pay, SCRDM and MMT Reference Data Models.
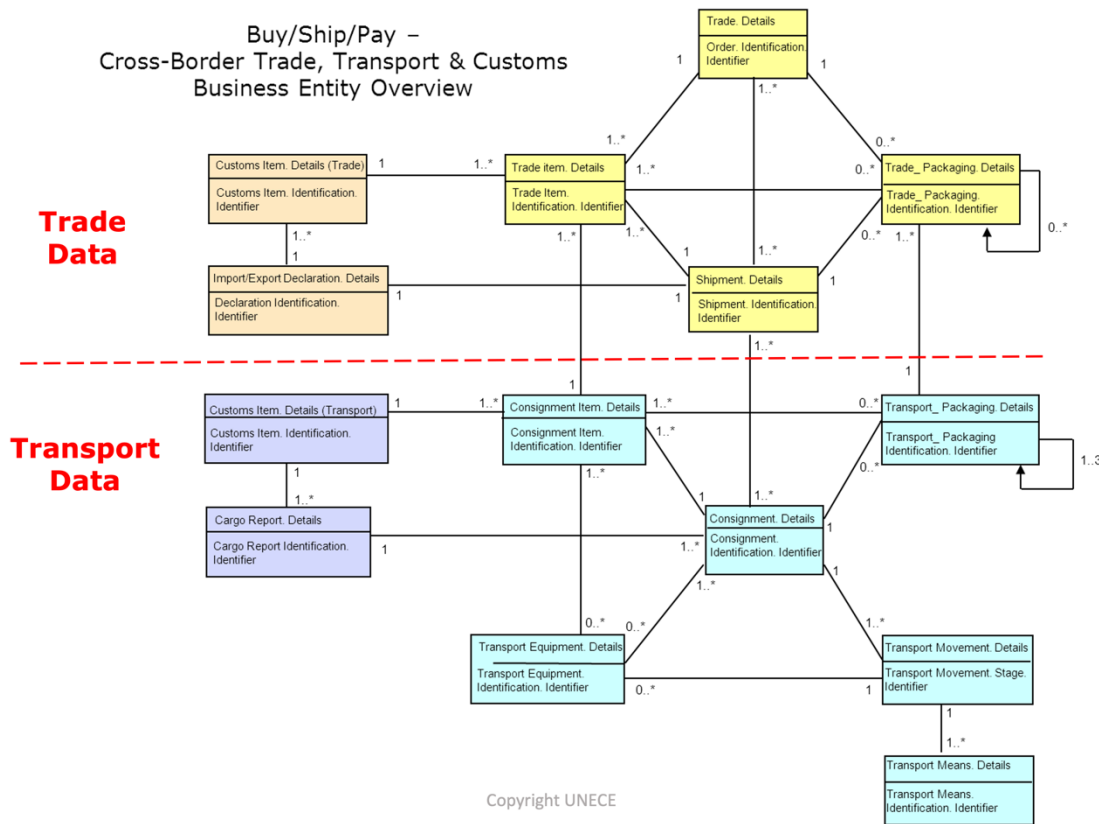

Figure 7: MMT High Level Entity Model

5.4 Business Choreography View

The overall business choreography for this BRS is represented in the following activity diagram:
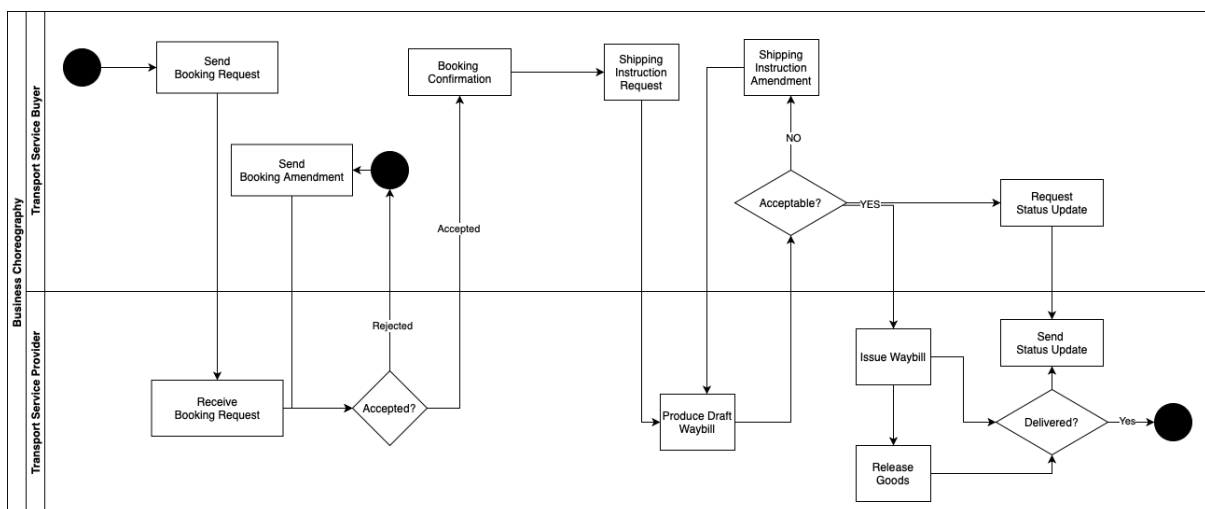

Figure 8: Business Transaction Activity Diagram

Each activity and its use case(s) are detailed in the sub BRS for that process.