UN/CEFACT
United Nations Centre for Trade Facilitation and Electronic Business

ICAO Air Cargo Development Forum (IACD)
Session 4: Improving Air Cargo Connectivity and Supply Chain
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Objectives

• Simple, transparent and effective processes for global business
• Efficient and automated exchange of information

Outputs

• Global Trade Facilitation and Electronic Business Recommendations and Standards

Means

• Public Private Sector Partnership – over 400 experts from government and business
• Meet virtually every week plus two Forums per year

Global Remit
UN/CEFACT Mission

- UN/CEFACT’s mission is to improve the ability of business, trade and administrative organizations, from developed, developing and transitional economies, to exchange products and relevant services effectively.

- Its principal focus is on facilitating national and international transactions, through the simplification and harmonization of processes, procedures and information flows, and so contribute to the growth of global commerce.
Some of our Trade Facilitation Recommendations

- Rec1 – UN Layout Key for Trade Documents *(recently revised)*
- Rec4 – National Trade Facilitation Bodies *(recently revised)*
- Rec6 – Aligned Invoice Layout Key for International Trade
- Rec8 – Unique Identification Code Methodology – UNIC
- Rec11 – Documentary Aspects of the Transport of Dangerous Goods
- Rec12 – Measures to Facilitate Maritime Transport Documents Procedures
- Rec14 – Authentication of Trade Documents *(recently revised)*
- Rec15 – Simpler Shipping Marks
- Rec16 – LOCODE Code for Trade and Transport Locations *(being revised)*
- Rec18 – Facilitation Measures Related to International Trade Procedures
- Rec22 – Layout Key for Standard Consignment Instructions
- Rec25 – Use of the UN Electronic Data Interchange for Administration, Commerce and Transport Standard (UN/EDIFACT)
- Rec27 – Preshipment Inspection
- Rec33 – Single Window Recommendation
- Rec34 – Data Simplification and Standardization for International Trade
- Rec36 – Single Window Interoperability
- Rec41 – Public Private Partnerships in Trade Facilitation
- Rec42 – Trade and Transport Facilitation Monitoring Mechanism
International Supply Chain Model

**BUY**

- Establish Contract
- Order Goods
- Advise On Delivery
- Request Payment
- Packing
- Inspection
- Certification
- Accreditation
- Warehousing

**SHIP**

- Establish Transport Contract
- Collect, Transport and Deliver Goods
- Provide Waybills, Goods Receipts Status reports etc.

**PAY**

- Obtain Import/Export Licences etc
- Provide Customs Declarations
- Provide Cargo Declaration
- Apply Trade Security Procedures
- Clear Goods for Export/Import

**IN VolVes**

- Commercial Procedures
- Transport Procedures
- Regulatory Procedures
- Financial Procedures

- Provide Credit Rating
- Provide Insurance
- Provide Finance
- Execute Payment
- Issue Statements
UN/CEFACT Semantic Hub principle

Benefits of UN/CEFACT Semantic Models

• Standardized data exchange syntax-neutral structures, based on common Master data exchange structure

• The support of information sharing, such as enabled by data pipelines, with the timely capture of quality data from original data sources ensuring supply chain visibility

• Reduction of administrative burden by efficient reuse of data shared within the BUY SHIP PAY domain model

• Common basis for implementing in chosen data exchange syntax(es)
UN/CEFACT Semantic Hub principle

Some UN/CEFACT tools:

• UN/CEFACT Core Component Library
• UN/CEFACT Business Requirement Specifications
• UN Code Lists (UN Recommendations and UN/EDIFACT)
• UN/EDIFACT (syntax)
• UN/CEFACT XML (syntax)
• UN Recommendations
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):

- 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.

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:

- 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
UN/CEFACT evolution

- From Document centric to Process driven artefacts (Contextualized Business Artefacts)
- Supports Document centric & Process driven workflows
- Standardized syntax-neutral data exchange structures, based on common Master data exchange structure (from which complete documents and/or snippets of documents can be created in any chosen syntax e.g. XML, JSON or UN/EDIFACT etc.)
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Reference Data Models

• We did not try to fix the 400 year old road infrastructure in our cities

• We created super highways to support physical movement

• Similarly we have now developed Reference Data Models for defining required Process Driven information flows to be exchanged along super highways for information
UN/CEFACT
Multi-Modal Transport Reference Data Model

IATA standards
- Bill of Lading
- Trace & Track
- Despatch Advice
- Rail Consignment Note
- Packing Instruction
- Air Waybill
- Transit & TIR
- Container Operations
- Forwarding Instruction
- CMR & Road Consignment
- Warehouse Receipt
- Cargo Report
- Dangerous Goods Dec
- Flight Manifest
- Pre-Arrival Security Dec.
- Delivery Note
- Arrival Notice

WCO standards
- Warehouse Receipt
- Cargo Report
- Dangerous Goods Dec
- Flight Manifest
- Pre-Arrival Security Dec.
- Delivery Note
- Arrival Notice

Supply Chain RDM
- Invoice
- Offer
- Quotation
- Catalogue
- Remittance
- Delivery
- Scheduling

Core Component Library

MMT-RDM
Example of code lists developed and/or maintained by UN/CEFACT

Rec 7 Date Formats
Rec 8 UNIC
Rec 5 INCOTERMS
Rec 3 Country Codes
Rec 9 Currency Code
Rec 20 Units of Measurement
Rec 16 UN/LOCODE
Rec 28 Means of Transport
Rec 19 Mode of Transport
Rec 21 Package Codes
Rec 15 Shipping Marks
Rec 24 Status Codes
Other EDIFACT Code Lists
Improving Data Quality

• **Data Pipeline**
  • Results from three EU projects (Cassandra, CORE & SELIS).
  • Innovative methodology to recuperate data at the source and thus improve data quality.
Internet of Things

• **Smart Containers** offer an end-to-end visibility of shipment execution

• Smart containers are capable of sensing and communicating real time information for multimodal transport and logistics improvement.

• Smart containers recording and communicating significant events such as:
  • Arrival at warehouse
  • >1 hour stop on truck
  • Door open
  • >8° C
  • Running late
Upcoming Meetings

• Hangzhou Forum
  (http://www.unece.org/hangzhouforum.html)
  • 14-19 October, Hangzhou, China

• Transport and Logistics Showcase
  • 16 October 2018, Hangzhou, China

• Cross Border e-Commerce
  • 17 October 2018, Hangzhou, China

• UN/LOCODE Advisory Group meeting
  • 19 October, 2018, Hangzhou, China

• Single Window Conference
  • 12-13 November 2018, Casablanca, Morocco

• UN/LOCODE Project Team meeting
  • 3-4 December 2018, Geneva, Switzerland
Thank you

www.unece.org/cefact
http://tfig.unece.org/

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