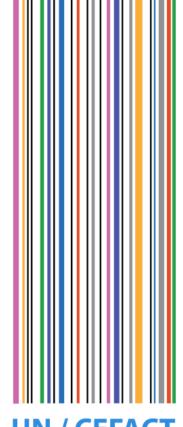


UN/CEFACT United Nations Centre for Trade Facilitation and Electronic Business

ICAO Air Cargo Development Forum (IACD)

Session 4: Improving Air Cargo Connectivity and Supply Chain

Zhengzhou, China, 7 September 2018



UN / CEFACT



Dr. QIU Yueming





UN/CEFACT

Objectives

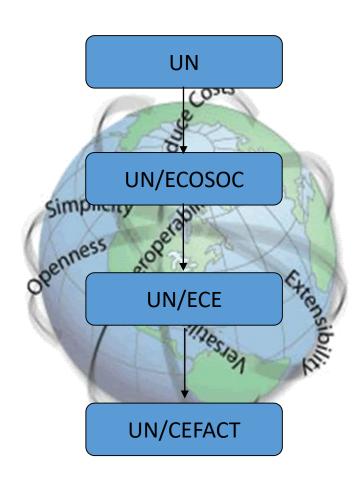
- Simple, transparent and effective processes for global business
- Efficient and automated exchange of information

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



INVOLVES

Commercial **Procedures**

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

Transport Procedures

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

Regulatory Procedures

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

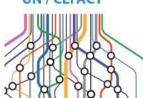


Financial Procedures

- 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



UN/CEFACT Semantic Hub



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 Consignments Items) from one or more Shipments







UN/CEFACT Process driven approach

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.)



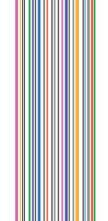
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Reference Data Models

- 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



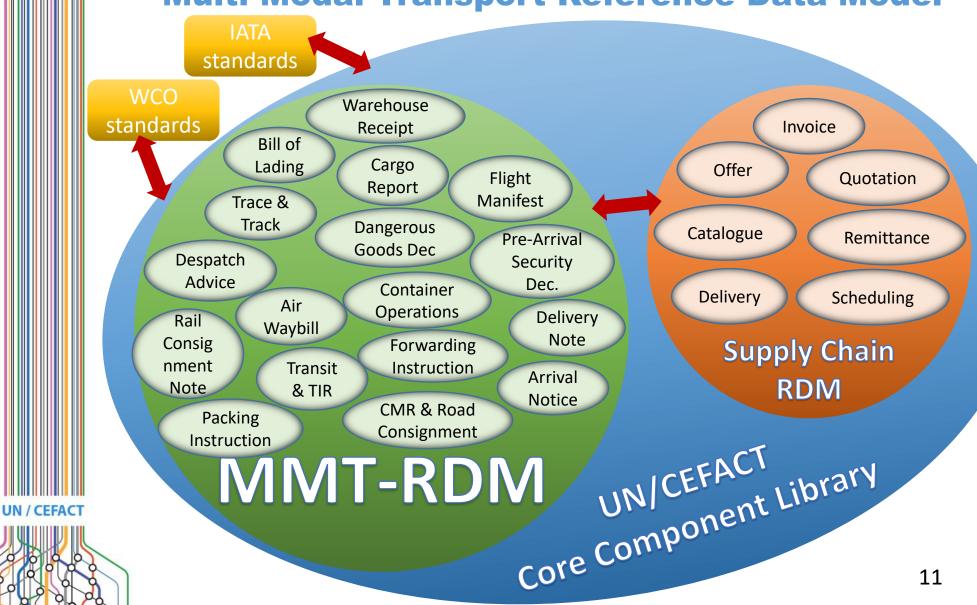






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Multi-Modal Transport Reference Data Model







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

Rec 7 Rec 8 **Date Formats** UNIC IA OFFICE OF DISF **EUROPEAN COMMUNITY** UNeDocs EXPORT CUSTOMS DECLARATION UN/LOCODE Consignor / Exporter 4 Loading lists 6 Total packages 7 Reference humber B Consignee 9 Person responsible for financial settlement No. Means of Transport 10 Country first 11 Trading Representative disp./exp. Code 17 Country destin.Code 15 Country of despatch / export 16 Country of origin 17 Country of final destination Mode of Transport 19 Ctr. 18 Identity and natio of means of transport at departure 20 Delivery terms 21 Identity and nationality of means of transport crossing the borde 22 Currency and total amount invoiced transaction 25 Mode of transport 26 Inland mo 27 Place of loading 28 Financial and banking data Package Codes 29 Office of exit 30 Location of goods 2 Article 33 Commodity code Marks and numbers - Container No(s) - Numbers and kind description of 34 Country origin code 35 Gross mass (kg

Rec 5 **INCOTERMS**

Rec 3 Country Codes

Rec 9 Currency Code

Rec 20 Units of Measurement

UN / CEFA Rec 15 Shipping Marks

Rec 16

Rec 28

Rec 19

Rec 21

Rec 24 Status Codes Other EDIFACT Code Lists

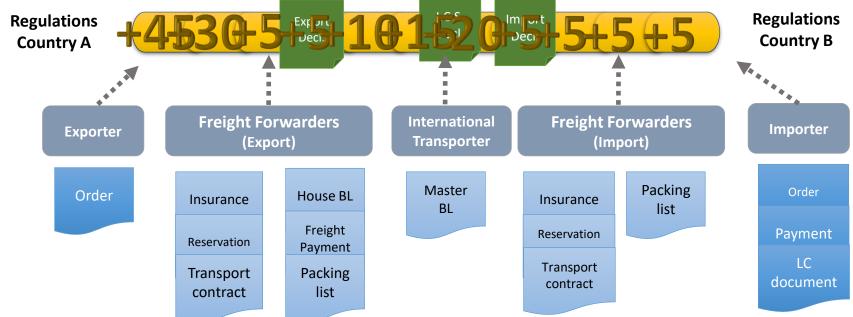




Improving Data Quality

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





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Thank you

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

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UNECE - UN/CEFACT
07 September 2018