Instruments for streamlining information exchange: Single Window, multimodal data exchange
What is Trade Facilitation?

TRADE FACILITATION

SIMPLIFICATION: Process of eliminating all unnecessary elements and duplications in formalities, processes and procedures.

HARMONIZATION: Alignment of national procedures, operations and documents with international conventions, standards and practices.

STANDARDIZATION: Process of developing internationally agreed formats for practices and procedures, documents, and information.

AUTOMATION
Need to analyse formalities and documentary procedures in order to simplify them:

• Streamlining documentary procedures and simplifying documents can significantly reduce transaction costs, improve trade competitiveness and thus benefit governments, businesses and consumers.

• Make an inventory of all required documents and procedures (to help implement TFA art. 1.1 «publication» and 1.2 «info on the Internet»)

• Using Time Release Studies (TFA art.7.6); Doing Business, LPI reports

• Carry out Business Process Analysis:
  – Analyze processes
  – Identify repeated or redundant formalities and requirements
  – Prepare recommendations on how to re-engineer the business processes in order to simplify them; eliminate unnecessary documentary procedures and formalities; prepare them for e-document and data exchange;

• Data harmonization
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
Rec13 – Facilitation of Identified Legal Problems in Import Clearance Procedures
Rec14 – Authentication of Trade Documents *(recently revised)*
Rec15 – Simpler Shipping Marks
Rec16 – LOCODE Code for Trade and Transport Locations *(under revision)*
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)
Rec26 – The Commercial Use of Interchange Agreements for Electronic Data Interchange
Rec27 – Pre-shipment Inspection
Rec33 – Single Window Recommendation *(recently revised)*
Rec34 – Data Simplification and Standardization for International Trade
Rec35 – Establishing a legal framework for international trade Single Window
Rec36 – Single Window Interoperability
Rec37 – Single Submission Portals (SSPs)
Rec40 – Consultation Approaches
Rec41 – Public Private Partnership in Trade Facilitation
Rec42 – Trade and Transport Facilitation Monitoring Mechanism
Rec43 – Sustainable Procurement
Large document volume in global trade

- **UN/CEFACT**: export process average: 27 parties involved, 40+ documents, 300+ copies to manage export processes
- **UNCTAD**: 5 bln Trade and Transport documents are issued annually
- **US**: Total US international trade documentation annually consumes more than one billion man hours, equal to 600 thousand work years
- **Australia**: 22 Agencies collect the name of the exporter on 118 different forms ..described in 61 different ways
Trade facilitation in the Supply Chain

An international Supply Chain is the end-to-end Business Process that delivers goods from the seller to the buyer.

The UN/CEFACT supply chain reference model: The Buy-Ship-Pay Model
Phase III-5: Process Analysis

Example: Prepare to Enter a Seaport Process (Existing Process)

Vessel Agent
- Prepare documents

Marine Department
- Request for Maritime Pilotage
- Application for Vessel Entering Port Area

Maritime Pilot’s Station
- Duplicated data submission: Three documents with almost identical data are handed-in to different receivers.
- Receive

Port Operator
- Receive
- Prepare the allocation of equipments
- Assign pilot officer

Problems:
- Duplicated Information
- High Cost and Time for sending and receiving documents
- Data Inconsistency
Phase III-6: Recommendation Development

Example: Time – Procedure Chart of Importation by Sea

9 Main processes
1. Prepare documents for import
2. Prepare to enter a seaport (Vessel)
3. Enter a seaport (Vessel)
4. Report cargo manifest
5. Unload cargo
6. Clear goods through customs
7. Arrange the transport for the pick-up of goods
8. Handle cargo at the terminal
9. Pay for goods

Main area for improving efficiency: days for preparing documents
UNCEFACT Recommendation 34:
Data Harmonization in 4 stages ("manual" or automated)

Business Process Analysis

Standards
- UNTDED
- WCO Data Model
- Core components

Capturing
- Interagency expert group

Definition
- Interagency expert group

Analysis
- Interagency expert group

Reconciling
- Data harmonization

Data element questionnaire

Result:
Standard data set

Structuring

Data modelling (+ alignment with UNTDED, WCO DM, etc.)
Regional harmonization / harmonized data model
Document Families – Border Challenges

- Trade
- Materials Management
- Transport
- Payment
- Insurance

UN/CEFACT Buy/Ship/Pay

Regulatory Model

Customs

Other Cross-Border Agencies

B2B

G2B

B2G

G2G
Streamlining Customs declarations: the SAD

Example of documentary simplification:
SAD (1988): EU + EFTA.

- Combined over 200 Customs and statistical documents in the EEC.
- Common rules for 30 years.
- Intro of Union Customs Code (UCC) amendments

- Rationalised and reduced administrative documentation
- Ensured openness in national administrative requirements
- Reduced amount of data
  - With possibility for countries to require or not some of the data elements (“Optional boxes”)
- Standardise and harmonise data
  - Which implies use of common codes for certain data elements
Streamlining Customs declarations: the SAD

- Use international standards
- WCO data model
- Internationally defined Codes

- **Country codes (iso alpha 2 codes – ISO 3166-derived)** (Boxes 15, 17, 21, 34 ...)
- **Currency codes** (box 22 – ISO 4217)
- **Modes of transport** (boxes 25 and 26 – UN-ECE rec. 28)
- **Customs offices** (box 29, 51 – UN LOCODE - partially)
- **Package codes** (box 31 UN-ECE rec. 21)
- **Commodity code** (box 33 – HS code)
- **Documents identification** (boxes 1, 40, 44, partially 1001 Edifact codes)
**Single Window planning algorithm inc. interoperability**

**Level 1**: Paperless Customs + e-payment of Customs duties + full container load electronic lists + risks taken into account

**Level 2**: Connection with the IT systems of other public regulatory bodies (aligning the paperless Customs with additional documents – e-certificates and e-permits)

**Level 3**: Electronic document interchange between stakeholders within the Port Community Systems (e.g. sea and air)

**Level 4**: Integrated national logistics platform where traders and providers of services related to logistics are exchanging the relevant information

**Level 5**: Regional system of electronic data exchange

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**Source**: UNNExT Guideline for SW

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Attention: in some countries, level 2 has been developed prior to level one, or level three prior to two
A Standard Set of Data and Transport Documents

- Traders fill in appr. 40 documents to 40 different agencies with often repeated data
- The aim of trade facilitation is to reduce red tape
- Reusing the available information
- The information on trade flows comes from business (incl. transport)

→ An idea to create a set of transport documents or a common data set for multimodal exchange, considering the Viking Corridor (Odessa – Klaipeda: Ukraine-Belarus-Lithuania)

- Prepare a standardised data set aligned with the UN/CEFACT Multimodal Transport Reference Data Model (MMT RDM) and the European Union Customs Data Model (EUCDM).
**Seamless multimodal supply chain**

### Supply

**Shipment – preparation for transportation**

<table>
<thead>
<tr>
<th>Bill of Lading</th>
<th>BoL, eCMR</th>
<th>CIM, SMGS</th>
<th>eCMR eTIR</th>
</tr>
</thead>
<tbody>
<tr>
<td>IMO/FAL forms</td>
<td>Invoice, package list, certificate of origin</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **Trip 1: sea**
  - Ship
  - Port Community System
  - Sea

- **Trip 2: inland water**
  - Ship

- **Trip 3: rail**
  - Truck
  - Country 1, 2

- **Trip 4: road**
  - Truck
  - Country 2

**Shipper, forwarder**

- Transport operator

**Freight forwarder**

- Skipper, driver

**Regulatory**

- Information for goods control

**Export and import declarations, transit documents**

**Information**

- Port Community System
  - Trip 2: inland water

- Trip 3: rail

- Trip 4: road
Общий набор данных, включающий данные всех необходимых документов для партии грузов, приведенный в соответствие с мультимодальной моделью данных СЕФАКТ ООН

**Bill of lading**

**IMO/FAL forms**

**CIM, CIM/SMGS and SMGS consignment notes**

**Invoice**

**Specification**

**Packing list**

**Proforma invoice**

**Quality certificate**

**Shipping order**

**Wagon list**

**CMR**

**Airwaybill**

**Customs documents:**
- Export declaration (EX-1);
- Transit declaration (T-1);
- Accompanying administrative documents
  - TIR Carnet;
  - ATA carnet;
  - Financial guarantee (for transit);

**Other regulatory agency certificates:**
- Certificate of Origin;
- Certificate of compliance;
- Carantine certificate;
- Veterinary certificate;
- Hygiene certificate;
- Fire safety certificate;
- Sanitary and phytosanitary certificate
Multimodal corridor approach

General transport documents:
• SMGS, CIM/SMGS or CIM Consignment Note;
• CIM / SMGS Wagon List (Appendix 7.2 to point 20)
• Container List (Appendix 7.4 to point 20)
• Handover sheet (Appendix 3 to SI to SMGS) https://www.cit-rail.org
• CMR, (eCMR);
• Air waybill (eAir waybill);
• Bill of Lading - B/L (e B/L)) and

Additional accompanying documents and permits:
• Invoice;
• Specification;
• Packing list;
• Proforma invoice;
• Certificate of Quality.
• Shipping order (export and Import and Transit)

Customs Documents:
• Export Declaration (export and Transit)
• Transit Declaration (T-1);
• Administrative Accompanying Document (AAD)
• TIR Carnet;
• ATA Carnet;
• Finance guarantee (for transit);

OGA Certificates:
• CO, C/O
• Certificate of Safety or Compliance;
• Quarantine Certificate;
• Veterinary Certificate;
• Hygienic Certificate;
• Fire Safety Certificate;
• Sanitary and Phytosanitary Certificates.

Align data in these documents with UN/CEFACT reference data models and WCO data model.
Benefits of UN/CEFACT Semantic Models

- The support for 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
- Standardized data exchange structures, based on common Master data exchange structure and independent of exchange syntax
- Common basis for implementing in chosen data exchange syntax(es)

UN/CEFACT International Supply Chain Reference Data Model Family

- Buy/Ship/Pay RDM
- Supply Chain RDM
- Multimodal Transport RDM
- Regulatory RDM
Thank you!

For more see Identifying Bottlenecks and Opportunities Itinerary:
http://tfig.unece.org/contents/itinerary-07-start.html

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