UNCEFACT work on Streamlining document procedures, Single Window and data harmonization

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UNECE and CEFACT in trade facilitation

• UNECE - 57 years experience in trade facilitation
• UN Centre for TF and e-Business (UNCEFACT):
  – Standards: UNEDIFACT, UNTDED, Core Components
  – over 35 TF recommendations (UNLK, Single Window), half of them on codes (e.g. UNLOCODE)
• Trade Facilitation is about rationalizing trade information flows (goods cannot move faster than the information about them)
• UNCEFACT – focus on semantics
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**

- **BUY**
  - Agree Contract (Payment Terms & Delivery Terms.)
  - Place, Confirm or Revise Order

- **SHIP**
  - Process Goods Declaration
  - Process Cargo Declaration
  - Apply Security Checks
  - Gear Goods

- **PAY**
  - Request Payment (Invoice)
  - Order Payment
  - Execute Payment
  - Issue Statement

- **Prepare For Export**
  - Book Transport
  - Insure Cargo
  - Make Customs Declaration
  - Obtain Export Credit Guarantee
  - Obtain Export Licence etc.

- **Export**
  - Process Goods Declaration
  - Process Cargo Declaration
  - Apply Security Checks
  - Gear Goods

- **Transport**
  - Collect Goods
  - Transport and Deliver Goods
  - Provide Waybills, Goods Receipts Status reports etc.
  - Provide Cargo Declaration
  - Advise Despatch

- **Prepare for Import**
  - Obtain Import Licence etc.
  - Book Transport
  - Establish Credit

- **Import**
  - Process Import Declaration
  - Progress Cargo Declaration
  - Check Security
  - Release goods
Formalities and documentation requirements should be: (1) kept to the minimum – what is really required by the need of society to regulate trade; (2) periodically reviewed with a view to decrease them and simplify them, so that they allow for:

- rapid clearance and release of goods (esp. perishables);
- time and cost of compliance to be constantly reduced;
- abolishing when no longer required by society.

And interests of society (safety and security) should be attended to.
UNCEFACT standards foundation for data and document harmonization & SW

- UNCEFACT Multimodal Transport reference Data Model
- UNCEFACT Unified Business Process Modelling Methodology – UMM
- UNCEFACT Core Components Technical Specification - CCTS v2.01 (ISO 15000-5/CCS)
- UNCEFACT Core Component Library
- UNCEFACT XML Naming and Design Rules
- UNCEFACT UN/EDIFACT Directory
- United Nations Trade Data Elements Directory (UNTDED)
- United Nations Layout Key (UNLK) – UNECE Rec. 1

Used in e-CMR and e-TIR

Project Rhein–Danube e-corridor based on EDIFACT
Implementation of electronic Cross-Border reporting in Europe

Joint document of COMPRISE WF6 and ERI

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Foreword

The purpose of this document is to give an overview of the possibilities of Electronic Reporting in Inland River Transport and the advantages and benefits to be gained by the introduction thereof.

The document is intended to be used as a reference by administrations, governmental agencies and commercial parties involved in Inland River transport and engaged in simplifying, harmonizing and rationalizing procedures and processes.

The document gives an overview of the experience gained and the available solutions and contains an inventory of the available standards, rules and regulations. It reflects the present situation in the transport over inland waterways regarding information flows, the official rules and regulations in the various countries the existing documentary requirements and electronic reporting possibilities.

This document also provides the instruments and vision for the enhancement of procedures in inland waterway transport and in what way the introduction of River Information Services will contribute to better control possibilities by the various authorities and to the availability of the necessary information to manage traffic and transport.

Electronic Reporting International has set standards for a common approach towards these services and the instruments mentioned will facilitate introduction and harmonized usage of River Information Services throughout Europe.
UN Layout Key for Trade and Transport Documents: UNLK – UNECE Rec. 1

- First published 1973
- Flexible aligned data presentation which has become *de facto* standard for most international trade and transport documents
- Application methodology for defining national, regional and industry specific document layouts
- Foundation for international transport conventions e.g. Maritime B/L (ICS), Airwaybill (IATA), Road CMR (IRU), Rail CIM (UIC), etc.
- Foundation of Customs and other Regulatory Procedures e.g. SAD, Phyto-Sanitary Certificates, Cert of Origins etc.
- Thousands of document formats based on UNLK across trade, transport, finance, customs, insurance, inspection etc.
- Latest revision of Rec.1 – UNLK for electronic documents
Various trade and transport documents – to a UNLK

<table>
<thead>
<tr>
<th>UNCTAD/ASYCUDA World</th>
<th>Declaration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manifest</td>
<td></td>
</tr>
<tr>
<td>Customs Reference</td>
<td>C 1</td>
</tr>
<tr>
<td>7 Reference number</td>
<td>2008 #1</td>
</tr>
<tr>
<td>31 Packages &amp; description of goods</td>
<td></td>
</tr>
<tr>
<td>Marks and numbers &amp; Containers No(s)</td>
<td></td>
</tr>
<tr>
<td>No &amp; market no</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Certificate of Origin</th>
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<tbody>
<tr>
<td>Is issued in the Russian Federation</td>
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<table>
<thead>
<tr>
<th>VZOREC OBRAZCA EUL (osemlistni set)</th>
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<tbody>
<tr>
<td><strong>EVROPSKA SKUPNOST</strong></td>
</tr>
<tr>
<td>1 Dekaletacija</td>
</tr>
<tr>
<td>2 Oprezo</td>
</tr>
<tr>
<td>3 Obrazi</td>
</tr>
<tr>
<td>4 Obrazi in spravno posedlo</td>
</tr>
<tr>
<td>5 Oprezo za spravno posedlo</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Address of Consignee</th>
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<tbody>
<tr>
<td>ABBADUANG RD., 1040, THAILAND</td>
</tr>
<tr>
<td>THAILAND</td>
</tr>
<tr>
<td>THAILAND</td>
</tr>
<tr>
<td>TONDO, MANILA, PHILIPPINES</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Certificate of Origin</th>
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</thead>
<tbody>
<tr>
<td>AFO COMBINED DECLARATION AND CERTIFICATE</td>
</tr>
<tr>
<td>FORM D</td>
</tr>
<tr>
<td>THAILAND</td>
</tr>
<tr>
<td>4 (Country)</td>
</tr>
</tbody>
</table>

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<tr>
<th>Note</th>
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<td>3.</td>
</tr>
<tr>
<td>4.</td>
</tr>
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</table>

| Signature of Authorised Officer of the Importing Country |

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<tr>
<th>Notes</th>
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UNLK Form Families

Trade Documents – Quotation, Order, Invoice etc.

Materials Management Documents – Despatch Advice, Pick List, Packing List etc.

Transport Documents – Bill of Lading, Shipping Instructions etc.

Customs Documents – Export, Import, Transit Declarations, Cargo Reports etc.

Other Regulatory Documents – Cert of Origin, DGN etc.
UN Layout Mapping Example

UID 2280
Name Transport Means. Actual Departure. Date
Definition Time
Synonym Date and or time of the departure of means
Repr. Flight Date. Sailing Date
Mapping an..17
UNLK: L 17, P 16
<table>
<thead>
<tr>
<th>UID</th>
<th>ISO7372 TDED Name</th>
<th>Definition</th>
<th>TDED repr.</th>
<th>Locations, Bridges</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000</td>
<td>Document. Type Name.Text</td>
<td>Free text name of a document such as 352 for Proforma invoice, 380 for Commercial invoice.</td>
<td>an..35</td>
<td>UNLK: L 02, P 45-80 MAR: IMO/FAL 1-7</td>
</tr>
<tr>
<td>1001</td>
<td>Document. Type.Code</td>
<td>Code specifying the name of a document such as 352 for Proforma invoice, 380 for Commercial invoice.</td>
<td>an..3</td>
<td>UNLK: L 04, P 41-45 CIMP: (120): a1 SAD: (SAD 1(first to third subdivision))</td>
</tr>
<tr>
<td>1099</td>
<td>Transport Means. Stay.Identifier</td>
<td>Identifier of the stay of a means of transport in a port or airport</td>
<td>an..35</td>
<td></td>
</tr>
<tr>
<td>4219</td>
<td>Transport Service. Priority.Code</td>
<td>Code specifying the priority of a transport service.</td>
<td>an..3</td>
<td>CIMP: (704):a1</td>
</tr>
<tr>
<td>5068</td>
<td>Invoice. Line Item. Amount</td>
<td>Total sum charged with respect to a single line item of an invoice.</td>
<td>n..18</td>
<td>UNLK: L 56, P 63-80</td>
</tr>
<tr>
<td>5070</td>
<td>Consignment. For Customs Total.Amount</td>
<td>Total amount for customs purposes of all goods in a consignment, whether or not they are subject to the same customs procedure, and have the same tariff/statistical heading, country information and duty regime</td>
<td>n..18</td>
<td>AWB: L 24, P 71-81 CIMP: (509):n..12, or the letters &quot;NCV&quot;</td>
</tr>
<tr>
<td>6094</td>
<td>Consolidation. Package.Quantity</td>
<td>Count of the total number of packages in all of the consignments referred to as one consolidation.</td>
<td>n..16</td>
<td></td>
</tr>
</tbody>
</table>
UN/CEFACT Core Component Library

CCL Progress

Key:
ACC - Aggregate Core Component
ABIE - Aggregate Business Information Entities
qDT – Qualified Data Type

Versions

ACCs  ABIEs  qDTs  Messages
UN/CEFACT Core Component Status

Latest Version D18A

- 1228 Aggregated Business Entities (ABIEs)

- Only 164 ABIEs needed to cover the business processes of Supply Chain plus Transport & Logistics (Buy/Ship/Pay)

Reuses of CCL subsets for Transport & Logistics and Supply Chain initiatives include:

- Cross Industry Supply Chain messages
- Agricultural eCert and Animal Passports
- FLUX Fisheries messages
- IATA CargoXML
- CITES ePermit
- EU CORE Project (WP10 – data pipeline carrier pilots)
- WCO Data Model cooperation
Data Harmonization in four stages ("manual" or automated, e.g. GEFEG)

Business Process Analysis

Data element questionnaire

Standards
- UNTDED
- WCO Data Model
- Core components

Capturing
Interagency expert group

Definition
Interagency expert group

Analysis
Interagency expert group

Reconciling
Data harmonization

Result:
Standard data set

Structuring

Data modelling (+ alignment with UNTDED, WCO DM, etc.)
Regional harmonization / harmonized data model
The Single Window

“A Single Window is a facility that allows parties involved in trade and transport to lodge standardized information and documents with a single entry point to fulfill all import, export, and transit-related regulatory requirements. If information is electronic, then individual data elements should only be submitted once”.

UNECE Recommendation 33

5 key elements of the definition

• Single submission of individual data
• Fulfilling regulatory requirements
• Single entry point
• Standardized information and documents
• The parties involved in trade and transport
Types of interorganizational information exchange

Trade SW
- eCustoms
- Declaration
- Certificates and licenses
  - Health
  - Veterinary
  - Phytosanitary
  - Origin
  - Technical standards

Info from business and other systems
- Forwarder
- Consignor
- Transporters

Transport SW
- Terminal
- Forwarder
- Transporter
- Importer
- Railway
- Road
- Trucks
- Customs

Regulatory bodies:
- Health
- Agriculture
- Technical standards
Interagency TF WG; National TF Committee
addressing policy and legal issues

National TF Strategy

The example of Ukraine

Port Community System

Consignor, exporter, consignee, freight forwarder
Single Window building algorithm in 5 stages (data exchange) – embed SW interoperability

Stage 1: Paperless Customs + electronic payment of Customs duties + electronic container packing list + risk management

Stage 2: Connection to the IT systems of other regulatory agencies (link of paperless Customs to other documents – electronic certificates and licenses)

Stage 3: Electronic document exchange among various stakeholders, port and airport community systems

Stage 4: Integrated national logistics platform, in which traders and logistics service providers exchange information

Stage 5: Regional information exchange

Note: in many countries level 3 was developed before level 2
4 major pillars of interoperability (covered by Rec.36): BSEC initiative; EC SW initiative

**SW uses**
- **international standards for trade data and document exchange**
- **data harmonization**
- **alignment with international standards**

**Interoperability on different levels:**
- **semantics**
- **business processes**
- **message syntax (IT systems)**
- **legal systems**

**Legal basis for exchange with other SW systems to be created in each SW**

**A governance structure to be established for SW interoperability**

Move from document based to process based approach
Information Pipeline
Future Customs and International Trading Systems (David Hasket et al.)

- **Consigner** or exporter
- **Consignee** or importer
- **Freight forwarder** or 3PL
- **Regulatory requirements of home country**
- **Regulatory requirements of third country**

- **Port 1**
- **Port 2**
- **Cargo**

- **Document and data level**
- **Organizational level**
- **Physical level**

- **Data on consignment**
- **Manifest data**

- **Customs**
- **Interiors**
- **Border police**
- **Port, health...**

- **Risks**
Thanks!

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