International Forwarding and Transport Messages Project

UN/CEFACT 36th Virtual Forum
APRIL/MAY 2021

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Rail – Kagisho Ramatsa
Maritime/Inland Waterway/Road – David Roff
Project Brief

- UN New York launched **COVID-19 initiative to encourage exchange of digitised electronic data** rather than paper documents in transport contract related data exchanges
- Many operators still have a document-centric approach to data exchange including **wide use of the IFT*** family** of UN/EDIFACT UNSMs
- Business Requirements Specifications (BRS) done
- Profiles for many classic transport document types done -> next step to publish further profiles on the UN/CEFACT website after UN/CEFACT Bureau notification (see UNTTC.ORG website)
- Current phase: **Air Mode** and **Dangerous Goods**
The MMT building blocks: Pipeline Data Exchange Structure (PDES) D21A

- Border Transport Means
- Master Bill Information
  - Master Consignment Item Info
  - House Bill Information (Y or X)
    - House Consignment Item Information (X)
      - Trade Line Item Info
      - Trade-Related Transaction Info
    - House Transport Contract
      - House Transport Contract Item details
  - House Transport Contract
    - House Transport Contract Item details
  - Trade Product Information (commodity code etc.).
  - Commercial information (seller and buyer details).
One Pipeline Data Exchange Structure (PDES) fits all?

• Focus on supporting digitalised data exchange to expedite cargo movements from mode to mode in multimodal transport movements such as corridors.

• Operational data of utmost importance highlighting a) dangerous goods information from one modal regulatory framework digitally to another without compromising safety and b) enabling traceability by linking key identifiers e.g. data pipe line (PDES)

• There might be other ways to define a common PDES. The last slide‘s picture is the identified way of profiling MMT for multimodal approaches
MMT RDM profiles – Various Transport Modes

Base (BSP to MMT RDM)

Buy/Ship/Pay (BSP) RDM

MMT RDM

Customization (Transport Modalities)

MMT RDM Guide (For Profiling)

eCMR

Maritime BoL

CIM/SMGS

Inland waterway BoL

FIATA BoL

……
Different experts and organisations can develop and maintain different profiles of MMT:

- with different lifecycle and update frequency
- with their own privacy policies
- on the level of UN/CEFACT and/or their organisations
- independently from each other
- with individual and different Intellectual Property Rights
- even by further customising profiles
- targeting various exchange methods and formats
- keeping their data model independent but linking them through mapping
- Aligned to UN Layout Keys paper documents and UN/EDIFACT
Profiles combined – gap analysis – which data can be forwarded from one mode to the other?

<table>
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<tr>
<th>common data set</th>
<th>eCMR</th>
<th>Maritime BoL</th>
<th>CIM-SMGS Consignment Note</th>
<th>CIM-SMGS Consignment Note under URL</th>
<th>Wagon List</th>
<th>Inland Waterway BoL</th>
<th>FIATA BoL</th>
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Multimodality and Interoperability example: EU eFTI regulation

### eFTI-DR – Table view

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<tr>
<th>Unique UN Assigned ID</th>
<th>UN Business Name</th>
<th>SG1 Business Name</th>
<th>UN Dictionary Entry Name (DEN)</th>
<th>UN Definition</th>
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<td>Gross Weight</td>
<td>Gross mass (kg)</td>
<td>Supply Chain_ Consignment Item</td>
<td>Gross Weight Measure</td>
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<td>A measure of the gross weight (mass) of this supply chain consignment item which includes packaging but excludes any transport equipment.</td>
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<td>A measure of the net weight (mass) of this supply chain consignment item which includes packaging but excludes any transport equipment.</td>
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Multimodality and Interoperability

https://svn.gefeg.com/svn/efti-publication/HTML/001.htm

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<th>SG1 Remark</th>
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UN Business Name | SG1 Business Name | Rates & Conditions | Combined Transport | Access to road haulage | Waste | Dangerous Goods | Rail Interoperability | Aviation Security |
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</table>
Modal Specific MMT-based Customisations

- Maritime
- Road
- Inland Waterway
- Rail

Air (currently in flight!)

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Rail

• Mapping of CIM/SMGS ECN data structure (MMT subset) to IFTMIN EDIFACT message

• Developed CIM/SMGS ECN data structure under the unified railway law as a subset of MMT

• Developed CIM/SMGS Wagon list data structure as a subset of MMT

• Mapped the possible data elements from railway documents for the purpose of achieving multimodality to MMT RDM

• Publication of the railway MMT subset artefacts on the UNTTC.org website (Component Library (CCL) Structure, Dataset alignment with other ‘document’ objects, XSD schema, UML diagrams, HTML index)
Documents/dataset mappings to MMT RDM:
1. Air Waybill (AWB)
2. Consignment Security Declaration (CSD)
3. Dangerous Goods Declaration (DGD)

Plan:
Two phases
1. Develop the standards – 15 July 2021
2. Pilot implementations – 01 September 2021

Now:
• Plan & project team assembly
• Domain experts welcome!
• Kick-off & project calls

1. Standards:
Follows UN/CEFACT MMT RDM
• Business Requirements Specifications (BRS)
• Core Component Library (CCL) Structure
• Dataset alignment with other ‘document’ objects
• XLS guideline structure
• XSD schema
• UML diagrams
• HTML index
• JSON-LD schema

2. Pilots:
In collaboration with ICAO
• Identify/outreach to candidate countries/areas
• Engage . Educate . Assist – with deployments

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Air

Air Waybill Approach

Airfreight supports multiple IATA standards for B2B & some B2G:

- Cargo-IMP: legacy, bespoke EDI
- Cargo-XML: current, UN/CEFACT aligned
- ONE Record: piloting, JSON-LD backwardly compatible

Mapping UN/CEFACT subset with **IATA ONE Record**

Enhanced data model e.g. piece level

MMT (BOL) <> Air Waybill (AWB) baseline, others to be considered e.g. House Waybill
### Results – March 2021

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<th>Business Name</th>
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Further Information

All documents available on UNTTC.org and UN/CEFACT Project pages

To participate or find out more contact:
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