MMT Multi Modal Transport

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Project Details

Domain	Transport & Logistics Domain
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Project Page	MMT Multi Modal Transport
Supporting VC	Sue Probert
Project Lead	David Hesketh
HoD Support	AT / FR / SW
Status	Completed
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Project Purpose

The project's purpose is to develop and publish a "MMT Multimodal Transport Data Reference Model"

Project Scope

e-Business communication in the Transport sector is extensive and largely conducted through UN/EDIFACT messaging systems, which were developed in the past by UN/CEFACT which still maintains the standards employed by these EDI systems. For the purposes of also supporting XML messaging, UN/CEFACT has in the last decade developed the Core Components Library, a neutral and syntax independent business data library using modern data modelling techniques based on CCTS v2.01 (ISO TS/15000-5). The Transport sector has identified a need for a migration support from paper-based to electronic exchanges and from UN/EDIFACT towards XML on the basis of the UN/CEFACT Core Component Library with clear reference to the UN/EDIFACT transport messages and their implementations in the various modes of transport.
The purpose of the project is to develop a Multi Modal Transport (MMT) reference data model, being a limited structured subset of the UN/CEFACT ebXML Core Components Library, providing semantic links especially between the Core Components and the EDIFACT implementations (in particular the worldwide implementation guidelines produced by ITIGG - International Transport Implementation Guidelines Group) a subgroup of previous TBG3. Other data model standards of interest to the transport sector will be considered, such as standards from individual modes of transport, the IATA CargoXML standards and other related sectors such as cross-border regulation covered by the scope of the WCO Data Model.
For several years work has been done to define a data pipeline for supply chain visibility, transport and cross-border regulatory agencies. The MMT project will contribute a standardised reference data model as a base pillar for a globally defined data pipeline.
The MMT reference data model will be based on the BRS document (Business Requirements Specifications) for International Forwarding and Transport developed according to the UMM modeling methodology, and derived from the UN/CEFACT International Supply Chain Reference Model version 0.8. This project will be the culmination of many years of previous work and will not be starting from scratch. The objective of the project is to review and update existing work plus the named contributions in order to deliver a reference model which not only provides a basis for future transport work but also very importantly a comprehensive set of links to legacy, specifically UN/EDIFACT. This requirement to provide links from the CCL to UN /EDIFACT has been requested regularly by the user stakeholders for migration purposes due to the very extensive use of UN/EDIFACT in transport communications especially in the maritime environment.
The MMT project has therefore the following objectives:
Development of a reference data model aimed at the transport and logistics sector which will be based on the ABIE structures of the Core Components Reference Library v2.01 and designed to be easily maintainable by the limited resources within UN/CEFACT
Provide, through this MMT reference data model, a standardized and harmonized semantic framework fully compliant with UN/CEFACT Core Components which will be easy to use for
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transport service providers, operators, shippers and other actors especially SMEs and which will encourage interoperability between syntaxes for data exchange structures
Provide links between UN Layout Key documents, UN/EDIFACT message implementation structures and the Core Component Library for reuse in XML implementations
Produce guidelines for using the MMT reference data model to produce XML messages for the transport sector and variations for specific transport

modes
Promote and disseminate the MMT deliverables through communication means and marketing tools
The MMT multimodal approach, which covers all modes of transport, follows the principles enshrined in the UN Layout Key (Recommendation 1), the UNTDED, UN/EDIFACT. These principles are also aligned to those of the WCO Data Model and the IATA CargoXML standard for Air Freight. As the IATA CargoXML is also based on the CCL v2.01, this project can be considered to widen the scope by providing a global cross-syntax reference data model published by UNCEFACT.
The scope of the MMT project is global, international and multimodal.
It covers the freight aspects of international supply chains as well as operational transport processes involving transport means, transport equipment and terminal operations.

Project Deliverables

The deliverables from the project are:
a) A structured MultiModal Transport reference data model based on the latest release of CCL v2.01
b) Semantics links with the Transport UN/EDIFACT messaging and other standards/data dictionaries (TDED, TDID, ITIGG, GS1, WCO data Model, UBL…..) to support increased interoperability between data exchange structures and standard mappings with different trading partners
c) Guidelines to produce XML messages based on the UN/CEFACT NDR (Naming and Design Rules) v2.1
The work will be based on the appropriate version of the Core Components Library (CCTS v2.01). All deliverables will be produced for publication in formats such as MS Word, MS Excel, html and textual XML schemas that are in line with the ODP and UN/CEFACT publication practices.
This project is strongly related to the parallel Common Framework for Freight Information Exchange project proposal to develop an information note. Both projects are interested in freight data exchange interoperability. The MMT project's deliverables will provide a strong semantic framework as a major contribution to the common framework project. It is important for these two projects to be collaborative in nature and share elements of importance between their respective team members.

Exit Criteria

a) A structured MultiModal Transport reference data model
- Internal and external review logs showing how comments have been addressed
- Final draft text ready for publication
b) Semantics links with the Transport UN/EDIFACT messaging and other standards/data dictionaries
- Internal and external review logs showing how comments have been addressed
- Final draft text ready for publication
c) Guidelines to produce XML messages
- Internal and external review logs showing how comments have been addressed
- Final draft text ready for publication

Project Team Membership and Required Functional Expertise

The project team is open to experts with broad knowledge and experience in the areas of logistics, transport and related activities as well as in modelling techniques. In addition, Heads of Delegations may invite technical experts from their constituency to participate in the work. Experts are expected to contribute to the work based solely on their expertise and to comply with the UN/CEFACT Code of Conduct and Ethics.

Geographical Focus

The geographic focus of the project is global

Initial Contributions

Initial contributions will be sourced from existing documentation and standards including:
- UN/CEFACT Core Components Library – CCL v2.01
- UNECE Recommendations and Code Lists
- UN/EDIFACT EDI documents/messages relating to Road, Maritime and Air Transport, Railroad, Authorities, including IMO FAL Forms
- Recommendations from ITIGG ((International Transport Implementation Guidelines Group)
- Guide to the UN/EDIFACT containers messages (SMDG/TBG3/ITIGG)
- BRS for International Forwarding and Transport
- WCO Data Model
- UBL Standards
- IATA CargoXML
- Others as available

Most of the international transport organisations are observer members of UN/CEFACT and as such have actively or passively supported the work of the transport domain. This particular project proposal is one that the mentioned organisations have been enthusiastic to support in principle. The project plans to only use publically available materials from the indicated initial contributors. There are no known IPR issues and there are no planned formal collaborations.

Resource Requirements

Participants in the project shall provide resources for their own participation.
The continued existence and functioning of the project team shall not require any additional resources from the UN/ECE secretariat other than:
- Establishing and maintaining the project team's public Web site pages with appropriate links, document download facilities, and items of interest
- Establishing and maintaining the project team's public and private list servers.

Project Proposal Files

File	Modified
PDF File TL Domain Project Proposal MMT_v13-2_03Sept14.pdf	Jan 19, 2016 by Gianguglielmo