Common Framework for Freight Information Exchange

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Project Purpose
This project’s purpose is to determine whether a common framework for freight information exchange needs to be developed as a UNECE Recommendation in order to support interoperability of cross border freight information among supply chain partners throughout the world.

Freight logistics, which involves several different modes of transport, depends on precise real-time communication between supply chain partners as well as within their internal operations. This is a globally dynamic and competitive domain in which customers in the public and private sector demand short windows for delivery of goods. Electronic information exchange is essential for interoperability between organizational and information systems, based on semantic and technical interoperability.

Project Scope
The scope of this project is to study requirements for freight information exchange across the international supply chain as well as reviewing existing frameworks in view of confirming or invalidating the need for a UNECE Recommendation on the subject.

The scope of this project will include the elements of study needed to establish an acceptable method of interoperability that can allow existing communities across the freight information chain to interoperate with one another. The end result is to identify a possible architecture that will allow seamless information flows between all supply chain partners from Consignor to Consignee. Any partner engaged in sharing data related to a shipment or a consignment can be viewed as interacting on an equal basis regardless of whether commercial or regulatory.

There are several initiatives already underway in UN/CEFACT that fall within this scope and give impetus to an interoperability methodology proposed in this project.

One of those is the The Trade Facilitation Implementation Guide, which is a tool for simplifying cross-border trade. The Guide has many, if not all, the elements needed for cross border trading but when digging down through the Business Domains and the Approaches and Methodologies Domains it stops within E-business solutions at the aspects covered. Some of these are “electronic exchange of documents and information for cross border trade transactions, including use of standards for document simplification, data harmonization, and inter-operability between businesses, government agencies and other relevant trade partners”. Although these areas of importance are mentioned there are no standard methodologies or processes mentioned that a trader could use. Thus a more complete Guide would include the tools for implementation which, now, are not available on a standardized basis in the world. The methodology proposed in this paper would make The Trade Facilitation Implementation Guide more complete and avoid further fragmentation of communities dealing with electronic exchange of documents and information for cross border trade transactions.

Also related to this Common Framework is the Single Window interoperability concept. This is a significant UN/CEFACT initiative that would profit from an interoperability methodology for allowing seamless communication between supply chain partners. The new Recommendation 36 on Single Window interoperability will cover the mechanism required for the interconnectivity of two or more Single Window facilities. This recommendation also addresses the need for cross-border trade information exchange which requires the exchange of data/information beyond the national Single Window, i.e. across the border. These UN/CEFACT initiatives along with North American, European and Asian initiatives are expected to form a working base for this project.

Project Deliverables
The project’s deliverable is an Informative Note that will indicate the outcome of the research conducted on whether a UNECE Recommendation for freight information exchange is needed.

Based upon lessons learned through the requirements gathering process and a public review, the Informative Note will describe efforts to develop a common framework in order to support interoperability among supply chain partners to move freight information within and across borders throughout the world.

The outcome of this project will contribute to developments in UN/CEFACT’s Transport and Logistics Domain projects , to the WCO Data Modeling Project Team, to ISO TC 154 for the current TEDD (ISO 7372) review, to ISO TC 204, in particular with respect to ISO TS/24533, and its sister specification on freight process governance, ISO TS/17187. This project is strongly related to a project being prepared to develop and publish the MMT (Multimodal Transport) Data Reference Model as a subset of the UN/CEFACT Core Component Library. This MMT project will provide a strong semantic framework as a major contribution to this common framework project. It is important for both projects to be collaborative in nature and share elements of importance between team members. The Domain Coordinator will work to make sure the relevant information is shared between the two projects. Both projects are interested in freight data exchange interoperability. The MMT project has not yet been completely flushed out but coordination will take place with the supporters until it has project status and then all project members will coordinate and cooperate.

Exit Criteria
Following revisions based on the public review, the Informative Note will be submitted to the Bureau with a view to it being brought to the attention of the Plenary.

Project Team Membership and Required Functional Expertise
Project team membership is open to experts with broad knowledge in the area of Transport and Logistics Operations, Supply Chain Operations, Cross Border Processes, Data Standardization Governance, Intra-organizational information systems, Business Process Model and Notation, and the Open-EDI Reference Model.
A wide range of experts from around the world are envisaged to participate in the project team: Australia, Austria, China, Germany, Japan, Korea, Norway, South Africa, United Kingdom and the United States.

Head of Delegation Support
Projects in CEFACT that are exploratory in nature, resulting in a paper, do not require the support of 3 Heads of Delegation.

Geographical Focus
The geographic focus is global.

Initial Contributions
Several initial contributions to the project will be complemented by other inputs as part of the requirements gathering phase. Initial contributions currently include:

a. A European Community initiative known as eFreight that has developed a Common Framework methodology that has been tested and proven in a couple of demonstrations with industry.
b. A comprehensive test was conducted in the United States and Canada on an Electronic Freight Management initiative.
c. Tests in Asia, through an initiative called NEAL-NET.
d. ISO TS/17187, Intelligent transport systems – Electronic information exchange to facilitate movement of freight and its intermodal transfer – Governance rules to sustain electronic information exchange methods.
e. ISO TS/24533 Intelligent transport systems – Electronic information exchange to facilitate the movement of freight and its intermodal transfer – Road transport information exchange methodology.

Resource Requirements
Participants in the project shall provide resources for their own participation. The existence and functioning of the project shall not require any additional resources from the UNECE secretariat.

Project Leadership
Project Leader: Michael P. Onder
Editors: Audun Vennesland, Jan Tore Pedersen, Andy Schoka, Kerri Ahn

Milestones

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<th>DELIVERABLE NAME</th>
<th>Project Inception</th>
<th>Expected Completion Date</th>
<th>Requirements Gathering</th>
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<th>Draft Development</th>
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<th>Public Review</th>
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<th>Project Exit</th>
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Project Proposal Files

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No files shared here yet.