UN/CEFACT Project Proposal

Supply Chain Reference Data Model (SCRDM)

Date: 2015-08-05
Update: 2016-8-29

1. Project Purpose
The project’s purpose is to develop and publish an international “Supply Chain Reference Data Model” for international & national trade.

2. Project Scope
Since 2013 a number of important developments have taken place affecting international trade. These developments, which could provide significant trade facilitation opportunities for UN/CEFACT, include:

- World Trade Organisation (WTO) Trade Facilitation Agreement;
- UNECE-UN/CEFACT Trade Facilitation Implementation Guide (TFIG) which has been published and is being widely disseminated worldwide.

During the 25th UN/CEFACT Forum in Geneva in April 2015, a recommendation was developed by the experts on the use of a single core component technical specification for future UN/CEFACT eBusiness developments. This recommendation has been adopted by the Bureau.

UN/CEFACT will now be able to provide stakeholders with a business process driven approach and a coherent set of specifications and tools to develop their requirements.

The proposed project is, therefore, to develop an international Supply Chain Reference Data Model, with the following objectives:

- Development of a reference data model which will be based on the Reference ABIE structures of the Core Component Library and designed to be easily maintainable by UN/CEFACT
- Provide, through this reference data model, a standardized and harmonized semantic framework fully compliant with UN/CEFACT Core Components which will be easy to use 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 syntax (including XML) implementations
- Produce guidelines for using the reference data model to define subset document structures

e-Business communication in the Supply Chain sector is extensive and often conducted through UN/EDIFACT messaging systems, which were developed and are maintained by UN/CEFACT. For the purposes of also supporting XML and other data exchange syntaxes, 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.

UN/CEFACT has published a series of document-centric XML schemas; this project will develop a reference data model which will enable business process-driven CCBDA-conformant schemas to be developed, published and maintained by UN/CEFACT.
The reference data model will be based on the BRS documents (Business Requirements Specifications) for supply chain management developed according to the UN/CEFACT Modeling Methodology (UMM). This project will be the culmination of many years of previous work and will not be starting from scratch. The project will review and update existing work together with the named contributions in order to deliver a reference model which not only provides a basis for future domain work but also very importantly provides a comprehensive set of links to legacy, specifically UN/EDIFACT.

The business process-driven approach to be taken follows the principles enshrined in the UN Layout Key (Recommendation 1), the UNTDED, UN/EDIFACT and the UN/CEFACT CCL.

The scope of the project is international, cross-border, domestic and cross-industry.

3. Project deliverables
The deliverables from the project will be:
   a) A structured reference data model based on the latest release of the CCL including a high level BRS and a high level RSM.
   b) Semantics links with UN/EDIFACT messaging and the TDED to support increased interoperability between data exchange structures
   c) Guidelines to produce exchange syntax neutral message structures using a reference data model accompanied by a High-Level Green Paper explanation

All deliverables will be produced for publication in formats such as MS Word, MS Excel and HTML that are in line with the ODP and UN/CEFACT publication practices.

4. Exit criteria
   a) A structured CCL-based reference data model including a high level BRS and a high level RSM
      - Internal and external review logs showing how comments have been addressed
      - Final version ready for publication
   b) Semantics links with UN/EDIFACT and UNTDED
      - Internal and external review logs showing how comments have been addressed
      - Final version ready for publication
   c) Guidelines to produce exchange syntax neutral message structures accompanied by a High-Level Green Paper explanation
      - Internal and external review logs showing how comments have been addressed
      - Final version ready for publication

5. Project Team membership and required functional expertise
The project team is open to experts with broad knowledge and experience in the area of supply chain 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.
6. **HoD support** *(required for technical standards, business standards and UNECE recommendations)*

Four Country Heads of delegation have given their support to this project - Germany, UK, Japan and US. Their written expressions of support are included at the end of this proposal document.

7. **Geographical Focus**

The geographic focus of the project is global.

8. **Initial contributions**

Initial contributions will be sourced from existing documentation and standards including:

- UN/CEFACT Core Components Library (CCL)
- UNECE Recommendations and Code Lists
- UN/EDIFACT EDI documents/messages relating to Supply Chain
- Cross-Industry BRSs for supply chain processes

There are no known IPR issues and there are no planned formal collaborations.

9. **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

10. **Project Leadership**

The following project team is proposed:

Project Leader: Rolf Wessel  
Lead Editor: Gerhard Heemskerk  
Other Editors (initial list): Mary Kay Blantz, Karina Duvinger, Michel Entat, Andreas Pelekies, Fabio Sorrentino, Hisanao Sugamata

11. **Milestones**
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