

7 May 2004

ENGLISH ONLY

UNITED NATIONS CENTRE FOR TRADE FACILITATION AND ELECTRONIC BUSINESS (UN/CEFACT)

ebXML Business Process Schema Specification Version 1.1

Submitted by the Chairman of the Techniques and Methodologies Group (TMG) *

This document is for discussion at the Tenth UN/CEFACT Plenary under agenda item 5.

* The Techniques and Methodologies Group (TMG) requests the Plenary to approve its resolution made at the UN/CEFACT Forum in Bonn 8 – 12 March, and to submit the UN/CEFACT – ebXML Business Process Specification Schema V1.10 to ISO TC 154 for a fast track approval process as a Draft Technical Specification.

Before coming to the session, delegations interested in reviewing the full specification are encouraged to refer to the full text on the Internet, the full text of the specification can be downloaded from :

<http://www.untmg.org/downloads/General/approved/BPSS-v1pt10.zip>

UN/CEFACT – ebXML Business Process Specification Schema V1.10

1. This UN/CEFACT Technical Specification has been developed in accordance with the UN/CEFACT Open Development Process (ODP) for Technical Specifications. The UN/CEFACT Techniques and Methodology Group (TMG) has approved the Specification for promulgation as a UN/CEFACT Technical Specification in accordance with the ODP.
2. The actual Specification in its totality can be downloaded from the TMG website <http://www.untmg.org/news20031018.html>

Executive summary

3. The ebXML Business Process Specification Schema technical specification (<http://www.untmg.org/downloads/General/approved/BPSS-v1pt10.pdf>) defines a standard language by which business systems may be configured to support the execution of business collaborations consisting of business transactions. It is based upon prior UN/CEFACT work, specifically the metamodel behind the UN/CEFACT Modeling Methodology (UMM) defined in the “UN/CEFACT Modeling Methodology - Meta Model - Revision 12 (2003-01-17)” specification.
4. The BPSS technical specification supports the specification of Business Transactions and the choreography of Business Transactions into Business Collaborations. Each Business Transaction can be implemented using one of many available standard patterns. These patterns are defined in the UMM specification. A pattern is not executable; it rather specifies the type of message exchange (request, response and signals) that applies for a given business transaction definition. It is a way to define classes of business transaction definitions. These patterns could potentially be related to different classes of electronic commerce transactions.
5. The current version of the BPSS technical specification addresses collaborations between two parties (Binary Collaborations). Collaborations involving more than two business partners (Multiparty Collaborations) have been deprecated.

Summary of contents of document

6. The document first introduces general concepts and semantics, then applies these semantics in a detailed discussion of each part of the model. The document then specifies all elements in the UML form, and then in XML form.

Audience

7. Technical Implementers of ebXML are the primary audience. We define a business process analyst as someone who applies the UN/CEFACT Modeling Methodology (UMM) which defines a process that revolves around interviewing business people.
8. An additional audience is formed by designers of business process definition tools who need to specify the conversion of user input in the tool into the XML representation of the Specification Schema.

Prerequisites

9. It is assumed that the audience will be familiar with or will have knowledge of the following technologies and techniques:

- Business process modeling techniques and principles as defined in UN/CEFACT's Modeling Methodology (UMM);
- The UML syntax and semantics;
- The Extensible Markup Language (XML).

Goals, objectives, requirements and problem description

10. BPSS Instances describe interoperable business processes that allow business partners to collaborate. These models must be executed by software components that collaborate on behalf of the business partners.

11. The goal of the ebXML Business Process Specification Schema is to provide the bridge between e-business process modeling and specification of e-business software components.

12. The ebXML Business Process Specification Schema technical specification provides for the nominal set of specification elements necessary to specify a collaboration between business partners, and to provide configuration parameters for the partners' runtime systems in order to execute that collaboration between a set of e-business software components.

13. A business process specification created with the ebXML Business Process Specification Schema is referred to as a BPSS instance.

14. The ebXML Specification Schema is available in an XML Schema: (<http://www.w3.org/2001/XMLSchema>) format at this location:

<http://www.untmg.org/downloads/General/approved/BPSS-v1pt10.xsd>

Furthermore, a UML description of elements of the schema is found in relevant sections of this document.

15. The UML version of the *ebXML Business Process Specification Schema* is merely a UML Class Diagram. It is not intended for the direct creation of BPSS instances. Rather, it is a self-contained statement of all the specification elements and relationships required to enable the creation of an ebXML compliant Business Process Specification. Any methodologies and/or metamodels used for the creation of ebXML compliant Business Process Specifications must at minimum support these elements and relationships.

16. The XML Schema provides the specification for XML-based BPSS instances.

17. The UML- and XML- based representations of the *ebXML Business Process Specification Schema* are unambiguously mapped to each other.

Related documents

18. A number of other documents provide detailed definitions of some of the components of the ebXML Business Process Specification Schema and of their inter-relationship. They include ebXML Specifications on the following topics:

- ebXML Technical Architecture Specification, version 1.04;
 - UN/CEFACT Core Components Dictionary, version 1.04;
 - ebXML Naming Convention for Core Components, version 1.04;
 - ebXML Collaboration-Protocol Profile and Agreement Specification 2.0;
 - ebXML Business Process and Business Information Analysis Overview, version 1.0;
 - ebXML Business Process Analysis Worksheets & Guidelines, version 1.0 ;
 - ebXML E-Commerce Patterns, version 1.0;
 - ebXML Catalog of Common Business Processes, version 1.0;
 - ebXML Message Service Specification 2.0;
 - UN/CEFACT Modeling Methodology (UMM) as defined in the N090R12 specification .
-