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COMMITTEE FOR TRADE, INDUSTRY AND
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Item 5 of the provisional agenda
Tenth session, 17-19 May 2004

PROPOSAL FOR SUBMISSION TO ISO TC154 OF CORE COMPONENTS TECHNICAL SPECIFICATION PART 8 OF THE ebXML FRAMEWORK Version 2.01

Submitted by the UN/CEFACT Techniques and Methodologies Group (TMG)

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 Core Components Technical Specification Version 2.01 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/news20031123.html

GE.04-30930

1. The Core Component Technical Specification is a UN/CEFACT Technical Specification that has been developed in accordance with the UN/CEFACT Open Development Process for Technical Specifications (ODP, TRADE/CEFACT/2000/22). It has been approved by the UN/CEFACT Techniques and Methodologies Group (TMG) for promulgation as a UN/CEFACT Technical Specification in accordance with the Final Technical Specification Release Stage (Step 7) of the Open Development Process (ODP) of UN/CEFACT (whereby, after successful verification, the Group releases the work as a UN/CEFACT Technical Specification for download on the UN/CEFACT Web site).

2. The specification contains information to guide in the interpretation and implementation of ebXML concepts, related to Core Components and can be downloaded from the TMG's website http://www.untmg.org/news20031123.html.

Introduction

3. The Core Components Technical Specification provides a way to identify, capture and maximize the reuse of business information to support and enhance information interoperability across multiple business situations. The specification focuses both on human-readable and machine-processable representations of this information.

4. The Core Components approach described in the specification document is more flexible than current standards in this area because the semantic standardization is done in a syntax-neutral fashion. Using Core Components as part of the ebXML framework will help to ensure that two trading partners using different syntaxes (e.g. Extensible Mark-up Language (XML) and United Nations/EDI for Administration, Commerce and Transport (UN/EDIFACT)) use Business Semantics in the same way on condition that both syntaxes have been based on the same Core Components. This enables clean mapping between disparate message definitions across syntaxes, industry and regional boundaries.

5. UN/CEFACT Business Process and Core Component solutions capture a wealth of information about the business reasons for variation in message semantics and structure. In the past, such variations have introduced incompatibilities. The Core Components mechanism uses this rich information to allow identification of exact similarities and differences between semantic models. Incompatibility becomes incremental rather than wholesale, i.e. the detailed points of difference are noted, rather than a whole model being dismissed as incompatible.

6. The Core Components Technical Specification describes and specifies a new approach to the well-understood problem of the lack of information interoperability between applications in the e-business arena. Traditionally, standards for the exchange of business data have been focused on static message definitions that have not enabled a sufficient degree of interoperability or flexibility. A more flexible and interoperable way of standardizing Business Semantics is required. The UN/CEFACT Core Component solution described in the specification presents a methodology for developing a common set of semantic building blocks that represent the general types of business data in use today and provides for the creation of new business vocabularies and restructuring of existing business vocabularies. The keywords MUST, MUST NOT, REQUIRED, SHALL, SHALL NOT, SHOULD, SHOULD NOT, RECOMMENDED, MAY, and OPTIONAL, when they appear in the specification document, are to be interpreted as described in Internet Engineering Task Force (IETF) Request For Comments (RFC) 2119.1

Scope and Focus

7. The Core Components Technical Specification can be employed wherever business information is being shared or exchanged among and between enterprises, governmental agencies, and/or other organizations in an open and worldwide environment. The Core Components User Community consists of business people, business document modellers and business data modellers, Business Process modellers, and application developers of different organizations that require interoperability of business information. This interoperability covers both interactive and batch exchanges of business data between

applications through the use of Internet and web-based information exchanges as well as traditional Electronic Data Interchange (EDI) systems.

8. The specification will form the basis for standards development work of business analysts, business users and information technology specialists supplying the content of and implementing applications that will employ the UN/CEFACT Core Component Library (CCL). The Core Component Library will be stored in a UN/CEFACT repository and identified in an ebXML compliant registry.

9. Owing to the evolving nature of the UN/CEFACT Core Component Library, the specification includes material that focuses on the business community doing further discovery and analysis work. Some of the contents of this specification are not typical of this type of technical document. However, they are critical for successful adoption and standardization in this area to move forward.

Structure of the specification

10. The specification has been divided into five main sections:

- Section 5: Working Process and Methodology for Business Users – Discovery, Harmonization, Assessment and How to Use [informative]
- Section 6: Technical Details – Core Components and Context [normative]
- Section 7: Technical Details – Storage and Metadata [normative]
- Section 8: Technical Details – Permissible Representation Terms and Approved Core Component Type, Content, and Supplementary Components [normative]
- Section 9: Definition of Terms [normative]

11. Sections 5, 6, 7 and 8 are complementary, but may also be used independently of each other. Section 5 is informative. A business audience may choose to read through the working process and methodology section (Section 5) and only reference the Technical Details (Sections 6, 7 and 8) as needed. Sections 6, 7 and 8 are normative. A technical audience may choose to focus on the technical details (Sections 6, 7 and 8), referring to the methodology (Section 5) and example (published as a supplemental document) sections as appropriate, using the current permissible Representation Terms and approved Core Component Type, Content, and Supplementary Components (Section 8) and the glossary (Section 9).

12. In addition, the UN/CEFACT Forum will prepare supplementary documents that may be used in conjunction with this Core Components Technical Specification. These supplementary documents will include:

- Message Assembly – expands on the Assembly principles and Constraints Language contained in the Core Components Technical Specification and provides specific methodology for assembling higher level Business Information Entities for electronic messages.
- Core Components Primer – details how the contents of Sections 5, 6, and 7 would be used in practice to create a library of Core Components and Business Information Entities.
- Catalogue of Core Components – represents the work of various organizations working in a joint endeavour to develop and publish semantically correct and meaningful information exchange parcels.
