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Electronic Business Extensible Markup Language (ebXML) —

Part 5: Core Components Specification (CCS)

Commerce électronique en langage de balisage extensible (ebXML) — Partie 5: Spécification des composants principaux (CCS)



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Foreword

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ISO 15000-5:2014 - Preview only

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: Foreword - Supplementary information

The committee responsible for this document is Technical Committee ISO/TC 154, *Processes, data elements and documents in commerce, industry and administration.*

This first edition of ISO 15000-5 cancels and replaces ISO/TS 15000-5:2005. It also incorporates the Amendment ISO/TS 15000-5:2005/Amd 1:2011.

The following revisions have been made:

- removal of rules that were unclear or that were specific to the English language;
- clarification of rules that were ambiguous;
- updating of metamodels to reflect reality;
- removal of non-normative clauses.

ISO 15000 consists of the following parts, under the general title *Electronic Business Extensible Markup Language (ebXML)*:

— Part 5: Core Components Specification (CCS)

The following parts are under preparation:

- Part 1: Collaboration-protocol profile and agreement specification (ebCPP)¹)
- Part 2: Message service specification (ebMS)²)
- Part 3: Registry information model specification (ebRIM)³⁾

¹⁾ Revision of ISO/TS 15000-1:2004.

²⁾ Revision of ISO/TS 15000-2:2004.

³⁾ Revision of ISO/TS 15000-3:2004.

— Part 4: Registry services specification (ebRS)⁴)

⁴⁾ Revision of ISO/TS 15000-4:2004.

Introduction

0.1 General

This International Standard 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 Core Component solution described in this International Standard 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.

0.2 Overview

The Core Components Specification (CCS) described in this International Standard provides a way to identify, document and maximize the re-use of business information to support and enhance interoperability across Business Processes. CCS focuses both on human-readable and machine-processable representations of this information.

The Core Components approach described in this International Standard 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 Markup Language (XML) and United Nations/EDI for Administration, Commerce, and Transport (UN/EDIFACT)] are using 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.

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, these variations have led to incompatible data models and a subsequent lack of interoperability. The core components mechanism will allow identification of similarities and differences between these 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.

0.3 Key Concepts

The CCS key concepts are based two levels of abstraction: Core Components and Business Information Entities. These focus areas are discussed in <u>Clauses 4</u> and <u>5</u>: in each case, the concepts are introduced and a normative definition is given, as well as an example, where appropriate.

NOTE The term Core Component is used as a generic term that encompasses Basic Core Components, Association Core Components, Aggregate Core Components, and their associated Core Component Types. Equally, the term Business Information Entity is used as a generic term encompassing Basic Business Information Entities, Association Business Information Entities, and Aggregate Business Information Entities.

0.4 Key Core Component Concepts

The central concept of this International Standard is the Core Component. The Core Component is a semantic building block, which is used as a basis to construct all electronic business messages.

There are four different categories of Core Components:

- a) Basic Core Component;
- b) Association Core Component;
- c) Core Component Type;
- d) Aggregate Core Component.