



Creating A Single Global Electronic Market

Naming Convention for Core Components

v1.04

Core Components Team

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1 Status of this Document

This document specifies an ebXML Technical Report for the eBusiness community.

Distribution of this document is unlimited.

The document formatting is based on the Internet Society's Standard RFC format.

This version:

www.ebxml.org/specs/ebCCNAM.pdf

Latest version:

www.ebxml.org/specs/ebCCNAM.pdf

2 ebXML Participants

We would like to recognize the following for their significant participation to the development of this document.

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3 Introduction

3.1 Summary of contents of document

This specification specifies the rules for naming ebXML Core Components and Business Processes.

In addition to the naming convention rules that lead to a Dictionary Entry Name, the document also provides rules for creating definitions. It also establishes the principle of synonyms to cover the instances where a commonly used business term equates to a well-formed Dictionary Entry Name according to the rules.

The keywords **MUST**, **MUST NOT**, **REQUIRED**, **SHALL**, **SHALL NOT**, **SHOULD**, **SHOULD NOT**, **RECOMMENDED**, **MAY**, and **OPTIONAL**, when they appear in this document, are to be interpreted as described in RFC 2119.

3.2 Audience

The target audiences for this document include business domain experts and technical experts.

3.3 Related documents

These include ebXML Technical Reports on the following topics:

[ccCTLG] Guide to the Core Component Dictionary Ver 1.04

[ebCCD&A] Core Component Discovery and Analysis Ver 1.04

4 Basic Information Entities – Data Element Level

4.1 Introduction

These rules are derived from the guidelines and principles described in document ISO 11179 (Guidelines for Structured Naming Conventions). In certain instances, these guidelines have been adapted to the ebXML Core Component environment. In particular, the guidelines have been extended to cover not only the naming of basic information entities or data elements but also to cover the naming of aggregated information entities.

Each ebXML basic information entity is defined by a:

- **Dictionary Entry Name** (Mandatory). Name of the component as derived from these naming convention rules. It consists of an *Object Class*, *Property Term* and *Representation Type*.
- **Definition** (Mandatory). The definition of a Dictionary Entry shall provide the real business use of that entry. It shall use a structure that allows that entry to be easily distinguished between the following: *Object Class*, the *Property Term*, and its *Representation Type*.

Note Rules for creating definitions are provided in Section 8 of this document.

- **Business term** (Optional). If the Dictionary Entry Name is different from the term used in business, then this business term shall also be presented as synonym. There may be several business terms or synonyms.
 - Dictionary Entry Name e.g. Account.Identifier; Purchase Order.Identifier
 - Business Term e.g. Account Number; Order Number, PO Number

4.2 Naming rules

Rule 1: The Dictionary Entry Name shall be unique and shall consist of *Object Class*, a *Property Term* and *Representation Type*.

Rule 2: “The *Object Class* represents the logical data grouping (in a logical data model) to which a data element belongs” (ISO11179). The *Object Class* is the part of a core component’s Dictionary Entry Name that represents an activity or object in a context.

An *Object Class* may be individual or aggregated from core components. It may be named by using more than one word.

Rule 3: The *Property Term* shall represent the distinguishing characteristic of the business entity. The *Property Term* shall occur naturally in the definition.

Rule 4: The *Representation Type* shall describe the form of the set of valid values for an information element. It shall be one of the terms specified in the “list of *Representation Types*” as included in this document.

Note If the *Representation Type* of an entry is “code” there is often a need for an additional entry for its textual representation. The *Object Class* and *Property Term* of such entries shall be the same.

(Example : “Car.colour.code” and “Car.colour.text”).

Rule 5: A Dictionary Entry Name shall not contain consecutive redundant words. If the *Property Term* uses the same word as the *Representation Type*, this word shall be removed from the *Property Term* part of the Dictionary Entry Name.

For example: If the *Object Class* is “goods” , the *Property Term* is “delivery date”, and *Representation Type* is “date”, the Dictionary Entry Name is ‘Goods. Delivery. Date’.

In adoption of this rule the *Property Term* “Identification” could be omitted if the *Representation Type* is “Identifier”.

For example: The identifier of a party (“Party. Identification. Identifier”) will be truncated to “Party. Identifier”.

Rule 6: One and only one *Property Term* is normally present in a Dictionary Entry Name although there may be circumstances where no property term is included; e.g. Currency Code.

Rule 7: The *Representation Type* shall be present in a Dictionary Entry Name. It must not be truncated.

Rule 8: To identify an object or a person by its name the *Representation Type* “name” shall be used..

Rule 9: A Dictionary Entry Name and all its components shall be in singular form unless the concept itself is plural; e.g. goods.

Rule 10: An *Object Class* as well as a *Property Term* may be composed of one or more words.

Rule 11: The components of a Dictionary Entry Name shall be separated by dots and a following space character. The words in multi-word *Object Classes* and multi-word *Property Terms* shall be separated by the space character. Every word shall start with a capital letter.

Rule 12: Non-letter characters may only be used if required by language rules.

Rule 13: Abbreviations, acronyms and initials shall not be used as part of a Dictionary Entry Name, except where they are used within business terms like real words; e.g. EAN.UCC global location number, DUNS number

Rule 14: All accepted acronyms and abbreviations shall be included in an ebXML glossary.

4.3 *Language specific rules*

Rule 15: The dictionary content will be in English Language following the primary Oxford Dictionary English spellings. This assures unambiguous spelling.

Rule 16: There may be restrictions in specific languages, which need to be applied when transforming the ebXML Component Catalogue into other languages. These restrictions may be formulated as additional rules and added as separated language specific annexes to this document.

5 List of Representation Types

The following list contains the permissible *Representation Types* (as defined with ISO 11179).

ebXML Definition	Representation Type
A number of monetary units specified in a currency where the unit of currency is explicit or implied. Points to the CCT Amount Type	Amount
A character string (letters, figures or symbols) that for brevity and / or language independency may be used to represent or replace a definitive value or text of an attribute. Codes usually are maintained in code lists per attribute type (e.g. colour). Points to the CCT Code Type	Code
A day within a particular calendar year. Note Reference ISO 8601. Points to the CCT Date Type	Date
A particular point in the progression of time. Points to the CCT Date Type	DateAndTime
A character string used to identify and distinguish uniquely, one instance of an object within an identification scheme from all other objects within the same scheme.	Identifier
A list of two, and only two, values which indicate a condition such as on/off; true/false etc. (synonym: "boolean")	Indicator
A numeric value determined by measuring an object. Measures are specified with a unit of measure. The applicable units of measure is taken from UN/ECE Rec. 20. Points to the CCT Measure Type	Measure
A word or phrase that constitutes the distinctive designation of a person, place, thing or concept.	Name
A rate expressed in hundredths between two values that have the same unit of measure.	Percent
A number of non-monetary units. It is associated with the indication of objects. Quantities need to be specified with a unit of quantity Points to the CCT Quantity type	Quantity
A quantity or amount measured with respect to another measured quantity or amount, or a fixed or appropriate charge, cost or value e.g. US Dollars per hour, US Dollars per EURO, kilometre per litre, etc.	Rate
A character string generally in the form of words of a language. Points to the CCT Text type	Text
The time within a (not specified) day. Reference ISO 8601:1988. Points to the CCT Date type	Time

6 Naming of Aggregate Information Entities

Each ebXML aggregate information entity is defined by a:

- **Dictionary Entry Name** (Mandatory). Name of the component, created following these naming convention rules. It consists of an *Object Class* and its *Property Term*.

Core Component Types documented on their own do not have a *Representation Type*. Their different components normally have mixed *Representation Types*. As soon as a business entity re-uses a Core Component Type, the *Representation Type* of its component carrying the real business value shall be allocated to this re-used Core Component Type. Core Component Types will use the *Property Term* “Type”.

Aggregates shall use the *Property Term* “Details”.

According to Trade/CEFACT/1999/3 recommendations, aggregates which are composed of core components having different *Representation Types* must not be linked to a *Representation Type*.

- **Definition** (Mandatory). The definition of an aggregate shall provide the real business use. It shall use a structure which provides a clear distinction between the *Object Class* and the *Property Term*.
- **Business term** (Optional). If the Dictionary Entry Name is different from the term used in business, then this business term shall also be presented as a synonym. There may be several business terms or synonyms.
 - Dictionary Entry Name e.g. Consignment Cash-on-Delivery Amount. Details
 - Business Term e.g. Consignment Cash-on-Delivery Amount

7 Rules for Components' Definitions

This is a collection of rules that have been agreed upon during the development of the initial set of core components:

- To avoid the definition simply being a regurgitated version of the Dictionary Entry Name, the definition should repeat the Dictionary Entry Name followed by “is” and provide an understandable definition afterwards, which should also be translatable.
- One of the fundamental principles specified in ISO 11179, and supported by ebXML, is that the definition should be developed first and the Dictionary Entry Name should be extracted from it.

8 Disclaimer

The views and specification expressed in this document are those of the authors and are not necessarily those of their employers. The authors and their employers specifically disclaim responsibility for any problems arising from correct or incorrect implementation or use of this design.

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