



Creating A Single Global Electronic Market

Catalogue of Context Drivers

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/ccDRIV.pdf

Latest version:

www.ebxml.org/specs/ccDRIV.pdf

2 ebXML Participants

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

Editing team:

Mike Adcock	APACS
Sue Probert	Commerce One
James Whittle	e CentreUK
Gait Boxman	TIE
Thomas Becker	SAP

Contributors:

Tom Warner
Jim Dick
Rob Jeavons
David Connelly
Arofan Gregory
Martin Bryan
Mike Adcock
Eduardo Gutentag
Matthew Gertner
Polly Jan
Sharon Kadlec
Sally Wang
James Wertner

Todd Freter

Henrik Reiche

Chris Nelson

Martin Roberts

Samantha Rolefes

3 Introduction

3.1 *Summary of contents of document*

This document provides a catalogue of context drivers, which have been discovered to-date by the Core Component project team. These are not definitive, and nor do they represent a final complete list. This document should be read in conjunction with the document ebXML TR - Context and Re-Usability of Core Components Ver 1.04. 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.

4 Context Classifications

4.1 *List of discovered context drivers*

A large number of different context descriptors have been considered as part of the ebXML analysis effort, some of which were selected for full inclusion and definition.

This approach defines component re-use within business documents and now requires that some implementation take place before final decisions can be made regarding the value of all of these descriptors. It is intended that the thinking around possible descriptors not be discarded until their worth can better be judged.

- Region (*Geopolitical*)
- Industry
- Business Process
- Product
- Official Constraints
- Role
- Temporal
- Information Structural Context
- Application Processing
- Service Level
- Business Purpose
- Virtual Marketplace
- Contractual

4.2 Classifications

The following context classifications are the ones recommended by the ebXML Core Components Project Team. It has been recognized that other classification schemes may be needed, and that it will be possible to reference other classification schemes for any of the identified context descriptors.

4.3 Business process context

The Business Process context relies on a classification based on the list of core business processes, but contains some additional information. It will be possible to indicate that some minor variations have been made to an existing core process; that a process not in the core is being used; or that an extension may be made at any level of the classification, to accommodate existing business processes. Further, to be used meaningfully in qualifying variation within information entity structure, business process context descriptors may need to go to a finer level of detail than merely specifying the overall business process of which they are a part. This is especially true where both trading partners may be adding information to a single functional aggregate at different points in the business process, and the optionality of that information is being determined by where in the process the information entity is used. (An example of these concepts can be found in ebXML TR – Core Component Discovery and Analysis Ver 1.04.)

The requirement to identify a particular event in the overall business process is complicated by the fact that there may be many players involved in a single business process, and even in a single "leg" of the overall exchange. This occurs when one or both trading partners have agents, as is often the case in payments processing where the trading partner's banks are involved in the exchange, and providing services to facilitate the overall business process. The existence of a portal - where a wide range of "en route" services may be provided - further complicates the issue.

4.4 Regional context

4.4.1 Regional classification

The regional classification allows one or more values to be associated with any business message or component, according to the following structure.

Global

[Continent]

[Economic Region]

[Country] - ISO 3166.1

[Region] - ISO 3166.2

There is no single hierarchy. At any level of the hierarchy, a value may be a single value, a named aggregate, or cross-border value. These values are structured as follows:

Single Value: A single value as shown in the example shown in the next section, indicating a single continent, economic region, country, or region, depending on position within the hierarchy.

Named Aggregate: A related group of values (which may themselves be named aggregates or cross-border constructions), which have been related and assigned a name. A named aggregate contains at least two values.

Cross-Border: One or more pairs of values, designated "To", "From", or "Bi-directional", indicating the direction of cross-border context. Values may be named aggregates or single values.

Points in the hierarchy are specified by the use of the node value, or by the full or partial path. There are cases where the full path is required to understand the hierarchy, as a result of the use of the more complex constructs. A single-point specification is understood to inherit all of the properties of the single-value hierarchy except where otherwise specified.

4.4.2 List of values

The following example shows an extract of the basic, single-value hierarchy of recommended values, based on the common ISO 3166 Country Codes.

Europe

Eastern Europe

AL – ALBANIA

AM – ARMENIA

etc.

4.5 Official constraints context

The official constraints context driver describes data use contexts, which are the result of standards, legal or regulatory requirements, contractual or business agreements, and similar "official" drivers. This classification is outlined as follows: Regulatory And Legislative (includes customs)

- Standards (includes ISO, Milspecs, etc.)

- Guidelines (best practices, unofficial standards)
- Conventions And Treaties (these are different from Regulatory and Legislative)
- Contractual And Trading Partner Agreement

This classification shall be structured as either:

- A free-text field with a qualifying text field to put in "schema" or reference describing what is contained in the text field (legal reference system, for example).
- A free text "code" field with the ability to reference the source.

4.6 *Product context*

The goods or services that the exchange of information describes or enables, e.g. the subject of the transaction, or the set of things that is being described.

4.6.1 Sources for recommended classifications

- United Nations Standard Product and Service Code (UN/SPSC)
Custodian: United Nations
- Standard International Trade Classification (SITC Rev .3)
Custodian: United Nations Statistics Division (UNSD)
- The "Harmonized Commodity Description and Coding System" (HS)
Custodian: WTO
- Classification Of the purposes of non Profit Institutions serving households (COPI)
Custodian: UNSD (This provides a mapping between the first three.)

4.6.2 Structure

Context rules may be associated with each structure level, and more than one value may be specified for defining the use of a particular information entity.

4.7 *Industry context*

The industry or sub-industry in which the information exchange takes place. An Industry is an organisation or group of organisations involved in service, commercial or institutional activity.

4.7.1 Sources for recommended classifications

- International Standard Industrial Classification (ISIC)

Custodian: UNSD

- United Nations Standard Product and Service Code (UN/SPSC)

Custodian: United Nations

(Top-level Segment (digits 1 and 2) used to define industry.)

4.7.2 Structure

Hierarchical structure as defined by existing standard. Context rules may be associated with each structure level, and more than a single value may be specified when describing the use of an information entity.

4.8 *Role context*

Roles: Roles specify the party types (buyer, seller, assembler, catalogue publisher, etc.) that interactively perform interface activities that collaboratively achieve a business objective.

Role Types: The ebXML Business Process Methodology Guidelines, which is a specialization of the UN/CEFACT Unified Modelling Methodology (UMM), specifies that roles must be one of the following role types:

Organisational: As the name implies, the “Organisational” role is for playing the role of an “organization” such as an enterprise, a company, or a factory to cite a few examples. Only an organization performs a particular role in an e-business process. An employee does not perform these activities. Authorization to perform an activity is granted at an organizational level.

Employee: The “Employee” role is used in business interactions that are performed by employees of an organization. An employee for business/legal reasons can only perform an employee role. Usually the details of the employee must be captured and stored/transmitted to another partner for auditing/liability processes when the two partner roles are not in the same organization. Authorization to perform an activity is granted on an employee level.

Functional: The “Functional” role is for the cases when either an employee or an organization can perform the interaction. So the functional role can be either an organizational or an employee role.

Initiator: The “Initiator” is the role that initiates the business process and contains the start state and initial activity.

Responder: The “Responder” is the role that interacts with the initiator in a business process and commercial transaction.

4.8.1 Sources for recommended classifications

Code List 3035 (UN/EDIFACT)

Data Element 98 (X12)

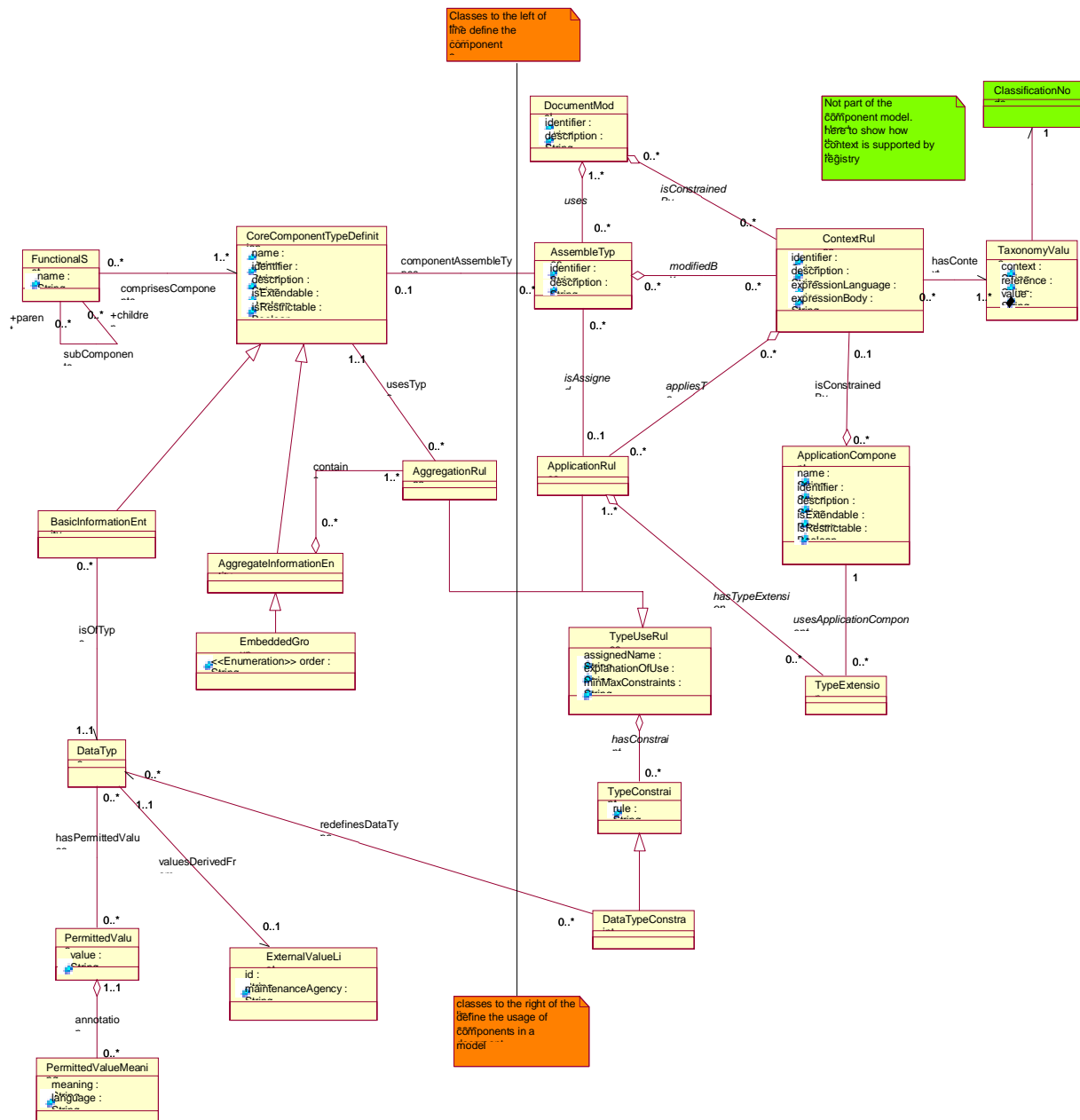
5 Registry Support for Taxonomies

5.1 *Set of data required to be published*

The Registry Metamodel supports the requirement of attaching an arbitrary number of Classification Nodes to any Registered Entry. This is achieved by means of a Classification, which can be associated with a Registered Entry; each instance of the Classification identifies a Classification Node. The top-level node in the Classification Node tree can identify the type of classification (e.g. Geography) by means of its name. If this name does not give the unambiguous context within which the Registered Entry is classified then the Classification may optionally be associated with another Classification Node that provides the context for the Classification (e.g. Located In).

The Classification Node is in itself a Registered Entry and by this means benefits from the versioning facility of the Registry.

6 Context-controlled Core Component Metamodel



7 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.

8 Contact Information

Team Leader

Name	Arofan Gregory
Company	Commerce One
Street	Vallco Parkway
City, state, zip/other	Cupertino, CA
Nation	US
Phone:	
Email:	arofan.gregory@commerceone.com

Vice Team Lead

Name	Mike Adcock
Company	APACS
Street	Mercury House, Triton Court, 14 Finsbury Square
City, state, zip/other	London EC2A 1LQ
Nation	UK
Phone:	+44-20-7711-6318
Email:	mike.adcock@apacs.org.uk

Editor

Name	James Whittle
Company	e centre ^{UK}
Street	10, Maltravers Street
City, state, zip/other	London WC2R 3BX

Nation UK
Phone: +44-20-7655-9022
Email: james.whittle@e-centre.org.uk