



Creating A Single Global Electronic Market

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Catalogue of Context Drivers

ebXML Core Components

10 May 2001

Version 1.04

14 **1 Status of this Document**

15 This Technical Report document has been approved by the Core Component Project
16 Team and has been accepted by the ebXML Plenary.

17

18 This document contains foundation material based on ebXML Technical Specifications
19 or Reports.

20

21 The document formatting is based on the Internet Society's Standard RFC format.
22 Distribution of this document is unlimited.

23

24 This version:

25 www.ebxml.org/specs/ccDRIV.pdf

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28 development of this document.

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84 **4 Introduction**

85 **4.1 *Summary of Contents of Document***

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

90
91 The keywords **MUST**, **MUST NOT**, **REQUIRED**, **SHALL**, **SHALL NOT**, **SHOULD**,
92 **SHOULD NOT**, **RECOMMENDED**, **MAY**, and **OPTIONAL**, when they appear in this
93 document, are to be interpreted as described in RFC 2119.

94 **5 Context Classifications**

95 **5.1 List of discovered Context Drivers**

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

98
99 This approach defines component re-use within business documents and now requires
100 that some implementation take place before final decisions can be made regarding the
101 value of all of these descriptors. It is intended that the thinking around possible
102 descriptors not be discarded until their worth can better be judged.

- 103
- 104 • Region (*Geopolitical*)
- 105 • Industry
- 106 • Business Process
- 107 • Product
- 108 • Official Constraints
- 109 • Role
- 110 • Temporal
- 111 • Information Structural Context
- 112 • Application Processing
- 113 • Service Level
- 114 • Business Purpose
- 115 • Virtual Marketplace
- 116 • Contractual
- 117

118 **5.2 Classifications**

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

123

124 **5.3 Business Process Context**

125 The Business Process context relies on a classification based on the list of core business
126 processes, but contains some additional information. It will be possible to indicate that
127 some minor variations have been made to an existing core process; that a process not in
128 the core is being used; or that an extension may be made at any level of the classification,
129 to accommodate existing business processes.

130

131 Further, to be used meaningfully in qualifying variation within information entity
132 structure, business process context descriptors may need to go to a finer level of detail
133 than merely specifying the overall business process of which they are a part. This is

134 especially true where both trading partners may be adding information to a single
 135 functional aggregate at different points in the business process, and the optionality of that
 136 information is being determined by where in the process the information entity is used.
 137 (An example of these concepts can be found in ebXML TR – Core Component Discovery
 138 and Analysis Ver 1.04.)
 139

140 The requirement to identify a particular event in the overall business process is
 141 complicated by the fact that there may be many players involved in a single business
 142 process, and even in a single "leg" of the overall exchange. This occurs when one or both
 143 trading partners have agents, as is often the case in payments processing where the
 144 trading partner's banks are involved in the exchange, and providing services to facilitate
 145 the overall business process. The existence of a portal - where a wide range of "en route"
 146 services may be provided - further complicates the issue.
 147

148 **5.4 Regional Context**

149 **5.4.1 Regional classification**

150 The regional classification allows one or more values to be associated with any business
 151 message or component, according to the following structure.
 152

153 Global
 154 [Continent]
 155 [Economic Region]
 156 [Country] - ISO 3166.1
 157 [Region] - ISO 3166.2

158 There is no single hierarchy. At any level of the hierarchy, a value may be a single value,
 159 a named aggregate, or cross-border value. These values are structured as follows:
 160

161 **Single Value:** A single value as shown in the example shown in the next section,
 162 indicating a single continent, economic region, country, or region, depending on
 163 position within the hierarchy.
 164

165 **Named Aggregate:** A related group of values (which may themselves be named
 166 aggregates or cross-border constructions), which have been related and assigned a
 167 name. A named aggregate contains at least two values.
 168

169 **Cross-Border:** One or more pairs of values, designated "To", "From", or "Bi-
 170 directional", indicating the direction of cross-border context. Values may be named
 171 aggregates or single values.
 172

173 Points in the hierarchy are specified by the use of the node value, or by the full or partial
 174 path. There are cases where the full path is required to understand the hierarchy, as a
 175 result of the use of the more complex constructs. A single-point specification is
 176 understood to inherit all of the properties of the single-value hierarchy except where
 177 otherwise specified.
 178

179 **5.4.2 List of Values**

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

182 Europe
183 Eastern Europe
184 AL – ALBANIA
185 AM – ARMENIA
186 etc.
187

188 **5.5 Official Constraints Context**

189 The official constraints context driver describes data use contexts, which are the result of
190 standards, legal or regulatory requirements, contractual or business agreements, and
191 similar "official" drivers. This classification is outlined as follows:

- 192
- 193 • Regulatory And Legislative (includes customs)
 - 194 • Standards (includes ISO, Milspecs, etc.)
 - 195 • Guidelines (best practices, unofficial standards)
 - 196 • Conventions And Treaties (these are different from Regulatory and Legislative)
 - 197 • Contractual And Trading Partner Agreement
- 198

199 This classification shall be structured as either:

- 200 • A free-text field with a qualifying text field to put in "schema" or reference describing
201 what is contained in the text field (legal reference system, for example).
 - 202 • A free text "code" field with the ability to reference the source.
- 203

204 **5.6 Product Context**

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

207

208 **5.6.1 Sources for Recommended Classifications**

- 209 • United Nations Standard Product and Service Code (UN/SPSC)
210 Custodian: United Nations
 - 211 • Standard International Trade Classification (SITC Rev .3)
212 Custodian: United Nations Statistics Division (UNSD)
 - 213 • The "Harmonized Commodity Description and Coding System" (HS)
214 Custodian: WTO
 - 215 • Classification Of the purposes of non Profit Institutions serving households (COPI)
216 Custodian: UNSD (This provides a mapping between the first three.)
- 217

218 **5.6.2 Structure**

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

221

222 **5.7 Industry Context**

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

227 **5.7.1 Sources for Recommended Classifications**

- 228 • International Standard Industrial Classification (ISIC)
229 Custodian: UNSD
- 230 • United Nations Standard Product and Service Code (UN/SPSC)
231 Custodian: United Nations
232 (Top-level Segment (digits 1 and 2) used to define industry.)
233

234 **5.7.2 Structure**

235 Hierarchical structure as defined by existing standard. Context rules may be associated
236 with each structure level, and more than a single value may be specified when describing
237 the use of an information entity.
238

239 **5.8 Role Context**

240 **Roles:** Roles specify the party types (buyer, seller, assembler, catalogue publisher, etc.)
241 that interactively perform interface activities that collaboratively achieve a business
242 objective.
243

244 **Role Types:** The ebXML Business Process Methodology Guidelines, which is a
245 specialization of the UN/CEFACT Unified Modelling Methodology (UMM), specifies
246 that roles must be one of the following role types:
247

248 **Organisational:** As the name implies, the “Organisational” role is for playing the
249 role of an “organization” such as an enterprise, a company, or a factory to cite a
250 few examples. Only an organization performs a particular role in an e-business
251 process. An employee does not perform these activities. Authorization to perform
252 an activity is granted at an organizational level.
253

254 **Employee:** The “Employee” role is used in business interactions that are
255 performed by employees of an organization. An employee for business/legal
256 reasons can only perform an employee role. Usually the details of the employee
257 must be captured and stored/transmitted to another partner for auditing/liability
258 processes when the two partner roles are not in the same organization.
259 Authorization to perform an activity is granted on an employee level.
260

261 **Functional:** The “Functional” role is for the cases when either an employee or an
262 organization can perform the interaction. So the functional role can be either an
263 organizational or an employee role.
264

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

267

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

270

271 ***5.8.1 Sources for Recommended Classifications***

272 Code List 3035 (UN/EDIFACT)

273

274 Data Element 98 (X12)

275

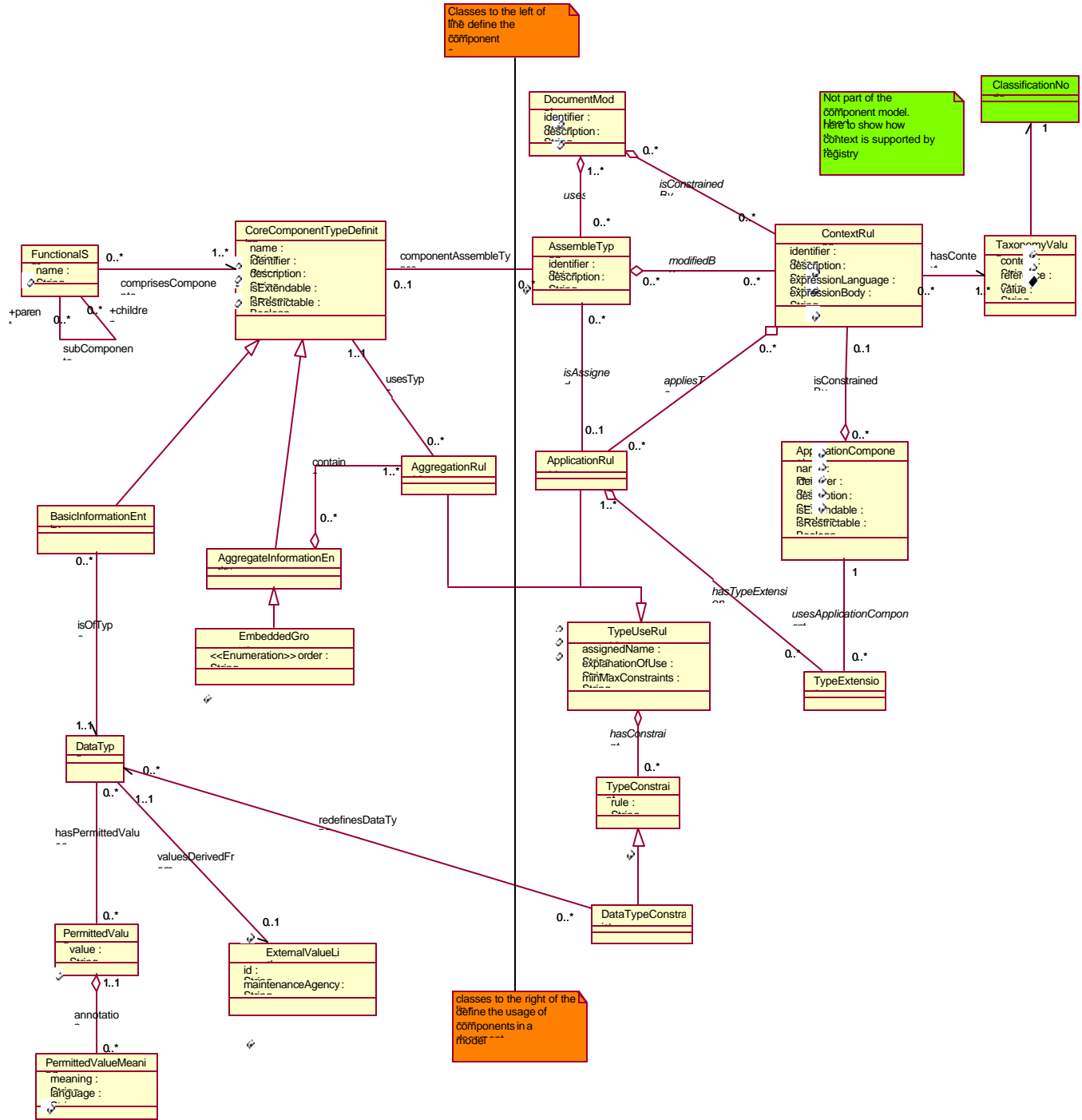
276 **6 Registry Support for Taxonomies**

277 **6.1 Set of Data required to be published**

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

286
287 The Classification Node is in itself a Registered Entry and by this means benefits from
288 the versioning facility of the Registry.
289

290 7 Context-controlled Core Component Metamodel



292 8 Disclaimer

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294 not necessarily those of their employers. The authors and their employers specifically
295 disclaim responsibility for any problems arising from correct or incorrect implementation
296 or use of this design.

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