

OASIS UBL TC comments on the eBTWG Draft Core Components Specification 1.8

The UBL group believe that, whilst the current CCTS provides a strong basis for good semantic modeling and definition of Core Components and Basic Information Entities, some modifications and clarifications would make it even better. Our comments are heavily based on our initial experience at applying the CCTS to the development of the UBL library of BIEs.

Some of these modifications may appear significant, but we feel it necessary to raise these matters sooner rather than later, whilst the implementations of ebXML libraries (such as UBL) are still under development.

Having said that, we are mindful of the need for the CCTS work to mature and move forward. We do not want to detract from the team's momentum and hope that you will consider many of these proposals as simplifications rather than complications to your work.

This submission is designed to be read in conjunction with the accompanying document entitled "*Feedback from OASIS UBL TC to Draft Core Components Specification 1.8*"[UBL]. This provides further information, examples, diagrams and discussion on the background to our recommendations.

Questions regarding these comments can be addressed to the UBL CCTS Comments Editing Team, care of [Tim McGrath](mailto:tmcgrath@portcomm.com.au) (tmcgrath@portcomm.com.au).



Line Numbers	Current text	Proposed text	Reason for Change									
840-856	<i>To be inserted</i>	<p>Property is the model element named by a <i>property term</i>. This is similar to the way a <i>Core Component's</i> “activity or object”¹ is the model element named by an <i>object class</i>.</p> <p>This concept (property) corresponds to “field” in database models, “attribute” in ER modeling, “member” in Java, “child element” in XML, and “attribute” in UML.</p> <p>For example, imagine an ACC called “Address”. This ACC might have properties: “Street” of type “Text”, and “Country” of type “Code”.</p> <p>Summarizing, these properties could be defined thus:</p> <table border="1"> <thead> <tr> <th><i>Object Class</i></th> <th><i>Property Name/Term</i></th> <th><i>Representation Term</i></th> </tr> </thead> <tbody> <tr> <td>Address</td> <td>Street</td> <td>Text</td> </tr> <tr> <td>Address</td> <td>Country</td> <td>Code</td> </tr> </tbody> </table>	<i>Object Class</i>	<i>Property Name/Term</i>	<i>Representation Term</i>	Address	Street	Text	Address	Country	Code	<p>Proposal 1</p> <p>The CC model should explicitly include the concept of <i>property</i>.</p> <p>There appears to be an imprecise treatment of “properties”. While the specification talks extensively about “property terms” – which are part of a “data element name” for a “data element”, we are left to <i>infer</i> the existence and makeup of the “property” concept.</p> <p>We are trying to give “property terms” to things. What things are we trying to give them to? The specification doesn’t tell us.</p> <p>The term “property” is used often in the specification, but it is never formally defined. Additionally, the term “child field” is sometimes used synonymously to “property”, and is also left undefined. Furthermore, neither appears in any of the conceptual diagrams.</p>
<i>Object Class</i>	<i>Property Name/Term</i>	<i>Representation Term</i>										
Address	Street	Text										
Address	Country	Code										
840-856	<i>To be inserted</i>	<p>A property’s name (i.e. Property Term) should reflect the role played by that property’s content <i>relative to</i> the Object Class/Aggregate Core Component in which that property is declared.</p> <p>For example, the object class ‘Shipping’ might</p>	<p>Proposal 2</p> <p>A property’s name (i.e. Property Term) should reflect the role played by that property’s content <i>relative to</i> the Object Class/Aggregate Core Component in</p>									

¹ CCTS lines 2162-2163

		<p>have a 'From' property and a 'To' property. Each of these properties represents a 'Location'.</p> <p>The terms ('From' and 'To') reflect the role played by the respective 'Locations' and distinguish these two <i>uses</i> of the object class Location within the (Aggregate) object class 'Shipping', as in...</p> <table border="1"> <thead> <tr> <th><i>Object Class</i></th> <th><i>Property Name/Term</i></th> <th><i>Representation Term</i></th> </tr> </thead> <tbody> <tr> <td>Shipping</td> <td>From</td> <td>Location</td> </tr> <tr> <td>Shipping</td> <td>To</td> <td>Location</td> </tr> </tbody> </table>	<i>Object Class</i>	<i>Property Name/Term</i>	<i>Representation Term</i>	Shipping	From	Location	Shipping	To	Location	<p>which that property is declared.</p> <p>This new, formal concept of property allows us to identify (name) a Core Component (either a Basic or subsidiary Aggregate Core Component) within the Object Class/Aggregate Core Component that contains it.</p>
<i>Object Class</i>	<i>Property Name/Term</i>	<i>Representation Term</i>										
Shipping	From	Location										
Shipping	To	Location										
<p>1112 and 1235 and 2156</p>	<p>This represents the logical data grouping or aggregation (in a logical data model) to which a data element belongs.</p>	<p>This represents the logical data grouping or aggregation (in a logical data model) to which a property belongs.</p>	<p>Proposal 3</p> <p>The ISO 11179 term "Data Element" is identical to the "Property" concept described in Proposal 1 and Proposal 2</p> <p>The ISO 11179 standard governs specification and standardization of data elements. The definition from that standard:</p> <p>data element: A unit of data for which the identification, meaning, representation and permissible values are specified by means of a set of attributes (ISO/IEC 11179-3)</p> <p>Property as described in Proposal 1 and Proposal 2 is exactly such a data element.</p>									
<p>1118, 1241</p>	<p>Representation Term This defines</p>	<p>Representation Term: This describes the form of the set of valid values of a data element.</p>	<p>Align the definition of Representation Term more clearly with ISO 11179-5.</p>									

	the type of valid values for an information entity.						
1315-1316	The <i>Representation Term</i> is the part of a <i>Core Component</i> name that describes the form of valid values in which the business information is expressed in a data item.	The representation term is a component that describes the form of representation of the property.	Align the definition of Representation Term more clearly with ISO 11179-5.				
2169	Representation Term – The type of valid values for a Basic Core Component.	Representation term - Describes the form of the set of valid values of a property.	Align the definition of Representation Term more clearly with ISO 11179-5.				
After line 1119 and after line 1232 (with CC changed to BIE)	<i>To be inserted</i>	The mapping of ISO 11179-5 to the proposed Core Components model is: <table border="1"> <thead> <tr> <th>ISO 11179 Data Element Name Components</th> <th>CC Model</th> </tr> </thead> <tbody> <tr> <td>Object Class Term</td> <td>The ACC playing the “Object Class” role relative to the Property</td> </tr> </tbody> </table>	ISO 11179 Data Element Name Components	CC Model	Object Class Term	The ACC playing the “Object Class” role relative to the Property	Proposal 4 A (tripartite) Data Element Name (ISO 11179) for a Property is constructed from the Property’s ObjectClass, PropertyName/Term and RepresentationTerm
ISO 11179 Data Element Name Components	CC Model						
Object Class Term	The ACC playing the “Object Class” role relative to the Property						

Property Term	The name of the Property
---------------	--------------------------



			Representation Term	The CC playing the “Representation Term” role relative to the Property		
<p>335-336 344-354 389 (figure 4-2) 1008 1010 (figure 6-1) 1013-1017 1040-1045 1084-1085 1321 (table 6-1) 1331 (table 6-2) 1347 1734 2042 (section 8) 2082 2105 2143-2146</p>	<p><i>Various definitions</i></p>		<p>Definitions to be amended to reflect the consolidation of RT, CCTs as BCCs.</p>			<p>Proposal 5 Merge the list of Representation Terms and Core Component Types.</p> <p>Proposal 6 Call that merged list of Representation Terms and Core Component Types “Basic Core Components”.</p> <p>Proposal 7 A Basic Core Component will consist of a Primary Component and Supplementary Components.</p> <p>Proposal 8 A Basic Core Component will relate to its Primary and Supplementary Components through a BCCProperty.</p> <p>See <i>UBL Feedback section 2 [UBL]</i>, for a more detailed explanation.</p>
<p>1324-1327</p>	<p>In addition to permissible representation terms for <i>Core Components</i>,</p>		<p>Since a Representation Term will be the name of that Core Component type, the tripartite naming to properties of Aggregate Core Components is the same as with properties of Basic Core Components.</p>			<p>Following from the previous suggestion, we can say that Aggregate Core Components define new Representation Terms. The list of all Representation Terms is “controlled” – in that all entries</p>

	<p>there are also permissible representation terms for <i>Aggregate Core Components</i> and <i>Core Component Types</i>. Table 6-2 contains the permissible representation terms that apply to <i>Aggregate Core Components</i> or <i>Core Component Types</i>.</p>	<p>The list of all Representation Terms is “controlled” – in that all entries are defined Aggregate Core Components.</p>	<p>are defined Aggregate Core Components. Since a Representation Term will be the name of that Core Component type, the tripartite naming to properties of Aggregate Core Components is the same as with properties of Basic Core Components. This ensures the use of a meaningful Representation Term/ Core Component type name for Aggregate Core Components. <i>See UBL Comments, Section 3. Consistent Application of Tripartite Naming at the ACC Level and the BCC Level [UBL] for a detailed explanation and examples.</i></p>
<p>1209-1211 and 1305-1308 (except ACC is ABIE)</p>	<p>The Dictionary Entry Name of an Aggregate Core Component shall consist of a meaningful Object Class followed by a dot, a space character, and the term Details. The Object Class may consist of more than one word.</p>	<p>The Dictionary Entry Name of an Aggregate Core Component shall consist of a meaningful Object Class. The Object Class may consist of more than one word.</p>	<p>A defined Aggregate Core Component becomes the Representation Term of the properties of other Object Classes that subsequently use it.</p>
<p>1323 (table 6-1)</p>	<p><u>Code</u> A character</p>	<p><u>Code</u> A system of words, figures or symbols used to</p>	<p>Proposal 9</p>

<p>2051 (table 8-1)</p>	<p>string (letters, figures or symbols) that for brevity and / or language independence 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). <u>Identifier</u> A character string used to establish the identity of, and distinguish uniquely, one instance of an object within an identification scheme from all other objects within the same scheme. [Note: Type shall not be</p>	<p>(exactly) represent others. <u>Identifier</u> That which establishes the identity of (something).</p>	<p>There is a need to clarify the semantics of the terms ‘code’ and ‘identifier’. No one issue has caused as many problems as the application of these two concepts. Unlike other proposals, this is not a meta-model issue; it is an issue of content and terminology. There appears to be much confusion about the terms ‘codes’ and ‘identifiers’. The issue of when to declare a Basic Core Component either a Code or an Identifier still needs clarification. Getting the etymological roots of the terms correct seems a reasonable first step. As has been evidenced in the various debates on these issues, when carried down to enumeration and validation, it gets more complicated. For example, there is a natural tendency to want to enumerate for validation purposes small sets of things that we have been considering "codes", which are actually "identifiers". Therefore, at this stage we would encourage the CCTS to leave enumeration and validation out of the picture and concentrate on getting the semantics correct.</p>
-------------------------	---	--	---

	used when a person or an object is identified by its name. In this case the <i>Representation Term</i> "Name " shall be used.]		
--	--	--	--

