DR 17-0021 — DML: wild cards in the complex type CT\_GraphicalObjectData of dml-main.xsd and dml-main.rnc

Status: Open

Subject: DML: wild cards in the complex type CT\_GraphicalObjectData of dml-main.xsd and dml-main.rnc

Qualifier: Technical defect

Submitter: MURATA Makoto Organization: JISC

Contact Information: eb2m-mrt@asahi-net.or.jp

Submitter’s Defect Number: None

Supporting Document(s): none

Date Circulated by Secretariat: 2017-08-29

Deadline for Response from Editor: 2017-10-29

IS 29500 Reference(s): Part 1: Annex A and Annex B

Related DR(s): none

Nature of the Defect:

CT\_GraphicalObjectData in dml-main.xsd defines permissible child elements of graphicData elements. This complex type has xsd:any with processContents="strict".

Thus, an element is allowed if the XSD validator can find a schema for the element and the element is valid against the found schema.

First, in some OOXML documents, elements of the namespace “<http://schemas.microsoft.com/office/word/2010/wordprocessingCanvas>” appear as children of graphicData elements. But this namespace is not defined by ISO/IEC 29500 but is rather defined by a Microsoft extension. As a result, we cannot validate some OOXML documents unless we have schemas defined by a Microsoft extension. In other words, for some OOXML documents, conformance against ISO/IEC 29500 cannot be tested unless Microsoft extension schemas are installed.

If we replace processContents="strict" by processContents="lax", we can validate OOXML documents even when we do not have schemas defined by a Microsoft extension.

Second, this xsd:any is mimicked by the following rule in the RELAX NG schema dml-main.rnc. This implies that any non-VML element not in "urn:schemas-microsoft-com:office:office", "urn:schemas-microsoft-com:vml","urn:schemas-microsoft-com:office:word", "urn:schemas-microsoft-com:office:excel" is allowed and that no validation is carried out.

a\_CT\_GraphicalObjectData\_any =  
 element \* - (o:\* | v:\* | w10:\* | x:\*) {  
 anyAttribute\*,  
 mixed { anyElement\* }  
 }

However, this RELAX NG rule fails to capture the intention of the original XSD schema, since child elements of graphicData elements are never validated. They should be validated when they are defined by the schemas in 29500.

Solution Proposed by the Submitter:

First, replace processContents="strict" by processContents="lax" in the XSD schema.

Second, enumerate whose 29500-defined elements which are allowed as child elements of graphicData elements in both the XSD schema and RELAX NG schema.

Schema Change(s) Needed:

Yes

**Editor’s Response:**

None

Changes to Part 1: Y Part 2: N Part 3: N Part 4: Y