



Post-BRM Voting Guide for National Bodies

Outcome of the ISO/IEC JTC1 Ballot Resolution Meeting, Key Considerations, and Next Steps

The Ballot Resolution Meeting (BRM) concerning Microsoft's Office Open XML's (OOXML) – the office file format derived from Microsoft's Office 2007 program currently being fast-tracked through ISO/IEC Joint Technical Committee (JTC1) as DIS 29500 – ended 29 February 2008. Now follows a 30-day review period (until 29 March 2008) during which National Bodies may examine the revisions made during the BRM and reconsider their vote if they wish.

Despite the spirit of cooperation that prevailed among the 32 delegations from around the world that participated in the BRM and their good-faith effort to improve OOXML, the resulting revisions fell short of addressing the most serious problems, reinforcing the original vote by National Bodies to disapprove OOXML during the first round of balloting that ended 2 September 2007.

Over 80 percent of Ecma's proposed resolutions were not even discussed at the BRM. Of the 1,027 proposed resolutions on the BRM agenda, 126 were editorial changes approved by delegates *en bloc*; 48 were replaced by new text, discussed, and ultimately approved; and another 6 were discussed and accepted, leaving 847 not discussed at all.

"Malaysia had submitted 23 comments and more than 70% of them were not addressed satisfactorily by Ecma's proposed dispositions. We intended to resolve these technical issues at the BRM, but we could only raise 2 concerns due to the time constraints imposed."

-Puan Fadilah Baharin, Director General of STANDARDS MALAYSIA, in a [press release](#) issued after the BRM

The most serious problems identified by National Bodies were not resolved satisfactorily during the BRM. The revised DIS 29500 fails to address numerous fundamental concerns cited by National Bodies, including:

- **Backwards compatibility:** The stated goal of OOXML is "to represent faithfully the existing corpus of word-processing documents, spreadsheets and presentations that have been produced by Microsoft Office applications (from Microsoft Office 97 to Microsoft Office 2008 inclusive)." The binary Office specifications have been posted by Microsoft, but Microsoft has failed to deliver the so-called "mappings" that tell you how to translate a binary document into OOXML, or provide any guidance whatsoever on how to "represent faithfully" legacy documents. Given the same binary document, Microsoft Office, Apple iWork, OpenOffice.org, etc., will all produce different OOXML documents, breaking interoperability and preventing the realization of OOXML's stated goal of preserving legacy documents.
- **Harmonization with ODF:** Many National Bodies raised the issue of harmonization in their OOXML (DIS 29500) ballot comments. Korea, South Africa, Belgium, Peru, Switzerland, and the Czech Republic, among others, requested harmonization, while others like France and

New Zealand went one step further, developing a roadmap to achieve it. In addition, the National Bodies of Great Britain, Brazil, Chile, Columbia, Great Britain, Iran, New Zealand, and the United States requested that 40 specific features be added to OOXML in order to improve interoperability with ODF, such as the ability to have more than 63 columns in a table, to have background images in tables, or to have font weights beyond “normal” and “bold.” These were the exact features that Microsoft's translator project on SourceForge identified as needed to improve translation with ODF.¹ Ecma rejected all of these requests, instead promoting “translation” between ODF and OOXML, a poor substitute for having a single format, made even poorer by the lack of these features in OOXML.

- Dates: Objections to the way in which OOXML handles spreadsheet dates were raised by 27 National Bodies. OOXML requires that the year 1900 be (incorrectly) treated as a leap year. Rather than fix the erroneous leap-year calculation, the changes made at the BRM, while adding the possibility to store dates in ISO 8601 format, maintain the buggy legacy date basis as the default. This leaves would-be developers with five different ways of representing the same thing, once again breaking interoperability.
- XML Schema: The current version of the draft standard has three copies of the XML schema describing the various markup languages which comprise OOXML; Normative XML fragments in the run of the text, full schema listed at the end of the Markup Part, and binary annexes containing copies of the schema. As the default behavior for conformance is to ignore elements and attributes that are not understood, differences in the copies of the schema would likely lead to interoperability problems with conforming applications ignoring the problems.
- Name Confusion - “Open Office” versus “Office Open”: The confusion between the trademarked name of open-source software, OpenOffice, and OOXML, or Office Open XML, is not helpful for consumers. As evidenced by Microsoft web pages, their own enterprise architects and the media, this confusion between “open office” and “office open” is persistent, widespread, and still unresolved after the BRM. Even the Ecma Project Editor makes this error in Ecma's Proposed Disposition of Comments in his response to NZ-OO07.
- VML: National Bodies reported that VML was required in some scenarios, even for new documents. While Ecma's proposed solution (which was not even discussed during the BRM and therefore remains) eliminates VML in some of these scenarios, it introduces new XML types without explaining what these types do or what they mean. An implementor is therefore left to guess the meaning of attributes such as “justLastX” or “secretEdit” or “dde”.
- MathML: Several National Bodies requested that MathML, an open standard, be used. Ecma claims MathML support already exists. Despite Ecma's claims, a document created with MathML, following the directions in Ecma's comment, fails to load properly in Office 2007.
- SVG: Ecma claimed Office Open XML is “compatible with SVG”. Yet after embedding SVG in an OOXML document, the resulting document failed to load properly in Office 2007.
- SMIL: National Bodies requested replacing PresentationML's animation support with the existing W3C SMIL (Synchronized Multimedia Integration Language), an already-established

¹ <http://odf-converter.sourceforge.net/features.html#hUnsupportedDOCX>

standard that has undergone a full, public accessibility review and was designed to conform with the W3C's Web Accessibility Guidelines.² Ecma's response regarding Animation support: "This schema is loosely based on the syntax and concepts from the Synchronized Multimedia Integration Language (SMIL), a W3C Recommendation for describing multimedia presentations using XML." Instead of "loosely based" SMIL, SMIL should be used directly.

- Platform-dependent file paths to refer to images: In response to comments that DIS 29500 contained platform-dependent file paths to refer to images, Ecma proposed a dual-mode solution, where file paths can be expressed either by operating system dependent path specifications, or by a platform-neutral file-protocol IRI. This solution, however, will cause problems when reading the same document on multiple platforms, such as Windows and Linux.
- Macros: Four National Bodies, in their ballot comments from last September, pointed out that Section 2.16.5.41 of DIS 29500's Part 4 defines a "MACROBUTTON" field that allows the definition of a button in the document that will trigger a macro. But nothing is said about how the macro is stored, bound, what API's are available, what the security model is, etc. The request from one National Body was to "Describe this feature to a level where cross-platform, cross-application interoperability is possible." The following was approved in batch at the BRM without discussion or opportunity for objection: "The mechanism by which the command specified by text in field-argument-1 is located and/or executed by an application is implementation-defined". It is not only impossible to have cross-platform interoperability of this feature, but also impossible to implement a reasonable security policy to detect, scan or block macros.

Intellectual property rights issues were left completely out of the BRM process. Microsoft's Open Specification Promise (OSP), a promise that is supposed to protect projects from patent risk, has serious gaps and provides no assurance to GPL developers. Resolution of well-founded intellectual property rights concerns are critical to the IT industry and governments and are legitimate issues for national bodies to consider as a group. Microsoft has a patent promise, the Open Specification Promise (OSP) and a Covenant Not to Sue relating to OOXML, but developers and competitors who want to implement OOXML with confidence that they are not infringing on any intellectual property rights should be mindful that the coverage has serious gaps. The Software Freedom Law Center concluded that "the OSP provides no assurance to GPL developers and that it is unsafe to rely upon the OSP for any free software implementation, whether under the GPL or another free software license".³ There are also serious issues with respect to the accessibility of Office Open XML as a format.

2 <http://www.w3.org/TR/SMIL-access/>

3 See *Microsoft's Open Specification Promise: No Assurance for GPL*, Software Freedom Law Center, March 12, 2008 - <http://www.softwarefreedom.org/resources/2008/osp-gpl.html>

The procedural difficulties, which resulted in protests from several National Bodies, only serve to highlight the inappropriateness of “fast-track” for OOXML when the normal ISO approval procedure is available for a specification of this size and complexity.

National Bodies are not expected to have the opportunity to review the revised DIS 29500 as amended at the BRM prior to March 29. An amended text has yet to be produced, and may only be published after the 30-day period for National Bodies to reconsider their vote is over. Those participating in the discussions, and those National Bodies which did not send a delegation, will have no opportunity to see the fully revised standard, to review new content, context, and implementations, and to know whether new questions or difficulties have arisen.

Only by voting "disapprove" will National Bodies ensure that the problems will be resolved satisfactorily and promises made at the BRM actually delivered.

A path is available for National Bodies to ensure that Microsoft and Ecma make good on their recent promises at the BRM and most recently with what was described as a "major announcement" regarding interoperability principles. A vote to “disapprove” need not be final say on OOXML because Ecma and Microsoft will still have available the usual ISO approval procedure instead of the “fast-track,” which is appropriately reserved for standards that have achieved widespread implementation and use (e.g., PDF).

"I'm not an ISO expert, but whatever their 'Fast Track' process was designed for, it sure wasn't this... You just can't revise 6,000 pages of deeply complex specification-ware in the time that was provided for the process."

-Tim Bray, co-author of the W3C XML standard and Canadian BRM delegate, in a [blog post](#)

Next Steps. Within 30 days after the BRM (29 March 2008), national bodies that voted in the 2 September ballot may change their vote from any of “approve”, “disapprove” or “abstain” to any of “approve”, “disapprove” or “abstain”. The failure to discuss over 80 percent of the proposed resolutions and the inability to resolve satisfactorily the major problems identified by National Bodies reinforces the original vote to disapprove fast-tracking OOXML as an international standard. Ecma and Microsoft should:

- seek technical harmonization with the ISO-approved OpenDocument Format (ISO/IEC 26300:2006);
- alternatively, they can pursue the usual ISO-approval procedure instead of the “fast-track,” which is appropriately reserved for mature standards of reasonable scope and size.

Any National Body wishing to change its vote must communicate its intention by 29 March 2008 via email to Keith Brannon (brannon@iso.org) as well as Maho Takahashi (takahashi@iso.org), Martine Gaillen (gaillen@iso.org) and yourself on copy. The following shall be indicated in the subject: "Modification to the vote on DIS 29500 - Country (National Body/e.g. JISC)". For the latest details, please consult <http://www.itscj.ipsj.or.jp/sc34/>.