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BUSINESS PLAN FOR JTC 1/SC 34

PERIOD COVERED: from November 2008 to September 2009

SUBMITTED BY: Dr. Sam Gyun OH, Chair of SC 34

1.0 MANAGEMENT SUMMARY

1.1 JTC1/SC34 CHAIRMAN'S REMARKS

The major activity that took place at SC34 during this period was the maintenance of ISO/IEC 29500. We firmly believe that we have demonstrated our ability to maintain it actively by publishing four DCORs and two FPDAMs. SC34 will seek to be the home for all standards related to editable document formats. WG4 handles all maintenance issues of IS 26300 while Ecma TC45 members actively participate in WG4. The other is WG5, which will focus on interoperability issues among document formats such as ODF, OOXML, and PDF/A-1. Since the standards mentioned above have direct business implications for major industry players, there are potential dangers that political games can be played so open handling of all future documents must be maintained. SC34 intends to prevent future controversies. SC34 wishes to have a better arrangement with OASIS for maintaining IS 26300 (ODF) and intends to invite the OASIS group to work closely with SC34 members by establishing WG6 to maintain ODF within SC34. SC34 will ensure that all ODF experts play a leading role in this endeavour. SC34 intends to invite the OASIS group to work closely with SC34 members by establishing WG6 to maintain IS 26300 within SC34. SC34 will ensure that all the ODF experts play a leading role in this endeavour.

New drafts for the Topic Maps -- Constraint Language, ISO/IEC 19756 and Topic Maps -- Overview and Basic Concepts, ISO/IEC 13250-1 are under active review at the time of this report. Unfortunately one of the co-editors for Topic Maps -- Query Language, ISO/IEC 18048 has resigned and will be replaced at this SC 34 meeting.

1.2 JTC 1/SC 34 STATEMENT OF SCOPE

Standardization in the field of document structures, languages and related facilities for the description and processing of compound and hypermedia documents, including:

- languages for describing document logical structures and their support facilities
- languages for describing document-like objects in web environments
- document processing architecture and formatting for logical documents
- languages for describing interactive documents
- multilingual font information interchange and related services
- final-form document architecture and page information interchange

- hypermedia document structuring language and application resources
- API's for document processing

1.3 PROJECT REPORT

SC 34 has a total of 91 projects. Among them, 27 are in development. The programme of Work of SC 34 is available at this URL:

http://www.itscj.ipsj.or.jp/sc34/open/Secretariat_report.htm#POW

1.4 CO-OPERATION AND COMPETITION

The key players in the areas of standardisation with which SC 34 is concerned are:

- W3C (that maintains the XML family of standards),
- OASIS a Class A Liaison member of SC 34 that leads the maintenance of IS 26300 under agreement with JTC 1, and with whom SC 34 has recently agreed a joint maintenance procedure for IS 26300.

ODF, PDF/A1, and OOXML are all International Standard document formats, so seeking to define the extent of interoperability among them is imperative. Working cooperatively with industry partners has not been easy. W3C has liaison-C status and expressed an interest in working closely with SC34 cooperatively. SC34 will strive to work together with all industry partners that are concerned with document formats. We would also like to work together with ISO TC 171 since it is in charge of PDF/A-1 standard. SC34 is committed to working on interoperability among these standards.

Another area that needs cooperation is between Topic Maps and RDF/OWL community. Both provides ontology language standard with different focus. The former focuses its attention to establishing relationships among important classes, but the latter to inferencing and data mining. Cooperatively working together will be beneficial by making semantic web community rich.

W3C XML Schema competes with DSDL (Document Schema Description Languages) of SC34. There are no agreements between W3C and SC34. W3C XML Schema has much bigger market share, but many users are committed to DSDL.

2.0 PERIOD REVIEW

2.1 MARKET REQUIREMENTS

- SC 34 is well placed to engage in two key technology trends. First, there has been a transition of XML into the mainstream, where it is now an orthodox data representation technology. SC 34's strengths in all aspects of this technology are fit to address the growing needs of the user community that now employs XML for a very wide range of applications.

- Secondly, there also is a growing awareness of the applicability of Knowledge Management technologies to better enhance the value and utility of data sets. SC 34's Topic Maps technologies provide an excellent basis for such Knowledge Management activities.

At present, quality check of XML documents is often done by application programs rather than validators against schemas. This may be because W3C XML Schema causes, rather than solves, problems. Thus, the number of potential users of DSDL schema languages remains quite large. Furthermore, the emergence of XML-based office document standards (e.g., OOXML and ODF) will probably lead to stronger requirements on validation.

2.2 ACHIEVEMENTS

SC 34 has been actively maintaining ISO/IEC 29500. As of 2009-08-01, member bodies and liaisons have submitted 293 defect reports. WG4 have studied these defect reports carefully and have closed 208 of them. Significant changes in the dispositions of the defect reports have lead to the publication of two FPDAMs. Other changes in the dispositions have lead to the publication of four DCORs. The latest defect report log, statistics, and indexes of ISO/IEC 29500 are available at: <http://www.itscj.ipsj.or.jp/sc34/wg4/statistics/DefectReportsOn29500.html>.

The DSDL project has standardized RELAX NG (19757-2) and Schematron (19757-3), and NVDL (19757-4). Recently, DSRL (19757-8) and Namespace and datatype declaration in DTDs (19757-9) have been sent for publication to ITTF in September 2008. CREPDL (19757-7) will become an FDIS by December 2008.

In March 2009 SC 34 officers reached agreement with OASIS on a joint maintenance procedure for ISO/IEC 26300:2006 ODF. This agreement was approved by the SC 34 Plenary meeting in Prague, March 2009, and was subsequently ratified by JTC 1. The SC 34 Prague Plenary also established an Ad Hoc Group to develop recommendations on how SC 34 can best fulfil its role in the joint maintenance of ODF with OASIS. This Ad Hoc Group held its first meeting in Seattle in September 2009 and is expected to make its recommendations by March 2010. Two Defect Reports on ISO/IEC 26300:2006 submitted by the Japanese National Body, whose processing had been stalled by the lack of agreement on the correct maintenance procedure, are now being processed in accordance with the agreed joint maintenance procedure. Guidance on options for the participation of National Bodies in ODF maintenance have been prepared.

SC34 Published standards:

- ISO/IEC 29500-1:2008
Information technology -- Document description and processing languages -- Office Open XML File Formats -- Part 1: Fundamentals and Markup Language Reference
- ISO/IEC 29500-2:2008
Information technology -- Document description and processing languages -- Office Open XML File Formats -- Part 2: Open Packaging Conventions
- ISO/IEC 29500-3:2008
Information technology -- Document description and processing languages -- Office Open XML File Formats -- Part 3: Markup Compatibility and Extensibility
- ISO/IEC 29500-4:2008
Information technology -- Document description and processing languages -- Office Open XML File Formats -- Part 4: Transitional Migration Features

- ISO/IEC 19757-8:2008, Information technology -- Document Schema Definition Languages (DSDL) -- Part 8: Document Semantics Renaming Language (DSRL)
- ISO/IEC 19757-2: 2008, Information technology -- Document Schema Definition Language (DSDL) -- Part 2: Regular-grammar-based validation -- RELAX NG
- ISO/IEC 13250-4:2009, Information technology -- Topic Maps -- Part 4: Canonicalization
- ISO/IEC 9541-1/Amd 4:2009, Information technology -- Font information interchange -- Part 1: Architecture -- Amendment 4: Extension to font resource architecture
- ISO/IEC 9541-2/Amd 2:2009, Information technology -- Font information interchange -- Part 2: Interchange format -- Amendment 2: Extension to font reference
- ISO/IEC 9541-3/Amd 2:2009, Information technology -- Font information interchange -- Part 3: Glyph shape representation -- Amendment 2: Additional shape representation technology for Open Font Format
- ISO/IEC 9541-4:2009, Information technology -- Font information interchange -- Part 4: Harmonization to Open Font Format

Ballots conducted:

DCOR: 5

- ISO/IEC 9541-4:2009/DCor.1, Information technology -- Font information interchange -- Part 4: Harmonization to Open Font Format -- Draft TECHNICAL CORRIGENDUM 1
- ISO/IEC 29500-2: 2008/DCOR 1, Information technology -- Document description and processing languages -- Office Open XML File Formats -- Part 2: Open Packaging Conventions TECHNICAL CORRIGENDUM 1
- ISO/IEC 29500-3: 2008/DCOR 1, Information technology -- Document description and processing languages -- Office Open XML File Formats -- Part 3: Markup Compatibility and Extensibility -- TECHNICAL CORRIGENDUM 1
- ISO/IEC 29500-1: 2008/DCOR 1, Information technology -- Document description and processing languages -- Office Open XML File Formats -- Part 1: Fundamentals and Markup Language Reference -- TECHNICAL CORRIGENDUM 1
- ISO/IEC 29500-4: 2008/DCOR 1, Information technology -- Document description and processing languages -- Office Open XML File Formats -- Part 4: Transitional Migration Features -- TECHNICAL CORRIGENDUM 1

FDIS/FDAM: 4

- FDIS 9541-4, Information technology -- Font information interchange -- Part 4: Harmonization to Open Font Format
- ISO/IEC 9541-3:1994/FDAM 2, Information technology -- Font information interchange -- Part 3: Glyph shape representation -- AMENDMENT 2: Additional Shape Representation Technology for Open Font Format
- ISO/IEC 9541-1:1991/FDAM 4:2008, Information technology -- Font information interchange -- Part 1: Architecture -- AMENDMENT 4: Extension to font resource architecture
- ISO/IEC 9541-2:1991/FDAM 2:2008, Information technology -- Font information interchange -- Part 2: Interchange format -- AMENDMENT 2: Extension to font reference

FCD/FPDAM: 3

- FCD 19757-5, Information technology -- Document Schema Definition Languages (DSDL) -- Part 5: Extensible Datatypes

- ISO/IEC 29500-4: 2008/FPDAM 1, Information technology -- Document description and processing languages -- Office Open XML File Formats -- Part 4: Transitional Migration Features -- AMENDMENT 1
- ISO/IEC 29500-1: 2008/FPDAM 1, Information technology -- Document description and processing languages -- Office Open XML File Formats -- Part 1: Fundamentals and Markup Language Reference -- AMENDMENT 1

NP:1

- Proposal for New Work Item on OpenDocument Format (ISO/IEC 26300) / Office Open XML (ISO/IEC 29500) Translation

2.3 RESOURCES

We need more active participation from member bodies in the maintenance of ISO/IEC 20500.

Few of the SC34 meeting attendees are interested in the DSDL project, firstly because people attend SC34 for OOXML or ODF and secondly because DSDL experts do not always have time or money to attend SC34 F2F meetings.

3.0 FOCUS NEXT WORK PERIOD

3.1 DELIVERABLES

More defect reports on ISO/IEC 29500 are expected to be submitted. In reply to them, more DCORs and (F)PDAMs are expected to be published.

Some extensions of ISO/IEC 29500 have been suggested, but it is not clear when we start to extend ISO/IEC 29500 yet.

Among the DSDL parts, Overview 1 (FCD 19757-1), Extensible Datatypes (FCD 19757-5 soon), and 7 (FDIS 19757-7 soon) will be completed in the near future, and Schematron (IS 19757-3) will be extended by an amendment or revision.

3.2 STRATEGIES

SC34 intends to encourage the start of new projects in the area of XML infrastructure technologies, such as validation, visual representations of XML models, and XML processing APIs. As well as having direct utility to users of the (now-ubiquitous) XML technology, such infrastructure standards will help enhance the technical quality of SC34's own XML applications, and those of the wider stakeholder base. We will continue to collaborate with industry partners on this work, and, as far as possible, seek to avoid duplication of work already in progress, especially in W3C, OASIS and Ecma International.

3.2.1 RISKS

If we fail to create an open and fair process of working together, we will lose the opportunity to revolutionize what future documents can do for humans and society. We hope that much

controversy over OOXML will not jeopardize ISO/IEC processes. We hope that procedures will be improved, to enable ISO/IEC to respond to the need of the society, while at the same time doing so in ways that are based upon consensus and are sufficiently transparent to be seen by society to be fair to all points of view.

3.2.2 OPPORTUNITIES

Since we handle document format and ontology language standards, there are tremendous opportunities for us to create synergy between them. Future documents will contain semantic tags and how to utilize those semantic components to handle complex business needs will be crucially important. Combining the power of open document standards with Topic Maps will prove a great opportunity for semantic computing. This opportunity is likely to bear the fruits since SC34 is the home for both document format and ontology language experts.

3.3 WORK PROGRAMME PRIORITIES

SC34 intends to act as a good steward for the two major Office document formats for which it has responsibility: ISO/IEC 26300 and ISO/IEC 29500. Such work is critical to the millions of users of these formats throughout the World. The priority in the coming year is to establish effective functioning of SC34's new working groups who work on these formats.