Minutes of the: *meeting of the Co-ordinating Committee*

held in: *Geneva*

on: *11 – 12 October 2005*

Chairman: Ms J. Auber (HP)

Secretary: Mr. J. van den Beld (SG Ecma)

Attending: Mr. M. Breidthardt (IBM), Mr. O. Elzinga (Ecma), Mr. K. Fisher (Intel), Mr. H. Narita (Fujitsu), Mr. S. Statt (Intel), Mr. H. Theis (Tenovis), Mrs. I. Valet-Harper (Microsoft)

Excused: Mr. J. Neumann (Toshiba), Mr. P. Weijenbergh (Philips)

1   Review of the work of the TCs

The TC Chairmen's reports are attached to these minutes (**pdf version only**) and were presented as follows:

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TC12   Mr. Elzinga (no meetings, no written report)
TC15   Mr. van den Beld (no meetings, no written report)
TC17   Mr. van den Beld (no meetings, no written report)
TC20   Mr. Elzinga
TC26   Mr. van den Beld
TC31   Mr. van den Beld
TC32   Mr. Theis / Mr. Elzinga
TC38   Mr. Fisher
TC39   Mr. van den Beld
TC43   Mr. van den Beld
TC44   Mr. van den Beld
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1.9   TC39 - Programming and Scripting languages

See report: TC39/05/036.

TG1 will from now on prepare the next, i.e., 4th Edition of ECMA-262: ECMAScript. Its completion is scheduled for December 2006. E4X as specified in ECMA-357 will be fully integrated in the new Edition of the ECMAScript standard.

Mr. Bill Schulze has resigned from the Convenorship of TG1. The CC expresses its high appreciation for his work and endeavours in TG1 that is now revitalised to do its important work for the global scripting community.

The new Convenor of TG1 is **Mr. Brendan Eich.**

The approved standards and TRs of **TG2, TG3** and **TG4** are now under fast-track ballot in JTC 1.

TG5 has completed its Standard on the CLI Binding for C^{++} and has submitted it for approval by the GA in December 2005. The draft standard is an impressive document, of high quality. It has already raised interest in the C^{++} community, e.g., probably to take over some extensions into the C^{++} standard. There is also still a long 'wish list'. There is already an implementation coming to the market.

TG5 has made an unusual liaison effort towards JTC 1/SC22 has been made: in particular **Mr. Herb Sutter**, the C^{++} WG Convenor in JTC 1/SC22 has played an important role in that effort. **Mr. van den Beld** will highlight the special effects of this liaison in the JTC 1 Plenary scheduled for November 2005 in Banff, Canada.

The CC recommends to adopt the following draft new edition standard:

−   ECMA-357 2nd edition: ECMAScript for XML (E4X) Specification (GA/05/126 - TC39/05/042)

The CC recommends to adopt the following draft standard and to approve its submission to ISO/IEC JTC 1 for fast-track processing:

− C^{++} / CLI (GA/05/126 - TC39/05/041)

TC39 Chairman's Report to: *Coordinating Committee*

Written on: *26 September 2005*

CC Meeting on: *11-12 October 2005*

1 Officers

Chairman: Joel Marcey (Intel Corporation)

Vice-Chairman: Jim Miller (Microsoft Corporation)

For reference, the most recent chairman's report to the CC, prior to this, is contained in Ecma/TC39/2005/017.

2 Meetings

About 25 technical meetings of TC39 Task Groups and one TC39 meeting have occurred since the most recent report.

Task Group meetings:

- TG1   : 1 phone, 2 F2F
- TG2: 1 phone, 1 F2F
- TG3: 3 phone, 1 F2F
- TG4: Phone call every week in March/April, 0 F2F
- TG5: 6 phone, 1 F2F

TC39 meeting

- 1 F2F, 20th meeting hosted in Redmond, WA, USA by Microsoft Corporation on 22 September 2005

3 Progress

See TC39/2005/039 for the latest, detailed TC39 status and progress report via the minutes of the 20th meeting

The past 6 months saw edition 3 of the Ecma-334 and Ecma-335 specification, and edition 1 of the Eiffel specification (Ecma-367) approved by the Ecma General Assembly. The TC39-TG3 (CLI), TC39-TG2 (C#) and TC39-TG4 are now working through the ISO/JTC1 fast-track process to receive ISO approval for the respective Ecma standards. The TC39-TG1 (EcmaScript) has received ISO/IEC approval for edition 1 of Ecmascript for XML (Ecma-357) after the Japan National Body had agreed to change its vote from NO to YES w/ comments. TG1 has aligned its Standard ECMA-357 with ISO/IEC 22537. This has resulted in a 2nd Edition of ECMA-357, submitted for approval by the General Assembly in December 2005. The TC39-TG5 completed working draft 1.15 of the C++/CLI specification and it is submitted to Ecma as Edition 1.

4   Latest TC39/TG Status:

4.1   Task Group 1: EcmaScript (TG1/2005/005)

Mr. Jeff Dyer (Macromedia) presented the Convener report of **William Schulze** (Macromedia) to TC39.

Mr. Bill Schulze has resigned as Convener. The TG1 and TC39 thanks him for his service to TG1. Mr. Brendan Eich of Mozilla Foundation has been nominated and elected as the next Convener of the TG1.

The final draft of ISO/IEC 22537 and Disposition of Comments Report have been forwarded to ITTF by October 3, 2005.

The working group has tentative agreement on a feature set and schedule for Ecma-262 edition 4. The goals are to reach functional agreement by March 2006 and complete a draft of Ecma-262 edition 4 for approval by the GA by September 2006.

4.2   Status report from Task Group 2: C# (TG2/2005/015)

Dr. Nigel Perry (University of Canterbury, New Zealand) presented his Convener's report to TC39.

TG2 is in the midst of the ISO fast-track process for $C^{\#}$ Edition 3. TG2 has proposed 22 comments on $C^{\#}$ edition 3 for the ISO process and reviewed and attempted resolution to these comments at their September meeting currently.

TG2 is looking forward to resolving all ISO comments in an expedient manner in order to produce the next ISO standard.

Dr. Nigel Perry was re-elected as convener of the TG2.

4.3   Status report from Task Group 3: CLI (TG3/2005/039)

Mr. Joel Marcey (Intel Corporation) presented his Convener's report to TC39.

The TG3 is in the midst of the ISO fast-track process for CLI Edition 3.

The TG3 has proposed 13 comments on CLI edition 3 for the ISO process. The TG3 reviewed and resolved many of these comments at their September meeting.

The convener is looking forward to resolving all ISO comments in an expedient manner in order to produce another ISO standard.

Mr. Joel Marcey was re-elected as convener of the TG3.

4.4   Status report from Task Group 4: Eiffel (TG4/2005/007)

Mr. Emmanuel Stapf (Eiffel Software) presented his Convener's report to TC39.

Eiffel Edition 1 accepted as an ECMA standard by the ECMA GA in June 2005.

The convener will collect all issues raised by committee members in the TC39-TG4 reflector since the final draft of the standard. They will be discussed/resolved during our next face-to-face meeting, and possibly turn them into ISO comments.

4.5   Status report from Task Group 5: CLI Binding for C++ (TG5/2005/025)

Dr. Tom Plum (Plum Hall) presented his Convener's report to TC39.

The first Edition is now complete (WD 1.15). TG5 has presented Edition 1 of the C++/CLI specification for approval by TC39, where it was approved. TG5 plans to meet in Spring 2006

to determine if any submission to the ISO/IEC JTC 1 fast track process is required, and in Fall 2006 (12-13 October 2006) if required to address public comments to ISO.

5   Election of Officers

Both the chair and vice-chair positions were up for election at the 20th TC39 meeting. Mr. Joel Marcey (Intel Corporation), the current chair, was nominated and unanimously re-elected. Mr. Kelvin Hoover (Microsoft), who was named vice-chair at a special election at the 19th TC39 meeting, was no longer able to perform his duties. Thus the vice-chair position was vacant. Mr. Jim Miller of Microsoft was nominated and unanimously elected. The TC39 chair would like to thank Mr. Miller for his willingness to accept the vice-chair position.

6   Drafts to be submitted to the GA for Adoption

- TG1: Ecma-357, edition 2, Ecmascript for XML
- TG5:   Working draft 1.15 of edition 1 of the C++/CLI specification

7   Recommendations

The TC39 has unanimously approved the following specifications

- TG1: Ecma-357, edition 2, Ecmascript for XML
- TG5: Working draft 1.15 of edition 1 of the C++/CLI specification

and recommends approval of these specifications by the GA in December 2005, and for adoption by ISO/IEC JTC 1 under their fast-track procedure.

8   Future TC39 Meetings

- Meeting 21: Montreux or Geneva, Switzerland, hosted by ECMA, 11th April 2006 (venue and date to be confirmed)

Joel Marcey (Intel Corporation)

Chairman TC39

TC43 Chairman's Report to: *Co-ordinating Committee*

Written on: *10 October 2005*

1   Officers

Chairman: Mr. Sanjay Deshmukh, Intel Corporation

Vice-Chairman: Dr. Thomas O'Rourke, Intel Corporation

2   Meetings

The following technical working group meetings of TC43 have been held since the last report to the Co-ordinating Committee in May 2005.

TC43 meetings:

- September 15th 2005   Phone conference – Updates on ISO submission & NURBS

- August 5th 2005   Face to face meeting in Los Angeles – Review of 2nd Edition status, NURBS and Bezier contributions, future features and Ecma membership.

- May 5th, 2005   Phone conference – Review of 2nd Edition submission to Ecma GA & timeline

Although the group had only three meetings between May and October considerable progress was made (details discussed later in section 4) due to excellent offline initiative from several members from the group, e.g. drafting of NURBS and Bezier contributions.

3   Future Meetings

The team is progressing on advancements to U3D, including support of NURBS, Bezier, compression, and other areas. Members in the group have been encouraged to work offline in sub-groups (if needed) to develop contributions that are reviewed in TC43 meetings. In this way the work on NURBS and Bezier has been proceeding at a rapid pace. The group has agreed on meeting for two additional teleconference meetings (late October and November) and another face-to-face meeting before end of 2005, tentatively scheduled for December 2, 2005. The group would like to focus on NURBS, Bezier and mesh compression as the high-priority features in the near term. The 2006 meeting schedule has yet to be determined.

4   Progress

Ecma TC43 has made excellent progress since the May 2005 Coordinating Committee meeting towards the completion and submission of the 2nd edition of the U3D File Format specification and the development of advanced U3D features, i.e. NURBS and Bezier.

In early June TC43 had completed the 2nd edition of the U3D File Format specification and respectfully submitted it via postal ballot to the Ecma General Assembly for consideration as an Ecma standard. Our group was notified on August 10th that Ecma GA had approved our specification as ECMA-363 (http://www.ecma-international.org/publications/standards/Ecma-363.htm). Ecma submitted ECMA-363 to ISO/IEC JTC 1 SC29 for fast track processing. A liaison statement was received from the WG11 (MPEG) group within the SC29 group indicating a few technical suggestions on the file format structure, in order to align better with existing ISO file format. The liaison statement also welcomed Ecma representatives to brief SC29 regarding Universal 3D and to discuss their suggestions more fully. Two members of TC43 (Mr. Sanjay Deshmukh and Dr. Tom O'Rourke, Ecma TC43 Chair and Vice Chair respectively)

will be representing the group at the WG11 meeting in France. Hopefully this engagement will also serve to foster a strong long-term relationship between Ecma TC43 and SC29 WG11. Please refer to the Ecma email archive for the liaison statement and Ecma's response.

To announce the availability of ECMA-363, Ecma published a press release (http://www.ecma-international.org/news/PressReleases/PR_TC43_U3D_Aug05.htm). TC43 members co-authored the press release with Ecma's press analyst, obtaining quotes from Intel and Adobe VPs. ECMA-363 was also announced in a press and analyst event at the Intel Developer Forum on August 23, 2005. The open source software associated with ECMA-363 from the 3D Industry Forum (http://www.3dif.org) was made available on sourceforge (http://sourceforge.net/projects/u3d) and since the announcement in August-end that site experienced significant downloads.

Progress was also made towards advanced features on Universal 3D, including NURBS and Bezier Patch. Several members worked between meetings to develop a contribution on NURBS that was reviewed at a high-level in a group meeting. The group agreed to the general approach and recommended that the editor (Dr. Tom O'Rourke) formalize the contribution in an Ecma standard template and submits it to the group for formal review. The formal review of the NURBS specification is expected to be held in the December group meeting. It is yet to be determined whether NURBS and/or Bezier will comprise the 3rd edition of the U3D standard or whether those features should become a standalone standard.

The group has agreed on a prioritized list of features/enhancements to U3D, the top five features are listed below (please consult TC43 email archive for complete list):

1. Mesh Compression
2. NURBS
3. Bezier Patch
4. 2D annotation and text
5. Shaders (Fixed)

The above features will be addressed by the group in the coming meetings in 2005 and 2006. The meeting schedule for 2006 has yet to be determined.

Lastly, the provisional Ecma membership for 3D Industry Forum (3DIF) will be ending in December. The group has discussed this important issue in several meetings and 3DIF members have been advised and encouraged to join Ecma. Mr. Jan van den Beld's email to the TC43 group on October 5th, 2005 (refer to the TC43 email archive) provides the complete background and status. Ecma membership details have been requested by several 3DIF members and some have already initiated steps toward becoming Ecma members. Some 3DIF members, however, may not join due to financial limitations, etc. This transition may be difficult for the group but hopefully the impact will be minimal and the group can continue to make excellent progress on advancing U3D as was demonstrated in 2004/2005.

5   Drafts to be submitted to the GA for Adoption

None at this time. The TC43 group intends to complete the NURBS and possibly the Bezier specifications by the end of 2005. The group may then seek to submit the TC43-approved specifications to Ecma GA via postal ballot for adoption in Q1 2006.

6   Recommendations

None at this time.

Sanjay Deshmukh (Intel Corporation)

Chairman TC43

TC44 chairman's report to Co-ordinating Committee

September 2005

1   General

The officers of TC44 "Holographic Storage Information (HIS) Systems in 2005 are:

Chairman   Mr. W. Glinka

Vice Chairman   Open

2   Meetings

1st Meeting	San Francisco, CA	December 8, 2004
2nd Meeting	Tokyo, Japan	March 3, 2005
3rd meeting	Montreux, CH	May 19, 2005
4th meeting	Maui, Hawaii	July 28, 2005

TC44 meetings continue to attract great attention from academia and the holographic storage industry. Several companies have joined Ecma to work in TC44. These companies are:

- Fuji Photo Film
- Optware
- Pulstec
- Toagosei
- InPhase Technologies

The following organizations have attended at least one meeting of TC44:

- ALPS
- Caudle Associates
- CMC Magnetics
- Coherent
- Fuji Photo Film
- Fujitsu
- Hitachi
- IBM
- InPhase Technologies
- JVC
- Le Carvennec Consultants
- LITE ON
- Matsushita
- Microsoft
- Hitachi Maxell
- Optware
- Pulstec
- Pioneer
- Plasmon
- Software Architects
- Stanford University
- Texas Instruments
- Toagosei
- Tokyo University
- Toshiba

3   Programme of Work

TC44 is chartered to maintain an overall view and strategy for standardization in the field of holographic information systems, and to prepare Standards and Technical Reports in this field (TC44-2004-004).

TC44 has started work on it's first project "Information Interchange on Holographic Versatile Disc (HVD) Recordable Cartridges – Capacity: 200 Gbytes per Cartridge". The document is currently in its 3rd draft. A 4th draft will be discussed at the next meeting in November 2005.