Excerpts

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

held in: *Geneva*

on: *17 - 18 May 2004*

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. P. Hofmann (IBM), Mr. H. Narita (Fujitsu), Mr. J. Neumann (Toshiba), Mr. S. Statt (Intel), Mr. H. Theis (Tenovis), Mrs. I. Valet-Harper (Microsoft), Mr. P. Weijenbergh (Philips)

Guests: Mr. Benoit, Mr. Deshmukh, Mr. Fihnn, Mr. Jacklin, Mr. Olsson

1.8   TC39 - Programming and Scripting languages

See report: TC39/04/18.

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

–   ECMAScript for XML (E4X) Specification (GA/04/23 – TC39/04/10)

TC39 is very pleased with the proposed standard "ECMAScript for XML" (E4X), which will allow application programmers familiar with scripting to use XML to create, manipulate and navigate XML data without having to go through a steep XML learning curve: see also GA/04/25 and TC39/04/6.

However, there are regularly complaints that scripting is one of the most important reasons that web pages are presented differently, and often deformed, by different browsers. In Germany, some sites intend to forbid the use of ECMAScript altogether, for accessibility reasons. The ICTSB in Europe has received complaints also about accessibility. In the Netherlands a project is underway, with government funding, to try to "program around such problems".

The CC instructs TG1 to come forward with a problem description and (a) possible solution(s) for the problem. Actually, the CC would like to arrive at a situation where all requirements of the W3C Web Accessibility Guidelines can be matched when using ECMAScript, but it is not known whether that is feasible. A minimum requirement is to come forward with a guideline on the use of ECMAScript. **Mr. Schulze** will give a presentation at the GA in June 2004 about the strategic direction for the future of ECMAScript. The CC would also like to see, in his presentation, a response to the accessibility problems.

The object model under development for CSTA (see item 1.6 of these minutes) is a mapping of XML on CLI. It is an interesting question whether TG1 should not take a similar approach, next to or instead of "on language level".

TC39 Chairman's Report to: Co-ordinating Committee

Written on: 8 April 2004

1   Officers

Chairman: Joel Marcey (Intel Corporation)

Vice-Chairman: Andrew Clinick (Microsoft Corporation)

For reference, the most recent chairman's report is contained in Ecma/TC39/2003/44.

2   Meetings

The following 20 technical meetings of TC39 Task Groups and one TC39 meeting have occurred since the most recent report.

Task Group meetings:

- TG1 6-7 November 2003   Face-to-Face, San Francisco, CA, USA, hosted graciously by Macromedia
- TG1 9 February 2004   Conference call, hosted graciously by BEA
- TG1 12 February 2004   Face-to-Face, Seattle, WA, USA, hosted graciously by Microsoft
- TG1 16-17 March 2004   Face-to-Face, Melbourne, Australia, hosted graciously by Monash University
- TG1 March 30, 2004   Conference call, hosted graciously by Microsoft
- TG2 25-26 January 2004   Face-to-Face, Kona, HI, USA, hosted graciously by Plum Hall
- TG2 16-17 March 2004   Face-to-Face, Melbourne, Victoria, Australia, hosted graciously by Monash University
- TG3 17 October 2003   Phone conference
- TG3 6 January 2004   Phone conference
- TG3 27-28 January 2004   Face-to-Face, Kona, HI, USA, hosted graciously by Plum Hall
- TG3 19 February 2004   Phone conference
- TG3 14-15 March 2004   Face-to-Face, Melbourne, Victoria, Australia, hosted graciously by Monash University
- TG4 21-23 November 2003   Zurich, Switzerland, hosted by ETH
- TG4 12-14 February 2004   Orinda, USA, hosted by Axa Rosenberg
- TG4 1-3 April 2004   Zurich, Switzerland, hosted by ETH Zurich
- TG5 4-5 December 2003   Face-to-Face, College Station, TX, USA, hosted by Microsoft and Plum Hall
- TG5 16 December 2003   Phone conference
- TG5 6 January 2004   Phone conference

- TG5 29-31 January 2004   Face-to-Face, Kona, HI, USA, hosted by Plum Hall
- TG5 18– 20 March 2004   Face-to-Face, Melbourne, Australia, hosted by Monash University

TC39 meeting

- 18 March 2004, Melbourne, Victoria, Australia, hosted by Monash University

3   Future meetings

All task groups plan to meet at least once through face-to-face or via the telephone mechanisms before the next TC39 meeting.

The TG1 plans to meet at least once before the next TC39 meeting

The TG2 plans to meet at least 2 times before the next TC39 meeting (June and September)

The TG3 plans to meet at least 3 times before the next TC39 meeting (June, August, September) as well has have various phone conferences.

The TG4 plans to meet at least 3 times before the next TC39 meeting (June, August, September)

The TG5 plans to meet at least 2 times before the next TC39 meeting (June, September)

TC39 meeting

- 24 September 2004, Redmond, Washington, USA (Microsoft Corporation)

4   Progress

The task groups of the TC39 are making substantial progress on all fronts. All task groups are continuing work on their respective specification editions. The TG1 has submitted E4X for adoption by the GA and will now continue to work on the ECMAScript specification. The TG2 and TG3 are continuing to refine the new features and technologies that are being added to their specifications for an edition 3 specification. The TG4 is continuing to work on a first edition of their specification. Many meetings and phone conferences have been held within all task groups. See "Latest Status" for complete details.

The TG1 has submitted their E4X specification for adoption. No concrete date for submission of the next edition of the ECMAScript specification has been set.

The TG2 expects to submit the next edition of the C# specification in September 2004.

The TG3 expects to submit the next edition of the CLI specification in September 2004.

The TG4 plans to submit the first edition of the Eiffel specification in September 2004.

The TG5 plans to submit the first of edition of the CLI Binding for C++ specification in September 2004.

5   Latest Status:

5.1   Task Group 1: ECMAScript (2004/011)

Mr. Rok Yu (Microsoft) presented his Convener's report to TC39.

Mr. Schneider, Editor of the E4X draft, gave a very interesting presentation on E4X (04/16) and the interesting possibilities it offers: E4X allows to create, manipulate and navigate XML data, from within ECMAScript. By doing so, a steep learning curve to master XML programming can be avoided. Implementations of the forthcoming Standard can very well attract a lot of interest in the world (called "success disaster"). The development of the Standard has taken 1,5 years, slightly longer than expected, but also requiring substantial amounts of unexpected work.

Mr. Schneider gave a demonstration of a preview implementation from BEA (04/6) running on Mozilla/Rhino open source software. The plan is to make this implementation publicly available as open source software. All active TG1 member companies (will) have an implementation, as well as several non-members. There are also several mobile implementations in the works.

This edition of the Standard provides the necessary language extensions, their syntax and semantics, for ECMAScript Edition 3 (the current standards as published by Ecma and ISO/IEC).

The first priority from now on in TG1 will be the development of ECMAScript 4. With respect to E4X, next goal is to support XML Schema. It is likely that **Mr. Schulze** will present some proposals for the future of ECMAScript at the next GA. Also **Mr. Brendan Eich**, the inventor of Javascript, and now CTO of the Mozilla Foundation has an interest to revamp ECMAScript, according to a meeting of **Mr. van den Beld** with him on 25th March 2004.

5.2 Status report from Task Group 2: C# (2004/012)

Mr. Jon Jagger (Jagger Software) presented his Convener's report to TC39.

Six out of the seven proposed features have already been implemented in the latest C# compiler of Microsoft. There are virtually no questions left. The development of the next edition of the C# standard is well under control. Its final draft will be sent to TC39 for approval in September and to the GA for approval in December 2004. The C# standard has now been translated in Japanese, in one year; adoption is expected in October 2004.

To enable more public engagement with the C# standard, the task group has established a public mailing list, graciously created and hosted by Novell. The public mailing list address is ecma-csharp@lists.ximian.com and can be subscribed to at http://lists.ximian.com/mailman/listinfo/ecma-csharp

5.3 Status report from Task Group 3: CLI (2004/013)

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

The current working draft of the specification is WD2.5, which means that five iterations of the specification have been edited and circulated since edition 2. Incorporated in this working draft are improvements/edits to the edition 2 specifications, the core of the generics technology, relaxed exception ordering and disablement of runtime checks – both of which allow for more performant CLI implementations, and a methodology for exchanging debugging information across implementations.

One important open issue is how the generics technology will affect CLS: it will be discussed in a special CLS Subgroup in TG3.

There are currently 91 open comments on CLI. Despite the need to apply an aggressive schedule to resolve all items, TG3 expects to finish the draft in time for approval by TC39 in September 2004.

To enable more public engagement with the CLI standard, the task group has established a public mailing list, graciously created and hosted by Novell. The public mailing list address is ecma-cli@lists.ximian.com and can be subscribed to at http://lists.ximian.com/mailman/listinfo/ecma-cli .

5.4 Status report from Task Group 4: Eiffel (2004/014)

Mrs. Christine Mingins (Monash University) presented her Convener's report to TC39.

TG4 uses ETL3 ("Eiffel the Language 3") as base document for the standard: its review has now almost been completed. Currently, 93 proposals are under consideration.

The goal of TG4 is still to have a first edition of the standard ready for approval by the Ecma GA in December 2004. The decision process to determine how many of the 93 proposals will go into this edition, has not yet been completed.

The new Convenor is **Mr. Stapf**. **Mr. van den Beld** thanked **Mrs. Mingins** – who is on sabbatical leave for most of this year – on behalf of TC39 and Ecma for her enthusiastic guidance of TG4 and her many knowledgeable contributions to successfully complete the difficult task of TG4.

5.5   Status report from Task Group 5: CLI Binding for C++ (2004/015)

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

The goal of TG5 is to complete and approve its Standard in 2004. The liaison/co-operation with JTC1/SC22-WG21 on C++ is going smoothly. The Ecma Secretariat will create an e-mail archive for WG21, and arrange access provisions for this archive and the TG5 working documents.

6   Election of Officers

No elections. The next election will occur at the 18th TC39 meeting to be held in September in Redmond, WA, USA.

7   Drafts to be submitted to the GA for Adoption

1. ECMAScript for XML (E4X) submitted by the TC39-TG1

8   Recommendations

Consistent with the agreements made at the most recent meeting of TC39, the following recommendations are made by the chairman:

1. The General Assembly adopt the ECMAScript for XML (E4X) specification
2. The General Assembly submit the ECMAScript for XML (E4X) to ISO for fast track

Joel Marcey (Intel Corporation)

Chairman TC39