

**Minutes of the:** *meeting of the Co-ordinating Committee*  
**held in:** *Winterthur*  
**on:** *14 - 15 October 2003*

**Chairman:** Ms J. Auber (HP)  
**Secretary:** Mr. J. van den Beld (SG Ecma)  
**Attending:** Mr. Elzinga (Ecma), Mr. Narita (Fujitsu), Mr. Neumann (Toshiba),  
Mr. Statt (Intel), Mr. Theis (Tenovis), Mrs. Valet-Harper (Microsoft),  
Mr. Weijenbergh (Philips)  
**Guests:** Mr. Jacklin  
**Apologies:** Mr. Gass, Mr. Hofmann

## 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:

TC12 Mr. Elzinga (no meetings, no report)  
TC15 Mr. van den Beld (no meetings, no report)  
TC17 Mr. van den Beld (no meetings, no report)  
TC20 Mr. Elzinga (no meetings, no report)  
TC26 Mr. van den Beld  
TC31 Mr. Neumann  
TC32 Mr. Elzinga  
TC38 Mr. Elzinga  
TC39 Mr. van den Beld  
TC42 Mr. van den Beld

## 1.8 TC39 - Programming and Scripting languages

See report: TC39/03/44.

The four existing TGs have made substantial progress in their work. New standards for C#, CLI and Eiffel will be submitted for approval by the GA in December 2004.

The press release on the forthcoming standard on ECMAScript for XML has been well-received. See URL:

<http://www.ecma-international.org/news/ECMA%20E4X%20Final%20Final%20Web.htm>

TG1 expects to complete the standard around the end of 2003. The CC supports the request from TC39 for a postal ballot by the GA early 2004, when made. A document for the justification of this postal ballot will be provided by TC39 and TG1.

TC39 has approved in its 16<sup>th</sup> meeting on 1<sup>st</sup> of October 2003 to start a new Task Group, TG5, for the development of a standard for the binding of the programming language C++ and Common Language Infrastructure (CLI). The Convenor will be **Mr. Plum** (Plum Hall).

It is likely that the project is interesting for several companies, including some which are not yet a member of Ecma.

Good acceptance of the new standard in the market place is highly likely.

The ToR for the new TG will also be reflected in the ToR of TC39. See annex A for the updated ToR of TC39 and the ToR of TG5.

## Annex A

### TC39 - Programming and Scripting languages

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#### Scope:

To standardize:

- the syntax and semantics of the general purpose, cross platform, vendor-neutral scripting language ECMAScript
- ECMAScript for XML
- the programming language C<sup>#</sup> (C "sharp")
- the programming language Eiffel
- a Common Language Infrastructure (CLI)
- a CLI binding for C++

#### Programme of work:

1. To develop a standard for the dynamic scripting language ECMAScript.
2. To develop a standard set of language extensions to provide native XML support in ECMAScript.
3. To develop a standard for the programming language C<sup>#</sup> (pronounced C "sharp").
4. To develop a standard for the Common Language Infrastructure (CLI).
5. To develop a standard for the programming language Eiffel.
6. To develop a standard set of language extensions to provide a CLI binding for C++.
7. To contribute the standards to ISO/IEC JTC 1.
8. To investigate the further direction of standards developed by TC39.
9. To evaluate and consider proposals for complementary or additional technology.
10. To maintain liaison with appropriate other Ecma TCs and TGs.

### TC39 - TG5 - CLI Binding for C++

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#### Scope:

To standardize the syntax and semantics of a general purpose, cross platform, vendor-neutral set of language extensions to provide a CLI binding for C++.

#### Programme of work:

1. To develop a standard set of language extensions to provide a CLI binding for C++.
2. To maintain liaison with appropriate Ecma International TCs and with external standards bodies.

**TC39 Chairman's Report to:**

**Co-ordinating Committee**

**Written on:**

**14 October 2003**

## **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/TC39/2003/17.

## **2 Meetings**

The following 27 technical meetings of TC39 Task Groups and one TC39 meeting have occurred since the most recent report.

Task Group meetings:

- TG1 24 April 2003: Conference call, hosted graciously by BEA
- TG1 8-9 May 2003: Redmond, WA, USA, hosted graciously by Microsoft
- TG1 22-23 May 2003: Conference call, hosted graciously by BEA
- TG1 5-6 June 2003: Mountain View, CA, USA, hosted graciously by Netscape
- TG1 19-20 June 2003: Conference call, hosted graciously by Microsoft
- TG1 1-2 July 2003: Redmond, WA, USA, hosted graciously by Microsoft
- TG1 15-17 July 2003: San Francisco, CA, USA, hosted graciously by Macromedia
- TG1 22 August 2003: Conference call hosted graciously by Microsoft
- TG1 4-5 September 2003: Redmond, WA, USA, hosted graciously by Microsoft
- TG1 29-30 September 2003: Ilminster, Somerset, England, hosted graciously by Jagersoft
- TG2 25-26 March 2003: Face-to-Face, Cupertino, CA, USA, hosted graciously by Hewlett-Packard
- TG2 11-12 June 2003: Face-to-Face, Hillsboro, OR, USA, hosted graciously by Intel Corporation
- TG2 1-2 October 2003: Face-to-Face, Somerset, United Kingdom, hosted graciously by Jagger Software
- TG3 27-28 March 2003: Face-to-Face, Cupertino, CA, USA, hosted graciously by Hewlett-Packard
- TG3 10 April 2003: Phone conference
- TG3 23 April 2003: Phone conference
- TG3 2 May 2003: Phone conference
- TG3 8 May 2003: Phone conference
- TG3 29 May 2003: Phone conference

- TG3 9-10 June 2003: Face-to-Face, Hillsboro, OR, USA, hosted graciously by Intel Corporation
- TG3 26 June 2003: Phone conference
- TG3 24 July 2003: Phone conference
- TG3 7 August 2003: Phone conference
- TG3 21 August 2003: Phone conference
- TG3 29-30 September 2003: Face-to-Face, Somerset, United Kingdom, hosted graciously by Jagger Software
- TG4 19-21 June 2003: Nancy, France, hosted by Loria
- TG4 25-27 September 2003: Goleta, USA, hosted by Eiffel Software

TC39 meeting

- 1 October 2003, Dillington House, Somerset, UK, hosted by Jaggertsoft

### 3 Future meetings

The TG1 plans to meet face-to-face at least once (November) before the next TC39 meeting. Future face-to-face meetings and phone conferences will be scheduled as needed.

The TG2 plans to meet face-to-face twice (January, March) before the next TC39 meeting.

The TG3 plans to meet face-to-face twice (January, March) before the next TC39 meeting. The TG3 also plans to utilize as needed phone conferences between the two meetings in order to ensure a stable edition 3 specification.

The TG4 plans to meet face-to-face at least once twice (November) before the next TC39 meeting. Future face-to-face meetings and phone conferences will be scheduled as needed.

TC39 Meeting

- 18 March 2004, Melbourne, Australia (Monash University)

### 4 Progress

The TC39 has unanimously (with one abstention) agreed to the formation of a 5<sup>th</sup> task group. The TG5's focus will be to standardize a C++ language binding to the CLI (the CLI has been standardized by the TG3). The TG5 will be convened by Tom Plum (Plum Hall) and the specification will be edited by Rex Jaeschke (Microsoft).

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, TG2, TG3 are adding new features and technologies to their specifications. The TG4 is working on creating a first edition of their specification. Many meetings and phone conferences have been held. Joel Marcey was re-elected as convener of the TG3. No other elections occurred. See "Latest Status" for complete details.

The TG1 plans to submit next editions of their specifications (ECMAScript and E4X - which should soon be integrated) for postal ballot at the end of 2003.

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.

## 5 Latest Status:

### 5.1 Task Group 1: ECMAScript (2003/039)

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

The TG1 has been active over the last 6 months. Mr. Waldemar Horwat resigned from the position as E4 Editor at the July 15<sup>th</sup> meeting. The working group decided to suspend work on E4 until ECMAScript for XML (E4X) is completed and a new editor is identified. The working group thanks Mr. Horwat for his efforts as E4 Editor. The working group agreed that the first version of the E4X will continue to be developed as an extension to ECMAScript Edition 3 and that the integration of E4X into ECMAScript will be completed in the next version per the original terms of reference.

### 5.2 Status report from Task Group 2: C# (2003/40)

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

The TG2 has made substantial progress over the last 6 months. The task group has been focused on solidifying specifications to be added to edition 3 of the C# specification. Technical submissions surrounding Generics, Property Accessibility, Iterators, Anonymous Methods, Partial Types, Explicit Namespace Qualifier and Keyword Evolution have been folded into the specification or just require small edits before being folded. Work on other technical submissions, including Pragma, are waiting concrete proposals. To enable more public engagement with the CLI standard, the task group tried to establish a usenet group called comp.std.csharp. The vote for this group unfortunately failed to garner sufficient votes. As a fallback, the working group will look into the possibility of DevelopMentor hosting a public mailing list for the purpose of discussing the C# standard.

### 5.3 Status report from Task Group 3: CLI (2003/38)

**Mr. Basim Kadhim (Fujitsu)** presented his Convener's report to TC39 (for Joel Marcey – Intel Corporation).

The TG3 has been very busy during the last six months, with 3 face-to-face meetings and 9 phone calls. During this time, the task group has been focused on solidifying specifications to be added to edition 3 of the CLI specification. The task group has incorporated parts of Generics into its working draft with ongoing work continuing. Proposals for relaxed exception ordering and a debugging information interchange format have been approved will be incorporated into a working Work on the no. prefix is complete and is incorporated into current working drafts. A proposal for the extended threading library API was reviewed and received preliminary approval at the latest face-to-face meeting. As usual, minor-scale comments and issues are being resolved as they are introduced. There are still quite a few class library comments to be resolved. To enable more public engagement with the CLI standard, the task group tried to establish a usenet group called comp.std.cli. The vote for this group unfortunately failed to garner sufficient votes. As a fallback, the working group will look into the possibility of DevelopMentor hosting a public mailing list for the purpose of discussing the CLI standard.

Joel Marcey (Intel) was unanimously elected to continue as convener of the task group while Basim Kadhim (Fujitsu) was unanimously elected to continue his role as vice-convener

### 5.4 Status report from Task Group 4: Eiffel (2003/37)

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

The TG4 has reviewed about two thirds of 'Eiffel the Language 3' (ETL3). This document forms the draft Ecma standard. The June and September meeting were spent performing in-depth reviews of draft chapters of ETL3 and reviewing/pre-approving several feature items. The meeting also planned the work to be done by next 2 meetings in which we will finish the review of ETL3 and prepare after the June 2004 meeting our first final draft for submission to the GA during the second semester of 2004.

## 6 Election of Officers

Joel Marcey (Intel Corporation) was unanimously re-elected as chair of TC39. Andrew Clinick (Microsoft Corporation) was unanimously re-elected as vice-chair of TC39.

**7 Drafts to be submitted to the GA for Adoption**

The TC39 currently has no drafts to be submitted to the GA for adoption.

**8 Recommendations**

The TC39 currently has no recommendations.

Joel Marcey (Intel Corporation)  
Chairman TC39