

**Minutes for the:** **15<sup>th</sup> meeting of Ecma TC39**  
**held in:** **Cupertino, CA, USA**  
**on:** **24- 25 March 2010**

## 1 Opening, welcome and roll call

### 1.1 Opening of the meeting (Mr. Neumann)

The meeting (hosted by Apple at their premises in Cupertino, CA) was opened by **Mr. Neumann**, Chair of TC39 at approximately 10:15 AM on 24<sup>th</sup> March 2010 ([Ecma/TC39/2010/011](#) – Venue for the 15<sup>th</sup> meeting of TC39, Cupertino, March 2010).

### 1.2 Introduction of attendees

The meeting participants introduced themselves.

#### 1.2.1 Ecma participants present at the TC39 meeting

John Neumann – Ecma, Chair TC39

Istvan Sebestyen – Ecma, Secretary TC39

Maciej Stachowiak – Apple

Geoff Garen – Apple

Sam Weinig – Apple

Dr. Waldemar Horwat – Google

Dr. Tom van Cutsem – Google

Mike Samuel – Google

Douglas Crockford – Yahoo!

Andreas Gal – Mozilla

Gavin Barraclough -- Apple

Jeff Dyer -- Adobe

Mark Miller – Google

Allen Wirfs-Brock – Microsoft

Cormac Flanagan – UCSC

Brendan Eich – Mozilla

Dave Herman – Mozilla

Sam-Tobin Hochstadt – Northeastern University

Ihab Awad – Google

Sam Ruby – (IBM, part-time on the phone, only for reporting on the status of the decimal work)

### 1.3 Host facilities, local logistics

**Mr. Stachowiak** welcomed the delegates on behalf of the host Apple and provided some useful information on the local logistics and on the Social event.

## 2 Adoption of the agenda ([2010/012](#))

The agenda (Ecma/TC39/2010/012 – Agenda for the 15th meeting of TC39, Cupertino, March 2010) was accepted with minor additions.

## 3 Approval of minutes from January 2010 ([2010/010](#))

The minutes of the January 2010 TC39 meeting have been approved unanimously without any changes (Ecma/TC39/2010/010 – Minutes of the 14th meeting of TC39, Mountain View, January 2010).

## 4 Discussion of Licensing/Copyright/Trademark/Membership

On the **Trademark** of ECMAScript there were no new developments reported.

On **Software Copyrights** **Mr. Sebestyen** and **Mr. Wirfs-Brock** have reported about the status of discussion in the CC. There the requirements of TC39 have been made clearer. The CC has hold a number of conference calls (with the involvement of invited legal experts from interested Ecma members) on the subject and the discussion is still going on. The by the CC approved minutes of the conference calls are also being posted as GA documents. The goal is it to finish this exercise early enough to send it to the next Face-to-Face CC meeting at the end of April 2010. On request of TC39 for information the draft texts of the policy have been made available also as TC39 documents (see Ecma/TC39/2010/015 and Ecma/TC39/2010/019 “Ecma International Policy on Submission, Inclusion and Licensing of Software (Editor: Microsoft)”). The final goal of both the CC and the GA is to provide TC39 with an Experimental TC39 software copyright policy as early as possible.

## 5 Report from the Secretariat – mixed with some technical items

### 5.1 ES5 JTC 1 fast-track status and ES5 Erratum

**Mr. Sebestyen** has reported about the fast-track status of ECMA-262 Edition 5. The Ecma document was sent to ISO immediately after the GA. We are now in the voting period where NBs and liaison organizations like Ecma may submit comments. It is planned that also Ecma TC39 will provide comments to the standard, though it may not vote. The 5 months technical comment period will end on August 6, 2010. Thus it is very important that the Ecma TC39 comments get there by this date. Depending on the comments received there might be a BRM for the standard in form of a BRM meeting, or if the comments are trivial then just the International Editor (**Mr. A. Wirfs-Brock**) will make the changes and publication of the standard will go ahead. Since Ecma has already identified several comments to the standard, it might be possible that others will too and a BRM will be set up.

It is expected that in the next months (until the fast-track ballot closes) the ES5 Errata list will grow. The list will be taken into account by the ISO Editor (and maybe at the BRM – if there will be one) for incorporation into the standard. If so, then TC39 must harmonize the current 5<sup>th</sup> Edition with the then to be approved ISO version. This would result in a new Edition of ECMA-262 probably to be approved by the December 2010 GA. Here the issue of the Ecma Edition numbering was brought up. Since the new edition would only correct some errors in Edition 5 it has been asked if it would be possible to introduce an Edition numbering something like “5.1”. **Mr. Sebestyen** promised to check this.

### 5.2 W3C discussion – Status of potential joint meeting with W3C in spring 2010

There was a short discussion on the further collaboration with W3C especially a possible joint meeting in spring 2010.

It was mentioned that the W3C may have a meeting in April-May in the Silicon Valley area that may be organized back-to-back with a TC39 meeting. **Mr. Neumann** has volunteered to

find out the details of this and if so, propose date for the new joint meeting. TC39 would be willing to adjust its schedule to have such a joint meeting again – if needed.

However, nothing was heard from the W3C people (Philippe), but it was said that the planned W3C face-to-face meeting will not take place. So there will be no joint meeting with W3C during spring 2010. It was pointed out that in November 1-5 2010 W3C will have its next TC meeting (in Lyon, France). That would be a good opportunity for a joint meeting with them. TC39 has not decided on this issue. TC39 members should think about it, look at their travel budget. It was also brought up that Lyon is rather close to Geneva (about 2 hours per train), so a TC39 only meeting before or after the W3C meeting would in principle also be possible. This has to be discussed at the next TC39 meeting how to proceed.

### 5.3 ECMA-357 (E4X) update or revision

There was a lengthy discussion on the faith of ECMA-357 in the January 2010 meeting. It was then agreed that members should think about the future of ECMA-357 and come back to this topic at the March TC39 meeting. It was also pointed out that until then the topic would also be discussed on the informal ECMAScript forum on the web. However, this topic was not discussed in the March meeting. For this reason this is just a reminder here.

## 6 Discussion of ES harmony

### 6.1 Hygienic Macros

Ecma/TC39/2010/016 Hygienic Macros for EcmaScript.

Presentation by **Mike Samuel**.

### 6.2 Modules

Ecma/TC39/2010/018 Module proposals by **I. Awad**

Ecma/TC39/2010/017 Simple modules by Sam and Dave

Still in “strawman” status.

### 6.3 Proxies (alternative catchalls)

Ecma/TC39/2010/013 Harmony Proxies: loose ends by **T. Van Cutsem** and **M. S. Miller**

### 6.4 Ephemeron Tables

Still in “strawman” state, will move later into a real “proposal” stage.

### 6.5 Traits

Ecma/TC39/2010/014 Traits by **T. Van Cutsem** and **M. S. Miller**

### 6.6 Quasi-literals

## 7 Any other business (decimal)

At the end of day 2 there was a short conference call (with the participation of **Mr. Sam Ruby**) organized where it was reported about the status of “decimal”. It has been said that since the November TC39 meeting no progress on “decimal” has been made. Originally **Sam Ruby** and **Mark Miller** should have been working on the issue if decimal could be better linked into ECMAScript via “Library approach” (but not special case). **Sam Ruby** reported that due internal matters (retirements) this issue might get different priority now. Again **Sam** and **Mark** have been tasked to do the “homework” that was given to them in the November 2009 TC39 meeting. Maybe **Sam Ruby** could discuss this (with **Mark Miller** and **Brendan Eich**) at his next visit to the Silicon Valley area.

**Mr. Neumann** explained to **Mr. Ruby** (who is both “insider” in W3C and also in TC39) the status of the potential joint meeting with W3C for possible assistance request.

## 8 Date and place of the next meeting(s).

May 26 – 27, 2010. Location Silicon Valley. Google has volunteered to host the meeting.

It was agreed to include into the agenda of the meeting:

- Concurrency Control
- Typed Erase
- Specification language

## 9 Closure

**Mr. Neumann** closed the meeting at 16:15. He thanked the delegates for their hard work, Apple for their kind hospitality and Ecma International for the Social Event.