

**Minutes of the:  
held in:  
on:**

**Ecma TC39, ES3.1WG  
Phone conference  
02 December 2008**

## 1 Roll call and logistics

### 1.1 Participants

Doug Crockford (Yahoo!), Pratap Lakshman (Microsoft), Sam Ruby (IBM) and Allen Wirfs-Brock (Microsoft)

## 2 Agenda

Spec updates.

## 3 Minutes

In all the algorithm steps, we need to be consistent in calling out the use of standard built-in functions/constructors as appropriate - step2 in 15.2.3.5 is a good example to follow - and step 3 from the same section is an example of how to specify calling a standard built-in function - need to make a pass through all the algorithms to make sure we are consistent.

Going forward lets open trac tickets for all such items that require edits in the specification - and we should use these weekly meetings as triage meetings - agreed; I have left in comments in the specification document that I shall convert to trac tickets.

We would like to see work continue on decimal - however the specification currently only half supports writing generic numeric algorithms - operators can have operands that are doubles, or decimals or some combination; the multiplication algorithm (section 11.5) currently does not support this; the presence of a constant like say 2 in a multiplication expression "poisons" the expression by forcing a coercion of Number always and hence the result will always be a Number and not a Decimal - but that is a bug - we discussed this in the Redmond meeting and agreed that "and" in step 5 of the algorithm should have been an "or" - there were other issues reported that have been acknowledged as bugs - some of the comments from the Kona meeting need more details; for e.g. the minutes note that "Decimal support is broken in most of the tables".

Nomenclature issues in section 8, and in section 10 need to be fixed - there are cases where terms are used before they are defined and this is making the section difficult to read - the expectation that the section can be read top-down is a little unrealistic - lets clean it up as much as we can and then put in forward references in the form of section numbers where appropriate.

Did we agree to take out the "fast" parameter from Object.keys ? - Yes, we did.

Meeting adjourned.