



**Identification of ICT technical
specifications
Evaluation Report of ECMAScript**

István Sebestyén

- **ECMAScript was proposed as candidate specification by the European Commission**
- **The main standard ECMA-262 is also an ISO/IEC JTC1 standard (ISO/IEC 16262), so does not need to be evaluated**
- **However, they were some additional specifications:**
 - *ECMA-402 (Edition 1) ECMAScript Internationalization API Specification (December 2012)*
 - *and the technical report ECMA TR/104 ECMA-262 Test Suite (December 2011)*
- **to be identified in accordance with Article 13 and annex II of Regulation (EU) No. 1025-/2012.**

The secretariat of the evaluation group was provided by the Commission services and the group was composed of representatives from following Platform members:

- **1) Ecma International**
- **2) DIGITALEUROPE**
- **3) CENELEC**
- **4) Open Mobile Alliance**
- **5) Switzerland**

Work was done by email and face-to-face meeting (conferencing)

- **ECMAScript is not a single specification, but a “suite” composed of several specifications and other documents which may be described as “basic internet- and web-standards”. ECMAScript is the formal (normative) specification for Javascript.**
- **It is a general multipurpose programming language which is also one of the main programming languages for the WWW.**
- **The range of ECMAScript usage is very broad, covering web-client based applications like web-browsers, or server-based applications like electronic banking, email servers or even computer games.**

What is the added value of these ECMAScript components?

- **These components are complementary specifications needed to extend ECMA-262 for the following reasons:**
- **- ECMA-402 offers "internationalization" capabilities to the ECMA-262 by ensuring an automatic adaptation to different language environments;**
- **- ECMA TR/104 ensures the effective and testable implementation of ECMA-262 (Test your browser compatibility with ECMAScript: <http://test262.ecmascript.org/#>).**

- **“Public procurers can already benefit from the reference to ISO/IEC 16262; the enhancement of the two ECMAScript components would provide additional benefit for the implementation of the ECMAScript.”**
- **The evaluation report provides evidence that the evaluation group has compiled in view of the compatibility of ECMA- 402 and ECMA TR/104 with the requirements for identification laid out in Annex II of the Regulation. Members of the Platform are invited to consider and discuss this evidence in developing the Platform’s recommendation to the European Commission.**

- The Platform should note the importance of applications being testable, and draws the attention of procurement authorities to the availability of ECMA-TR/104 for testing ECMA-262 and ISO/IEC 16262 implementations.
- The Platform should note the importance of the ECMAScript internationalization capabilities described in ECMA-402. These enhancements to ECMAScript are valuable and should be considered by procurement authorities seeking to build in internationalisation arrangements.
- The evidence documented in this report demonstrates compliance of ECMA-402 with most requirements for identification laid out in Annex II of the Regulation.
- The evidence documented in this report demonstrates compliance of ECMA-TR/104 with the substance of the requirements for identification laid out in Annex II of the Regulation.

- **Status of ECMA-TR/104.** The evaluation team did not reach agreement on whether TR/104 should be referenced. *One view:* the document is a “Technical Report”. By definition, such a document is non-normative. *Other view:* It is “not-normative, but standard” as contains an open and expandable set of testing programs.
- **Market acceptance of ECMA-402.** *One view:* 3 independent implementations at standards development, 1 commercial implementation and 1 beta implementation after approval is enough. *Other view:* it is not enough



INTERNATIONAL

**Rue du Rhône 114
CH-1204 Geneva
T: +41 22 849 6000
F: +41 22 849 6001**

www.ecma-international.org