Report from the TC39 Secretariat

Samina Husain

István Sebestyén

2023-07-06

- ES2023 approved by the Ecma GA

- New GA and TC39 Member Oramasearch approved

- Short summary of each TC39 meeting contributions

- Status of ES2023 «Nice PDF» Versions

- Status & Reminder: JTC1 Periodic Review of fast-tracked TC39 Standard ECMA-414 (ECMAScript Suite). Please Vote.

Annex slides:

- List of latest relevant TC39 and Ecma GA documents

- Status of TC39 meeting participation

- TC39 standards download and access statistics

- Next TC39, GA and ExeCom meetings

- The "frozen" version for the 2 months RF Patent Policy "opt out" has been closed in time for a GA approval in June.

- No comments have been received.

- The Ecma GA has approved ES2023 at the 125th GA Plenary on June 27, 2023.

The published new Editions on the Ecma website:

- ECMA-402 10th Edition:
https://www.ecma-international.org/publications-and-standards/standards/ecma-402/

- ECMA-262 14th Edition:
https://www.ecma-international.org/publications-and-standards/standards/ecma-262/

Congratulations and Thanks!!!

- Ecma/GA/2023/023   Application of Oramasearch for SPC membership
- Ecma/GA/2023/024   TC39 RF TG form signed by Oramasearch

- https://oramasearch.com

- Scope: Software Development

- Location: San Francisco, California

- Founded: 2023

Welcome to TC39 and Ecma!!!

- Short "Summaries" of the Meeting Contributions are now included both in the main part of the Minutes of the TC39 meetings as well we in the Technical Notes. In the same way as the "Conclusions".

- Convenient to those who are more interested in the main part of the Minutes, then in the attached Technical Notes.

- Separately we also publish in a separate ZIP file all the presentations of the TC39 meeting. Only 2 contributions are missing.

- For the missing summaries of a few topics, as short overview text was provided based on the notes, and added into the Minutes of the May 2023 TC39

- Please provide a summary for each topic presented, it is required for accurate meeting Minutes, Thanks!

- Ecma standards/TRs are edited in ECMA-376 Format (ooxml) = Templates under TOOLS on the Ecma Server: https://members.ecma-international.org

  - *TOOLS-017.dotx   New Ecma template for the preparation of draft Standards (update January 2023)*

  - *TOOLS-018.dotx   New Ecma template for the preparation of draft Technical Reports (update January 2023)*

- Ecma publication policy is to make available standards/TRs and electronically publish on the Ecma website in a PDF Format.

- The PDF is the electronic version of the paper "book", and it is the ideal archivable form.

- Printed and bound paper copies are available on rare request.

- The solution for ES2023, was the same as last year with ES2022

- Allen Wirfs-Brock efforts

<p style="text-align:center; color:red">Thank you, Allen!!!</p>

- Allen is not available to continue this in 2024

- For ES2024 and beyond a solution is needed

- Allen has provided recommendations and procedures

- What are the next steps?

- JTC1 requires that every 5 years a Periodic Review of Fast-Tracked Standard

- TC39 was/is involved in
ECMA-404 (JSON = ISO/IEC 21778:2017) and
ECMA-414 (ECMAScript® specification suite. 3rd edition, December 2017; ISO/IEC 22275: 2018)

- ECMA-404 is a very stable standard that actually would be ideal for JTC1 "stabilization". Never a change…Confirmed on 06 March 2023

- ECMA-414 contains "undated" normative references to ECMA-262 and ECMA-402. "Undated" means that is solves the problem of too "fast" and "frequent" updates of ES202x standards.

- Voting ends: 02 September 2023

- ECMA-414 (ECMAScript® specification suite. 3rd edition, December 2017; ISO/IEC 22275: 2018) is under the 5 years reconfirmation

- Talk to your ISO/IEC JTC1 SC22 National Body

Ballot source information

Reference:	ISO/IEC 22275:2018	**Type:**	ISO/SR (Systematic review)
Committee:	ISO/IEC JTC 1		
Opening date:	2023-04-15	**ISO closing date:**	2023-09-02
Title:	Information technology — Programming languages, their environments, and system software interfaces — ECMAScript® Specification Suite		

Reference documents and links

ISO/IEC 22275:2018 ed.1 - id.73002 / Publication / PDF (en)

- ISO/IEC JTC 1/SC 22 Programming languages, their environments and system software interfaces is a standardization subcommittee of ISO/IEC JTC 1 that develops and facilitates standards within the fields of programming languages, their environments and system software interfaces.

- JTC1 SC22 is responsible to carry out the 5 years a Periodic Review of the Ecma TC39 standards

- Membership of SC22:

- Secretariat: ANSI (USA)

- The 23 "P" (participating) members of ISO/IEC JTC 1/SC 22 are: Austria, Bulgaria, Canada, China, Czech Republic, Denmark, Finland, France, Germany, Israel, Italy, Japan, Kazakhstan, Republic of Korea, Netherlands, Poland, Russian Federation, Slovenia, Spain, Switzerland, Ukraine, United Kingdom, and United States of America. They are obliged to vote.

- SC22 has also 21 "O" (observing) members. They may vote.

- Voting rule: Simple majority of those who have voted

- Structure: SC 22 has had a total of 24 working groups (WGs), many have been disbanded when the focus of the working group was no longer applicable to the current standardization needs.

- ISO/IEC JTC 1/SC 22 is currently made up of eight (8) active working groups: COBOL, Fortran, Ada, C, Prolog, C++, Programming Language Vulnerabilities, Linux Standard Base (LSB)

- ECMAScript in the Plenary only?

- We need lobbying when the vote on the periodic review takes place.

- Liaison person to SC22: Rex Jaeschke

- **Annex**

(just for reading as reminder….)

- GA documents provide general Ecma information (policy matters, activities of other TCs, liaison with other SDOs, etc.).

- GA documents are not automatically available to TC39 members. Ask your GA Representative for copy.

- Ecma TC39 documents are the "official" Ecma TC39 documentation within Ecma (both for "long-term archival" and as information to other Ecma TC and GA members).

- It is linked to TC39 as an Ecma TC (includes new formal Ecma members in TC39, status of ES20xx approval in Ecma etc.)

There are therefore partial overlaps of what is also available on TC39 GitHub

- Ecma/TC39/2023/026   Responses to the Ecma Contribution License Agreement (CLA), 12 May 2023

- Ecma/TC39/2023/027   Slides for the 96th TC39 meeting, May

- Ecma/TC39/2023/028   Minutes of the 96th TC39 meeting, May (Rev. 1)

- Ecma/TC39/2023/029

- Ecma/GA/2023/055 End of the opt-out period for ECMA-262 and ECMA-402 (2023) Standards

- Ecma/GA/2023/034 Minutes of the ExeCom meeting, 19-20 April 2023

- Ecma/GA/2023/035 Ecma TC39 extensive meeting notes – guidelines for implementation

- Ecma/GA/2023/041 Report from the Ecma Secretariat, June 2023

- Ecma/GA/2023/042 Status of Ecma NFP members 2023 renewal

- Ecma/GA/2023/043 Membership & financial report, June 2023 (Rev. 1)

- Ecma/GA/2023/044 Treasurer's interim report, June 2023

- Ecma/GA/2023/046 Proposed changes to the Ecma By-laws

- Ecma/GA/2023/047 Proposed changes to the Ecma Rules

- Ecma/GA/2023/049 Report of meetings with the Linux Foundation

- Ecma/GA/2023/050 Agenda for the 125th GA, June 2023

- Ecma/GA/2023/054 Minutes of the 96th TC39 meeting, May (Rev. 1)

Recent TC39 Meeting participation

Meeting 2019-2021	Total	Local	Remote	Companies
July 19 Redmond	76	46	30	24
October 19 New York	70	46	24	26
December San Francisco	73	52	21	28
February 20 Honolulu	58	27	31	23
April 20 remote	73	0	73	28
June 20 remote	66	0	66	21
July 20 remote	76	0	76	28
Sept 20 remote	66	0	66	25
November 20 remote	62	0	62	22
January 21 remote	95	0	95	27
March 21 remote	80	0	80	25
April 21 remote	81	0	81	26

Meeting 2021-2022	Total	Local	Remote	Companies
May 21 remote	74	0	74	27
July 21 remote	57	0	57	23
August 21 remote	80	0	80	28
October 21 remote	54	0	54	22
December 21 remote	69	0	69	24
January 22 remote	66	0	66	29
March 22 remote	92	0	92	30
June 22 remote	59	0	59	23
July 22 San Francisco "mixed"	62	19	43	24
September 22 remote	44	0	44	20
November 22 A Coruña "mixed"	62	19	43	23
January 2023 remote	68	0	68	27

Meeting 2021-2022	Total	Local	Remote	Companies
March 23 "mixed" Seattle	65	20	45	24
May 23 remote	61	0	61	27

Download of Ecma Standards
1 January – 31 May 2023

Standard	Download
ECMA-262 ECMAScript Language Specification	11'814
ECMA-404 The JSON Data Interchange Format	5'063
ECMA-376 Office Open XML File Formats, all parts and editions	4'699
ECMA-334 C# Language Specification	1'614
ECMA-335 Common Language Infrastructure (CLI)	1'492
ECMA-74 Measurement of Airborne Noise Emitted by ICT Equipment	477
ECMA-48 Control Functions for Coded Character Sets, 5th edition	474
ECMA-388 Open XML Paper Specification	451
ECMA-418 Psychoacoustic metrics for ITT equipment	398
ECMA-422 C# Specification Suite	330
ECMA-402 ECMAScript Internationalization API	316
ECMA-414 ECMAScript® Specification Suite	287
ECMA-370 TED The Eco Declaration	262
ECMA-119 Volume and File Structure of CDROM for Information Interchange	248
ECMA-408 Dart Programming Language Specification	194
ECMA-363 Universal 3D File Format, 4th edition	167
ECMA-340 Near Field Communication Interface and Protocol (NFCIP-1)	144
ECMA-6 7-Bit Coded Character Set	124
Total downloads	**32'659**

- *List of the most popular standards html access in 2023
  (1 January − 31 May):*

- ECMA-262 ECMAScript Language Specification, 5.1th edition html version (page access)   33'466
- ECMA-262 ECMAScript Language Specification, 6th edition html version (page access)   48'592
- ECMA-262 ECMAScript Language Specification, 7th edition html version (page access)   49'426
- ECMA-262 ECMAScript Language Specification, 8th edition html version (page access)   9'972
- ECMA-262 ECMAScript Language Specification, 9th edition html version (page access)   4'896
- ECMA-262 ECMAScript Language Specification, 10th edition html version (page access)   5'836
- ECMA-262 ECMAScript Language Specification, 11th edition html version (page access)   5'452
- ECMA-262 ECMAScript Language Specification, 12th edition html version (page access)   7'283
- ECMA-262 ECMAScript Language Specification, 13th edition html version (page access)   27'934
- **Total ECMA-262:**   **192'857**

- *List of the most popular standards html access in 2023 (1 January – 31 May):*

- ECMA-402 ECMAScript Internationalization API, 1st edition html version (page access)   3'766
- ECMA-402 ECMAScript Internationalization API, 2nd edition html version (page access)   1'213
- ECMA-402 ECMAScript Internationalization API, 3rd edition html version (page access)   85
- ECMA-402 ECMAScript Internationalization API, 4th edition html version (page access)   106
- ECMA-402 ECMAScript Internationalization API, 5th edition html version (page access)   62
- ECMA-402 ECMAScript Internationalization API, 6th edition html version (page access)   43
- ECMA-402 ECMAScript Internationalization API, 7th edition html version (page access)   77
- ECMA-402 ECMAScript Internationalization API, 8th edition html version (page access)   217
- ECMA-402 ECMAScript Internationalization API, 9th edition html version (page access)   1'358
- **Total ECMA-402:**   **6'927**

- ECMA-419 ECMAScript® embedded systems API specification, 1st edition html version (page access)   325
- **Total ECMA-419:**   **325**

- *List of the most popular Technical Reports for downloads in 2023 (1 January – 31 May):*

- Technical Report   Downloaded

- TR/84   CLI - Information derived from Partition IV XML file   65

- TR/98   JPEG File Interchange Format (JFIF)   52

- TR/111 Overview of Universal Archive Disk Format (UADF)   52

- TR/104 ECMAScript Test Suite 2nd Edition   35

- TR/109 Class specifications for embedded hardware components   17

- TR/110 Recommendations and best practices for scripts on connected sensing devices   16

- **Total downloads**   **485**

Dates	Location	Host
2023-07-11 to 2023-07-13	Bergen, Norway	University of Bergen
2023-09-26 to 2023-09-28	Tokyo, Japan	Bloomberg
2023-11-27 to 2023-11-30	*Remote: "SF"*	

- *6 meetings per-year*

- *3 remote, 3 hybrid (one US, one Europe, one Asia)*

- *Remote meetings are up to four days*
  ...and sometimes we rejoice when we can end early and claim a day back

- *In-person meetings are three days*
  ...to permit Monday/Friday as travel days

TC Chairs are invited to the ExeCom:

- *5-6 October 2023, Geneva*

- *24-25 April 2024, Geneva*

- *1-2 October 2024, Geneva*

- *GA 126: 5-6 December 2023 (Cupertino, CA, USA, Host: Apple)*

- *GA 127: 26-27 June 2024 (Geneva, CH, Host: Ecma)*

- *GA 128: 11-12 December 2024 (USA, TBD)*

- **Thank You for your attention!**

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

www.ecma-international.org