



ISO/IEC JTC 1/SC 2 **N4833**
ISO/IEC JTC 1/SC 2/WG 2 **N5199**
2023-01-30

ISO/IEC JTC 1/SC 2/WG 2
Universal Coded Character Set (UCS) - ISO/IEC 10646
Secretariat: ANSI

DOC TYPE: Meeting minutes

TITLE: Unconfirmed minutes of WG 2 meeting 69
Virtual (Via Zoom calls); 2022-06-19 (2h starting at UTC 23:30) and 2022-06-23 (1h starting at UTC 23:00) 06-17/21

SOURCE: V.S. Umamaheswaran (bhanudorai@rogers.com), Recording Secretary
Michel Suignard (michel@suignard.com), Convener

PROJECT: JTC 1.02.18 - ISO/IEC 10646

STATUS: SC 2/WG 2 participants are requested to review the attached unconfirmed minutes, act on appropriate noted action items, and to send any comments or corrections to the convener as soon as possible but no later than the due date below.

ACTION ID: ACT

DUE DATE: 2023-05-31

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ISO
International Organization for Standardization
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ISO/IEC JTC 1/SC 2/WG 2
Universal Coded Character Set (UCS)

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Source:	V.S. Umamaheswaran (bhanudorai@rogers.com), Recording Secretary Michel Suignard (michel@suignard.com), Convener
Action:	WG 2 members and Liaison organizations
Distribution:	ISO/IEC JTC 1/SC 2/WG 2 members and liaison organizations

1 Opening and roll call

Input document:

[5151](#) List of experts, post meeting #69; Michel Suignard, Convener; 2022-12-15

The virtual meetings started at 23:00 UTC on 2022-06-20 and at 23:00 UTC on 2022-06-23, via Zoom call facilitated by Ms. Ayuko Nagasawa of JTC1/SC2 secretariat.

1.1 Roll call

Attendees introduced themselves. The following **33** experts accredited (or invited) by **11** national bodies and **4** liaison organizations were present at different times during the virtual meetings ON 2022-06-20 and 2022-06-23.

(Note: This list is derived from zoom call records and WG2 experts' registrations for this meeting. Please let us know if any corrections are needed.)

Name	Accreditation	Affiliation
Qin LU	.IRG convener	Hong Kong Polytechnic University (Retired)
Shuichi TASHIRO	.SC 2 Chairman	Kaishi Professional University
Ayuko NAGASAWA	.SC 2 Secretariat	IPSI/ITSCJ
Yifán WÁNG	SAT (Cat. C Liaison)	SAT Daizōkyō Text Database
Lin Mei WEI	.TCA (Cat. C Liaison)	Chinese Foundation for Digitization Technology
Yen-Ling TSENG	.TCA (Cat. C Liaison)	Chinese Foundation for Digitization Technology
Bear TSENG	.TCA (Cat. C Liaison)	Taipei Computer Association (TCA)
Michel SUIGNARD	.WG 2 Convenor; USA	Unicode, Inc.
Karljürgen FEUERHERM	Canada	Wilfrid Laurier University
V.S. (Uma) UMAMAHESWARAN	Canada	Independent
Zhuang CHEN	China	CESI
Jan KUČERA	Czech Republic	Charles University
Reinhold HEUVELMANN	Germany	Deutsche National Bibliothek
Shikar Kumar SARMA	India	Gauhati University
Aditya Bayu PERDANA	Indonesia	Pengelola Nama Domain Internet Indonesia (PANDI)
Bayu NERVIADI	Indonesia	Dinas Kebudayaan Yogyakarta
Denny HENDRANINGRAT	Indonesia	Badan Standardisasi Nasional (BSN)
I Gede Gita Purnama Arsa PUTRA	Indonesia	Udayana University
Ilham NURWANSAH	Indonesia	Pengelola Nama Domain Internet Indonesia (PANDI)
Mayastria YEKTININGTYAS	Indonesia	Badan Standardisasi Nasional (BSN)
Ratih AYU	Indonesia	Pengelola Nama Domain Internet Indonesia (PANDI)

Name	Accreditation	Affiliation
Michael EVERSON	Ireland	Evertime
Tetsuji ORITA	Japan	Tokyo Institute of Technology
Toshiya SUZUKI	Japan (SC34 Liaison)	Hiroshima University
Wataru TAKAGI	Japan	Hitachi, Ltd.
Masaru TAKECHI	Japan	NHK Engineering System Inc.
Go Woon KIM	Korea	Telecommunications Technology Association (TTA)
Kyongsok KIM	Korea	Pusan National University
Wang Sung YANG	Korea	Tipping Point Consulting Group (TPCG)
Andrew WEST	UK	Independent
Ken LUNDE	USA	Apple, Inc.
Deborah ANDERSON	USA, UC Berkeley (Cat. C Liaison)	University of California, Berkeley
Peter CONSTABLE	USA, Unicode (Cat. A Liaison)	Microsoft Corp.

Mr. Peter Constable and Dr. Deborah Anderson volunteered to be on the drafting committee assisting the convener Mr. Michel Suignard and the recording secretary Dr. Umamaheswaran, in drafting the meeting recommendations.

2 Approval of the agenda

Input document:

[5183](#) Agenda for the 69th Meeting of SC2/WG2; Michel Suignard, Convenor; 2022-06-08

The convener introduced the latest version of the agenda document. The main item for this short virtual meeting is to progress Amendment 1 to the 6th edition of 10646 2020 edition. There is also proposal for dealing with contributions on characters and scripts that will not be included in Amendment 1.

Experts were reminded to identify any new contributions to the convener. The agenda will have needed updates as the meeting progresses.

Experts from China and Ireland indicated they will be sending in new documents. Two documents (N5191 and N5192 on Shouwen Seals) from China, and one resubmission of document N5145 on Latin Characters for Ormulum were added to the agenda.

Disposition: Approved the agenda as updated. Updates to the agenda were posted to the WG2 website as the meeting progressed.

(Note: the agenda item numbers in these minutes may not align with the agenda item numbers in document [N5050](#). All the changes made during the meeting are included in the appropriate sections in these minutes. Some agenda items have been regrouped, reorganized or renumbered. Agenda items that did not have any document to discuss do not appear in these minutes. Documents on the agenda that did not have any discussion are only for information to WG2 experts, or are for future meetings. The following table of contents reflects the discussed items.)

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3 Approval of minutes of meeting 68

Input document:

[5122](#) Meeting minutes meeting #68, [Action Items](#); V.S. Umamaheswaran, Secretary; 2019-12-31

Dr. Umamaheswaran: I have not received any comments on the circulated unconfirmed minutes so far. Please give me any feedback you may have before the end of this meeting.

Disposition: Adopted the minutes as presented.

4 Review of action items from previous meeting

Input document:

[5122-AI](#) Action items from Meeting minutes meeting #68, [Action Items](#); V.S. Umamaheswaran, Secretary; 2019-12-31

Dr. Umamaheswaran reviewed and updated the action items from the previous meetings. The tables below show the updated status for each item. Of the **38** action items that were reviewed, **9** items are carried forward, 4 are dropped and **25** items are marked as either 'noted' or 'completed'.

4.1 Outstanding action items from meeting 60, Chiang Mai, Thailand, 2012-10-22/27

Item	Assigned to / action (reference resolutions in document N4254, and unconfirmed minutes in document N4253 for meeting 60, with any corrections noted in the minutes of meeting 61 in document N4403).	Status
AI-60-10	Irish national body - Mr. Michael Everson	
a.	To get more information related to the status, its stability and other clarifications based on the discussions in the meeting on document N4323 - Mwangwego script. M61 through M68 -- in progress.	Dropped.

4.2 Outstanding action items from meeting 62, San Jose, CA, USA; 2014-02-24/28

Item	Assigned to / action (reference resolutions in document N4554, and unconfirmed minutes in document N4553 for meeting 62, with any corrections noted in the minutes of meeting 63 in document N4603).	Status
AI-62-6	Ad hoc group on Principles and Procedures (Dr. Umamaheswaran)	
a.	To take note of section 2.1 in document N4544 on Representation of CJK ideograph glyphs; and update the P&P document appropriately. M63 through M68 -- in progress.	In progress.
b.	With reference to N4543 Character Name considerations; Michel Suignard; 2014-02-20, to elaborate on character names in the P&P document working with Mr. Michael Everson. M63 through M68 -- in progress.	In progress.

4.3 Outstanding action items from meeting 63, Colombo, Sri Lanka; 2014-09-29/10-03

Item	Assigned to / action (Reference recommendations in document N4604, and unconfirmed minutes in document N4603 for meeting 63 (with any corrections noted in the minutes of meeting 64 in document N4739).	Status
AI-63-6	Ad hoc group on Principles and Procedures (Dr. Umamaheswaran)	
a.	To take note of section 2.1 in document N4620 on Representation of CJK ideograph glyphs; and update the P&P document appropriately.	In progress.
AI-63-7	Experts from China (Chen Zhuang), UK (Andrew West), Japan (Toshiya Suzuki), Ireland (Mr. Michael Everson)	
	To take note of and act on the following item:	
a.	M63.15 (Khitan Large script): WG2 invites the authors of document N4631 to revise their proposal on the Khitan Large script taking into account the feedback summarized in the ad hoc report document N4642, working with other experts interested in this script. M64 through M68 -- in progress.	Dropped.

4.4 Outstanding action items from meeting 66, Hohhot, Inner Mongolia, China; 2017-09-25/29

Item	Assigned to / action (Reference recommendations in document N4874, and unconfirmed minutes in document N4953 for meeting 66, with any corrections noted in the minutes of meeting 67 in document N5020).	Status
AI-66-6	Experts from China (Chen Zhuang), UK (Andrew West), Japan (Toshiya Suzuki), Ireland (Mr. Michael Everson). TCA (Lin Mei Wei), Mongolia experts	
	To take note of and act on the following item:	
b.	M66.18 (Naxi Dongba script): WG2 accepts the Naxi Dongba ad hoc report in document N4895, and invites the author of the script to provide a revised version with the characters reordered according to the type of classification used in the source dictionaries, based on the revised chart in document N4898. WG2 recommends to SC2 to accept the revised version of the script, consisting of 1188 characters in a new block Naxi Dongba in the range 1A800...1ACFF for encoding in the standard. M67 through M68 -- in progress.	In progress.

4.5 Outstanding action items from meeting 67, SOAS, University of London, London, UK; 2018-06-16/20

Item	Assigned to / action (Reference recommendations in document N4954, and unconfirmed minutes in document N5020 for meeting 67, with any corrections noted in the minutes of meeting 68 in document N5122).	Status
AI-67-6	Experts from Japan (Mr. Wataru Takagi)	

	To take note of and act on the following items:	
a.	<i>M67.30 (IRG Process)</i> : WG2 recommends that SC2 welcome the input from Japanese national body on improving the working of IRG (in document N4948), and invites the Japanese national body to take into consideration the feedback from the discussion in WG2. M68 in progress.	Dropped.
AI-67-7	BIS (K. Manikandan), Experts on Assamese from India and elsewhere.	
	To take note of and act on the following item:	
a.	<i>M67.25 (Assamese script)</i> : After consideration of the proposal in document N4947 to encode the Assamese script, WG2 recommends that SC2 accept the ad hoc report on Assamese script in document N4999, which has the following main recommendations: Add Assamese character names in the nameslist as annotations, Change the block header from Bengali to Bengali-Assamese, and, Prepare a revised contribution on new characters to be added. WG2 encourages the experts on Assamese script to continue the work towards a revised contribution and submit to WG2. WG2 recommends that SC2 invites the national body of India, BIS, to coordinate this effort. M68 in progress.	In progress.
AI-67-8	Experts from China (Chen Zhuang), UK (Andrew West), Japan (Toshiya Suzuki), Ireland (Mr. Michael Everson). TCA (Lin Mei Wei), Mongolia experts	
	To take note of and act on the following items:	
c.	<i>M67.26 (Shuishu script)</i> : WG2 invites the authors of Shuishu script (Block 1B300-1B4FF Shuishu Logograms and Block 1B500-1B52F Shuishu Radicals from document N4894R) that was taken out of PDAM 2.2 based on ballot comments, to revise their proposal, taking into account the feedback received at this meeting (see documents N4942, N4946 and N4956), working with other experts interested in this script. M68 in progress.	In progress (N5110 - Report of discussion – 2019-07-01; await experts' input)
d.	<i>M66.21 (Primitive Scripts of South West China)</i> : WG2 invites the authors of documents N4856 and N4901, to revise their proposals on Muya, Namuz and Ersu scripts, taking into account the feedback received at this meeting, working with other experts interested in this script. M68 in progress.	Dropped.

4.6 Outstanding action items from meeting 68, Microsoft Campus, Redmond, WA, USA; 2019-06-17/21

Item	Assigned to / action (Reference recommendations in document N5054, and unconfirmed minutes in document N5122 for meeting 68 - this document you are reading).	Status
AI-68-1	Recording Secretary - Dr. V.S. UMaMaheswaran	
a.	To finalize the document N5054 containing the adopted meeting recommendations and send it to the convener as soon as possible.	Completed. Document N5054.
b.	To finalize the document N5122 containing the unconfirmed meeting minutes and send it to the convener as soon as possible.	Completed. Document N5122.
AI-68-2	Convener - Mr. Michel Suignard	
a.	To add relevant contributions carried forward from previous meetings to agenda of next meeting. (See list of documents under AI-68-11, item c below.)	Completed. See under AI-68-11-item c below.
AI-68-3	Editor of ISO/IEC 10646: (Mr. Michel Suignard with assistance from contributing editors)	
	To prepare the appropriate amendment texts, sub-division proposals, collection of editorial text for the next edition, corrigendum text, or entries in collections of characters for future coding, with assistance from other identified parties, in accordance with the following:	
a.	<i>M68.01 (Disposition of ballot comments of CD-2 to 6th Edition)</i> : WG2 recommends that SC2 accepts the disposition of ballot comments on CD-2 to 6 th edition in document N5106. The following significant changes are noted: a. Remove: A7C0 LATIN CAPITAL LETTER THORN WITH DIAGONAL STROKE, and A7C1 LATIN SMALL LETTER THORN WITH DIAGONAL STROKE. Change the glyphs at A764 and A765 to have diagonal strokes instead of horizontal strokes. b. Remove 3050C (UK-02790) and add source reference UK-02790 to 22C3A. c. Move Gongche characters from 9FF0..9FF6 to 2A6D7..2A6DD (end of CJK Ext. B). d. Add UK-01969 (RS 140.9) as new entry in CJK Ext. G (new position is 30C5D).	Completed.

	e. Remove: 11A48 ZANABAZAR SQUARE CLUSTER-INITIAL LETTER LA, and 11A49 ZANABAZAR SQUARE CLUSTER-INITIAL LETTER SA.	
b.	<i>M68.02 (Counting Rod Numerals)</i> : WG2 recommends that the Project Editor remove 5 Southern Song counting rods at 1D379..1D37D from the CD of 6 th edition, based on the feedback in document N5071 , pending a revised contribution.	Completed.
c.	<i>M68.03 (Yezidi script)</i> : WG2 recommends that the Project Editor add the encoding of the Yezidi script proposed in document N5053, in a new block named Yezidi in the range 10E80..10EBF, and populate it with 47 characters at 10E80..10EA9, 10EAB..10EAD and 10EB0..10EB1, with their names and glyphs shown in document N5100.	Completed.
d.	<i>M68.04 (Tangut character additions)</i> : WG2 recommends that the Project Editor add the following characters with their glyphs, source references and radical counts, as shown in document N5100 for encoding in the standard, based on the proposal in document N5064 , and suggested modifications in document N5095 : a. 9 new Tangut ideographs at 18D00..18D08 in a new block named Tangut Supplement in the range 18D00..18D7F, and b. 6 new Tangut components at 18AFA..18AFF in the Tangut Components block.	Completed.
e.	<i>M68.05 (Latin character additions)</i> : WG2 recommends that the Project Editor add the following characters with their glyphs as shown in document N5100 for encoding in the standard: a. A7C7 LATIN CAPITAL LETTER D WITH SHORT STROKE OVERLAY A7C8 LATIN SMALL LETTER D WITH SHORT STROKE OVERLAY A7C9 LATIN CAPITAL LETTER S WITH SHORT STROKE OVERLAY A7CA LATIN SMALL LETTER S WITH SHORT STROKE OVERLAY. in Latin Extended-D block, based on the proposal in document N5044 , and suggested modifications in document N5095 . b. 2E52 TIRONIAN SIGN CAPITAL ET in Supplemental Punctuation block, based on the proposal in document N5042 , and suggested modifications in document N5095 . a. A7F5 LATIN CAPITAL LETTER REVERSED HALF H A7F6 LATIN SMALL LETTER REVERSED HALF H in Latin Extended-D block, based on the proposal in document N5039 . b. 1ABF COMBINING LATIN SMALL LETTER W BELOW 1AC0 COMBINING LATIN SMALL LETTER TURNED W BELOW in Combining Diacritical Marks Extended block, and, AB68 LATIN SMALL LETTER TURNED R WITH MIDDLE TILDE AB69 MODIFIER LETTER SMALL TURNED W AB6A MODIFIER LETTER LEFT TACK AB6B MODIFIER LETTER RIGHT TACK in Latin Extended-E block, based on the proposal in document N5036 .	Completed.
f.	<i>M68.06 (CJK Extension G Updates)</i> : WG2 recommends that the Project Editor incorporate the additions, disunifications, source reference corrections, radical corrections and glyph corrections arising out of the review of CJK Extension G (30000..3134F) in CD-2 of the standard, summarized in document N5065 . The following additions and deletions are to be noted: Additions to CJK Ext-G: UK-01969(30C5D), GZ-4511301(30DD9), GZ-0722601(307BF) Deletions due to Unifications: UK-02790(formerly at 3050C), GZ-1861301(formerly at 309C9) (New CJK Ext. G range is 30000..3134A.)	Completed.
g.	<i>M68.07 (CJK Extension A Additions)</i> : WG2 recommends that the Project Editor add ten (10) characters 4DB6..4DBF to CJK Extension A (3400..4DBF) that resulted from disunifications that are summarized in document N5068, with background information in documents N5080 (4), N5081 (1), N5083 (4), and N5094 (1).	Completed.
h.	<i>M68.08 (China and TCA UNCs)</i> : WG2 recommends that the Project Editor add thirteen (13) characters at 9FF0..9FFC in the CJK Unified Ideographs block (4E00..9FFF), with their glyphs,	Completed.

	source references and radical stroke information as shown in document N5100 for encoding in the standard, based on the proposal in documents N5072 and N5107.	
i.	<i>M68.09 (Miscellaneous CJK updates):</i> WG2 recommends that the Project Editor incorporate the changes to glyphs, source references, horizontal extensions and radical stroke information from document N5068 for inclusion in the standard.	Completed.
j.	<p><i>M68.10 (Miscellaneous additions):</i> WG2 recommends that the Project Editor add the following characters with their glyphs as shown in document N5100 for encoding in the standard:</p> <ul style="list-style-type: none"> a. 2E50 CROSS PATTY WITH RIGHT CROSSBAR, and 2E51 CROSS PATTY WITH LEFT CROSSBAR in the Supplemental Punctuation block, based on the proposal in document N5037. b. 1019C ASCIA SYMBOL in Ancient Symbols block, based on the proposal in document N5038. c. 11147 CHAKMA LETTER VAA in Chakma block, based on the proposal in document N5055. d. 31BC BOPOMOFO LETTER GW 31BD BOPOMOFO LETTER KW 31BE BOPOMOFO LETTER OE, and 31BF BOPOMOFO LETTER AH in Bopomofo Extended block, based on the proposal in document N5052. c. 08C5 ARABIC LETTER JEEM WITH THREE DOTS ABOVE, and 08C6 ARABIC LETTER JEEM WITH THREE DOTS BELOW in Arabic Extended A block, based on the proposal in document N5049. d. 08C7 ARABIC LETTER LAM WITH SMALL ARABIC LETTER TAH ABOVE in Arabic Extended-A block, based on the proposal in document N5048. 	Completed.
k.	<i>M68.11 (Adlam font):</i> WG2 recommends that the Project Editor replace the font with the new font proposed in document N5076 for the code chart for Adlam script (1E900..1E95F) in the standard, based on the rationale provided in that document.	Completed.
l.	<i>M68.12 (Font for CJK Radicals supplement and Kangxi Radical blocks):</i> WG2 recommends that the Project Editor replace the font with the new font proposed in document N5069 for the code chart for CJK Radicals Supplement block (2E80..2EFF) and Kangxi Radicals block (2F00..2FDF) in the standard, based on the rationale provided in that document.	Completed.
m.	<i>M68.13 (Consideration for attachments and references in the next edition):</i> WG2 recommends that the Project Editor create two separate clauses separating the lists of references in the standard: one with the list of data files that would have been attached to the standard, and the other a list of normative references to items common with the Unicode Standard. Further, WG2 recommends that the project editor adopt the proposed changes from CD-2 disposition of comments for TE.1 from Japan, on page 11 in document N5106. Also, WG2 requests that SC2 endorses this recommendation for preparation of the 6th edition of the standard.	Completed.
n.	<p>Missed item from recommendations: (From document N5056 on Emoji input) The 55 characters that were accepted for inclusion in the standard, are listed below:</p> <p>4 characters in Transport and Map Symbols block: 1F6D6 HUT, 1F6D7 ELEVATOR, 1F6FB PICKUP TRUCK, and 1F6FC ROLLER SKATE</p> <p>10 characters in Supplemental Symbols and Pictographs block: 1F90C PINCHED FINGERS, 1F972 SMILING FACE WITH TEAR, 1F977 NINJA, 1F978 DISGUISED FACE, 1F9A3 MAMMOTH, 1F9A4 DODO, 1F9AB BEAVER, 1F9AC BISON, 1F9AD SEAL, and 1F9CB BUBBLE TEA</p> <p>41 characters in Symbols and Pictographs Extended-A block: 1FA74 THONG SANDAL, 1FA83 BOOMERANG, 1FA84 MAGIC WAND, 1FA85 PINATA, FA86 NESTING DOLLS, 1FA96 MILITARY HELMET, 1FA97 ACCORDION, 1FA98 LONG DRUM, 1FA99 COIN, 1FA9A CARPENTRY SAW, 1FA9B SCREWDRIVER, 1FA9C LADDER, 1FA9D HOOK, 1FA9E MIRROR, 1FA9F WINDOW, 1FAA0 PLUNGER, 1FAA1 SEWING NEEDLE, 1FAA2 KNOT, 1FAA3 BUCKET, 1FAA4 MOUSE TRAP, 1FAA5 TOOTHBRUSH, 1FAA6 HEADSTONE, 1FAA7 PLACARD, 1FAA8 ROCK, 1FAB0 FLY, 1FAB1 WORM, 1FAB2 BEETLE, 1FAB3 COCKROACH, 1FAB4 POTTED PLANT, 1FAB5 WOOD, 1FAB6 FEATHER, 1FAC0 HEART, 1FAC1 LUNGS, 1FAC2 PEOPLE</p>	Completed.

	HUGGING, 1FAD0 BLUEBERRIES, 1FAD1 BELL PEPPER, 1FAD2 OLIVE, 1FAD3 FLATBREAD, 1FAD4 TAMALE, 1FAD5 FONDUE, and 1FAD6 TEAPOT.	
	o. <i>M68.14 (Progression of CD)</i> : WG2 recommends that the Project Editor prepare the final text of CD of the 6th edition of the standard, which will include the changes arising from recommendation M68.01 through M68.13 above, along with the final disposition of comments (document N5106 http://www.unicode.org/wg2/docs/n4952R-dam1DOC.pdf), and forward it to the SC2 secretariat for processing as an CD-3 ballot. The draft code charts are in document N5100. The target starting dates are modified to CD-3 2019-08, DIS 2019-11, FDIS 2020-07.	Completed. Edition 6 has been published .
AI-68-4	IRG Rapporteur and IRG Editor (Dr. Lu Qin)	
	To take note of and act upon the following item:	
	a. <i>Recommendation M68.17 (IRG Name Change)</i> : WG2 recommends that SC2 change the name of IRG from 'Ideographic Rapporteur Group' to 'Ideographic Research Group', and make the IRG an ad hoc group reporting to WG2, continuing with its current mission of reviewing contributions on encoding of Unified Ideograph characters in support of East Asian languages, assisting WG2 in the continued development and maintenance of ISO/IEC 10646.	Noted.
AI-68-5	Ad hoc group on roadmap (Dr. Umamaheswaran)	
	a. To update the Roadmaps with the results from this meeting.	Completed. See latest roadmaps .
AI-68-6	Experts from TCA (Selena Wei), China (Chen Zhuang), Japan (Toshiya Suzuki), and other experts interested in Small Seal script	
	To take note of and act on the following item:	
	a. <i>Recommendation M68.15 (Small Seal script)</i> : WG2 recommends that SC2 notes the progress made by the experts in document N5089, and encourages the experts to continue the work towards a contribution for encoding the script, taking into account the feedback documents and discussion at this meeting (document N5108). WG2 notes that another ad hoc meeting of experts is planned to be held from 2019-09-30 to 2019-10-01 at Tatung University, Taipei, and invites all the interested experts to take note towards planning to attend the meeting (see document N5109).	Completed. See documents N5188, N5189, N5190 and N5191.
AI-68-7	Experts from China (Chen Zhuang), and other experts interested in Lisu Monosyllabic script.	
	To take note of and act on the following item:	
	a. <i>Recommendation M68.18 (Lisu Monosyllabic Script)</i> : WG2 invites the authors of documents N5047 to revise their proposal on Lisu Monosyllabic script, taking into account the feedback received at this meeting, working with other experts interested in this script.	In Progress Document N5122 ad hoc report invited an updated proposal.
AI-68-8	Experts from TCA (Selena Wei), and other experts interested in Bopomofo.	
	To take note of and act on the following item:	
	a. <i>Recommendation M68.19 (Bopomofo Script)</i> : WG2 invites the authors of documents N5088 to revise their proposal on Bopomofo script, taking into account the feedback received at this meeting, working with other experts interested in this script.	In Progress
AI-68-9	Experts from TCA (Selena Wei), China (Chen Zhuang), and other experts interested in Oracle Bone script.	
	To take note of and act on the following item:	
	a. <i>Recommendation M68.20 (Oracle Bone Script)</i> : WG2 invites the authors of documents N5090 to revise their proposal on Oracle Bone script, taking into account the feedback received at this meeting, working with other experts interested in this script.	In Progress
AI-68-10	Experts from China (Chen Zhuang), UK (Andrew West), Japan (Toshiya Suzuki), Ireland (Mr. Michael Everson). TCA (Lin Mei Wei), Experts from Mongolia, and other experts interested in Mongolian script.	
	To take note of and act on the following item:	
	a. <i>Recommendation M68.16 (Mongolian)</i> : WG2 accepts the report of the Unicode Mongolian working group at this meeting, and recommends that SC2 note the different action items in N5103. WG2 endorses the creation of the Unicode Technical Report UTR#54 to document the Mongolian variants information and implementation guidelines, towards simplification of the Mongolian names list and referencing from ISO 10646. WG2 further encourages the experts to continue the work on open items identified in the report. WG2 also notes that a	Noted.

	WG2 ad hoc Mongolian meeting will take place from 2020-04-01/03 at Adobe, San Jose, CA, USA (tentative location) (Michel Suignard as the convener), and invites all the interested experts to take note towards planning to attend the meeting.	
AI-68-11	Experts from all national bodies and liaison organizations	
	To take note of and provide feedback on the following items.	
a.	<i>Recommendation M68.21 (Future meetings):</i> WG2 endorses the following schedule for future meetings: WG2 Meeting 69 – 2020-06-15/19 – (Japan, Location to be announced), Scotland, UK <i>backup</i> (Co-located with SC2 plenary meeting 25) WG2 Meeting 70 – 2021-06 (Dundee, Scotland, UK), Canada backup IRG Meeting 54 Los Gatos, CA, USA 2020-05-18/22 (Unicode/Netflix) IRG Meeting 55 New Haven, CT, USA, 2020-10-19/23 (Yale University) Ad Hoc meeting on Small Seal, 2019-09-30 to 2019-10-01, Tatung University, Taipei, Taiwan, Host: TCA (see document N5109 for details). Ad Hoc meeting on Mongolian, 2020-04-01/03, Host: Adobe, San Jose, CA, USA (tentative location).	Noted. All the listed meetings were rescheduled to be Virtual meetings due to Covid-19.
b.	To provide feedback to the author(s) of document N4749 on Circled Numbers, document N5040 on Three Christian Symbols, document N5041 on Jianzi Musical Notation and Format Controls, document N5043 on proposal for ten characters for Middle English, document N5045 on proposal for two characters for Middle Scots, document N5063 on Egyptian Hieroglyphs Extension, document N5092 on Tamga symbols, document N5098 on Western Cham script, and document N5101 on proposal on Komi letters. (All these documents were discussed at this meeting).	Not able to track. Assumed to be completed.
c.	Script proposals carried from previous meetings (with updated references): Afáka (N4292), Bagam (N4293), Balti 'B' (N4016), Balti scripts (N3842), Bété (N4876), Bima (L2/16-119), Brusha (L2/17-183), Buginese extensions (L2/16-159), Chinese Chess Symbols (N3910), Cypro-Minoan (N4733), Diwani Siyaq Numbers (L2/15-066R), Egyptian Hieroglyphs Extended-A (N5063), Egyptian Hieroglyphs Extended-B (N4944), Eebee Hmong (N4668), Garay (N4709), Jurchen (N4795), Kawi (N4266), Kerinci (L2/16-074), Khambu Rai (N4018), Khatt-i Baburi (N4130), Khitan Large (N4631, N4642), Khotanese (L2/15-022), Kpelle (N3762), Kulitan (L2/15-232), Lampung (L2/16-073), Landa (N3768), Leke (N4438), Loma (N4786, N4837), Lota Ende (L2/16-076), Mandombe (L2/16-077R), Moon (N4128), Mwangwego (N4323), Naxi Dongba (N4898), Naxi Geba (N4886, N4887), Obsolete Simplified Chinese Ideographs (N3695), Old Yi (N3288), Oracle Bone (N4687), Palaeohispanic Northern (L2/19-332), Palaeohispanic Southern (L2/19-333), Pau Cin Hau Syllabary (L2/16-014), Persian Siyaq (L2/15-112R), Proto-Cuneiform (N4797), Pungchen (L2/17-181), Pyu (N3874), Ranzana (N4515, L2/16-015), Southwest China Hieroglyphs (N4856, N4901), Sumbawa (L2/16-096), Tegalari (L2/17-378), Tocharian (L2/15-236), Tolong Siki (N3811), Vexillology symbols (L2/17-089), Vithkuqi (N4854), Western Cham (N5098), Woleai (N4146), and Zou (N3864).	Noted. Cypro-Minoan, Kawi and Vithkuqi are in CD-1.2 to 6th edition. Garay, Gurung-Khema and Tegalari (renamed Tulu-Tegalari) are proposed for the next CD. Rest of the documents are carried over for future enhancements.

5 JTC1 and ITTF matters:

5.1 Notice of Publication: ISO/IEC 10646:2020

Input document:

[SC2/4745](#) Notice of Publication: ISO/IEC 10646:2020, Information technology — Universal coded character set (UCS)

FYI. The 6th edition of ISO/IEC 10646 has been published. It is also in the list of 'Publicly Available Standards'.

There was no discussion at this meeting.

6 SC2 matters:

6.1 Related to 10646 6th Edition and CDAM 1 to 10646 6th Edition

FYI. The following documents were distributed to SC2 members after the last meeting (WG2 meeting 68) and have been dealt with in SC2. There was no discussion at this meeting.

a. Documents related to 6th edition of 10646

[SC2/N4702](#) Text for ISO/IEC DIS 10646 (Ed 6), Information technology

[SC2/N4714](#) Summary of Voting on ISO/IEC DIS 10646 (Ed 6), Information technology -- Universal coded character set (UCS)

[5132](#) Disposition of comments on ISO/IEC DIS 10646 6th edition; Michel Suignard, Project editor; 2020-06-17

[SC2/N4723](#) Text for ISO/IEC FDIS 10646 (Ed.6)

[SC2/N4743](#) Result of Voting on ISO/IEC FDIS 10646 (Ed.6), Information technology — Universal coded character set (UCS)

b. Documents related to CDAM 1 to 6th edition of 10646

[SC2/4769](#) Text for ISO/IEC 10646 (Ed.6) CDAM1

[5173](#) Disposition of comments on CDAM1 to ISO/IEC 10646 6th edition, [Draft](#); Michel Suignard, Project editor; 2022-01-31

6.2 Proposal for a new 10646 (Ed.6) subdivision: 2nd Amendment ([N5182](#)) Adoption

Input document:

[5182](#) ISO/IEC 10646 new program of work for 10646 6th Edition, 2nd Amendment; Michel Suignard, Convenor; 2022-06-08

7 WG2 matters:

7.1 Disposition of comments on 10646 Ed.6 CDAM1.2

Input documents:

[SC2/4783](#) Text for ISO/IEC 10646 (Ed.6) CDAM1.2

[SC2/N4793](#) Summary of voting on 10646 Ed.6 CDAM1.2

[5180](#) Draft disposition of comments on CDAM1.2 to ISO/IEC 10646 6th edition; Michel Suignard, Project editor; 2022-06-08

Documents referenced in national body comments:

[L2/21-174](#) Recommendations to UTC #169 October 2021 on Script Proposals; Deborah Anderson, et al; 2021-10-04

L2/21-221 Wrong Identities of Three Historical Sundanese Character; Ilham Nurwansah; 2021-09-29

[L2/22-068](#) Recommendations to UTC #171 April 2022 on Script Proposals; Deborah Anderson, et al; 2022-04-18

L2/22-078 IRG Meeting #58 Recommendations and Action Items (IRG N2530); IRG; 2022-03-21

Output document:

[5194](#) Disposition of comments on CDAM1.2 to ISO/IEC 10646 6th edition Michel Suignard, Project editor 2022-06-22

Text for CDAM 1.2 (in document [SC2/4783](#)) was balloted prior to this meeting (meeting 69). From the summary of voting (document [SC2/N4793](#), of the 24 votes cast, there were 10 Approvals, 10 Abstentions, 3 Approvals with Comments (China, Indonesia and USA), and 1 Disapproval (Japan). Ballot comments received from China, Indonesia, Japan and USA are addressed below (from document [N5180](#)).

7.1.1 China: Positive with comments

T1 – CJK Unified Ideographs Extension H – proposes change to glyph change for code point 032351 glyph for GXM00286. The stroke count should be changed to 6 consequently.

(See also comment TE.2 from USA).

Disposition: Accepted.

E.1 – Digraphs letters for Kazakh – proposes to remove the note “Use of these characters is discouraged ...” for code points 0675 to 0678

Mr. Michel Suignard: The preamble text was modified in response to a similar comment made for CDAM1. Based on consideration for the new comment and re-evaluation, a modified text is proposed for the preamble to “Diagraphs letters for Kazakh”.

Disposition: Accepted in principle.

7.1.2 Indonesia: Positive with comments

TE.1: Characters for Balinese.

Indonesia proposes adding three characters - Balinese Inverted Carik Siki, Balinese Inverted Carik Pareren and Balinese Panti Bawak, at 1B4E, 1B4F and 1B7F; citing their acceptance for future addition to Unicode, from Unicode Script ad hoc recommendation in document [L2/22-068](#).

Mr. Michel Suignard: Considering the goal of Amendment 1 being in synch with Unicode 15.0, and the addition of the new characters would be for a future version of Unicode, it is preferable to consider these additions for a future amendment to 10646.

Disposition: Accepted in principle.

TE.2: Character for Javanese and Sundanese Arabic

Indonesia proposes adding *pěpět* diacritic character with suggested name ‘Arabic Fatha With Elbow’ for Javanese and Sundanese in Arabic script, providing some rationale and samples of use; also claiming it is different from ‘maddah’.

Mr. Michel Suignard: Such a request should be made through a proposal document, with explanation of how it is different from Maddah at 0653. It could be a candidate for a future amendment, if the proposal is accepted.

Disposition: Not accepted.

ED.1 – Sundanese

Indonesia suggests making correction to Sundanese characters aligning with discussion in document [L2/21-221](#) and recommendation by Unicode Script ad hoc committee document [L2/21-174](#).

(See also comment T.3 from USA).

Mr. Michel Suignard: This was an oversight. Formal alias Sundanese Letter Archaic I will be added to 1BBD Sundanese Letter Bha.

Disposition: Accepted.

ED.2: Kawi

Proposes correcting the glyphs in the list of character names to be full, rather than being clipped, like those in the code charts.

Mr. Michel Suignard: The font has been improved with more interlinear spacing.

Disposition: Accepted.

7.1.3 Japan: Negative.

TE.1: CJK Ext. H ideograph 31F68

Japan requests deletion of 31F68 and reconsider if it could be unified with 26C25. Previous comments and relevant discussions are provided as rationale.

Mr. Michel Suignard: I have proposed not accepting it giving the rationale in the disposition of comments document. This item was not brought to the attention of IRG and the next IRG meeting will make it too late to be in synch with Unicode 15.0 which is in Beta review now. Also, we do not leave a hole in ideograph charts.

Discussion:

- a. Mr. Tetsuji Orita: Thanks for your comments on our input. We can accept that it was not brought to attention of IRG March 2022 meeting. These characters – 31F68 and 26C25 - are variants. The comment on the discussion record remains unsettled and I would like the IRG to discuss this issue. It may be quite late in the process.
- b. Mr. Michel Suignard: The next IRG is not till the end of year. One can do what JP proposes ... but it is quite late.
- c. Mr. Peter Constable: It will be an issue for Unicode 15, if IRG cannot determine before the September 2022 date. Unicode needs a final decision early. We may postpone this character from encoding. Japan can make a comment at the CDAM stage in ISO. The character is either included or removed. We can continue to evaluate beyond July.
- d. Dr. Qin Lu: If the character is not removed the problem like these should not be repeated.
- e. Mr. Michel Suignard: At this point I would like to keep the character as is. There are ways to deal with the issue in implementations.
- f. Dr. Qin Lu: Most of the IRG work is now on the net, and with online tools. In the past travel may have been an issue. I would like Japan to partake in IRG more actively. Chinese IRG experts can also give us a feedback.
- g. Mr. Michel Suignard: Removing the character, in my opinion, is not an option.
- h. Dr. Ken Lunde: Whether to orphan the character is a decision to be taken at the next meeting of IRG – Oct 17-21 2022.
- i. Mr. Peter Constable: In the next draft – you intend to continue keeping the reference?
- j. Mr. Michel Suignard: Yes. I will rewrite the disposition, and review with Mr. Tetsuji Orita. Let me know if that would be acceptable to JP.

Disposition: Not accepted. The character will be kept with current source reference GXM00175. If IRG recommends in its October 2022 meeting to remove it, it can be orphaned by changing its source reference to GU-31F68 (itself).

TE.2: CJK Ext. H ideograph 31F4C

Japan requests deletion of 31F4C and reconsider if it can be unified with 2CECB. The source information for both are abbreviated form of the term “Bodhi”, and should be considered as cognate. More rationale is provided.

Mr. Michel Suignard: Recommend not accepting this, based on these ‘might be’ unifiable. There is no input from IRG on this item. I have provided my rationale.
Disposition: Not accepted.

7.1.4 USA: Positive with comments

TE.1: CJK Ext. C

USA proposes adding new ideograph at 2B739 to CJK Ext. C, based on IRG recommendation M58.6 (in [L2/22-078](#)) regarding a submission from Macao SAR.

Disposition: Accepted. (See final disposition of comments document N5194 for more information.).

TE.2: CJK Ext. H

USA proposes corrected glyph for the G-Source ideograph of 32351.

(See also T.1 comment from China).

Disposition: Accepted.

TE.3: Sundanese

USA proposes adding a formal name alias ‘Sundanese Letter Archaic I’ to 1BBD Sundanese Letter Bha. Rationale and references are provided.

Disposition: Accepted.

ED.1, ED.2 and ED.3: Spelling of ‘Kaktovik’

USA proposes correcting ‘Kaktovic’ to ‘Kaktovik’ – two occurrences in Kaktovik (page 6) Annex.1 (page 8), and Annex A.2.2 (page 9).

Disposition: Accepted.

The final disposition of comments is in document [N5194](#).

Discussion:

- a. Mr. Peter Constable: Going forward – is the CDAM 1.2 progressing to DAM stage?
- b. Mr. Michel Suignard: Ballot comments can still be made. We try to satisfy the NO vote. I will wait if there is comment on the final D.O.C document.

Relevant recommendation:

M69.01 (Disposition of ballot comments of CDAM1.2 to 6th Edition): WG2 recommends that SC2 accept the disposition of ballot comments on CDAM1.2 to 6th edition in document [N5194](#) (SC2 N4809). The following significant changes are noted:

- a. Addition: 2B739 CJK UNIFIED IDEOGRAPH-2B739
- b. Glyph changes for U+5F50 and U+32351.

7.2 Roadmap Snapshot

Input document:

Roadmap: Roadmaps to Unicode

Snapshots as of this WG2 meeting (meeting 69) are BMP version 13-0-0, SMP version 14-0-2, SIP version 14-0-0, TIP version 14-0-1 and SSP version 14-0-0. They include all the script proposals in the action item from WG2 meeting 68 and additional or updated script proposals before this WG2 meeting (WG2 meeting 69).

7.3 Meeting #69 recommendations Adoption

Output document:

[5154](#) Meeting #69 Recommendations; V.S. Umamaheswaran, Michel Suignard; 2022-06-23

8 IRG status and reports

FYI .The following IRG related documents were circulated to SC2 members after the previousWG2 meeting (WG2 meeting 68). Some of these are referenced in the IRG summary document [N5177](#) below.

- a. Related to IRG Principles and Procedures

Input documents:

[5161](#) IRG PnP V13; IRG Convenor; 2021-04-05

[5167](#) IRG Principles and Procedures (IRG PnP) Version 14; IRG Convenor; 2021-09-24

[5178](#) IRG Principles and Procedures (IRG PnP) Version 15; IRG Convenor; 2022-03-18

b. Related to IRG Meeting Recommendations

Input documents:

[5120](#) IRG Meeting #53 Shenzhen, China, 2019/10/21~27, Recommendations and Action Items; IRG; 2019-10-24

[5157](#) IRG meeting #56 Virtual, 2021/03/15~18, Recommendation; IRG; 2021-03-18

[5165](#) IRG Meeting #57 Virtual, 2021/09/13~17 Recommendations and Action Items; IRG; 2021-09-17

8.1 Summary IRG 57 and 58 ([N5177](#)) FYI

Input document:

[5177](#) Summary IRG 57 and 58; IRG; 2022-06-16

Dr. Qin Lu: Please take note of future meeting schedules to be approved:

IRG#59, Online Zoom(Unicode) 2022-10-17/21

IRG#60, Online Zoom(Unicode), 2023-03-20/24

IRG#61, Los Gatos, California, USA(Netflix), (back up Yale University),
backed up by online zoom(Unicode), 2023-10-16/20

See relevant recommendation M69.12 on future meetings under item 11.on page 20.

9 Contributions related to ballots:

9.1 Related to and incorporated into 10646 Ed.6 CDAM1

FYI .The following documents were distributed to WG2 after the last meeting (WG2 meeting 68) and have been utilized while preparing the text for CDAM1 to 10646 Ed. 6. Some of the mature contributions include in CDAM 1 to be in synch with Unicode version 14.0 have only UTC document references. There was no discussion at this meeting.

Input documents:

[5125](#) Proposal to change the code chart font for 21 blocks in Unicode Version 14.0; Ken Lunde; 2019-12-02

[5126](#) Additional Tangut Glyph Corrections; Andrew West, Viacheslav Zaytsev; 2019-12-21

[5129](#) China's CJK horizontal extension for technical used characters, [Data file](#); CAI Lei, Tao Yang, China; 2020-02-10

[5134](#) Tangut Glyph Modifications and Corrections; Andrew West, Viacheslav Zaytsev; 2020-07-07

[5135](#) Final proposal to encode the Cypro-Minoan script in the SMP; Michael Everson, SEI; 2020-07-14

[5136](#) Considerations regarding Cypro-Minoan and Aegean numbers; Michael Everson, SEI; 2020-07-14

[5137](#) Considerations regarding a normalized Cypro-Minoan reference font, revised-2; Michael Everson, SEI; 2020-12-31

[5138](#) Proposal for encoding the Vithkuqi script in the SMP, 2nd revision; Michael Everson, SEI; 2020-12-07

[5140](#) Submission of 5 Macao SARG UNC Characters and One TCA UNC character; Lu Qin, IRG convener; 2020-08-08

[5141](#) Proposal for encoding the Toto script in the SMP; Deborah Anderson, SEI; 2019-09-27

[5142](#) Arabic additions for Quranic orthographies; Deborah Anderson, Roozbeh Pournader; 2019-09-29

[5144](#) Revised proposal to add two characters for Middle Scots; Michael Everson; 2020-10-01

[5145](#) Revised proposal to add ten characters for Middle English; Michael Everson; 2020-10-05

[5146](#) Proposal to add two SIGMOID S characters for mediaeval palaeography; Michael Everson; 2020-10-01

[5147](#) Proposal to add two mediaeval punctuation characters, revised; Michael Everson; 2020-11-10

[5148](#) Consolidated code chart including proposed phonetic and medieval characters, revised; Michael Everson, Kirk Miller; 2020-11-09

[5152](#) Proposal to add the OBLIQUE HYPHEN; Michael Everson; 2021-01-12

[5153](#) Final proposal to encode Old Uyghur in Unicode; Anshuman Pandey; 2020-12-18

[5155](#) Request for glyph changes and annotations for Kazakh, Kyrgyz, and Uyghur; Lorna Evans, SIL; 2020-12-07

[5156](#) Unicode pipeline, Post Unicode 14.0; Michel Suignard; 2020-03-04

[5159](#) Updated T glyphs of U+3777 and U+6AC0; TCA; 2021-03-25

[5160](#) Chinese comments on WG2 N5155; China NB; 2021-02-02

[5162](#) Response to China NB comments on WG2 N5155; Unicode Consortium; 2021-04-09

[L2/19-053](#) Proposal to Encode Znamenny Musical Notation in Unicode; Aleksandr Andreev, Nikita Simmons; 2019-04-17

[L2/20-284](#) Proposal to encode Kawi (revised); Aditya Bayu Perdana, Ilham Nurwansah; 2020-12-22

[L2/21-027](#) Proposal to add the Tangsa Script in the SMP (revised); Stephen Morey; 2021-01-29

[L2/21-031](#) Proposal to Encode the Nag Mundari Script revised; Lawrence Wolf-Sonkin, Biswajit Mandal; 2021-04-24

[L2/21-058](#) Unicode request for Kaktovik numerals (revised); Kirk Miller, et al; 2021-04-30

9.2 Related to and incorporated into 10646 Ed.6 CDAM1.2

FYI .The following documents were distributed to WG2 after the last meeting (WG2 meeting 68) and have been utilized while preparing the text for CDAM1.2 to 10646 Ed. 6. There was no discussion at this meeting.

Input documents:

- [5158](#) Korean horizontal extension; KIM Kyongsok, South Korea; 2021-04-01
- [5164](#) Proposal to revise the glyph of one Old Turkic character; Michael Everson, Andrew West; 2021-08-24
- [5168](#) Name aliases and UTF-16 encoding scheme inconsistencies; Peter Brett, Tom Honermann; 2021-11-23
- [5169](#) Unicode Provisional Emoji Candidates for Unicode 15.0 for Review by SC2/WG2; Peter Constable, Unicode; 2021-12-06
- [5170](#) Proposal to revise the glyph of CYRILLIC LETTER MULTILOCULAR O; Michael Everson; 2022-01-09
- [5172](#) On the glyph of LATIN LETTER CLOSED INSULAR G; Michael Everson; 2022-01-09
- [5174](#) Proposed changes concerning Character Name Aliases in ISO/IEC 10646; Michel Suignard, Project editor; 2022-01-31
- [5175](#) ISO/IEC 10646 CDAM1.2 repertoire status and other updates; Michel Suignard, Project editor; 2022-02-01

9.3 Related to but not incorporated into ISO/IEC 10646 Ed.6 CDAM1.2

9.3.1 Disunification of CJK Unified Ideograph-5F50

Input documents:

- [L2/22-042](#) (IRGN2543) Proposal to disunify U+5F50 into three separate ideographs—redux; Ken Lunde; 2022-02-18
- [L2/22-076](#) (IRGN2538R) Submission of One Character for Macao Supplementary Character Set (MSCS); Macao SAR; 2022-02-28
- [L2/22-067](#) CJK & Unihan Group Recommendations for UTC #171 Meeting; Ken Lunde; 2022-04-16
- [L2/22-091](#) Vietnam Response to IRGN2509; Vietnam N.B.; 2022-04-12

Disposition: Addressed by disposition of USA comment TE.1 on CDAM 1.2, by adding 2B739 to CJK Ext-C.

9.3.2 Horizontal Extension of 51 Hanja chars

Input document:

- [5179](#) A proposal requesting a Horizontal Extension of 51 Hanja chars; KIM Kyongsok, et al (South Korea); 2022-03-24

Disposition: Accepted. There was no discussion.

9.3.3 Glyph and data changes for various CJK Unified ideographs

Input document:

- [5195](#) (L2/22-067) CJK & Unihan Group Recommendations for UTC #171 Meeting; Ken Lunde; 2022-04-16

Disposition: Accepted. There was no discussion.

Relevant recommendations:

M69.02 (Additional changes to Amendment 1): WG2 recommends that the Project Editor add the 51 Horizontal Hanja extensions documented in [N5179](#) and further CJK related glyph and data changes included in document [N5195](#).

M69.03 (Progression of CDAM1.2): WG2 recommends that the Project Editor prepare the final text of CDAM1.2 of the 6th edition of the standard, which will include the changes arising from recommendations **M69.01** through **M69.02** above, along with the final disposition of comments (document [N5194](#)), and forward it to the SC2 secretariat for processing as a DAM ballot. The target starting dates are DAM 2022-07-01, FDAM 2023-02-01, AMD 2023-05-01.

9.3.4 Latin characters for Ormulum

Input document:

- [5145](#) Revised proposal to add ten characters for Middle English; Michael Everson; 2020-10-05

Mr. Michael Everson: This proposal is from September 2020. It proposed four combining characters and six spacing characters used in the early Middle English Ormulum. Of these two Capital Letters – Double Thorn and Double Wynn – were not included. I have provided responses to all the questions that were raised at that time. Examples using these in a font are also shown. These two may not appear as the first letter in a word; but when you write all letters in Capital, we would need these Capital letters. The other characters were all included in CDAM 1. I request that these be put into the DAM 1.

Discussion:

- a. Dr. Deborah Anderson: I need to look at the document for any feedback I may have had.
- b. Mr. Peter Constable: I am generally OK for both cases for Latin letters. But there was some concern that we should be conservative.

Disposition: No decision was arrived at before the end of the meeting.

10 Script contributions not related to ballots

10.1 Carried forward not related to ballots

The following contributions are being carried forward, with references to a mix of WG2 and UTC documents. Most preliminary proposals usually have UTC numbers, whereas documents that were in progress or submitted to WG2 do have WG2 numbers. All the documents that are in progress in WG2 are in the [WG2 document register](#). The list has been updated from the agenda document [N5183](#)

Afaka (N4292)	Loma (N4786 , N4837)
Bagam (N4293)	Lota Ende (L2/16-076)
Balti 'B' (N4016)	Mandombe (L2/16-077R)
Balti scripts (N3842)	Moon (N4128)
Beria (L2/08-265)	Mwangwego (N4323)
Bété (L2/19-044)	Naxi Dongba (N4898)
Bima (L2/16-119)	Naxi Geba (N4886 , N4887)
Brusha (L2/17-183)	Obsolete Simplified Chinese Ideographs (N3695)
Buginese extensions (L2/16-159)	Old Yi (N3288)
Chinese Chess Symbols (N3910)	Oracle Bone (N5090)
Diwani Siyaq Numbers (L2/15-066R)	Palaeohispanic Northern (L2/22-146)
Eebee Hmong (N4668)	Palaeohispanic Southern (L2/22-147)
Egyptian Hieroglyphs Extended-A (N5063)	Pau Cin Hau Syllabary (L2/16-014)
Egyptian Hieroglyphs Extended-B (N4944)	Persian Siyaq (L2/21-105)
Jianzi Musical Notation and Format Controls, (N5041)	Proto-Cuneiform L2/22-239
Jurchen (N4795)	Pungchen (L2/17-181)
Kerinci (L2/16-074)	Ranjana (N4515 , L2/16-015)
Khambu Rai (N4018)	Southwest China Hieroglyphs (N4856 , N4901)
Khatt-i Baburi (N4130)	Sumbawa (L2/16-096)
Khitan Large (N4631 , N4642)	Tamga symbols (N5092)
Khotanese (L2/15-022)	Tocharian (L2/15-236)
Kpelle (N3762)	Tolong Siki (N3811)
Kulitan (L2/15-232)	Vexillology symbols (L2/17-089)
Lampung (L2/22-044)	Western Cham (N5098)
Landa (N3768)	Woleai (N4146)
Leke (N4438)	Zou (N3864)
Linear Elamite (L2/21-233)	

10.2 New Scripts or Blocks

10.2.1 ISO/IEC 10646 repertoire proposals post CDAM 1.2

Input document:

[5181](#) ISO/IEC 10646 repertoire proposals post Amd1; Michel Suignard, Project editor; 2022-06-08

[5156](#) Unicode pipeline, Post Unicode 14.0; Michel Suignard; 2020-03-04

Output document:

[5182](#) ISO/IEC 10646 new program of work for 10646 6th Edition, 2nd Amendment; Michel Suignard, Convenor; 2022-06-08

Mr. Michel Suignard: There are several proposals, some of them are mature, that are potential candidates for additions to the standard. I propose we start work on the next amendment to the standard. A project subdivision and a set of candidate scripts / character additions are to be prepared. Document [N5181](#) is my proposed draft content for the next amendment. Several of these have been discussed in UTC and have been accepted for future version of Unicode, as can be seen in the Unicode pipeline document [N5156](#).

(Mr. Michel Suignard briefly described several of the scripts and additional characters that are proposed for inclusion in the next amendment.)

Disposition: Recommend a project subdivision proposal for the second amendment, with the proposed additions as initial content.

Relevant recommendations:

M69.04 (New Program of work for a second amendment to ISO/IEC 10646 6th edition):

WG2 recommends that SC2 accept to start a new program of work for a second amendment to ISO/IEC 10646 6th edition. The supporting document is [N5182](#), and the starting repertoire is detailed in [N5181](#). The target dates are:

CDAM: 2022-08-01, DAM 2024-06-01, FDAM 2025-02-01, AMD 2025-05-01.

M69.09 (Progression of CDAM2):

WG2 recommends that the Project Editor prepare the text of CDAM2 of the 6th edition of the standard, which will include the changes arising from recommendations M69.05 through M69.08 above and forward it to the SC2 secretariat for processing as a CDAM2 ballot. The draft code charts are in document [N5181](#). The target starting date is 2022-08-01.

10.2.1.1 New Scripts for Amendment 2

Input documents:

[5139R2](#) Proposal for encoding the Todhri script in the SMP, 2nd revision; Michael Everson, SEI; 2020-12-31

[L2/22-068](#) Recommendations to UTC #171 April 2022 on Script Proposals; Deborah Anderson, et al; 2022-04-18

[4709](#) Proposal for encoding the Garay script in the SMP of the UCS; SEI/Michael Everson; 2016-03-22

[4875](#) Report on the Garay script 2017; Charles Riley; 2017-09-09

[L2/22-048](#) Consideration of the encoding of Garay with updated user feedback; Andrij Rovenchak, et al; 2022-02-23

[L2/22-031](#) Updated proposal to encode the Tulu-Tigalari script in Unicode (replaces L2/21-210); Vaishnavi Murthy Yerkadithaya, Vinodh Rajan; 2022-01-18

[L2/21-157](#) Proposal to encode the Sunuwar script in Unicode (revised); Anshuman Pandey; 2021-12-21

[L2/22-043R](#) Proposal to Encode Kirat Rai script (revised); Biswajit Mandal, Lorna Evans; 2022-04-20

The above are new scripts proposed in document [N5181](#) for inclusion in the next amendment.

Relevant recommendation:

M69.05 (new scripts): WG2 recommends that the Project Editor add the following scripts with following new blocks, characters with their glyphs as referenced in document [N5181](#) for future encoding in the standard:

- a. TODHRI (block: 105C0..105FF), new code points: 105C0-105F3
- b. GARAY (block: 10D40..10D8F), new code points: 10D40..10D65, 10D69..10D85, 10D8E..10D8F
- c. TULU-TIGALARI (block: 11380..113FF), new code points: 11380..11389, 1138B, 1138E, 11390..113B5, 113B7..113C0, 113C2, 113C5, 113C7..113CA, 113CC..113D1, 113D4..113D5, 113D7..113D8, 113E1..113E2
- d. SUNUWAR (block: 11BC0..11BFF), new code points: 11BC0..11BE1, 11BF0..11BF9
- e. KIRAT RAI (block: 16D40..16D7F), new code points: 16D40..16D79

10.2.1.2 Additions to existing scripts for Amendment 2

Input documents:

[L2/22-006](#) Proposal to encode ARCHAIC SHRIL in Kannada and Telugu; Srinidhi A, Sridatta A; 2022-01-04

[L2/22-059](#) Proposal to Encode Three Balinese Punctuation Marks; Rikza F. Sh., Aditya Bayu Perdana; 2022-03-16

[L2/22-068](#) Recommendations to UTC #171 April 2022 on Script Proposals; Deborah Anderson, et al; 2022-04-18

(Note: Ballot comment TE.1 from Indonesia on CDAM 1.2 requests the above three Balinese characters to be added.

Unicode SAH report [L2/22-068](#) has endorsed its acceptance.)

[L2/22-045](#) Proposal to add capital rams horn; Denis Moyogo Jacquerye; 2022-02-23

[L2/22-047](#) Proposal to encode Arabic Combining Alef Overlay used in Quran published in Libya; Lateef Sagar Shaikh; 2022-02-23

[L2/22-046](#) Proposal to encode numerals for Eastern Pwo Karen and Pa'O; Ben Mitchell; 2022-02-23

The above are proposed additional characters for existing scripts, included in document [N5181](#), for inclusion in the next amendment.

M69.06 (additions to existing scripts):

WG2 recommends that the Project Editor add the following additions to existing scripts with following new blocks (as appropriate), characters with their glyphs as referenced in document [N5181](#) for future encoding in the standard:

- a. Telugu: 0C5C TELUGU ARCHAIC SHRIL
- b. Kannada: 0CDC KANNADA ARCHAIC SHRIL
- c. Balinese:
 - 1B4E BALINESE INVERTED CARIK SIKI
 - 1B4F BALINESE INVERTED CARIK PAREREN
 - 1B7F BALINESE PANTI BAWAK

- d. Latin Extended-D: A7CB LATIN CAPITAL LETTER RAMS HORN
- e. Arabic Extended-C: 10EFC ARABIC COMBINING ALEF OVERLAY
- f. Myanmar Extended-C (new block 116D0..116FF):
 - 116D0..116D9 MYANMAR PAO DIGIT ZERO to MYANMAR PAO DIGIT NINE
 - 116DA..116E3 MYANMAR EASTERN PWO KAREN DIGIT ZERO to MYANMAR EASTERN PWO KAREN DIGIT NINE

10.2.2 Shuowen Small Seal

Input documents:

[4688](#) Proposal to encode Small Seal Script in UCS; TCA and China; 2015-10-20
[4853](#) Shuowen Seal Ad Hoc Meeting Resolutions; Ad hoc group; 2017-09-01
[5034](#) Report of Discussion on Small Seal Script during WG2 #67; Suzuki Toshiya; 2018-12-17
[5089](#) Shuowen Seal Informal Meeting Report (June 1st 2019, Beijing); Selena Wei, et al.; 2019-06-01
[5105](#) Proposal to encode Small Seal Script, [Appendix](#); TCA, China; 2019-06-19
[5108](#) Report of Seal Script discussion at WG2 #68; Suzuki Toshiya; 2019-06-19
[5117](#) Shuowen Seal Encoding Report; TCA; 2019-09-27
[5118](#) About the future extension of Shuowen Seal; Selena Wei, Yenling Tseng; 2019-09-27
[5119](#) Shuowen Seal Ad Hoc Meeting Report, Taipei, Oct 2019; Shuowen ad hoc; 2019-10-01
[5123](#) Comments on several criteria to distinguish Shuowen Seal Glyphs (Feedback to WG2 N5118); Suzuki Toshiya; 2019-12-01
[5133](#) Comparison table of N5105 proposal (of Shuowen Seal) and Changzhi's version, [data](#); Suzuki Toshiya; 2020-04-01 (with appended data)
[5187](#) TCA and China Feedback on N5133 Experts from TCA and China 2022-06-20
[5188](#) About the future extension of other versions of Shuowen Seal TCA 2022-06-17
[5189](#) THX Seal glyph Correction Principles Selena Wei 2022-06-17
[5190](#) THX correction glyph summary table TCA and China 2022-02-20
[5191](#) THX Property Table (pdf 14.5MB), [Excel format](#) TCA and China 2022-06-20

Discussion:

- a. Mr. Michel Suignard: The current proposal in WG2 is in document N5105. There has been some limited (due to Covid-19 situation) activity on this script by experts from TCA and China since our last face to face meeting.
- b. Ms. Lin Mei Wei (Selena) introduced document [N5191](#) on THX (Tenghuaxie version of Shuowen seal glyphs) containing a table of the glyphs, and an attached Excel document. A set of glyph corrections principles (as in document [N5189](#)) was used in dealing with reported glyph correction comments from earlier. These are to be compared with document [N5133](#). A group of experts from China and TCA have had discussions (in Chinese) on the script. The input from other experts are also discussed within this group. Documents N5191 and N5192 are the results. Any feedback is to be sent to their email.
- c. Mr. Michael Suignard: Looking at the Excel document, there can be some font issues.
- d. Dr. Suzuki Toshiya: TCA and China were not interacting with experts outside.
- e. Ms. Lin Mei Wei: Experts from Japan and elsewhere can interact using current methods.

Disposition: The progress has been noted. Experts are to review and feedback. TCA and China are encouraged to involve other experts as well.

Relevant recommendation:

M69.10 (Small Seal script): WG2 recommends that SC2 note the progress made by the experts from China and TCA in document [N5188](#), [N5189](#), [N5190](#), and [N5191](#), and encourages these experts to work with experts from USA and Japan and others to progress towards a consolidated contribution for encoding the script.

Discussion on recommendation M69.10:

Dr. Suzuki Toshiya: I suggest forming a WG2 ad hoc group to discuss the current work. I hope WG2 requests Seal ad hoc group to form a consensus. During the last 2 years, the Seal ad hoc group had not made any official online meeting. Their consensus is important to include the huge code chart into future CD or CDAM text.

Mr. Michel Suignard: There is no concrete proposal yet. The documents reflect just the current stage in the progress of work by experts. I expect experts from besides TCA and China also to participate.

Mr. Peter Constable: It is not clear to me ... is the request to ask SC2 to create an ad hoc?

Mr. Michel Suignard: An ad hoc of experts is what we had meant in the past. The initiative was by experts themselves.

Note: if the proposal matures as the second amendment progresses, it can be a candidate for inclusion in the amendment in the future.

Relevant recommendation:

M69.11 (Additions to CDAM2 before next WG2 meeting):

WG2 recognizes that some scripts and additional characters which are under preparation as potential additions to the standard could become mature and will have consensus among WG2 experts to include in the standard. The project editor should be able to add these to the balloted texts, after exercising due diligence. Candidates include, but are not limited to:

- Small Seal script
- Gurung Khema script

10.3 Miscellaneous Proposals

10.3.1 Proposal to add further characters from legacy computers and teletext

Input document:

[L2/21-235](#) Proposal to add further characters from legacy computers and teletext [see also [version without attachments](#), [sources spreadsheet](#), [mappings Zip file](#)] (revised); Rebecca Bettencourt, Doug Ewell, et al; 2022-01-26

Mr. Michel Suignard: The proposed characters are considered to be stable and are in synch with Unicode pipeline. There was no discussion.

Disposition: Recommend inclusion in proposed repertoire for Amendment 2 in document [N5181](#).

Relevant recommendation:

M69.07 (Characters from legacy computers and teletext):

WG2 recommends that the Project Editor add the following additions to existing scripts with following new blocks (as appropriate), characters with their glyphs as referenced in document [N5181](#) for future encoding in the standard:

- a. Control Pictures:
 - 2427 SYMBOL FOR DELETE SQUARE CHECKER BOARD FORM
 - 2428 SYMBOL FOR DELETE RECTANGULAR CHECKER BOARD FORM
 - 2429 SYMBOL FOR DELETE MEDIUM SHADE FORM
- b. Symbols for Legacy Computing Supplement (new block 1CC00..1CEBF):
 - 1CC00..1CCF9 UP-POINTING GO-KART to OUTLINED DIGIT NINE
 - 1CD00..1CEAF BLOCK OCTANT-3 to LOWER HALF RIGHT ONE QUARTER BLOCK
- c. Supplementary Arrows-C:
 - 1F8B3..1F8BB DOWNWARDS BLACK ARROW TO BAR to SOUTH WEST ARROW FROM BAR
- d. Symbols for Legacy Computing:
 - 1FBCB..1FBEF WHITE CROSS MARK to TOP LEFT JUSTIFIED LOWER RIGHT QUARTER BLACK CIRCLE

10.3.2 Proposal to add characters from Smalltalk

Input document:

[L2/21-234](#) Proposal to add characters from Smalltalk [see also [version without attachments](#), [sources spreadsheet](#), [mappings Zip file](#)]; Rebecca Bettencourt, Doug Ewell, et al; 2021-12-21

Mr. Michel Suignard: The proposed characters are considered to be stable and are in synch with Unicode pipeline. There was no discussion.

Disposition: Recommend inclusion in proposed repertoire for Amendment 2 in document [N5181](#).

Relevant recommendation:

M69.08 (Characters from Smalltalk):

WG2 recommends that the Project Editor add the following additions to existing scripts with following new blocks (as appropriate), characters with their glyphs as referenced in document [N5181](#) for future encoding in the standard:

- a. Symbols for Legacy Computing Supplement (new block 1CEB0..1CEBF):
 - 1CEB0..1CEB3 HORIZONTAL ZIGZAG LINE to BLACK RIGHT TRIANGLE CARET
- b. Supplementary Arrows-C:
 - 1F8B2 RIGHTWARDS ARROW WITH LOWER HOOK

10.4 Carried forward for future meeting(s)

Input documents:

[5047](#) Proposal to Encode the Lisu Monosyllabic Scripts; Han Gang, et al, China NB; 2019-04-16

[5121](#) Report of Lisu Mono-Syllabic discussion at WG2 #68 (2019/June/18); Suzuki Toshiya; 2019-07-14

[4758](#) Updated Proposal for encoding Shuishu in the SMP of the UCS; China; 2016-09-22

[4922](#) Additional repertoire for ISO/IEC 10646:2017 (5th ed.) Amendment 2 (pdam2.2) with Ext.G; Michel Suignard, Project editor; 2017-11-22

[4839](#) Towards the ordering of the Shuishu script; Michael Everson; 2017-07-26

[4956](#) Analysis of Shuishu character repertoire; Andrew West, Eiso Chan; 2018-06-01

[4942](#) Comments on Shuishu in PDAM2.2 text; Toshiya Suzuki; 2018-04-02

[4946](#) Additional Comments on Shuishu in PDAM2.2 text; Toshiya Suzuki; 2018-04-20

[5110](#) Report of Shuishu discussion at WG2 #68; Suzuki Toshiya; 2019-07-01

[4795](#) Towards an encoding of the Jurchen script and implications for Khitan Small Script; Andrew West, et al; 2017-05-03

[5131](#) A Supplementary Proposal to Encode the Jurchen Characters; Sun Bojun, et al. China; 2020-02-10

[5130](#) Toward encoding Blissymbolics in Plane 1 of the UCS; Michael Everson; 2020-05-13

[5149](#) On the keyboard inputting of Blissymbols; Michael Everson; 2020-12-31

[5171](#) On radicals for lexicography in Blissymbols; Michael Everson; 2022-01-09

[5166](#) Preliminary Proposal from SAT CJK Buddhist Symbols Collection; Wang Yifan, et al. SAT; 2021-09-23

The above proposals were on the agenda, but were not discussed during the meeting. They are open for feedback from WG2 experts and are added to the list of documents carried forward for the next WG2 meeting.

11 Future meetings

Discussion:

- a. Mr. Michel Suignard: Meeting 71 is currently targeted to be in Canada, for 2023-06-19/23. It can move by a week, if needed.
- b. Dr. Karljürgen Fuerherm: The important item is to get a room booked with the Registration personnel at the university. One or two weeks of moving the dates should be OK.
- c. Mr. Michel Suignard: One or two weeks should be OK. Thanks a lot for all the work you have done this year. Now, for Meeting 72, would Japan be interested in hosting?
- d. Mr. Tetsuji Orita: I did not expect this request for hosting. I will investigate with my colleagues if we can host in 2024 and will let you know.
- e. Mr. Michel Suignard: Any backup volunteers for Meeting 72? It is two years from now. Is Scotland still a candidate?
- f. Mr. Michael Everson: As a backup, yes. We will see how it goes.
- g. Mr. Jan Kučera: Czech Republic is possible – in Prague.

These WG2 meetings are expected to be co-located with SC2 plenaries.

Relevant recommendation:

M69.12 (Future meetings):

WG2 endorses the following schedule for future meetings:

WG2 Meeting 70 – 2023-06-19/23 – (Waterloo, Ontario, Canada), backup Aberdeen, Scotland, UK (Co-located with SC2 plenary meeting 28)

WG2 Meeting 71 – 2024-06 Prague, Czech Republic, backup: Aberdeen, Scotland, UK, or Japan

IRG Meeting 59 virtual, 2022-10-17/21 (Beijing daytime)

IRG Meeting 60 virtual, 2023-03-20/24 (Beijing daytime)

12 Closing

12.1 Approval of Recommendations of meeting 69

Output document:

[5154](#) Meeting #69 Recommendations; V.S. Umamaheswaran, Michel Suignard; 2022-06-

Experts accredited (or invited) by the national bodies or liaison organizations for Canada, China, Czech Republic, Germany, Indonesia, Ireland, Japan, Republic of Korea, UK, SC34 (Liaison), SEI - UC Berkeley (Liaison), TCA (Liaison), the Unicode Consortium (Liaison), and USA, were present when the draft recommendations were discussed.

Any discussion of note under any of the recommendations is included under the appropriate '*Relevant recommendation*' included in the minutes above.

After some minor edits, the final recommendations in document N5154 were accepted by consensus, and will be forwarded to SC2.

Character count in the published 6th edition of ISO/IEC 10646 is **143925**. There will be **5327** additions for DAM1, and **1064** additions for CDAM2, totalling **150316** allocated characters at the end of this meeting.

The recommendations included the following appreciations:

M69.13 (Appreciation to DKUUG for web site support): WG2 thanks DKUUG and its staff for its continued support of the web site for the older WG2 documents.

M69.14 (Appreciation to Unicode Consortium): WG2 thanks the Unicode Consortium and its staff for providing the new web site and for its assistance in code chart productions and other support for WG2.

M69.15 (Appreciation to SC2 secretariat): WG2 thanks the SC2 secretariat, especially Ayuko Nagasawa, for facilitating this virtual meeting.

12.2 Adjournment

The meeting adjourned at 24:00 UTC.

13 Action Items

All the action items recorded in the minutes of the previous meetings from 25 to 59, 61, and 64 to 66, have been either completed or dropped. Status of outstanding action items from previous meetings 60, 62, 63, 67, 68 and new action items from meeting 69 are listed in the tables below.

13.1 Outstanding action items from meeting 62, San Jose, CA, USA; 2014-02-24/28

Item	Assigned to / action (reference resolutions in document N4554, and unconfirmed minutes in document N4553 for meeting 62, with any corrections noted in the minutes of meeting 63 in document N4603).	Status
AI-62-6	Ad hoc group on Principles and Procedures (Dr. Umamaheswaran)	
a.	To take note of section 2.1 in document N4544 on Representation of CJK ideograph glyphs; and update the P&P document appropriately. M63 through M69 -- in progress.	In progress.
b.	With reference to N4543 Character Name considerations; Michel Suignard; 2014-02-20, to elaborate on character names in the P&P document working with Mr. Michael Everson. M63 through M69 -- in progress.	In progress.

13.2 Outstanding action items from meeting 63, Colombo, Sri Lanka; 2014-09-29/10-03

Item	Assigned to / action (Reference recommendations in document N4604, and unconfirmed minutes in document N4603 for meeting 63 (with any corrections noted in the minutes of meeting 64 in document N4739).	Status
AI-63-6	Ad hoc group on Principles and Procedures (Dr. Umamaheswaran)	
a.	To take note of section 2.1 in document N4620 on Representation of CJK ideograph glyphs; and update the P&P document appropriately. M64 through M69 -- in progress.	In progress.

13.3 Outstanding action items from meeting 66, Hohhot, Inner Mongolia, China; 2017-09-25/29

Item	Assigned to / action (Reference recommendations in document N4874, and unconfirmed minutes in document N4953 for meeting 66, with any corrections noted in the minutes of meeting 67 in document N5020).	Status
AI-66-6	Experts from China (Chen Zhuang), UK (Andrew West), Japan (Toshiya Suzuki), Ireland (Mr. Michael Everson). TCA (Lin Mei Wei), Mongolia experts	

	To take note of and act on the following item:	
b.	<i>M66.18 (Naxi Dongba script)</i> : WG2 accepts the Naxi Dongba ad hoc report in document N4895, and invites the author of the script to provide a revised version with the characters reordered according to the type of classification used in the source dictionaries, based on the revised chart in document N4898. WG2 recommends to SC2 to accept the revised version of the script, consisting of 1188 characters in a new block Naxi Dongba in the range 1A800...1ACFF for encoding in the standard. M67 through M69 -- in progress.	In progress.

13.4 Outstanding action items from meeting 67, SOAS, University of London, London, UK; 2018-06-16/20

Item	Assigned to / action (Reference recommendations in document N4954, and unconfirmed minutes in document N5020 for meeting 67, with any corrections noted in the minutes of meeting 68 in document N5122).	Status
AI-67-7	BIS (K. Manikandan), Experts on Assamese from India and elsewhere.	
	To take note of and act on the following item:	
a.	<i>M67.25 (Assamese script)</i> : After consideration of the proposal in document N4947 to encode the Assamese script, WG2 recommends that SC2 accept the ad hoc report on Assamese script in document N4999, which has the following main recommendations: <ul style="list-style-type: none"> a. Add Assamese character names in the nameslist as annotations, b. Change the block header from Bengali to Bengali-Assamese, and, c. Prepare a revised contribution on new characters to be added. WG2 encourages the experts on Assamese script to continue the work towards a revised contribution and submit to WG2. WG2 recommends that SC2 invites the national body of India, BIS, to coordinate this effort. M68 and M69 - in progress.	In progress.
AI-67-8	Experts from China (Chen Zhuang), UK (Andrew West), Japan (Toshiya Suzuki), Ireland (Mr. Michael Everson). TCA (Lin Mei Wei), Mongolia experts	
	To take note of and act on the following items:	
c.	<i>M67.26 (Shuishu script)</i> : WG2 invites the authors of Shuishu script (Block 1B300-1B4FF Shuishu Logograms and Block 1B500-1B52F Shuishu Radicals from document N4894R) that was taken out of PDAM 2.2 based on ballot comments, to revise their proposal, taking into account the feedback received at this meeting (see documents N4942, N4946 and N4956), working with other experts interested in this script. M68 and M69 - in progress.	In progress (N5110 - Report of discussion – 2019-07-01; await experts' input)

13.5 Outstanding action items from meeting 68, Microsoft Campus, Redmond, WA, USA; 2019-06-17/21

Item	Assigned to / action (Reference recommendations in document N5054, and unconfirmed minutes in document N5122 for meeting 68, , with any corrections noted in the minutes of meeting 69 – this document you are reading)	Status
AI-68-7	Experts from China (Chen Zhuang), and other experts interested in Lisu Monosyllabic script.	
	To take note of and act on the following item:	
a.	<i>Recommendation M68.18 (Lisu Monosyllabic Script)</i> : WG2 invites the authors of documents N5047 to revise their proposal on Lisu Monosyllabic script, taking into account the feedback received at this meeting, working with other experts interested in this script. M69 - in progress	In Progress.
AI-68-8	Experts from TCA (Selena Wei), and other experts interested in Bopomofo.	
	To take note of and act on the following item:	
a.	<i>Recommendation M68.19 (Bopomofo Script)</i> : WG2 invites the authors of documents N5088 to revise their proposal on Bopomofo script, taking into account the feedback received at this meeting, working with other experts interested in this script. M69 - in progress	In Progress
AI-68-9	Experts from TCA (Selena Wei), China (Chen Zhuang), and other experts interested in Oracle Bone script.	
	To take note of and act on the following item:	
a.	<i>Recommendation M68.20 (Oracle Bone Script)</i> : WG2 invites the authors of documents N5090 to revise their proposal on Oracle Bone script, taking into account the feedback received at this meeting, working with other experts interested in this script. M69 - in progress	In Progress

13.6 New action items from Virtual meeting 69 – 2022-06-20 & 23

Item	Assigned to / action (Reference recommendations in document N5154 , and unconfirmed minutes in document N5199 for meeting 68 - this document you are reading).	Status
AI-69-1	Recording Secretary - Dr. V.S. UMaaheswaran	
a.	To finalize the document N5154 containing the adopted meeting recommendations and send it to the convener as soon as possible.	(Was Completed by Convener). Document N5154 .
b.	To finalize the document Nxxxx containing the unconfirmed meeting minutes and send it to the convener as soon as possible.	TO DO Document Nxxxx.
AI-69-2	Convener - Mr. Michel Suignard	
a.	To add relevant contributions carried forward from previous meetings to agenda of next meeting. (See list of documents under AI-69-7, item b below.)	
AI-69-3	Editor of ISO/IEC 10646: (Mr. Michel Suignard with assistance from contributing editors)	
	To prepare the appropriate amendment texts, sub-division proposals, collection of editorial text for the next edition, corrigendum text, or entries in collections of characters for future coding, with assistance from other identified parties, in accordance with the following:	
a.	<i>M69.01 (Disposition of ballot comments of CDAM1.2 to 6th Edition):</i> WG2 recommends that SC2 accept the disposition of ballot comments on CDAM1.2 to 6 th edition in document N5194 (SC2 N4809). The following significant changes are noted: <ul style="list-style-type: none"> a. Addition: 2B739 CJK UNIFIED IDEOGRAPH-2B739 b. Glyph changes for U+5F50 and U+32351. 	Completed. Document N5194 was sent to SC2.
b.	<i>M69.02 (Additional changes to Amendment 1):</i> WG2 recommends that the Project Editor add the 51 Horizontal Hanja extensions documented in N5179 and further CJK related glyph and data changes included in document N5195 .	Completed.
c.	<i>M69.03 (Progression of CDAM1.2):</i> WG2 recommends that the Project Editor prepare the final text of CDAM1.2 of the 6th edition of the standard, which will include the changes arising from recommendations M69.01 through M69.02 above, along with the final disposition of comments (document N5194), and forward it to the SC2 secretariat for processing as a DAM ballot. The target starting dates are DAM 2022-07-01, FDAM 2023-02-01, AMD 2023-05-01.	
d.	<i>M69.04 (New Program of work for a second amendment to ISO/IEC 10646 6th edition):</i> WG2 recommends that SC2 accept to start a new program of work for a second amendment to ISO/IEC 10646 6th edition. The supporting document is N5182 and the starting repertoire is detailed in N5181 . The target dates are: CDAM: 2022-08-01, DAM 2024-06-01, FDAM 2025-02-01, AMD 2025-05-01.	Completed. Documents N5181 and N5182 were sent to SC2.
e.	<i>M69.05 (new scripts):</i> WG2 recommends that the Project Editor add the following scripts with following new blocks, characters with their glyphs as referenced in document N5181 for future encoding in the standard: <ul style="list-style-type: none"> a. TODHRI (block: 105C0..105FF), new code points: 105C0-105F3 b. GARAY (block: 10D40..10D8F), new code points: 10D40..10D65, 10D69..10D85, 10D8E..10D8F c. TULU-TIGALARI (block: 11380..113FF), new code points: 11380..11389, 1138B, 1138E, 11390..113B5, 113B7..113C0, 113C2, 113C5, 113C7..113CA, 113CC..113D1, 113D4..113D5, 113D7..113D8, 113E1..113E2 d. SUNUWAR (block: 11BC0..11BFF), new code points: 11BC0..11BE1, 11BF0..11BF9 e. KIRAT RAI (block: 16D40..16D7F), new code points: 16D40..16D79 	Completed.
f.	<i>M69.06 (additions to existing scripts):</i> WG2 recommends that the Project Editor add the following additions to existing scripts with following new blocks (as appropriate), characters with their glyphs as referenced in document N5181 for future encoding in the standard: <ul style="list-style-type: none"> g. Telugu: 0C5C TELUGU ARCHAIC SHRII h. Kannada: 0CDC KANNADA ARCHAIC SHRII i. Balinese: <ul style="list-style-type: none"> • 1B4E BALINESE INVERTED CARIK SIKI • 1B4F BALINESE INVERTED CARIK PAREREN 	Completed.

	<ul style="list-style-type: none"> 1B7F BALINESE PANTI BAWAK <p>j. Latin Extended-D: A7CB LATIN CAPITAL LETTER RAMS HORN</p> <p>k. Arabic Extended-C: 10EFC ARABIC COMBINING ALEF OVERLAY</p> <p>l. Myanmar Extended-C (new block 116D0..116FF):</p> <ul style="list-style-type: none"> 116D0..116D9 MYANMAR PAO DIGIT ZERO to MYANMAR PAO DIGIT NINE 116DA..116E3 MYANMAR EASTERN PWO KAREN DIGIT ZERO to MYANMAR EASTERN PWO KAREN DIGIT NINE 	
g.	<p><i>M69.07 (Characters from legacy computers and teletext):</i> WG2 recommends that the Project Editor add the following additions to existing scripts with following new blocks (as appropriate), characters with their glyphs as referenced in document N5181 for future encoding in the standard:</p> <p>d. Control Pictures:</p> <ul style="list-style-type: none"> 2427 SYMBOL FOR DELETE SQUARE CHECKER BOARD FORM 2428 SYMBOL FOR DELETE RECTANGULAR CHECKER BOARD FORM 2429 SYMBOL FOR DELETE MEDIUM SHADE FORM <p>e. Symbols for Legacy Computing Supplement (new block 1CC00..1CEBF):</p> <ul style="list-style-type: none"> 1CC00..1CCF9 UP-POINTING GO-KART to OUTLINED DIGIT NINE 1CD00..1CEAF BLOCK OCTANT-3 to LOWER HALF RIGHT ONE QUARTER BLOCK <p>f. Supplementary Arrows-C:</p> <ul style="list-style-type: none"> 1F8B3..1F8BB DOWNWARDS BLACK ARROW TO BAR to SOUTH WEST ARROW FROM BAR <p>d. Symbols for Legacy Computing:</p> <ul style="list-style-type: none"> 1FBCB..1FBEF WHITE CROSS MARK to TOP LEFT JUSTIFIED LOWER RIGHT QUARTER BLACK CIRCLE 	Completed.
h.	<p><i>M69.08 (Characters from Smalltalk):</i> WG2 recommends that the Project Editor add the following additions to existing scripts with following new blocks (as appropriate), characters with their glyphs as referenced in document N5181 for future encoding in the standard:</p> <p>c. Symbols for Legacy Computing Supplement (new block 1CC00..1CEBF):</p> <ul style="list-style-type: none"> 1CEB0..1CEB3 HORIZONTAL ZIGZAG LINE to BLACK RIGHT TRIANGLE CARET <p>d. Supplementary Arrows-C:</p> <ul style="list-style-type: none"> 1F8B2 RIGHTWARDS ARROW WITH LOWER HOOK 	Completed.
i.	<p><i>M69.09 (Progression of CDAM2):</i> WG2 recommends that the Project Editor prepare the text of CDAM2 of the 6th edition of the standard, which will include the changes arising from recommendations M69.05 through M69.08 above and forward it to the SC2 secretariat for processing as a CDAM2 ballot. The draft code charts are in document N5181. The target starting date is 2022-08-01.</p>	
AI-69-4	IRG Rapporteur and IRG Editor (Dr. Lu Qin)	
	To take note of and act upon the following item:	
a.	<p><i>M69.12 (Future meetings):</i> WG2 endorses the following schedule for future meetings:</p> <p>....</p> <p>IRG Meeting 59 virtual, 2022-10-17/21 (Beijing daytime)</p> <p>IRG Meeting 60 virtual, 2023-03-20/24 (Beijing daytime)</p> <p>....</p>	
AI-69-5	Ad hoc group on roadmap (Dr. Umamaheswaran)	
a.	To update the Roadmaps with the results from this meeting.	
AI-69-6	Experts from TCA (Selena Wei), China (Chen Zhuang), Japan (Toshiya Suzuki), and other experts interested in Small Seal script	
	To take note of and act on the following item:	Completed.
a.	<p><i>M69.10 (Small Seal script):</i> WG2 recommends that SC2 note the progress made by the experts from China and TCA in document N5188, N5189, N5190, and N5191, and encourages these experts to work with experts from USA and Japan and others to progress towards a consolidated contribution for encoding the script.</p>	
AI-69-7	Experts from all national bodies and liaison organizations	
	To take note of and provide feedback on the following items.	
a.	<p><i>M69.12 (Future meetings):</i> WG2 endorses the following schedule for future meetings:</p>	

	<p>WG2 Meeting 70 – 2023-06-19/23 – (Waterloo, Ontario, Canada), backup Aberdeen, Scotland, UK (Co-located with SC2 plenary meeting 28)</p> <p>WG2 Meeting 71 – 2024-06 Prague, Czech Republic, backup: Aberdeen, Scotland, UK, or Japan IRG Meeting 59 virtual, 2022-10-17/21 (Beijing daytime)</p> <p>IRG Meeting 60 virtual, 2023-03-20/24 (Beijing daytime)</p>	
b.	<p>The following is a list of contributions carried forward from earlier meetings. They are open for review and feedback to the authors from interested experts from SC2/WG2 and Liaison organizations. Scripts marked in bold below are new or updates of previous list in Meeting 69 agenda document.</p> <p>Afáka (N4292), Bagam (N4293), Balti 'B' (N4016), Balti scripts (N3842), Beria (L2/08-265), Bété (L2/19-044), Bima (L2/16-119), BlissSymbols (N5130, N5149, N5171), Brusha (L2/17-183), Buginese extensions (L2/16-159), Chinese Chess Symbols (N3910), CJK Buddhist Symbols (N5166), Diwani Siyaq Numbers (L2/15-066R), Eebee Hmong (N4668), Egyptian Hieroglyphs Extended-A (N5063), Egyptian Hieroglyphs Extended-B (N4944), Jianzi Musical Notation and Format Controls, (N5041), Jurchen (N4795, N5131), , Kerinci (L2/16-074), Khambu Rai (N4018), Khatt-i Baburi (N4130), Khitan Large (N4631, N4642), Khotanese (L2/15-022), Kpelle (N3762), Kulitan (L2/15-232), Lampung (L2/22-044), Landa (N3768), Leke (N4438), Linear Elamite (L2/21-233), Lisu Mono-Syllabic (N5047, N5121), Loma (N4786, N4837), Lota Ende (L2/16-076), Mandombe (L2/16-077R), Moon (N4128), Mwangwego (N4323), Naxi Dongba (N4898), Naxi Geba (N4886, N4887), Obsolete Simplified Chinese Ideographs (N3695), Old Yi (N3288), Oracle Bone (N5090), Palaeohispanic Northern (L2/22-146), Palaeohispanic Southern (L2/22-147), Pau Cin Hau Syllabary (L2/16-014), Persian Siyaq (L2/21-105), Proto-Cuneiform (L2/22-239), Pungchen (L2/17-181), Ranjana (N4515, L2/16-015), Southwest China Hieroglyphs (N4856, N4901), Sumbawa (L2/16-096), Tamga symbols (N5092), Tocharian (L2/15-236), Tolong Siki (N3811), Vexillology symbols (L2/17-089), Western Cham (N5098), Woleai (N4146), Zou (N3864).</p>	

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