ISO/IEC JTC 1/SC 2

Coded character sets

Secretariat: JISC (Japan)

Document type:	Resolutions
Title:	Recommendations of the 68th Meeting of ISO/IEC JTC 1/SC 2/WG 2, Redmond, WA, US, 2019-06-17/21
Status:	This document is circulated for information.
Date of document:	2019-06-24
Source:	WG 2
Expected action:	INFO
No. of pages:	6
Email of secretary:	nagasawa@itscj.ipsj.or.jp
Committee URL:	https://isotc.iso.org/livelink/livelink/open/jtc1sc2

Source:	WG 2 meeting 68, Microsoft Campus, Redmond, WA, USA; 2019-06-17/21
Title:	Recommendations from WG 2 meeting 68
Action:	For approval by SC 2 and for information to WG 2
Status:	Adopted at meeting 68 of WG 2
Distribution:	ISO/IEC JTC 1/SC 2 and WG 2

Experts accredited (or invited) by the national bodies or liaison organizations for Canada, China, Czech Republic, Japan, Republic of Korea, SEI - UC Berkeley (Liaison), the Unicode Consortium (Liaison), TCA (Liaison), and USA, were present when the following recommendations were adopted (see attached attendance list).

Character count in 5th edition including Amd.1 and Amd.2 **137931**
***5598** additions proposed for CD of next edition (end of meeting 67)*
***5840** additions in balloted in CD-2 between meeting 67 and meeting 68*
Character count **143771** *(total allocated till prior to meeting 68)*

Recommendation M68.01 (Disposition of ballot comments of CD-2 to 6th Edition):
WG2 recommends that SC2 accepts the disposition of ballot comments on CD-2 to 6th 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).
  e. Remove:
     11A48 ZANABAZAR SQUARE CLUSTER-INITIAL LETTER LA, and
     11A49 ZANABAZAR SQUARE CLUSTER-INITIAL LETTER SA.

Count in CD: -4
Adopted with objection from expert from Japan.

Recommendation M68.02 (Counting Rod Numerals):
WG2 recommends that the Project Editor remove 5 Southern Song counting rods at 1D379..1D37D from the CD of 6th edition, based on the feedback in document N5071, pending a revised contribution.

Count: -5
Unanimous

Recommendation M68.03 (Yezidi script):
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.

Count: +47
Unanimous

Recommendation M68.04 (Tangut character additions):
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.

Count: +15
Unanimous

Recommendation M68.05 (Latin character additions):
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.
c. 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.
d. 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.

Count: +13
Unanimous

Recommendation M68.06 (CJK Extension G Updates):
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.)

Count: +1
Unanimous

Recommendation M68.07 (CJK Extension A Additions):
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).

Count: +10
Adopted with abstention from experts from Japan.

Recommendation M68.08 (China and TCA UNCs):
WG2 recommends that the Project Editor add thirteen (13) characters at 9FF0..9FFC in the CJK Unified Ideographs block (4E00..9FFF), with their glyphs, 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.

Count: +13
Unanimous

Recommendation M68.09 (Miscellaneous CJK updates):
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.

Count: +0
Adopted with abstention from experts from Japan.

Recommendation M68.10 (Miscellaneous additions):
WG2 recommends that the Project Editor add the following characters with their glyphs as shown in document N5100 for encoding in the standard:

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.

e. 11147 CHAKMA LETTER VAA
    in Chakma block, based on the proposal in document N5055.

f. 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.

g. 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.

h. 08C7 ARABIC LETTER LAM WITH SMALL ARABIC LETTER TAH ABOVE
    in Arabic Extended-A block, based on the proposal in document N5048.

Count: +11
Unanimous

Recommendation M68.11 (Adlam font):
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.

Unanimous

Recommendation M68.12 (Font for CJK Radicals supplement and Kangxi Radical blocks):
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.

Adopted with abstention from experts from Japan.

Recommendation M68.13 (Consideration for attachments and references in the next edition):
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.

Unanimous

Recommendation M68.14 (Progression of CD):
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), 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.

Count: 5840 +101=5941
Unanimous

Recommendation M68.15 (Small Seal script):
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).

Unanimous

Recommendation M68.16 (Mongolian):
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 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.

Unanimous

Recommendation M68.17 (IRG Name Change):
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.

Unanimous

Recommendation M68.18 (Lisu Monosyllabic Script):
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.

Unanimous

Recommendation M68.19 (Bopomofo Script):
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.

Unanimous

Recommendation M68.20 (Oracle Bone Script):
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.

Unanimous

Recommendation M68.21 (Future meetings):
WG2 endorses the following schedule for future meetings:
>   WG2 Meeting 69 – 2020-06-15/19 – (Japan, Location to be announced), Scotland, UK *backup* (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).

Unanimous

Appreciation M68.22 (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.

By Acclamation

Appreciation M68.23 (Appreciation to Unicode Consortium for web site support):
WG2 thanks the Unicode Consortium and its staff for providing the new web site and its support for WG2.

By Acclamation

Appreciation M68.24 (Appreciation to Host):
WG2 thanks the national body of USA, and the Unicode Consortium for hosting the meeting. WG2 thanks Microsoft, in particular Ms. Jiali Sheng, Mr. Peter Constable, Ms. Karolina Kowalik and Mr. Ayman Aldahleh for providing the facilities, refreshments and excellent meeting support. WG2 further expresses its appreciation to the Unicode Consortium, Michel and Christine Suignard, and Murray and Kamie Sargent, for the excellent social evening and dinner.

By Acclamation

Character count in 5th edition including Amd. 1 and Amd. 2 **137931**
5941 *additions for CD of next edition (end of meeting 68)*
Character count **143872** *(total allocated till end of meeting 68)*

The following **38** experts accredited (or invited) by **10** national bodies and **3** liaison organizations were present at different times during the meeting.

Name	Accreditation	Affiliation
Asmus FREYTAG	.Guest	Unicode, Inc.
Qin LU	.IRG Convener	Hong Kong Polytechnic University
Shuichi TASHIRO	.SC 2 Chairman	Information-technology Promotion Agency
Ayuko NAGASAWA	.SC 2 Secretariat	IPSJ/ITSCJ
Lin Mei WEI	.TCA (Cat. C Liaison)	Chinese Foundation for Digitization Technology
Michel SUIGNARD	.WG 2 Convenor; USA	Unicode, Inc.
Alain LABONTÉ	Canada	Independent
Karljürgen FEUERHERM	Canada	Wilfrid Laurier University
V.S. (Uma) UMAMAHESWARAN	Canada	Independent
Bojun SUN	China	Institute of Ethnology and Anthropology
Chingju LAI	Invited expert, China	SIL International
Gang HAN	China	Wixi ethnic, cultural and religious department
Jianchun LU	China	Weifang Beida Jade Bird Huaguang Imagesetter Systems Co., Ltd.
Lili HE	China	China Publishing Group Digital Media Co.,Ltd.
Nashunwuritu	China	Inner Mongolia University
Xiaowen ZHOU	China	Beijing Normal University
Yifei ZHANG	China	China Publishing Group Digital Media Co.,Ltd.
Zhongxi PAN	China	Archives of Sandu Shui Ethnic Autonomous County
Zhuang CHEN	China	CESI
Jan KUČERA	Czech Republic	Charles University
Michael EVERSON	Ireland	Evertype
Tetsuji ORITA	Japan	IBM Japan
Toshiya SUZUKI	Japan	Hiroshima University
Wataru TAKAGI	Japan	Hitachi, Ltd.
Kyongsok KIM	Korea	Pusan National University
Wang Sung YANG	Korea	Hancom
Baatar ENKHDALAI	Mongolia	Communications and Information Technology Authority of Mongolia
Andrew WEST	UK	Independent
Hai LIANG	USA	Unicode, Inc.
Jiali SHENG	USA	Microsoft Corp.
Ken LUNDE	USA	Adobe, Inc.
Ken WHISTLER	USA	Unicode, Inc.
Lisa MOORE	USA	Unicode, Inc.
Roozbeh POURNADER	USA	WhatsApp, Inc.
Deborah ANDERSON	USA, UC Berkeley (Cat. C Liaison)	University of California, Berkeley
Peter CONSTABLE	USA, Unicode (Cat. A Liaison)	Microsoft Corp.
Lee COLLINS	Vietnam	Netflix, Inc.
Thanh Nhān NGÔ	Vietnam	NYU Linguistic String Project