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 64 Kunibiki Messe, Matsue, Shimane, Japan; 2015-10-19/23
SOURCE:	V.S. Umamaheswaran (umavs@ca.ibm.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:	2016-09-20
DISTRIBUTION:	SC 2/WG 2 members and Liaison organizations
MEDIUM:	Acrobat PDF file
NO. OF PAGES:	44 (including cover sheet)

ISO
International Organization for Standardization
Organisation Internationale de Normalisation

ISO/IEC JTC 1/SC 2/WG 2
Universal Coded Character Set (UCS)

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	Kunibiki Messe, Matsue, Shimane, Japan; 2015-10-19/23
Source:	V.S. Umamaheswaran (umavs@ca.ibm.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

Input document:

4685 Second Draft Agenda for the 64th Meeting of ISO/IEC JTC1/SC2/WG2, Matsue, Japan, 2015-10-19, 23; Michel Suignard, convener; 2015-10-23

Mr. Michel Suignard, the new convener, opened the meeting at 14:10h.

(Welcoming of the experts by the host, explanation of logistics and meeting facilities, and introduction by the attending experts, were done in the JTC 1/SC 2 plenary session that preceded the WG 2 meeting.)

On the assumption that we can use a mirror site for WG 2 access, URL: www.unicode.org/wg2/docs contains the documents for this meeting, including any updates to the agenda.

1.1   Roll call:

Input document:

4673 WG2 experts list; Uma; 2016-10-01 (available from the convener).

A hardcopy of the WG2 experts list was circulated and attendees were requested to indicate any updates needed. Going forward, this list of experts will be made available only upon request to the convener. It will not be posted as a searchable public document.

The following **37** experts and guests accredited by **6** national bodies and **3** liaison organizations were present at different times during the meeting.

Name	Accreditation	Affiliation
Qin LU	.IRG rapporteur	Hong Kong Polytechnic University
Yoshiki MIKAMI	.SC 2 Chairman	Nagaoka University of Technology
Toshiko KIMURA	.SC 2 Secretariat	IPSJ/ITSCJ
Chui-Hsing CHIU	.TCA (Cat. C Liaison)	Bureau of Standards, Metrology and Inspection
Lin Mei WEI	.TCA (Cat. C Liaison)	Chinese Foundation for Digitization Technology
Suh-Chyin CHUANG	.TCA (Cat. C Liaison)	Bureau of Standards, Metrology and Inspection
Michel SUIGNARD	.WG 2 Convenor; USA	Unicode Inc.
V.S. (Uma) UMAMAHESWARAN	Canada	IBM Canada
Daisy LAI	China	Guizhou University
GuoYing LI	China	Beijing Normal University
Liming ZHAO	China	Tsinghua University
Qinjun YAO	China	Institute of Ethnology, Libo
ShiJang WEI	China	Independent
Wushouer SILAMU	China	Xinjiang University
Xin HU	China	Jiangyong Nushu Eco Museum
Zhonghua LIU	China	Nushu Rescue and Protection Leading Group of Jiangyong County
Zhuang CHEN	China	CESI
Michael EVERSON	Ireland	Evertype
Keisuke KOIDE	Japan	METI
Keisuke MUTOU	Japan	IPA

Name	Accreditation	Affiliation
Kiyonori NAGASAKI	Japan	University of Tokyo
Masaru TAKECHI	Japan	ARIB
Shuichi TASHIRO	Japan	IPA
Tatsuo KOBAYASHI	Japan	Meiji University
Tetsuji ORITA	Japan	IBM Japan
Tomokazu TAKADA	Japan	National Language Research Institute
Toshiya SUZUKI	Japan	Hiroshima University
Wataru TAKAGI	Japan	Hitachi Ltd.
Yoichi MIHASHI	Japan	SCREEN Graphic and Precision Solutions Co. Ltd.
Daniel KOBAYASHI-BETTER	Japan (Guest)	Osaka University
Kenji HIAMOTO	Japan (Guest)	Cabinet Secretariat
Orie ENDO	Japan (Guest)	Independent
Tsutomu YADA	Japan (Guest)	Osaka University
Andrew WEST	UK	Independent
Kenneth WHISTLER	USA	Unicode Inc.
Deborah ANDERSON	USA, UC Berkeley (Cat. C Liaison)	UC Berkeley
Peter CONSTABLE	USA, Unicode (Cat. A Liaison)	Microsoft

Messrs. Michel Suignard, Toshiya Suzuki and Dr. Deborah Anderson volunteered to be on the drafting committee assisting Dr. Umamaheswaran, the recording secretary, in drafting the meeting recommendations.

2   Approval of the agenda

Input document:
4685 Second Draft Agenda for the 64th Meeting of ISO/IEC JTC1/SC2/WG2, Matsue, Japan, 2015-10-19, 23; Michel Suignard, convener; 2015-10-23
Output document:
4700 Agenda for the 64th Meeting of ISO/IEC JTC1/SC2/WG2, Matsue, Japan, 2015-10-19/23; Michel Suignard, Convener; 2015-08-04

Mr. Michel Suignard: The tentative agenda is in document N4685. Some of the hyperlinks in the agenda document are to publicly available documents – especially those that have double postings.

The following are some additions to the agenda:
- Nushu 2 new documents: N4689, N4690
- Soyombo
- CJK being normative.
- Oracle Bones, Small Seal script, Shuishu script – new contributions from Chinese experts.

Updated agenda will reflect the above changes. Document N4700 contains the updated agenda; and it was kept up to date as the meeting progressed.

Agenda management:
Mr. Michel Suignard:

Nushu script has number of complicated comments. We will have an ad hoc to address the comments. Mr. Peter Constable will chair the ad hoc. Some of the Nushu experts are not here today. My understanding is that we can have it tomorrow morning.
Japanese expert in Nushu will be leaving tomorrow night.
Mr. Chen Zhuang: The Chinese experts will be here tonight.
I will expect the ad hoc to start at 09:00h. I prefer not to take more than half a day. 09:00h to 12:00h.

We had ad hoc on Soyombo and Zanabazar Square in Tokyo before this meeting. There will be an ad hoc report. It will be posted to the document collection.

Japanese TV symbols – may have a brief presentation.
On Wednesday morning, we can take up Hentaigana.
Are there any time constraints on any other topic? (None).
We will try to wrap up by Thursday noon. The SC 2 'Sort' ad hoc will meet Thursday afternoon for about an hour.

Disposition: The agenda was approved as updated above. It was also updated and posted to the WG 2 website as new topics or contributions were identified as the meeting progressed.

(Note: the item numbers in these minutes do not always align with the agenda item numbers in document N4700. 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 discussion are dropped from these minutes, and any relevant documents that were not discussed are grouped as FYI only, or to be carried forward. The following table of contents reflects the items that were discussed.)

3 Approval of minutes of meeting 63

Input document:
4603 Unconfirmed minutes of WG2 meeting 63; Uma; 2015-09-01

Dr. Umamaheswaran: No comments have been received so far. Experts are requested to view and pass on any comments to Dr. Umamaheswaran before the end of the meeting.

Disposition: Adopt the minutes as presented.

Action item: Convener to send the adopted minutes for distribution to SC2.

4 Review action items from previous meeting

Input document:
4603-AI Action items from WG2 meeting 63; V.S. Umamaheswaran, Recording Secretary; 2015-09-01

Dr. Umamaheswaran reviewed and updated the action items from the previous meetings. The resulting updated status for each item is shown below. Of the total of **36** action items that were reviewed, **7** items are carried forward as 'in progress', and **29** items have been 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 59.)	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 and M62 -- in progress.	In progress.

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 section 3 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.	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.	In progress

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

Item	Assigned to / action (Reference resolutions in document N4604, and unconfirmed minutes in document N4603 for meeting 63 - this document you are reading).	Status
AI-63-1	Recording Secretary - Dr. V.S. UMAmaheswaran	
a.	To finalize the document N4604 containing the adopted meeting resolutions and send it to the convener as soon as possible.	Completed; see document N4604.
b.	To finalize the document N4603 containing the unconfirmed meeting minutes and send it to the convener as soon as possible.	Completed; see document N4603.
AI-63-2	Convener - Mr. Mike Ksar	

	To take note of and act upon the following items:	
a.	*M63.04 (Changes to sub-clauses related to presentation of CJK ideograph sources):* … WG2 further requests SC2 to communicate to Unicode Consortium to take note of recommendation in section 2.3 of document N4620.	Completed.
b.	*M63.18 (Roadmap snapshot):* WG2 requests its convener to post the updated snapshot of the roadmaps (in document N4617) to the WG2 web site and communicate the same to SC2 secretariat. WG2 also requests SC2 to create on SC2 LiveLink site, a standing document named 'Roadmaps', an appropriately edited version of the current 'Roadmaps' page on WG2 website, with a single URL pointing to www.unicode.org/roadmaps, towards eliminating the need to create a snapshot prior to each WG2 meeting.	Completed. See SC2 standing document SD1 SC2 Roadmaps.
c.	*M63.13 (Tones for human being emoji):* WG2 requests SC2 to communicate to Unicode Consortium that SC2 would like UTC to have a public review issue on the encoding to satisfy 'tones on human being emoji' to enable national bodies to get public feedback from their countries or regions. SC2 is requested also to alert national bodies to keep a lookout for the announcement of such a public review issue on the Unicode web site.	Completed.
d.	To add relevant contributions carried forward from previous meetings to agenda of next meeting. (See list of documents under AI-63-8, items b and c below.)	Completed.
AI-63-3	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.	*M63.01 (Disposition of DAM1 ballot comments)***:** WG2 accepts the disposition of ballot comments for DAM1 to the 4th edition in document N4615. All the comments being editorial, WG2 further recommends that the updated text of DAM1 be sent to SC2 to forward to ITTF for publication.	Completed.
b.	*M63.03 (Disposition of ballot comments of PDAM2 to 4th edition):* WG2 accepts the disposition of PDAM2 ballot comments in document N4649. The following significant changes are noted: a. Create a new block 11660…1167F named MONGOLIAN SUPPLEMENT Move the 5 currently encoded Birgas from 181A…181E in the Mongolian block to this new block Accept the proposed **8** new Birgas in document N4632 and add them in this new block Rename existing ones and name new ones per suggestion for naming proposed in comment T.5 by UK with code positions, names and glyphs as shown in the charts in document N4637 b. Insert **1** new Tangut ideograph after 17131, correct the glyphs and reorder several of the Tangut ideographs, per document N4588R2 (final charts in document N4637) and in response to PDAM2 comment T.2 from China c. Move 6 Tamil archaic characters from 0BDF, 0BFB…0BFF to 11FF0…11FF5 in Tamil Supplement block d. Rename 11A29 to ZANABAZAR SQUARE LETTER -A e. Rename 1B100 to NUSHU ITERATION MARK and move it to 16FE1 in Ideographic Symbols and Punctuation block; reorder the Nushu block by moving up 1B101…1B28C by one code position f. Add **1** character 08D4 ARABIC SMALL HIGH WORD AR-RUB in Arabic Extended-A block (from document N4592) g. Add **3** characters - 08BB ARABIC LETTER AFRICAN FEH, 08BC ARABIC LETTER AFRICAN QAF, and 08BD ARABIC LETTER AFRICAN NOON in Arabic Extended-A block (from document N4597) h. Move 1F32D to 23FE and rename it POWER SLEEP SYMBOL, and, i. Several corrections to glyphs, annotations and headings in nameslists	
c.	*M63.04 (Changes to sub-clauses related to presentation of CJK ideograph sources):* WG2 accepts the proposed changes to sub-clause 23.1, sub-clause 23.2, and the updated glyphs for 205 J column ideographs, described in section 2.2 from document N4620, for inclusion in Amendment 2.	
d.	*M63.05 (Updates to CJK chart and source references):* WG2 accepts the proposed changes to the seven source references and glyphs as proposed in document N4621 for inclusion in Amendment 2.	
e.	*M63.06 (CJK Unified Ideographs Extension F):* WG2 accepts to create a new block named 'CJK Unified Ideographs Extension F' in the range 2CEB0…2DDBF in the SMP, and populate it with the **3852** ideographs proposed in document N4580 (summary form and its attached files), for inclusion in Amendment 2.	

f.	*M63.07 (Osage script):* WG2 accepts to create a new block named 'Osage' in the range 104B0…104FF in the SMP, and populate it with **72** characters in code positions 104B0…104D3 and 104D8…104FB, with their names and glyphs as shown in document N4619, for inclusion in Amendment 2.	
g.	*M63.08 (Cyrillic characters):* WG2 accepts to create a new block named 'Cyrillic Extended-C' in the range 1C80…1C8F in the BMP, and populate it with **9** characters in code positions 1C80…1C88, with their names and glyphs based on document N4607, with updated names and charts shown in document N4637, for inclusion in Amendment 2.	
h.	*M63.09 (Combining Glagolitic letters):* WG2 accepts to create a new block named 'Glagolitic Supplement' in the range 1E000…1E02F in the SMP, and populate it with **38** characters (all are combining letters) in code positions 1E000…1E02A, with their names and glyphs as shown in document N4608, for inclusion in Amendment 2.	
i.	*M63.10 (Tangut radicals):* WG2 accepts to create a new block named 'Tangut Radicals' in the range 18900..18BFF in the SMP, and populate it with **753** characters in code positions 18900..18BF0, with their names and glyphs as shown in document N4636, for inclusion in Amendment 2.	
j.	*M63.11 (Additional changes in Amendment 2):* WG2 accepts the following additional changes in Amendment 2: a. Add A8C5 SAURASHTRA SIGN CANDRABINDU with its glyph from document N4590 in the Saurashtra block b. Add 0C80 KANNADA SIGN SPACING CANDRABINDU with its glyph in document N4591 in the Kannada block c. Add 20BE LARI SIGN in the Currency Symbols block, with a glyph based on the Logo in document N4593 that is acceptable to the proposers d. Add 1018E NOMISMA SIGN in the Ancient Greek Numbers block; with the 'default' form for the glyph shown in document N4594 e. Add 2E44 DOUBLE SUSPENSION MARK in the Supplemental Punctuation block, with glyph similar to the one in document N4595 f. Add 1018D GREEK INDICTION SIGN in Ancient Greek Numbers block, with 'default' form for the glyph from document N4596 g. Rotate the glyph for 3127 BOPOMOFO LETTER I by 90 degrees, with an appropriate change in the annotation, per request in document N4609, and, h. Reverse the shape of current glyph for 301C WAVE DASH as requested in document N4606 i. Add a new extended collection named MOJI-JOHO-KIBAN IDEOGRAPHS based on document N4625, introductory text for collection from Japanese expert and an appropriate modification by the editor to Note 3 under section 4.25 to permit non-named sequences in extended collections.	
k.	To check and fix incorrect H3 source for CJK Ideographs from document N4598 in CJKC_SR.txt file for PDAM2.1.	
l.	*M63.12 (Progression of PDAM2):* WG2 recommends that its project editor prepares and forwards the final text of Amendment 2 to the 4th edition of the standard, which will include the changes arising from recommendations M63.03 to M63.11 above, along with the final disposition of comments (document N4649) to the SC2 secretariat for processing as a PDAM 2.1 ballot. The final code charts will be in document N4637. The target starting dates are modified to: PDAM 2.1 2014-10 DAM: 2015-05, FDAM: 2015-11. WG2 notes that a possibly revised Adlam script and characters to satisfy 'tones on human being emoji', are some additional candidates for inclusion in the text of Amendment 2.	Items b to l – Completed.
m.	*M63.14 (Project subdivision for future 5th edition of the standard):* Recognizing the need to amalgamate the content of 4th edition with Amendments 1 and 2, and to enable further additions to the standard that have been proposed once they are mature, WG2 recommends to its convener and project editor to generate a new project subdivision proposal for the next (5th) edition of the standard, along with a suitable schedule, and submit it to SC2 for approval.	Completed.
AI-63-4	IRG Rapporteur and IRG Editor (Dr. Lu Qin)	
	To take note of and act upon the following items:	

a.	*Recommendation M63.19 (Future meetings):* WG2 endorses the following schedule for future meetings:
	       IRG Meeting 44 - 2015-06-15/19, Seoul, Korea (Republic of)
	       IRG Meeting 45 - 2015-10-26/30 (2015-11-16/20 as backup), HK Polytechnic Univ., Hong Kong SAR
		Completed

b.	*M63.04 (Changes to sub-clauses related to presentation of CJK ideograph sources): … W*G2 additionally requests the IRG to review the resulting CJK Unified Ideographs charts that will be in document N4624.	Completed	
c.	To supply the project editor all the information needed to be able to produce the Extension F charts for PDAM 2.1.	Completed	
d.	To review and provide feedback on document N4630 on horizontal extension of 152 Hanja char; KIM Kyongsok; 2014-09-24	Completed	
AI-63-5	Ad hoc group on roadmap (Dr. Umamaheswaran)		
a.	To update the Roadmaps with the results from this meeting.	Completed. See SC2 standing document SD1 SC2 Roadmaps.	
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	Expert from Unicode consortium (Mr. Peter Constable)		
a.	To review and clarify the wording of the associated annotation for 301C Wave Dash - especially about the 'mapping'.	Completed.	
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 items.		
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.	In progress	
b.	*M63.16 (Shuishu script):* WG2 invites the authors of document N4638 to revise their proposal on the Shuishu script taking into account the feedback received at this meeting, working with other experts interested in this script.	In progress.	
c.	*M63.17 (Naxi Dongba script):* WG2 invites the authors of document N4633 to revise their proposal on the Naxi Dongba script taking into account the feedback received at this meeting, working with other experts interested in this script.	In progress.	
d.	Nushu experts to review feedback document N4610 and document N4626 on Nushu from Japanese expert. Japanese experts are invited to provide comments on PDAM 2.1 along the lines of their contribution on Nushu in document N4626.	Completed.	
AI-63-8	Experts from all national bodies and liaison organizations		
	To take note of and provide feedback on the following items.		
a.	*Recommendation M63.19 (Future meetings):* WG2 endorses the following schedule for future meetings: WG2 Meeting 64 - 2015-10-19/23, Matsue, Japan (location is tentative) (co-located with SC2) WG2 Meeting 65 - 2016-10 (tentative), Russia (tentative), USA (backup) (co-located with SC2) WG2 Meeting 66 - 2017-10 (tentative), China (pending confirmation) (co-located with SC2)	Noted.	
b.	Following items are carried forward from earlier meetings - filtered at meeting 63: Scripts, new blocks or large collections (awaiting updated proposals from the authors): Afáka script N4292; Bagam script N4293; Balti 'B' N4016;Balti scripts N3842; Chinese Chess N3910; Dhives Akuru N3848; Diwani Numerals N4119; Diwani Siyaq Numbers N4122; English Phonotypic Alphabet EPA N4079; Eskaya N4499; Garay script N4261;Gondi script N4291; Indic Siyaq N4123; Jenticha N4028;Jurchen N4077; Kawi script N4266; Khatt-i Baburi N4130;Khambu Rai N4018, Kpelle N3762; Landa N3768; Leke N4438; Loma N3756; Moon N4128; N4323;Nandinagari N4389; Nepaalalipi script N4322; Nepal Himalayish N4347; Newar script N4184; Old Yi N3288;Obsolete Simplified Chinese Ideographs N3695; Ottoman Siyaq System Numerals N4118; Ottoman Siyaq N4124;Pau Cin Hau Syllabary N4412; Persian Siyaq N4125;Pyu N3874; Ranjana (N4515), Raqm Numerals N4117; Rohingya N4283;Soyombo script N4414; Tangsa Lakhum Mossang script N4496; Tangsa Latsam Khimhun N4497; Tolong Siki N3811; Tulu N4025; Woleai N4146; Zou N4044.	Some updated.	
c.	The following documents (that were flagged for experts' feedback at meeting 63): N4572 Preliminary Proposal to Standardize Variation Selectors for U+3013; Suzuki Toshiya; 2014-03-31 N4574 Gujarati signs used for the transliteration of Arabic; Anshuman Pandey; 2014-05-02 N4579 IRG Principles and Procedures Version 7; Lu Qin, IRG Rapporteur; 2014-06-19 N4629 SEI Liaison Report to WG2 - Sep 2014; Debbie Anderson, SEI - UC Berkeley; 2014-09-21 N4630 A proposal requesting a horizontal extension of 152 Hanja char; KIM Kyongsok; 2014-09-24	Noted.	

N4634 Proposal to encode Small Seal Script; TCA & China; 2019-09-30	
(See also documents under action AI-63-7 above.)	

5   JTC1 and ITTF matters

5.1   Notice of publication:

Input document:

SC 2/N4403 Notice of publication: ISO/IEC 10646 2014/Amd .1 Cherokee Supplement and other characters; SC2 secretariat; 2015-05-26

The above document was for information of WG2 experts, and was not discussed.

6   SC2 matters:

6.1   Documents for information

Input documents:

SC2/N4377 SC2 meeting #19 resolution: 19-07: revision of ISO/IEC 10646 (5th edition)
SC2/N4399 DAM2 text (requires LiveLink login); SC2 secretariat; 2015-04-27

The above documents were for information of WG2 experts, and were not discussed.

6.2   Summary of Voting on 10646: DAM2 to 4th edition

Input document:

SC2/N4428 Summary of Voting on ISO/IEC 10646:2014/DAmd 2; SC2 secretariat; 2015-10-08 (requires LiveLink login)

Out of the 38 responses to the ballot, 12 (11 P-members and 1 O-member) had voted positive (with comments from US), 3 (all P-members had voted negative – Ireland, Japan and UK, along with their comments), 23 (20 P-members and 3 O-members) had abstained.

During the disposition of comments discussion, it was pointed out that the US vote should have been recorded as 'negative' with associated comment, instead of 'positive'.

6.3   Disposition of Ballot Comments DAM2 to 4th edition

Input documents:

4522 Proposal to encode the Tangut script in the UCS; Andrew West, Michael Everson, Han Xiaomang, Jia Changye, Jing Yongshi, Viacheslav Zaytsev; 2014-01-21
4667 Review of Tangut repertoire in DAM ballot; Andrew West, Michael Everson, Viacheslav Zaytsev; 2015-07-16
4683 Draft disposition of comments on DAM2 text to ISO/IEC 10646 4th edition; Michel Suignard, project editor; 2015-10-11
4684 Reply to WG2N4650 and WG2N4667 on Tangut; China; 2015-10-13

Output documents:

4691 Disposition of comments on DAM2 text to ISO/IEC 10646 4th edition; Michel Suignard, project editor; 2015-10-20
4694 Additional repertoire Amendment 2 (FDAM2) to ISO/IEC 10646:2014 (4th edition); Michel Suignard, project editor; 2015-10-22

Mr. Michel Suignard: The draft disposition of comments contains the comments received from Ireland, Japan, UK and the US, along with the proposed dispositions.

Ireland: Disapproval

T1. Page 14, Row 08A0: Arabic Extended-A.

Ireland requests the change of the name of 08E2 from DISPUTED END OF AYAH to ARABIC DISPUTED END OF AYAH. Compare 06DD ARABIC END OF AYAH.

Disposition: Accepted – change the name of 08E2 to ARABIC DISPUTED END OF AYAH.

T2. Page 65, Row 17000: Tangut.

Ireland requests revision to Tangut encoding according to recommendations in document N4667.

(See also comments T1 to T5 from UK)

Disposition: See discussion and disposition to comments from *United Kingdom* on page 12.

E1. Page i, Title page.

Ireland requests that the name "Osage" be added to the title of the Amendment.

Disposition: Accepted in principle. Can change title of amendment, but is too late for project sub-division document.

E2. Page 24, Row 1C80: Cyrillic Extended-C.

Ireland requests that the glyphs be improved slightly. Some experts have provided comments and an updated font is available.

Disposition: Accepted in principle. Mr. Michael Everson will provide font.

E3. Page 25, Row 20A0: Currency Symbols.

Ireland requests a change to the glyph of 20BE LARI SIGN so that the right hand curve is longer and thicker. In addition, on the following page most of the glyphs are not shown.

Disposition: Accepted and missing glyphs will be fixed.

E4. Page 41, Row 3CED: CJK Unified Ideographs Extension-A.

Ireland requests that the winding errors for 4C88-K3-3661 and 4C89-K3-3663 be corrected.

Mr. Michel Suignard: I can alert Prof. Kim about this. It seems the issue is related to the Font Design. If someone has a low resolution, it could be too close.

Disposition: Accepted in principle.

E5. Page 144, Row 1F300: Miscellaneous Symbols and Pictographs.

Ireland requests that the glyph for 1F3F9 BOW AND ARROW be centred properly.

Disposition: Accepted.

E6. Page 144, Row 1F300: Miscellaneous Symbols and Pictographs.

Ireland requests a cross-reference for 1F3FA AMPHORA to U+100E8 LINEAR B IDEOGRAM VESSEL B209.

Disposition: Accepted.

Mr. Michael Everson: Based on the above dispositions, Ireland changes its vote to Acceptance.

Japan: Disapproval

T1. Page 29, Sub-clause 23.1 List of source references.

Out of CJK J source characters having JIS X0212 source and JA source, the source reference of the characters also encoded in JIS X0213 are changed. In order to represent the meaning of source reference clearly, JNB would like to change the "index" of each source reference. Japan proposes changing the index used for the source references: J3B to J13, J3C to JA3, J4B to J14, J4C to JA4, and add a new entry J13A (with its source reference provided).

Mr. Michel Suignard: The work on source references associated with JIS standards started a few ballots ago. The proposed changes are related to fixing the Source References, and are refinements to what we had done before. A new convention is used. The only change that requires clarification is for the newly added J13A – which changes the source reference for two characters U+7626 and U+7E6B from J3A to J13A type. The other 8 characters having now J3A sources (U+4FF1, U+525D, U+541E, U+5653, U+59F8, U+5C5B, U+5E77, and U+20B9F) keep that value. I would like JP NB to confirm that above-proposed disposition is correct.

Disposition: Accepted. These changes will be reflected in Amd. 2 as well as in CD 5th edition.

T2. Page 29, Sub-clause 23.1 List of source references.

Following the comments in T.1 above, Japan requests changing the source references shown in the code charts for the affected code points.

Mr. Michel Suignard: The code chart sample provided by Japan has some errors. It will be corrected.

Disposition: Accepted in principle. The charts will reflect the changed index values for source references from disposition for T.1 above.

T3. Page 29, Sub-clause 23.1 List of source references.

Japan points out a potential difficulty in recognizing JIS X0212 characters when the source code separation rule is applied to some of the JIS X0212-1990 characters as proposed in this amendment. Japan proposes some clarification text as described under comments T9 and T10 related to Annex P below from Japan.

Mr. Michel Suignard: There is already a note under S.1.6 indicating collection 372 identifies JIS X0212-1990 characters. We can consider additional clarification in Annex P.

Disposition: Accepted in principle.

T4. Page 29, Sub-clause 23.1 List of source references.

In alignment with comment T1 above from Japan, Japan proposes replacing J3B-hhhh, J3C-hhhh, J4B-hhhh, and J4C-hhhh, with J13-hhhh, JA3-hhhh, J14-hhhh, JA4-hhhh, and J13A-hhhh, for additional third field format values.

Disposition: Accepted.

T5. Page 29, Sub-clause 23.1 List of source references.

Japan proposes to reflect the changed source reference indexes from comment T1 above, also in relevant entries in the new CJKSrc.txt file.

Mr. Michel Suignard: There is one incorrect change in the comment from Japan; J3BA should be J13A.

Disposition: Accepted in principle.

T6. Page 2393, Annex A.4.3 371 JIS 2004 IDEOGRAPHICS EXTENSION

Japan proposes to reflect the changed source reference indexes from comment T1 above, in the relevant sentence to read as:
"The code points of this collection are identified by J3 *Kanji* J sources (J3, J3A, J13, J13A and JA3) and J4 *Kanji* J sources (J4, J14 and JA4) in the Source Reference file for CJK Unified Ideographs (CJKSrc.txt). See 23.1 and 23.2 for details."

Mr. Michel Suignard: The reference in T6 above should be to A.4.2 instead of A.4.3.
Disposition: Accepted in principle.

T7. Page 2393, Annex A.4.3 372 JAPANESE IDEOGRAPHICS SUPPLEMENT

Japan proposes correcting the Note replacing 2742 with 2743 to read:
"NOTE – 2743 characters are common between the collections 371 and 372."

Mr. Michel Suignard: This note with the error has been in place for a long time. I am assuming Japan's new count is correct.
Disposition: Accepted.

T8. Page 2423, Annex I.2 Syntax of an ideographic description sequence

Japan proposes to delete - "a coded stroke, which consists of any coded character from the CJK STROKES block." - providing some rationale for its proposal.
Mr. Michel Suignard: There are clearly arguments pro and con for allowing the CJK Strokes in DCs. However, the fact that some CJK Ideographs cannot be represented in their absence seems a compelling argument. A similar argument was made with PDAM2.3 ballot and the response from there is quoted (in the draft disposition document).
Discussion:
   a. Mr. Peter Constable: As part of ISO/IEC 10646, we do not document any IDSs. One of the audiences for these would be IRG. They can declare that IDSs are not used to represent the characters in the standard. IDS is only a tool to describe the character.
   b. Mr. Michel Suignard: IDS-s are provided in input contribution; for example, CJK F was with IDSs.
   c. Dr. Ken Whistler: It should be clear that ISO/IEC 10646 does not define a formal language syntax using IDCs. It is for the groups such as IRG to prescribe where the strokes can or cannot be used in an IDS.
   d. Mr. Toshiya Suzuki: Am I hearing that the entire IDS related stuff should be removed?
   e. Dr. Ken Whistler: No. I think the editor's disposition is appropriate. We will have the description in the standard. However, it will not be a formal syntax. If IRG wants to put a constraint on it and write a parser, they are free to do so. ISO/IEC 10646 will not enforce this.
   f. Mr. Toshiya Suzuki: Specifying what kind of IDCs could be in the IDS should be in ISO/IEC 10646.
   g. Dr. Ken Whistler: IDS may not be appropriate for some ideographs or others such as emoji.
   h. Mr. Tetsuji Orita: IRG can restrict the IDSs to whatever is appropriate for them.
   i. Mr. Michel Suignard: It is up to users of IDS-s such as IRG.
Disposition: Not accepted.

T9. Page 2453, Annex P Additional information on CJK Unified Ideographs

Japan proposes to attach a file containing the list of 2828 characters mentioned in the description about J1 and JA source characters in Annex P.
Mr. Michel Suignard: A better place for such an enumerated list of code points describing these characters is in Annex A, for consistency.
Disposition: Accepted in principle. Include the list in Annex A

T10. Page 2453, Annex P Additional information on CJK Unified Ideographs

Japan requests revising the descriptive text related to JIS X 0213-2004 in Annex P, to reflect changes to the source reference indexes (per comment T1 above, from Japan). Also, add text to reflect the addition of the list of characters per comment T9 above from Japan. Proposed replacement text is also included.
Mr. Michel Suignard: As mentioned for comment T8 above, the list of characters should be under Annex A, possibly as a new collection 374. Concerning the graphic descriptions above related to source separation, it would be better to add a note under Annex S.3 such as:

   NOTE – Seven pairs described below have J sources, which were originally part of the JIS X 212-1990 level-3, therefore covered by the Source separation rule, which are also part of the JIS X 213:2004 with source identified as J13. The pairs (J13 character code points emphasized) are **U+5861**-U+586B, U+6483-**U+64CA**, U+75E9-**U+7626**, **U+83D1**-U+8458, U+848B-**U+8523**, U+91A4-**U+91AC**, and **U+985A**-U+985B.

Disposition: Accepted in principle. Changes will be according to the suggestions from Michel Suignard above.

Based on the above dispositions, Japan changed its vote to Acceptance.

United Kingdom: Disapproval

T1. Tangut U+17CF0

UK proposes correcting the glyph for 17CF0, with rationale provided in document N4667.

(See also comment T2 from Ireland.)

Mr. Michel Suignard: UK requests a change for the middle component while document N4684 from Chinese experts requests a change for the left component.

Discussion:

    a. Mr. Andrew West: 17E33 in the DAM ballot is the character marked in the Chinese input. 17CF0 looks similar to this – probably a variant of it. It is one stroke different from 17E33. China's suggestion should be for 17E33.

    b. (After checking with Chinese experts) Chinese experts are not happy about the proposed change.

    c. Mr. Michael Everson: I am willing to explain to the Chinese expert what we are proposing.

    d. Mr. Chen Zhuang: The expert is agreeable to show the strokes clearly separated out. However, not the way it is proposed by UK or Ireland.

    e. Mr. Andrew West: Based on further discussion with Chinese experts, UK is willing to withdraw this comment.

Disposition: Comment is withdrawn by UK.

T2. Tangut U+17F24

UK proposes reordering 17F24 to 17F20, and moving 17F20...17F23 to 17F21...17F24, with the rationale provided in document N4667.

(See also comment T2 from Ireland.)

Disposition: Accept. Reorder as proposed.

T3. Tangut U+18316

UK proposes reordering 18316 to 18314, and moving 18314...18315 to 18315...18316, with the rationale provided in document N4667.

(See also comment T2 from Ireland.)

Disposition: Accept. Reorder as proposed.

T4. Tangut U+186A1 and U+186A2

UK proposes removing 186A2, and moving 186A3...187ED to 186A2...187EC, with the rationale provided in document N4667, showing 186A1 and 186A2 are insignificant glyph variants of the same character, and should have been unified per unification principles in document N4522. UK also proposes using the 186A2 glyph for 186A1 for consistency with 186A0, and changing the source reference for 186A1 to L2008-0523-4565.

(See also comment T2 from Ireland.)

(Chinese experts, in document N4684, also support this proposed change.)

Disposition: Accept. Remove and reorder as proposed.

T5. Tangut Components

UK proposes inserting the two Tangut components shown in N4667 at 18817 and 18818, and move 18817...18AF0 to 18819...18AF2. The removal of these two components was a mistake, as they are required to represent Tangut stroke types.

(See also comment T2 from Ireland.)

Disposition: Accepted. Add back the two components and reorder as proposed. Mr. Andrew West is to supply the data for the components to the project editor.

Mr. Andrew West: Based on the above dispositions, UK changes its vote to Acceptance.

United States: Negative with comments

(SC2 summary of responses indicates Acceptance… was in error).

Technical comment

T1. Tamil Supplement

The US requests the Tamil Supplement block be removed from the ballot until additional review and study can be conducted.

Discussion:

    a. Dr. Deborah Anderson: We received feedback from various Tamil communities to delay the Tamil supplement block. There is still some discussion going on in some committees in Tamil Nadu and they have not met yet.

    b. Mr. Michel Suignard: What was India's response to the ballot? India has abstained on DAM2 ballot. We can accept the US comment – by removing it from Amd. 2 but including it in the CD 5th edition, giving another opportunity for review and commenting by Tamil community.

Disposition: Accepted. Move Tamil Supplement block from Amd. 2 to CD of 5th edition.

Editorial comment
E1. Page 11 Annex I
US proposes correcting "The subgroups and their contents is as follows:" to "The subgroups and their contents are as follows:" in Annex I.2.
Disposition: Accepted.

Dr. Deborah Anderson: US changes its response to Acceptance.

Disposition:
Mr. Michel Suignard: After checking with the SC2 secretary, since we did receive at least one Negative vote, we cannot go straight to publication. We have to ask SC2 for an FDAM 2-month ballot before publication.
The final disposition of comments will be in document N4691 with the associated code charts to be used for FDAM2 in document N4694.

Relevant recommendation:
M64.03 (Disposition of ballot comments of DAM 2 to the 4th edition):
WG2 recommends that SC2 accepts the disposition of DAM 2 ballot comments in document N4691. The following significant changes are noted:
a. The Tamil Supplement block (11FC0...11FFF, **55** characters) is moved out of Amendment 2 and inserted into the CD for 5th edition.
b. In the Tangut block, 186A2 is removed; two Tangut components (shown in N4667) are added at 18817 and 18818; and various other glyph changes, re-orderings and source reference changes are made.
c. 2828 CJK Ideographs J-Sources were updated.
d. 08E2 is renamed to ARABIC DISPUTED END OF AYAH.

See relevant recommendations in section 10.5 on page 35.
7   WG2 matters

7.1   Related to Amendment 2 to 10646 4th edition
Input documents:
SC2/N4379 ISO/IEC 10646:2014/PDAM 2.2, Information technology -- Universal Coded Character Set (UCS) - - AMENDMENT 2: Bhaiksuki, Marchen, Tangut, Zanabazar Square, and other characters; SC2 Secretariat; 2014-10-14
SC2/N4387 Summary of voting on SC 2 N 4379, ISO/IEC 10646 (Ed.4)/PDAM 2.2, Information technology -- Universal Coded Character Set (UCS) -- Amendment 2: Bhaiksuki, Marchen, Tangut, Zanabazar Square, and other characters; SC2 Secretariat; 2015-01-19 (Requires LiveLink login)
4656 Disposition of comments on PDAM2.2 to ISO/IEC 10646 4th edition; Michel Suignard, project editor; 2015-01-22
SC2/N4389 ISO/IEC 10646:2014/PDAM 2.3, Information technology -- Universal Coded Character Set (UCS) -- AMENDMENT 2: Bhaiksuki, Marchen, Tangut, and other characters; SC2 Secretariat; 2015-02-03
SC2/N4395 Summary of Voting on SC 2 N 4389, ISO/IEC 10646:2014/PDAM 2.3, Information technology -- Universal Coded Character Set (UCS) -- AMENDMENT 2: Bhaiksuki, Marchen, Tangut, and other characters; SC2 Secretariat; 2015-04-07 (Requires LiveLink login)
4664 Disposition of comments on PDAM2.3 to ISO/IEC 10646 4th edition; Michel Suignard, project editor; 2015-04-24

Mr. Michel Suignard: The above documents are related to progression of Amd. 2 since the last WG2 meeting. We did a PDAM2.2. Disposition of comments were in document N4656. A PDAM2.3 was issued for a 2-month ballot, removing controversial items from PDAM 2.2. It was approved - see disposition of comments in document N4664. It led to a DAM2 ballot and we have the ballot comments and disposition under item 6.3 on page 9 above. As the project editor, I had some freedom to do modification of names and moving of code points, to satisfy the various ballot comments at the committee level, and I have exercised that. The various documents that were considered are listed for WG2 experts' information under items 9.1, 9.2and 9.3.

7.2   10646 5th edition
7.2.1   Summary of Voting on CD of 10646 5th edition
Input documents:
SC2/N4405 ISO/IEC CD 10646 (Ed. 5), Information technology – Universal Coded Character Set (UCS); SC2 Secretariat; 2015-06-01
SC2/N4416 Summary of voting on ISO/IEC CD 10646 (Ed.5) - SC 2 N 4405, Information technology -- Universal Coded Character Set (UCS); SC2 Secretariat; 2015-09-04 (Requires LiveLink login)

There were 10 approvals, 5 disapprovals (Germany, Japan, Mongolia, UK and USA), 10 abstentions and 2 no responses.
7.2.2   Disposition of comments on CD of ISO/IEC 10646 5th edition
Input documents:
4184 Proposal to Encode the Newar Script; Anshuman Pandey; 2012-01-05.
UTC L2/14-281 Rationale for Atomic Encoding of Murmured Resonants in Newa, Ken Whistler, 2014-10-27.
4522 Proposal to encode the Tangut script (27MB); Andrew West, et al; 2014-01-23

4580 Proposal for CJK Unified Ideograph Extension F, Lu Qin, IRG Rapporteur; 2014-08-18
4610 Progress Report of Nushu Code Chart Review by Japanese; Suzuki Toshiya; 2014-09-02
4652 Proposal of Nushu Code Chart based on WG2 N4610; Suzuki Toshiya; 2015-01-12
4656 Disposition of comments on PDAM2.2 to ISO/IEC 10646 4th edition; Michel Suignard, project editor; 2015-01-22
4663 Further discussion on the disposition of PDAM2.2 ballot comments; Japan; 2015-04-01
4686 Draft disposition of comments on ISO/IEC CD 10646 5th edition; Michel Suignard, project editor; 2015-10-13
4693 Nushu Ad Hoc Report; Deborah Anderson, UC Berkeley; 2015-10-20
4695 Discussion of 2CEF1; Andrew West and Liang Hai; 2015-10-22
4697 Re-ordering Nushu following the disposition of comments on CD 10646 5th edition; Michael Everson; 2015-10-22
4699 Summary of Ad Hoc Meeting on Two Historical Scripts from Mongolia (Tokyo, Japan); Deborah Anderson, SEI, UC Berkeley; 2015-10-17
UTC L2/15-174 Request to change the representative glyph of MALAYALAM VOWEL SIGN VOCALIC RR; Srinidhi A, and Sridatta A; 2015-07-16
UTC L2/15-211 Suggested edits to the documentation of U+2060 WORD JOINER in ISO/IEC 10646; Laurențiu Iancu and Ken Whistler; 2015-07-29

Output documents:
4698 Disposition of comments on ISO/IEC CD 10646 5th edition; Michel Suignard, project editor; 2015-10-22
4702 Draft additional repertoire for ISO/IEC 10646:2016 (5th edition) CD.2; Michel Suignard, project editor; 2015-10-25

Comments were received from Germany, Japan, Mongolia, UK, and USA. The following document is the disposition of those comments. The disposition is organized per country.

Germany: Disapproval
T1. Page 1571: Row 1F3: Miscellaneous Symbols and Pictographs
Germany requests renaming 1FA54 to BLACK-COLORED HEART (from BLACK HEART) so that it will not be mistaken for a 'Filled' heart.
Mr. Michel Suignard: There are many encoded characters with names in which BLACK can mean either "filled" or black. Starting to use BLACK-COLORED and/or BLACK-FILLED to differentiate the usage cases seems extreme. There is also the proposed annotation for 1F5A4 – 'Unequivocally represented as black in all variants', which should clarify the intent.
Discussion:
    a. Mr. Michael Everson: I agree with the editor's proposal.
    b. Dr. Ken Whistler: We had a dingbat - black heart. I agree with Mr. Michael Everson.
Disposition: Not accepted.

Japan: Disapproval
Comments T1 through T6, and their dispositions, were the same as under comments from Japan for DAM2 ballot response under item 6.3 on page 9 above.
T7. Page 53, Clause 32 Soyombo and Zanabazar Square blocks
Japan requests to exclude Zanabazar Square and Soyombo scripts, pending the outcome of an expert meeting planned for 2015-10-16/17, in Tokyo.

Dr. Deborah Anderson and Mr. Peter Constable presented a report from the meeting. Document N4699 contains the meeting report.

Dr. Deborah Anderson: A meeting of experts on Soyombo and Zanabazar Square scripts was held last Friday and Saturday (Oct 6 and 17, 2015) in Tokyo. The meeting report will be translated to Mongolian for circulation to attendees from Mongolia. The report summarizes the agreements by the attending experts. There are attachments with code chart and nameslist. There are also other attachments to the report.

Revisions to the Soyombo script that is in the CD are identified. An attached revised proposal was prepared. Name changes and annotations to be included are listed. Several corrections to current names (Typos) are also identified. Some footnotes are suggested to be included into the proposal document. It includes removing Mark 3 and change the glyph for Mark 2 and associated annotation. Other annotations were agreed on. Other modifications to the proposal document are also proposed. Two others are suggested for future additions. Other potential candidates for future additions are also listed. Some others are for further study. The attached updated proposal from Mr. Anshuman Pandey includes all the suggested updates for the proposal document.
Discussion:
    a. Mr. Peter Constable: The ad hoc did not discuss any of suggested name changes in the ballot comments.
    b. Mr. Andrew West: Regarding F1A and F1C, did you want to put a note in the charts?
    c. Mr. Peter Constable: The ad hoc report is for updates to the proposal document. Some of the material may be carried over into the standard.

d. Mr. Andrew West: F1C is a character that is used in Astrology; it is not a punctuation mark. If someone is using that as a Punctuation mark, I think it should be a separately coded character.
e. Mr. Toshiya Suzuki: I am trying to understand Mr. Andrew West's comment. Are you against including this character?
f. Mr. Peter Constable: The character is already in the standard. The set of changes needed for the standard is documented and could be used towards progressing the script in the standard.

The following are some notable changes to Soyombo script:
    Correct the names in the code chart for the following four characters to (with CD code points):
    11A84 SOYOMBO CLUSTER-INITIAL LETTER RA
    11A85 SOYOMBO CLUSTER-INITIAL LETTER LA
    11A86 SOYOMBO CLUSTER-INITIAL LETTER SHA
    11A87 SOYOMBO CLUSTER-INITIAL LETTER SA
    Remove 11AA0 SOYOMBO TERMINAL MARK-3
    Change glyph for 11A9F SOYOMBO TERMINAL MARK-2
    Change names for the following three characters (Code points in the previous proposal):
    11A9B SOYOMBO HEAD MARK WITH MOON AND SUN AND TRIPLE FLAME
    11A9C SOYOMBO HEAD MARK WITH MOON AND SUN AND FLAME
    11A9D SOYOMBO HEAD MARK WITH MOON AND SUN
    Skip two slots after 11A83 SOYOMBO LETTER KSSA (11A84 and 11A85) to accommodate two future additions and one slot after SOYOMBO DOUBLE SHAD for a new addition.

Mr. Peter Constable: Zanabazar Square script is used to write Mongolian, Tibetan and Sanskrit. Some of the users of the script are not familiar with all the languages. One of the experts knew about usage for Mongolian – but not for others. In manuscripts, alphabet charts are present; but these are created based on languages. In Mongolia, the letters used for Mongolian are listed first. The others are listed after the first list. The way they are grouped or their readings etc. are also dependant on the language. For example, the reading ba, ssa and va (in Sanskrit) could be different in Mongolian, for example. Another character does not appear in the Mongolian chart. Other related scripts, such as Phags-pa do have names similar to the Sanskrit reading. One of the letters appeared twice in a Mongolian chart to indicate different reading. The Mongolian expert thought that the second should have another glyph to show the duplicate. There was no consensus on some of these. However, we think that what is in the CD is correct.

Discussion:
a. Dr. Deborah Anderson: Several other recommendations are in the ad hoc report to update the proposal document. Adding some paragraphs, footnotes etc.
Change the glyph for 11A33 to Diamond shape (included in revised code chart).
Some 'Also used for ...' in the nameslist. Revised proposal is attached to the ad hoc report. A summary of changes is also identified in the revised proposal. Note the special usage related convention for a character in the chart.
b. Mr. Peter Constable: There was some discussion about whether additional space would be needed for the potential block extensions? If they are script-specific then we may need another column extension. Soyombo already has the space. Editorial marks are potential future candidates. Both these scripts do have Head Marks. They are handled in different ways. In Soyombo they are single characters, but different in Zanabazar.
c. Mr. Michel Suignard: Do we fix these differences? It may be better to change now.
d. Dr. Ken Whistler: I would suggest that we should consolidate what came out of the ad hoc. If a model change is required, we should walk through those first. Mr. Anshuman Pandey's comments were in line

Disposition of ad hoc report on Soyombo and Zanabazar Square scripts:
The recommendations from the ad hoc report are accepted for inclusion in the CD, and to satisfy various ballot comments on Soyombo and Zanabazar Square scripts in the CD.
Disposition of Japan comment T7:
Based on the ad hoc report, Japan's request to getting input from Mongolian experts has been accommodated. Japanese comment has been accepted in principle. However, the script will not be removed from the CD.
T8. Page 53, Clause 32 Nushu block
Japan requests to follow the repertoire proposed in WG2 N4652, pointing to problematic characters as described in WG2 N4610.
(See also comments T9 to T42 from UK.)
(The project editor had reproduced the relevant detailed answer to the points raised in document N4610 from document N4656 (Disposition of comments on PDAM2.2). The other points (mentioned as 'Additional Comments' from UK in document N4656 were not repeated, because a newer version was provided in their ballot response to the CD.)

Disposition:
Accommodated based on Nushu ad hoc report in document N4693.

Nushu ad hoc report:
Dr. Deborah Anderson presented the ad hoc report in document N4693.
Discussion:
   a. Mr. Michel Suignard: Mr. Andrew West will produce the data file. Document N4697 will have the charts. Informative notes will be in the updated CD nameslist. Would be also in the data file. Eventually it will be only in the data file.
   b. Mr. Michael Everson: I would like everyone to note that we have moved the whole block for Nushu in the revision, from 1B100…1B28F to 1B170...1B2FF.
Japan and UK were OK with the ad hoc report in adequately addressing their ballot comments.

Disposition:
Accept the ad hoc report, the associated new Nushu chart with new block position.

T9. Page 53, Clause 32 CJK Unified Ideographs Extension F
Japan requests, citing the recommendation from "CJK_F1 Editorial Meeting Report" (IRG document N2084), deletion of 49 SAT characters and changing radical of 2DCD5 from "stone" to "fire", and changing the radical number and stroke count to "86.13", in CJK-Ext-F charts.
Mr. Michel Suignard: The 49 characters were deleted as part of the 60 and added to CD 5ᵗʰ edition, per document N4656 (Disposition of comments on PDAM2.2). If we change in the radical from stone to fire, this character is probably in the wrong group of characters – with all the surrounding characters with Stone radicals. If we add Ext F2 also to the CD, we may be able to reorder. Reordering is an expensive production option. All the fonts have to be reordered etc. It is not worth the effort for one character.
Discussion:
   a. Mr. Andrew West: If there is going to be reordering of the characters, then we would request to have the radical changed. However, if it is not going to be reordered, we can probably leave it as it is.
   b. Dr. Lu Qin: Both the IRG and Japan had agreed to the change the Radical to Fire. However, if the charts are not going to be reordered then we can leave it with the Stone radical.
Disposition: Accepted in principle. After some side discussions, it was agreed to 'Change the radical to FIRE even if it is not reordered'. Await decision of Ext. F2.

T10. "CJKSrc.txt" file
Japan requests reflecting comment in T9 above in CJKSrc.txt file.
As commented above about CJK F, "CJKSrc.txt" should follow IRG recommendation.
Disposition: Accepted in principle.

T11. Page 2557 Annex A.1 Collections of coded graphics character
Japan requests indicating that collection 373 is a fixed collection.
Disposition: Accepted.

T12. Page 2566, Annex A.4.3 372 JAPANESE IDEOGRAPHICS SUPPLEMENT
Japan requests correcting 2742 to 2743 in the Note about the number of characters between collections 371 and 372.
Disposition: Accepted.

T13. Page 2569, Annex A.5.10 390 MOJI-JOHO-KIBAN IDEOGRAPHS-2015
Japan requests changing 2015 to 2016 in the name of collection 390 to read "390 MOJI-JOHO-KIBAN IDEOGRAPHS-2016".
(See also comment E4, changing Em-Dash to a Hyphen-minus between JOHO and KIBAN in collection's name.)
Discussion:
   a. Mr. Toshiya Suzuki: Some of the characters in MJKI are in CJK Ext. F. At the Colombo WG 2 meeting, Ext. F was not there.
   b. Mr. Michel Suignard: Some characters in Ext. F are identified with JMJKI source, and you may invite national body comments. If the full set of this collection is included in Ext. F1 and F2 it would be better. I also hope that Japan has used the latest CD-5ᵗʰ edition code points for the collection.
Disposition: Accepted in principle.

T14. Page 2570, Annex A.5.10 390 MOJI-JOHO-KIBAN IDEOGRAPHS-2015
Japan requests replacing "JMJKI-2014.txt" attached in CD text with the file that Japan is separately sending to project editor.
Note the characters after U+2CEB0 are CJK F characters.
Disposition: Accepted. The project editor had not received the file so far.

T15. Page 2570, Annex A.5.10 390 MOJI-JOHO-KIBAN IDEOGRAPHS-2015
Japan requests changing the name of "JMJKI-2014.txt".

Disposition: Accepted.

T16. Page 2599, Annex I.2 Syntax of an ideographic description sequence

Japan proposes to delete "a coded stroke, which consists of any coded character from the CJK STROKES block.", providing some rationale for its proposal.

(Same comment was made under DAM2 ballot comment T8. See discussion and disposition under item 6.3 on page 9 above.)

Disposition: Not accepted.

T17. Page 2611, Annex M Sources of characters

Japan requests updating the date of publication of ISO 10754 from 1984 to 1996.

Disposition: Accepted.

T18. Page 2629, Annex P Additional information on CJK Unified Ideographs

Japan proposes to attach a file containing the list of 2828 characters mentioned in the description about J1 and JA source characters in Annex P.

Disposition: Accepted in principle. Include the list in Annex A.

T19. Page 2636, Annex S.3 Source separation examples

Japan points out a potential difficulty in recognizing JIS X0212 characters when the source code separation rule is applied to some of the JIS X0212-1990 characters as proposed in this amendment. Japan proposes some clarification text.

(Same comment was made under DAM2 ballot comment T3. See discussion and disposition under item 6.3 on page 9 above.)

Disposition: Accepted in principle.

T20. Page 2629, Annex P Additional information on CJK Unified Ideographs

Japan requests revising the descriptive text related to JIS X 0213-2004 in Annex P, to reflect changes to the source reference indexes (per comment T1 under DAM2 ballot response above, from Japan). Also, add text to reflect the addition of the list of characters per comment T9 above from Japan. Proposed replacement text is also included.

(Same comment was made under DAM2 ballot comment T10. See discussion and disposition under item 6.3 on page 9 above.)

Disposition: Accepted in principle.

Editorial comments

E1. Page 2562 Annex A.2.3 Blocks in the SIP

Japan requests inserting 'CJK UNIFIED IDEOGRAPHS EXTENSION F 2CEB0-2DD7F' in the list of A.2.3.

Disposition: Accepted.

E2. Page 2562 Annex A.2.3 Blocks in the SIP

Japan requests correcting "The Unicode collections are described in A.5.10." to "The Unicode collections are described in A.6.".

Disposition: Accepted.

E3. Page 2565, Annex A.4.2 371 JIS 2004 IDEOGRAPHICS EXTENSION

Japan proposes correcting "ThThe code points …" to "The code points …".

Disposition: Accepted. (Note that the text has changed per disposition of Japan comment T6 in WG2 N4683.)

E4. Page 2569, Annex A.5.10 390 MOJI-JOHO-KIBAN IDEOGRAPHS-2015

Japan requests correcting "… JOHO—KIBAN … " to "… JOHO-KIBAN".

Disposition: Accepted.

E5. Page 2569, Annex A.5.10 390 MOJI-JOHO-KIBAN IDEOGRAPHS-2015

Japan requests correcting 388 to 390 in "The fixed extended collection 388 MOJI-JOHO-KIBAN IDEOGRAPHS-…. ".

Disposition: Accepted.

E6. Page 2583, Annex A.6.14 315 UNICODE 8.0

Japan requests correcting 314 to 315 in "The fixed collection 314 UNICODE 7.0 is arranged by planes as follows."

(See also comment E21 from U.K.)

Disposition: Accepted in principle.

Note: The editor is intending to replace the sub-clause A.6 Unicode collections and its referencing by the inclusion of the file DerivedAge.txt from Unicode, which describes the various versions of Unicode in much more succinct term. It will prevent any errors brought by the transcription from the original Unicode format.

Mongolia: Disapproval

General comment:

We would like to share our opinion and the latest research outcomes with researcher scholars who specialized on Soyombo script at Tokyo meeting in October 2015. We have to start research project on Soyombo script of the historical and cultural heritage, which is found in Mongolia as soon as possible. This year some conferences will held on Zanabazar and Soyombo

script in abroad and Mongolia. The research outcomes on Soyombo script from the conferences will bring significant result for Encoding project of Soyombo script; therefore, we would like to implement careful research on Soyombo script for further. Thank you for your kind consideration.

Disposition: Noted.

T1. Page 1316-1319 Zanabazar Square - Soyombo

Mongolia indicates that some missing characters will be discussed at a meeting of experts in Tokyo on 14 October 2015, and the consensus results should be considered for possible updates in the standard.

Disposition: Accepted in principle.

(The results from 'the meeting report in document N4699 on Soyombo and Zanabazar scripts' were accepted and will be reflected as part of the disposition of comments for DAM2 and CD5).

T2. Page 1320 Soyombo 2nd column 31st line

Mongolia proposes to add missing Bindu /Sun/ symbol to Soyombo script.

Disposition: Accepted in principle. The Soyombo names were modified as a result of the ad hoc meeting.

T3. Page 1316-1319 Zanabazar Square - Soyombo

Mongolian vowels, consonants, phonetics, word-lore and grammar should be considered in the proposal, to improve the encoding.

Disposition: Accepted in principle. These requests were considered by the ad hoc meeting when preparing an updated repertoire.

United Kingdom: Disapproval
General comment:
G1. Page 32, Code Charts and lists of character names – CJK Unified Ideographs Extension F
UK proposes that detailed information and evidence of usage should be provided for each proposed CJK unified ideograph in a WG2 document for this and all future submissions for sets of CJK unified ideographs – like Extension F.

Mr. Michel Suignard: The effort of gathering detailed information and evidence of usage for CJK ideographs is best done within the scope of IRG. Any national body interested in CJK is strongly encouraged to send its experts to IRG meetings. Document N4580, the initial proposal from IRG, already had additional information about CJK Ext F. One could always have better communication between interested parties.

Discussion:
   a. Dr. Lu Qin: When the IRG member bodies submitted their input, the evidence was provided and is available with IRG collection of documents. The evidence details are filtered out before the resulting information is submitted to WG2. Does the UK wish to have all the evidence submitted to WG2?
   b. Mr. Andrew West: It will be useful to have at least the source of the ideographs so that it will facilitate evaluating – especially for some of the obscure characters.
   c. Dr. Lu Qin: We could provide the source references for each ideograph to WG2 submission. Currently we keep all the source information in the IRG document repository.
   d. Mr. Andrew West: That would be useful.

Disposition: Noted.

Technical comments:
T1. Clause 32, Code Charts and lists of character names – CJK Unified Ideographs – 9FCE
UK proposes to change the residual stroke count for 9FCE from "112.7" to "112.6" in the code chart, and make the corresponding change in CJKSrc.txt, citing references to other code points.

Disposition:

Accepted. This change also applies to Amd. 2.

T**2. Clause 32, Code Charts and lists of character names – Newa – Murmured Resonants**

UK proposes removing the six Newa characters -- 11413, 11419, 11424, 1142A, 1142D, and 1142F, stating that the encoding the six murmured resonants NGHA, NYHA, NHA, MHA, RHA and LHA have not been sufficiently explored (with a reference to document N4184).

Mr. Michel Suignard:

There was a quite a bit back and forth on Newa between different groups. The base document N4184 provides the rationale for keeping these characters. I will be concerned removing these, because keeping these was part of being able to going forward with this script. The rationale for inclusion, based on comprehensive feedback on the original proposal, is given in document L2/14-281.

Discussion:
  a. Mr. Andrew West: We do understand the rationale in document N4184. However, we are not convinced that there are good technical reasons for keeping these due to potential future problems.
  b. Dr. Ken Whistler: This is the case where technical reasons are not the only reason. It is conceivable that one could use Devanagari model and have these as combination sequences. That was clear all along. The issue is that the writing system here is in transition and is being adopted by the user group. In addition, there are some political considerations by the user group for these high-frequency characters. For them, the conjunct formation method was not acceptable. From a technical analysis, conjunct representation would be adequate. There were two communities of interest – one interested in traditional docs in Devanagari style and the modern use group, which does not want to use the conjunct representation. For Newa itself there was no ambiguity. However, the question arises only when Sanskrit is written in this script. Spoofing wise, the incremental damage by adding the six atomic conjuncts should be of very miniscule concern.
  c. Mr. Peter Constable: As to alternate representation and spoofing, the alternate representation is always possible in all existing Indic scripts and we cannot completely eliminate the spoofing arising out of these.
  d. Mr. Andrew West: The clarification provided by Dr. Ken Whistler is useful. Nevertheless, the UK will keep our comments --- the UK committee discussed this topic in great detail.

Disposition:
Not accepted.

T3. Clause 32, Code Charts and lists of character names – Zanabazar Square – 11A09
UK proposes changing the name for 11A09 from "ZANABAZAR SQUARE REVERSED VOWEL SIGN I" to "ZANABAZAR SQUARE VOWEL SIGN REVERSED I", similar to 0F80 TIBETAN VOWEL SIGN REVERSED I.
Proposed change by U.K.
Disposition: Accepted.
Dr. Deborah Anderson: Note that this change is not in the code charts prepared by the ad hoc meeting on Zanabazar.

T4. Clause 32, Code Charts and lists of character names – Zanabazar Square – 11A3A
UK proposes changing the name for 11A3A from "ZANABAZAR SQUARE LETTER CLUSTER INITIAL RA" to ZANABAZAR SQUARE CLUSTER-INITIAL LETTER RA", to be consistent with character names for Tibetan, Phags-pa and Soyombo.
Disposition: Accepted.
Dr. Deborah Anderson: Note that this change is not in the code charts prepared by the ad hoc meeting on Zanabazar.

T5. Clause 32, Code Charts and lists of character names – Zanabazar Square – 11A3B...11A3E
UK proposes changing the names for:
    11A3B from "ZANABAZAR SQUARE LETTER CLUSTER FINAL YA" to ZANABAZAR SQUARE CLUSTER-FINAL LETTER YA".
    11A3C from "ZANABAZAR SQUARE LETTER CLUSTER FINAL RA" to ZANABAZAR SQUARE CLUSTER-FINAL LETTER RA".
    11A3D from "ZANABAZAR SQUARE LETTER CLUSTER FINAL LA" to ZANABAZAR SQUARE CLUSTER-FINAL LETTER LA".
    11A3E from "ZANABAZAR SQUARE LETTER CLUSTER FINAL VA" to ZANABAZAR SQUARE CLUSTER-FINAL LETTER VA".
to be consistent with similar character names in other scripts such as Tibetan, Phags-pa and Soyombo.
Disposition: Accepted.
Dr. Deborah Anderson: Note that these changes are not in the code charts prepared by the ad hoc meeting on Zanabazar.

T6. Clause 32, Code Charts and lists of character names – Zanabazar Square – 11A41...11A44
For consistency with the names of the corresponding characters in Tibetan and Phags-pa, UK proposes to change the names for 11A41 through 11A44 to include the word "MARK".
    Change "ZANABAZAR SQUARE TSHEG" to "ZANABAZAR SQUARE MARK TSHEG".
    Change "ZANABAZAR SQUARE SHAD" to "ZANABAZAR SQUARE MARK SHAD".
    Change "ZANABAZAR SQUARE DOUBLE SHAD" to "ZANABAZAR SQUARE MARK DOUBLE SHAD".
    Change "ZANABAZAR SQUARE LONG TSHEG" to "ZANABAZAR SQUARE MARK LONG TSHEG".
Disposition: Accepted.
Dr. Deborah Anderson: Note that these changes are not in the code charts prepared by the ad hoc meeting on Zanabazar.

T7. Clause 32, Code Charts and lists of character names – Soyombo – 11A98...11A9A
For consistency with the names of the corresponding characters in Tibetan and Phags-pa, UK proposes to change the names for 11A98 through 11A9A to include the word "MARK".
    Change "SOYOMBO TSHEG" to "SOYOMBO MARK TSHEG".
    Change "SOYOMBO SHAD" to "SOYOMBO MARK SHAD".
    Change "SOYOMBO DOUBLE SHAD" to "SOYOMBO MARK DOUBLE SHAD".
Disposition: Accepted.
Dr. Deborah Anderson: Note that these changes are not in the code charts prepared by the ad hoc meeting on Soyombo.

T**8. Clause 32, Code Charts and lists of character names – Soyombo – 11A9B...11A9DT**o be consistent with similar names elsewhere, such as 11A36 ZANABAZAR SQUARE SIGN CANDRABINDU WITH ORNAMENT, UK proposes to change the names for:

> 11A9D "SOYOMBO HEAD MARK WITH CANDRABINDU" to "SOYOMBO HEAD MARK", and
>
> 11A9C "SOYOMBO HEAD MARK WITH SINGLE FLAME" to "SOYOMBO HEAD MARK WITH ORNAMENT".

Disposition: Accepted in principle.

Dr. Deborah Anderson: The ad hoc meeting came with the following names and annotation:

> 11A9B SOYOMBO HEAD MARK WITH MOON AND SUN AND TRIPLE FLAME
>
> > • National symbol of Mongolia
>
> 11A9C SOYOMBO HEAD MARK WITH MOON AND SUN AND FLAME
>
> 11A9D SOYOMBO HEAD MARK WITH MOON AND SUN

T**9. Clause 32, Code Charts and lists of character names – Nushu – 1B100...1B28B**

UK proposes to create a separate text file named NushuSrc.txt that defines the character identity for each Nüshu character, with references to Nüshu Duben [NSDB], Nüshu Yongzi Bijiao [NSYZBJ], and other relevant sources as appropriate, since the Nushu character names that are derived algorithmically derived from their code points do not define the character identify.

Disposition: Accepted in principle.

See Nushu ad hoc report document N4693.

T10 through T42.

These were all comments on Nushu script – character names, ordering or glyph shapes. These comments similar to the ones made in document N4656 (Disposition of comments on PDAM2.2) *(page 21-23) by UK.*

Disposition: The Nushu ad hoc dealt with these comments and disposed of these comments. See the recommendations of the ad hoc in document N4693.

Proposed changes by U.K. and their dispositions:

> T10: Reorder 1B11E under 5 strokes. (Accepted).
>
> T11 -Correct the glyph for 1B11F to reflect the 4-stroke shape shown in NSDB. (Accepted).
>
> T12: Correct the glyph for 1B129 to reflect the shape shown in NSDB and NSYZBJ. (Accepted).
>
> T13: Either change the glyph for 1B13B to the 5-stroke form, **or** reorder 1B13B under 7 strokes. (Accepted reordering).
>
> T14: Correct the glyph for 1B178 to reflect the 6-stroke shape shown in NSDB. (Accepted).
>
> T15: Correct the glyph for 1B196 to reflect the 6-stroke shape shown in NSDB. (Reordered under 5 strokes; no glyph change).
>
> T16: Correct the glyph for 1B19A to reflect the 6-stroke shape shown in NSDB. (Accepted).
>
> T17: Either change the glyph for 1B1B3 to the 7-stroke form, **or** reorder 1B1B3 under 8 strokes. (Changed the glyph).
>
> T18: Correct the glyph for 1B1C1 to reflect the 7-stroke shape shown in NSDB. (Accepted).
>
> T18: Either change the glyph for 1B1CB to the 7-stroke form, **or** reorder 1B1CB under 9 strokes. (Reordered 1B1CB under 9 strokes).
>
> T20: Reorder 1B1CD under 8 strokes. (Accepted).
>
> T21: Either change the glyph for 1B1D1 to the 7-stroke form **or** reorder 1B1D1 under 9 strokes. (Changed the glyph for 1B1D1).8
>
> T22: Change the glyph for 1B1D3 to the 7-stroke form. (Accepted).
>
> T23: Change the glyph for 1B1DF to the 9-stroke form, and reorder under 9 strokes. (Accepted).
>
> T24: Correct the glyph for 1B1E6 to reflect the 8-stroke shape shown in NSDB and NSYXBJ. (Accepted).
>
> T25: Reorder 1B1EA under 9 strokes. (Accepted).
>
> T26: Reorder 1B1F0 under 5 strokes. (Ad hoc changed the glyph instead).
>
> T27: Either change the glyph for 1B1FF to the 8-stroke form, **or** reorder 1B1FF under 9 strokes. (Reordered 1B1FF under 9 strokes).
>
> T28: Reorder 1B20E under 9 strokes. (Accepted).
>
> T29: Correct the glyph for 1B212 to reflect the 8-stroke shape shown in NSDB and NSYXBJ. (Accepted). (Ad hoc also changed the glyph of 1B211).
>
> T30: Change the glyph to the 9-stroke form shown in NSDB and NSYZBJ. (Accepted).
>
> T31: Reorder 1B22D under 8 strokes. (Accepted).
>
> T32: Replace the glyph for 1B230 with one that better reflects the example given in NSDB. The character **may also** need to be reordered under 8 strokes. (Ad hoc only reordered under 8 strokes. Glyph was not changed.)
>
> T33: Correct the glyph for 1B23B to reflect the 9-stroke shape shown in NSDB and NSYXBJ. (Ad hoc only reordered under 8 strokes. Glyph was not changed.)

T34: Correct the glyph for 1B23D to reflect the 9-stroke shape shown in NSDB and NSYXBJ. (Ad hoc changed the glyph to 9 strokes, with circle to vertical stroke.)

T35: Correct the glyph for 1B253 to reflect the 10-stroke shape shown in NSDB and NSYXBJ. (Accepted).

T36: Correct the glyph for 1B25D to reflect the 11-stroke shape shown in NSDB and NSYXBJ. (Accepted).

T37: Change the glyph for 1B25F to reflect the 10-stroke shape shown in NSDB and NSYZBJ, and reorder the character under 10 strokes. (Accepted).

T38: Change the glyph for 1B260 to the form shown in NSDB. (Accepted).

T39: Check the correct glyph form for 1B267, and either change the glyph to 11 strokes or reorder the character under 12 strokes as appropriate. (Ad hoc reordered under 12 strokes.)

T40: Correct the glyph for 1B26A to reflect the 11-stroke shape shown in NSDB and NSYXBJ. (Accepted).

T41: Reorder the character under 11 strokes. (Ad hoc changed the glyph instead.)

T42: Check the correct glyph form for 1B279, and reorder the character under 11 strokes. (Ad hoc changed the glyph to add dot).

T**43. Clause 32, Code Charts and lists of character names – CJK Extension F – 2CEF1**

UK proposes to remove 2CEF1 pending confirmation of whether the dot is an intrinsic part of the character or not.

2CEF1 (JMJ-056848) has a round dot above which is not a stroke used in the Han script. Is this really a distinct character? Or, is it simply 20000 𠀀 with an editorial dot, in which case it can be represented as 20000 𠀀 plus 0307 combining dot above.

Mr. Michel Suignard: IRG had a response – N4663 page 5: "This is a Han Character although there Japan NB already submitted copy of DaiKanwa Dictionary as evidence. Is there any rationale to deny the description of authentic dictionary?"
Discussion:
  a. Mr. Toshiya Suzuki: I can show the scanned image of the source. UK comment is that the top dot is strange. The source had the dot in the source. It has already been in the Japanese e-government code charts. We need to be added to the standard.
  b. Mr. Andrew West: Is this dot used to indicate pronunciation? The character under the dot is already encoded in the standard.
  c. Dr. Lu Qin: Is the whole symbol phonetic or just the dot is phonetic symbol?
  d. Mr. Toshiya Suzuki: Based on the text associated with the evidence, there is no answer to your question.
  e. Mr. Andrew West: There was a further off-line discussion on document N4695. Perhaps our earlier decision is not correct. The document shows with various examples that the dotted ideograph is another form of a Bopomofo character and should not be a unified CJK.
  f. Mr. Michael Everson: The case has been made with new evidence that it should not be a unified CJK. It should be instead in Bopomofo block. It could be in current location.
  g. Mr. Michel Suignard: Whatever we do with this character, we could keep it in CD.
  h. Dr. Ken Whistler: The document has sufficient evidence. I agree that it is not a unified ideograph. It should be encoded in the Bopomofo block – and it should be annotated so that it is earlier form of Bopomofo Letter E.
  i. Mr. Toshiya Suzuki: For Japan, smooth encoding of Extension F is important. It would be acceptable for the NB to put it in the Bopomofo.
  j. Dr. Lu Qin: My personal opinion is that the evidence and the proposal is to place the character in the right place. I invite other IRG members to comment. As long as Extension F is not delayed, we should be OK.
  k. Mr. Michel Suignard: We have to reorder Extension F anyway for other reasons. We removed one Ext. F ideograph earlier.
  l. Mr. Andrew West: The glyph shape will be similar to other Bopomofo characters. Use the Morohashi's form.
  m. Mr. Toshiya Suzuki: It could be used as variation of another ideograph – it is a suggestion from Mr. Tatsuo Kobayashi.
  n. Mr. Tatsuo Kobayashi: It is OK to proceed with Mr. Andrew West's proposal. However, the JP government, could if needed, propose an Ideographic Variant also, in the future.

Disposition: Accepted in principle. Delete 2CEF1 from Extension F.
Add in the Bopomofo block:
> 312E BOPOMOFO LETTER O WITH DOT ABOVE
> (with an annotation: BOPOMOFO LETTER E EARLY FORM).

T44. Clause 32, Code Charts and lists of character names – CJK Extension F – 2D449

UK proposes to remove ideograph 2D449 (UDAT 60078) claiming it seems to be a misanalysis of ideograph 5619, referring to the SAT reference for this character < http://21dzk.l.u-tokyo.ac.jp/SAT2012/T0397_,13,0242x10.html > (see notes 5 and 10).

Mr. Michel Suignard: This comment is different from comment T18 in WG2 N4656 (on PDAM 2.2) for the same ideograph. This was answered in document N4663 (feedback from Japan) as – "The proposed character shape has different relative

position of component therefore they should be separated because of S.1.4.2. What is the reason changing radical?" The U.K. comment is new and require new analysis.

Mr. Andrew West: I had an ad hoc discussion with Dr. Kyonori Nagasaki. The Ming edition has text using that IDS. Based on the new evidence UK withdraws the comment.

Disposition: UK withdrew the comment.

Editorial comments:

E1. Clause 3 – Normative references

UK proposes to replace references to Unicode Standard version 7.0 with references to version 8.0.

Disposition: Accepted. Unicode 8.0 references were not available when the CD was prepared.

E2. Sub-clause 6.4 Naming of characters

UK proposes to add Tangut ideographs to the list of scripts in the exception list for character names.

Disposition: Accepted.

E3. Sub-clause 25.6 Character names for CJK Ideographs

UK proposes to replace 'Ideographs' with 'ideographs' in the clause heading.

Disposition: Accepted.

E4. Sub-clause 25.7 Character names for Tangut Ideographs

UK proposes to replace 'Ideographs' with 'ideographs' in the clause heading.

Disposition: Accepted.

E5. Clause 27 Structure of the Basic Multilingual Plane, Figure 8 – Phags-Pa

UK proposes to change "Phags-Pa" to "Phags-pa" for consistency in terminology.

Disposition: Accepted. Capitalization of Block names is not significant. There are All Caps, No Caps and Mixed Caps forms etc.

E6. Clause 27 Structure of the Basic Multilingual Plane, Figure 9 – Nko

UK proposes to change "Nko" to "NKo" for consistency with the name given in the code chart for this block.

Disposition: Accepted.

E7. Clause 28 Structure of the SMP, Figure 10 – Tangut Component

UK proposes to change "Tangut Component" to "Tangut Components".

Disposition: Accepted.

E8. Clause 28 Structure of the SMP, Figure 10 – Kana supplement

UK proposes to change "Kana supplement" to "Kana Supplement".

Disposition: Accepted.

E9. Clause 30 Structure of the TIP, Note

UK proposes to change "The TIP may contain scripts such as Oracle Bone or Bronze in future editions of this International Standard." to "The TIP may contain scripts such as Oracle Bone or Small Seal in future editions of this International Standard."

Disposition: Accepted.

E10. Sub-clause 32.1 General

UK proposes to change Each code chart is followed by a corresponding character names list, except blocks for the CJK ideographs and Hangul syllables" to "Each code chart is followed by a corresponding character names list, except blocks for the CJK ideographs, Tangut ideographs and Hangul syllables".

Disposition: Accepted.

E11. Sub-clause 32.2 Code chart

UK proposes to add a note to the effect that characters for which one or more standardized variation sequences are defined are indicated with a mark in the top-right corner of the corresponding code chart cell.

Disposition: Accepted.

E12. Sub-clause 32.3 Character names list

UK proposes to change "Unicode Standard Version 7.0" to "Unicode Standard Version 8.0".

Disposition: Accepted.

E13. Clause 32 Code charts and list of character names – Zanabazar Square

UK proposes to:

      change "Final Consonant Mark" to "Final consonant mark".

      change "Candrabindu and Candra Ornaments" to "Candrabindu and candra ornaments".

Disposition: Accepted.

E14. Clause 32 Code charts and list of character names – Soyombo

UK proposes to change subheading "Vowel carrier" to "Vowel letter", and, add a note "used for representing independent vowels in combination with vowel signs", as is given for the corresponding letter in Zanabazar Square.

Disposition: Accepted.

E15. Clause 32 Code charts and list of character names – Soyombo

UK proposes to change "Terminal Marks" to "Terminal marks".

Disposition: Accepted.

E16. Clause 32 Code charts and list of character names – Nushu

UK proposes to change "Nushu Mark" to "Nushu mark".

Disposition: Accepted.

E17. Clause 32 Code charts and list of character names – Nushu

UK proposes to the no longer relevant note: "The tone numbers are not exhaustive (because many characters have more than one reading), but they relate to identified characters in the source materials."

Disposition: Accepted.

E18. Clause 32 Code charts and list of character names – Enclosed Ideographic Supplement

UK proposes to change "Symbols for Chinese Folk Religion" to "Symbols for Chinese folk religion".

Disposition: Accepted.

E19. Clause 32 Code charts and list of character names – Supplemental Symbols and Pictographs

UK proposes to change "peared with" to "paired with".in the note for 1F935.

Disposition: Accepted.

E20. Clause 32 Code charts and list of character names – Supplemental Symbols and Pictographs

UK proposes to remove the words "Animal face" as a subheading above 1F98A Disposition:

Disposition: Accepted.

E21. Annex A.6.14 315 UNICODE 8.0

UK proposes to change "The fixed collection 314 UNICODE 7.0 is arranged by planes as follows." to "The fixed collection 315 UNICODE 8.0 is arranged by planes as follows."

Disposition: Accepted. See also comment E6 from Japan NB.

E22. Annex A.6.14 315 UNICODE 8.0 – Note

The code point "7E" is incorrectly written with a superscript letter E. UK proposes to change it to "2D-2F 7E-7F CF-D3 F8-FF".

Disposition: Accepted.

E23. Annex G Alphabetically sorted list of character names

UK proposes to change "The file specifies, after a 4-lines header, all the character names from this International Standard except Hangul syllables, CJK ideographs, and Tangut ideographs" to "The file specifies, after a 4-lines header, all the character names from this International Standard except Hangul syllables, CJK ideographs, Tangut ideographs, and Nushu characters".

Disposition: Accepted.

E24. Annex I.2 Syntax of an ideographic description sequence

UK proposes the editorial corrections (shown in bold) as follows:

> Change "a coded CJK **ideographs**, which consists of any coded character from the CJK UNIFIED IDEOGRAPHS **block** or the CJK COMPATIBILITY IDEOGRAPHS blocks"
> to "a coded CJK **ideograph**, which consists of any coded character from the CJK UNIFIED IDEOGRAPHS **blocks** or the CJK COMPATIBILITY IDEOGRAPHS blocks".
> Change "a coded CJK radical, which consists of any coded character from the CJK RADICALS **blocks** or the KANGXI RADICALS block"
> to "a coded CJK radical, which consists of any coded character from the CJK RADICALS **block** or the KANGXI RADICALS block".
> Change "the character FF1F **FULL WIDTH** QUESTION MARK to represent an otherwise **un-described** DC"
> to "the character FF1F **FULLWIDTH** QUESTION MARK to represent an otherwise **undescribed** DC".
> Change "a Tangut component, which consists of any coded character from the TANGUT **COMPONENT** block"
> to "a Tangut component, which consists of any coded character from the TANGUT **COMPONENTS** block".

Disposition: Accepted.

E25. Annex I.2 Syntax of an ideographic description sequence

UK proposes to add, "the character FF1F FULLWIDTH QUESTION MARK to represent an otherwise undescribed DC," to the Tangut IDS subgroup.

Disposition: Accepted.

E26. Annex L Character naming guidelines

UK proposes to change

"These guidelines do not apply to the names of CJK **Ideographs** and Hangul syllables which are formed using rules specified in 25.6 and 25.9 respectively."

To

"These guidelines do not apply to the names of CJK **ideographs**, Tangut ideographs, Nushu characters and Hangul syllables which are formed using rules specified in 25.6, 25.7, 25.8 and 25.9 respectively."
Disposition: Accepted.

E27. Annex M Source of characters
UK proposes to update sources of characters by adding a section for Tangut, under which are listed the works cited in WG2 N4522 section 11.
Mr. Michel Suignard: We do keep some information related to ISO standards. I could point to the Unicode documentation for all script related information.
Dr. Ken Whistler: Authors are requested to submit Bibliographic information to the Unicode standard.
Disposition: Accepted in principle.

Mr. Andrew West: UK Vote Stays Negative.

USA: Negative
General comment:
GE.1.
The US requests that a repertoire that includes at least Newa and Adlam scripts,
and the emoji characters 1F57A, 1F5A4, 1F6F4-1F6F5, 1F6D1, 1F919-1F91E, 1F920-1F926, 1F930, 1F933-1F937, 1F940, 1F942, 1F950-1F955, and 1F985-1F98A,
be included in an enquiry draft that goes out for ballot immediately following closure of this CD ballot.
Dr. Ken Whistler: The two scripts are urgently needed for modern user communities. The emoji characters are also needed based on requests from implementers and users. These are characters that will be in next version of Unicode and have higher priority in terms of urgency.
Disposition: Noted.

Technical comments:
(If te.1 and te.2 are accommodated, the US changes its vote to Yes.)
TE1. Supplemental Symbols and Pictographs
The US requests removal of 1F931 HERO, 1F932 CRIMINAL and 1F941 MAGIC WAND.
These three characters have not been formally proposed.
Mr. Michel Suignard:
These are mistakes on my part … they were not on the approved list of originating committee.
Disposition: Accepted.
TE.2. Old Italic
US proposes to change the name for 1032F to OLD ITALIC LETTER SOUTHERN TSE (referring to document N4669**.**
See brief discussion under section 9.5.1 on page 28.
Disposition: Accepted.
TE.3. Old Italic
US proposes addition of 1032D OLD ITALIC LETTER YE, and 1032E OLD ITALIC LETTER NORTHERN TSE, to the Old Italic block, with justification in UTC document L2/15-181 (document N4669).
See brief discussion under section 9.5.1 on page 28.
Disposition: Accepted.

Editorial comments:
E.1. Nushu
US proposes to remove the sentence beginning "The tone numbers are not exhaustive…." in the note before the Nushu block (p. 1471)
Disposition: Accepted.
E.2. Supplemental Symbols and Pictographs
US proposes to correct the spelling "peared" to "paired" in the annotation for 1F935.
Disposition: Accepted.
E.3. Supplemental Symbols and Pictographs
US proposes to change "Animal face" into a sub header before 1F98A FOX FACE.
Disposition: Accepted.
E.4. Malayalam

US requests the glyph for 0D44 MALAYALAM VOWEL SIGN VOCALIC RR be corrected, as documented in UTC document L2/15-174.

Disposition: Accepted. *(This item is also as a defect report under item 11.1 on page 37).*

E.5. Annex F.1.2

Word boundary indicators

Proposed change by US:

US proposes to change in section F.1.2 on WORD JOINER:

"**Word boundary indicators**" to "**Word and line boundary indicators**"

"**WORD JOINER** (2060) and **ZERO WIDTH NO-BREAK SPACE** (FEFF): These characters behave like a NO-BREAK SPACE in that they indicate the absence of word boundaries, but unlike NO-BREAK SPACE they have no presentational width."

to "**WORD JOINER** (2060) and **ZERO WIDTH NO-BREAK SPACE** (FEFF): These characters behave like a NO-BREAK SPACE in that they indicate the absence of line breaking opportunities, but unlike NO-BREAK SPACE they have no presentational width."

'For example, these characters could be inserted after the fourth character in the text "base+delta" to indicate that there is to be no word break between the "e" and the "+"'

to: 'For example, these characters could be inserted after the fourth character in the text "base+delta" to indicate that there is to be no line breaking opportunity between the "e" and the "+"'.

Background information is contained in UTC document L2/15-211.

Dr. Ken Whistler: The actual use of Word Joiner is to control line-breaking opportunity. The request is to correct the current text to indicate that.

Disposition: Accepted.

Dr. Deborah Anderson: US changes its vote to Acceptance.

Relevant recommendation:

M64.05 (Disposition of ballot comments of CD 5th edition):

WG2 recommends that SC2 accepts the disposition of CD (5th edition) ballot comments in document N4698. The following significant changes are noted:

a. The Tamil Supplement block (11FC0…11FFF, **55** characters) is moved out of Amendment 2 and inserted into the CD for 5th edition.
b. Old Italic (based on document N4669):
    Added 1032D OLD ITALIC LETTER YE
    Added 1032E OLD ITALIC LETTER NORTHERN TSE, and,
    Changed the name of 1032F to OLD ITALIC LETTER SOUTHERN TSE.
c. Removed CJK Unified Ideograph 2D138 (USAT-00061) from CJK Extension F; it is unified with 20991.
d. Removed CJK Unified Ideograph 2CEF1 (JMJ-056848) from CJK Extension F.
e. Added in Bopomofo block
    312E BOPOMOFO LETTER O WITH DOT ABOVE
    with an annotation that it is BOPOMOFO LETTER E EARLY FORM
    (based on document N4695).
f. Inserted the following **23** ideographs into CJK Extension F:
    UTC-01201 from document N4678,
    JMJ-068048 and JMJ-068049 from document N4680, and,
    20 new ideographs from Macau SAR from document N4679.
g. Removed 1F931 HERO, 1F932 CRIMINAL and 1F941 MAGIC WAND.
h. Entire Nushu block is reordered and moved to new range 1B170…1B2FF, based on Nushu ad hoc report in document N4693 and the accompanying revised chart in document N4697. Several glyphs were changed.
i. Shape of 11A33 ZANABAZAR SQUARE FINAL CONSONANT MARK is changed to a diamond shape.
j. Several Zanabazar Square character names were corrected as proposed by UK ballot comments and the ad hoc report on Mongolian scripts (N4699).
k. Several Soyombo character names were corrected or changed, one character (SOYOMBO TERMINAL MARK-3) was deleted, and three code positions were reserved for future encoding, per ad hoc report and attached revised code chart in document N4699, and in response to UK ballot comments.

(See document N4698 for full list of dispositions and associated changes.)

Progression of CD: Issue a second CD ballot incorporating the above changes as well as additions noted in later sections in these minutes.

See relevant recommendations in section 10.5 on page 35.

8   IRG status and reports

Input documents:

4676 Summary Report of IRG #43, San Jose, No. 17 – 21, 2014 and Special IRG #44, Beijing, Aug. 24-26, 2015 (revised); Lu Qin, IRG Rapporteur; 2014-05-28
4675 IRG (Special) Meeting #44 Recommendations and Action Items; IRG Special Meeting #44; 2015-08-26
4677 CJK_F1 Editorial Meeting Report; CJK editorial group; 2015-08-26
4678 UTC/US Urgently Needed Character; UTC/US & IRG; 2015-09-10 (also UTC L2/15-222R)
4679 Proposal for 21 Macao's UNC Characters (zip file with Proposal and associated files); Macao Special Administrative Region, China; 2015-09-22
4680 Japanese Submission for UNC proposed to IRG#44 (zip file with proposal summary form and attachments); Japan; 2015-09-18
4681 Recommendations of IRG Meeting #43; IRG Meeting #43; 2014-11-21

8.1   IRG No. 44 Summary

Dr. Lu Qin presented IRG No. 44 summary report in document N4676.

Item 1: Future meeting

IRG 45 is in 2016-11-16/20 in Hong Kong; this has already been approved.

IRG needs approval for following future meetings:

IRG 46 in Beijing – 2016-05-23

IRG 47 - requested hosting by Korea (backup is Japan) in 2016-10-17/21; (the location is to be confirmed).

Late November is not suitable for Dr. Lu Qin due to University semester commitments.

There is a possibility to move next WG2 meeting to Sept 2016 instead of Oct 2016.

The preference is to allow for more time between IRG and WG2 meetings.

See relevant recommendation M64.12 on page 38.

Item 2: CJK Extension F Ballot comments

IRG has reviewed all the ballot comments and the summary is in document N4677.

See discussion under item 9.5.2 on page 28.

Item 3: Extension G

Extension G repertoire is frozen. Finalization for submission to WG2 would be after IRG meeting 45 (2015-11-16/20). It could be a Candidate for adding to the next CD 5 ballot. We will leave it to the editor to work with IRG if they will be merged with current Ext. F or not.

Item 4: IRG IWDS update

Unification error list has been summarized; will be confirmed at IRG meeting 45.

Item 5: Horizontal Extension of H Source

HKSARG is working on a full set of HK characters for Horizontal extension, with expected completion in 2016. Macao SARG has some work along the same direction. TCA wanted a horizontal extension (T Column). They have to await publication of ext. F, before a T Column can be added.

Item 6: Preparation of New IRG Working Set

IRG has called for submission for its next working set 2015. Two sources from ROK are in CJK Ext. F. The editor is to add the two ROK Sources to 2D993 and 2DCD8. We would need the appropriate font from ROK.

Mr. Michel Suignard: This case is for two encoded characters and I need to know where to map these two characters in the ROK Ext F2 font.

Dr. Lu Qin: I will send an email to ROK.

Item 7: IRG PnP

kTotalStrokes will be now part of the data submission for future IRG working sets. There is no plan to verify the correctness of the data. The IRG working sets will now be named with the 4-digit year as part of its name.

A revised PnP document will be confirmed at IRG meeting 45.

item 8: UNC characters from MSARG, Japan and Unicode.

IRG has accepted 3 UNC proposals – 21 ideographs from MSARG, 2 ideographs from Japan and 1 ideograph from Unicode.

N4678 - UNC from Unicode

UTC-01201 ... it is the simplified form of U+78DC. It is a character for a Location (name of a village), used in China. Many people complaint not being able to locate it. It could be added either as next available code point in the CJK main block, or inserted into extension F. IRG has accepted this character.

Disposition:

Insert new ideograph UTC-01201 into CJK Extension F.
*See item f in relevant recommendation **M64.05** on page 25.*

N4679 – UNCs from Macao SARG.
As part of the exercise of defining a Macao Characters Encoding standard, MSARG found 23 characters were missing. The request from MSARG for UNCs, summarizes these 23 characters. Of these, one was a glyph error. One is part of CJK Ext. F2 and another one is already in current CJK Extension F. The request is to add 20 ideographs as UNCs. IRG has accepted these as UNCs.
Disposition:
Accepted. These 20 UNCs will be inserted into Extension F, in the next CD of 5th edition.
*See item f in relevant recommendation **M64.05** on page 25.*

N4680 – UNCs from Japan
Of the 178 ideographs needed for Foreigners registration system (per Japan's Ministry of Justice's notification no. 582, of December 2011), five ideographs were identified as missing from the standard. Of these three ideographs are in current CJK Extension F set. The remaining two are part of CJK Extension F2. Due to urgency of these characters Japanese national body requests that these two ideographs be removed from Extension F2 and treated as UNCs. IRG has accepted these as UNCs.
Disposition:
Accepted. These 2 UCs will be inserted into Extension F, in the next CD of 5th edition.
*See item f in relevant recommendation **M64.05** on page 25.*

9   Contributions related to ballots:

9.1   Related to PDAM2.2
Input documents:
4610 Progress Report of Nushu Code Chart Review by Japanese; Suzuki Toshiya; 2014-09-02
4650 Discussion of Tangut character L2008-4148; Andrew West, Viacheslav Zaytsev, Michael Everson; 2014-12-01
4652 Proposal of Nushu Code Chart based on WG2 N4610; Suzuki Toshiya; 2015-01-12
4653 Comments on Proposals of Zanabazar Square and Soyombo Script from Mongolian Experts; Suzuki Toshiya (Hiroshima University, Japan), Takashi Matsukawa (Otani University, Japan) and Hitoshi Kuribayashi (Tohoku University, Japan); 2015-01-16
UTC L2/15-094 Response to Mongolian and Japanese comments on Soyombo and Zanabazar Square; Anshuman Pandey; 2015-03-12
4654 Future Additions to ISO/IEC 10646; Unicode Consortium; 2014-10-30
4656 Disposition of comments on PDAM2.2 to ISO/IEC 10646 4th edition; Michel Suignard, project editor; 2015-01-22
4663 Further discussion on the disposition of PDAM2.2 ballot comments; Japan; 2015-04-01

The above is a list of contributions that were considered for preparing PDAM2.3 ballot, in addition to PDAM2.2 ballot comments. FYI.

9.2   Related to PDAM 2.3
Input documents:
4658 Additional repertoire Amendment 2.3 to ISO/IEC 10646:2014 (4th edition); Michel Suignard, project editor; 2015-01-31
4662 Comment on Religious Symbols in PDAM2.3 for ISO/IEC 10646:2012/Amd. 2.; Suzuki Toshiya; 2014-04-03

The above proposals were received after pdam2.3 was issued and were considered in preparing Dam2 ballot, in addition to pdam2.3 ballot comments. FYI.

9.3   Related to DAM2
Input documents:
4665 Additional repertoire Amendment 2.3 to ISO/IEC 10646:2014 (4th edition); Michel Suignard, project editor; 2015-04-22
4667 Review of Tangut repertoire in DAM ballot; Andrew West, Michael Everson, Viacheslav Zaytsev; 2015-07-16
4684 Reply to WG2N4650 and WG2N4667 on Tangut; China; 2015-10-13

The above documents were complement to DAM2 ballot comments. FYI.

9.4   Related to and incorporated into 10646 5th Edition CD
Input documents:
4651 n4651-pdam23-charts; Michel Suignard, project editor; 2014-12-16
4654 Future Additions to ISO/IEC 10646; Unicode Consortium; 2014-10-30
4655 Proposal to Encode the Soyombo Script in ISO/IEC 10646; Anshuman Pandey; 2015-01-26
4660 Towards a Consensus Encoding of Newa (Rev 2); Ken Whistler; 2014-12-04
4666 Draft additional repertoire for ISO/IEC 10646:2016 (5th edition); Michel Suignard, project editor; 2015-05-23
UTC L2/15-157 Future Additions for ISO/IEC 10646; Unicode, Inc. / Deborah Anderson; 2015-05-20

The above proposals contain the repertoire that were added to the CD 5th edition, in addition to content of Amendments 1 and 2 of 4th edition. FYI.

9.5 Related to and NOT incorporated into 10646 5th Edition CD

9.5.1 Addition of three Old Italic characters

Input documents:
4669 Proposal for the addition of three Old Italic characters; Michael Everson; 2015-07-23

Mr. Michael Everson: We met in Glasgow in July with other experts. The consensus is presented here. One character was already proposed with new name. The other two are new characters proposed. The rest of the document provides the rationale, evidence of use etc. Code points are correct in the revised version of the proposal.

Disposition: Accepted.

9.5.2 CJK Extension F Editorial Report

Input document:
4677 CJK_F1 Editorial Meeting Report; CJK editorial group; 2015-08-26

Dr. Lu Qin went over some selected items from document N4677, as part item 2 discussion in her IRG summary report.

Item on 2D260 in document N4677:
UK had commented that the stroke count for JMJ-059428 should be corrected from 30.11 to 30.10.
IRG discussed and would like to keep at 11. Wording in document N4677 is confusing.
Discussion:
   a. Mr. Andrew West: It is not clear how the strokes are counted.
   b. Dr. Lu Qin: In IRG we do not have the total stroke count. I will explain it later. The stroke count is requested by Unicode. It is locale dependent. When new character is sent in to IRG, the submitter provides the stroke count.
   c. Mr. Tatsuo Kobayashi: IRG has so many local rules. It is not all shared by all the WG2 members. I request that the IRG rules and document registers be shared by all WG2 members also. If IRG has explicit rules then IRG should share it with other WG2 members. An example is the stroke count issue.
   d. Dr. Lu Qin: It is implicitly mentioned in the IRG PnP document. It is shared with WG2 members.
   e. Mr. Michel Suignard: The stroke count was not in 10646 for a long time. It was used in the Unicode and it came into 10646 piece-meal. The question of which is preferred radical etc. is part of the uncertainty. The Stroke Count is not stable due to several such reasons.
   f. Mr. Andrew West: I found it is confusing – it is counted by which region it is used in etc. Grass radical, for example, has a stroke count of sometimes 3 and sometimes 4.

Disposition: No Change.

Item on 2D13F in document N4677:
This is another UK comment on Amd 2. The IRG input was that these should not be unified, though these are cognates.
Discussion:
   a. Mr. Andrew West: I think that there are too many such characters with minor differences.
   b. Dr. Lu Qin: It is not simple to make Unification Rules to cover all cases. However, we are making more unification-related examples. We went back to your comments and checked.
   c. Dr. Ken Whistler: The UK is raising a significant question that the IRG should take into account. This calls into question, if CJK Extension F and future extensions, contain such characters which seem to be cognates but are not unified by minor differences in shapes, it raises concerns about the unification principles used. There is no associated information in the proposals brought into WG2.
   d. Dr. Lu Qin: In this case, IRG did recognize that these are cognates but significant enough to be encoded.
   e. Dr. Kyonori Nagasaki: We would like to use these characters – if an existing character can be used. At the last IRG meeting, the experts could not find an example of unifying characters of such shape differences. There was no consensus for unification and therefore we did not unify.
   f. Dr. Ken Whistler: That is precisely the wrong principle we should use. The character in case 2D13F is an example. Such glyph variants should not be separately encoded. In Unihan there is an attempt to find variant information. The simple variants have already been covered by existing rules. I think 2D13F not being unified, is a mistake.
   g. Dr. Lu Qin: In my personal opinion, since we could not reach a consensus in IRG, we brought it forward. They were cognate characters. In this case, since they are cognates, these could be glyph variants.
   h. Mr. Michel Suignard: There is a concern here. Is there a way to collect such information for unification or not.
   i. Dr. Kyonori Nagasaki: The shape is not a mistake. It has been there for a long time.

j. Mr. Andrew West: The character is a cursive form of another character. That is why the glyph is a variant. One could use an IVS for such variants.

Disposition:
Unify with 20991… Withdraw the character 2D13F from Extension F.
Either SAT source or IVS will be decided by SAT (Dr. Kyonori Nagasaki).

Relevant recommendation:
M64.11 (Review of CJK Unification Rules):
WG2 recommends that IRG reviews its CJK unification rules to minimize the number of glyph variants that are coded as separate characters.

Item on 2DB74 in document N4677*:*
A glyph change is needed. SAT has to provide a revised font.
Disposition: No change for now.

10   Script contributions not related to ballots

10.1   Carried Forward

Afáka (N4292); Bagam (N4293); Balti 'B' (N4016); Balti scripts (N3842); Chinese Chess Symbols (N3910); Dhives Akuru (N3848); Diwani Siyaq Numbers (N4122); English Phonotypic Alphabet (EPA) (N4079); Eskaya (N4499); Garay (N4261); Indic Siyaq (N4123); Jenticha (N4028); Jurchen (N4077); Kawi (N4266); Khambu Rai (N4018); Khatt-i Baburi (N4130); Khitan (N4631); Kpelle (N3762); Landa (N3768); Leke (N4438); Loma (N3756); Moon (N4128); Mwangwego (N4323); Nandinagari (N4389); Naxi Dongba (N4633); Obsolete Simplified Chinese Ideographs (N3695); Old Yi (N3288); Ottoman Siyaq (N4124); Pau Cin Hau Syllabary (N4412); Persian Siyaq (N4125); Pyu (N3874); Ranjana (N4515); Rohingya (N4283); Tangsa Latsam Khimhun (N4497); Tangsa Lakhum Mossang script (N4496); Tolong Siki (N3811); Tulu (N4025); Woleai (N4146); Zou (N4044).

10.2   New Scripts or Blocks
10.2.1   Shuishu script
Input document:
4696 Preliminary Proposal for encoding Shuishu in the SMP of the UCS (zip file with Proposal and presentation deck); China; 2015-10-21

Mr. Chen Zhuang introduced the topic and Ms. Daisy (ChingJu) Lai made a presentation on the Shuishu script.
Discussion:
a. Mr. Michel Suignard: My question is about the names.
b. Ms. Daisy (ChingJu) Lai: The name is currently by pronunciations. They are very stable. The experts from various parts in the region had agreement on the pronunciation.
c. Mr. Michel Suignard: How many in the repertoire? It will help us with the space allocation for roadmap. What would be your plan going to the future … will there be more?
d. Ms. Daisy (ChingJu) Lai: 485 is the current count.
e. Mr. Andrew West: Are there any characters that you do not know how to pronounce.
f. Ms. Daisy (ChingJu) Lai: One of the books, for example, had 588 fundamental characters. Some of these had been put aside to arrive at the 485. The others are still being reviewed.
g. Mr. Peter Constable: What was the basis for deciding the order?
h. Ms. Daisy (ChingJu) Lai: It is by the pronunciation written in IPA.
i. Dr. Ken Whistler: The names you have there – are they based on a transliteration agreed upon by the Shue community?
j. Ms. Daisy (ChingJu) Lai: About 20 years ago, the Chinese government started using Pinyin. We used the IPA.
k. Dr. Ken Whistler: It would be helpful to explain the status of the transliteration you are using. If there is a difference between the government's Pinyin and the IPA you are using, it would be useful to explain it in the document. ISO/IEC 10646 uses a different transliteration, not the Pinyin. The explanation will help us choose the correct names.
l. Ms. Daisy (ChingJu) Lai: We are working on a Romanization scheme also.
m. Mr. Andrew West: Is the system you are using here, also used in education material?
n. Ms. Daisy (ChingJu) Lai: Yes, the students have to learn this system. Even for the University students this spelling has to be learned.
o. Mr. Andrew West: Are they using numbers for the tones?
p. Ms. Daisy (ChingJu) Lai: Symbols are used for the tones. The numbers act as the dividers.
q. Mr. Andrew West: You could use spaces in the names too.
r. Dr. Ken Whistler: I would suggest Shuishu character xxx yyy. You do not have to distinguish between the Stars etc. Have spaces in parts of the names. Tones are indicated by letters; but there are also numbers in the proposal.

s. Mr. Michel Suignard: We can revisit the ordering etc. once the names have been picked.

t. Mr. Toshiya Suzuki: How many dictionaries are there? You mentioned two. We used, for example, existing regional dictionaries. You indicated in the table source having number of characters; are these dictionaries? Using dictionaries helps for existing scripts.

u. Ms. Daisy (ChingJu) Lai: No, they are raw materials.

v. Mr. Peter Constable: What may be helpful is to point to where the character appears in the dictionary.

w. Ms. Daisy (ChingJu) Lai: There was an old person who wrote some notes. The current dictionary just documented what is known.

x. Dr. Ken Whistler: For example, character241 may have an entry in the dictionary. Just indicate where it appears.

y. Dr. Lu Qin: Some of the characters in the dictionary are not in the primary source.

z. Mr. Toshiya Suzuki: Current proposal does not have any subsets. When I checked books, they were zodiac symbols, numbers etc. May be grouping these into the categories would be useful. What I understand is that the script is primarily used with Astronomical or auspicious days etc. by priests.

aa. Mr. Peter Constable: In the next version of the proposal, you may be able to include the characters in to the different subgroups.

bb. Mr. Michael Everson: I would like to get a copy of your data files and dictionary. I met Gosling (?), he has a draft collection of Shuishu glyphs, and we can come up with a draft font with the data files and the dictionary.

cc. Mr. Michel Suignard: I will place these documents on the WG2 collection.

Relevant recommendation:
M64.09 (Shuishu script):
WG2 invites the authors of document N4696 to revise their proposal on the Shuishu script taking into account the feedback received at this meeting, working with other experts interested in this script.

10.2.2   Small Seals script
Input document:
4688 Proposal to encode Small Seal Script in UCS (zip file with Proposal and associated files); TCA and China; 2015-10-20

Ms. Lin Mei Wei (Selena) introduced the script. The latest proposal is an update of previous one and includes charts. The variant is from before Qin dynasty; with same meaning. (Not the same as 'variant' in WG2 terms.)
Discussion:

a. Mr. Andrew West: There were additions from Han (?) dynasty?

b. Dr. Ken Whistler: Collection is from Qin and Han dynasty. Small Seal script additions are from Sung dynasty.

c. Mr. Andrew West: How many newly added?

d. Ms. Lin Mei Wei (Selena): 402.

e. Mr. Toshiya Suzuki: Is this finished proposal? It is slightly different from previous version. There were three different versions of Small seal script. It looks like you have considered only one of these versions. Please clarify the choice of the single version versus the three versions.

f. Ms. Lin Mei Wei (Selena): We would like to submit only Zhengzhuan version now. There may be some deltas from other versions that could be added later.

g. Mr. Toshiya Suzuki: It may be OK to start with only version. When we extend for other versions, we could have glyph variants or there may be slots reserved for other versions in the code chart. We can also add the new characters at the end of the current block. Some considerations may be needed and clarify how the other versions may influence the choice of how to extend.

h. Ms. Lin Mei Wei (Selena): We would like to finish this first. We can put the delta at the end.

i. Mr. Tatsuo Kobayashi: I am confused as to what you want to encode. Some glyphs or some higher level meanings? What are you trying to do with the different shapes from different dictionaries?

j. Mr. Andrew West: You are using one edition and are proposing the character to encode. When you compare with another dictionary, that dictionary may have another shape but it may have the same meaning. What would you do with that?

k. Ms. Lin Mei Wei (Selena): We may encode it separately.

l. Mr. Andrew West: It should be perhaps the Variation Sequence.

m. Mr. Tatsuo Kobayashi: We do have characters and glyphs in the standard. What are you encoding?

n. Dr. Ken Whistler: It would be better answered by looking at second edition of Showen dictionary. Ask the question on an example character that is not in the current proposal. I would suggest we look at the references we have in the room.

o. Mr. Andrew West: In the final proposal we need to address the issue as to how the extensions will be handled – perhaps giving an example or two.

Relevant recommendation:

M64.10 (Small Seal script):

WG2 invites the authors of document N4688 to revise their proposal on the Small Seal script taking into account the feedback received at this meeting, working with other experts interested in this script.

10.3   Additions to Existing Scripts or Blocks

10.3.1   Five religious and cultural symbols

Input documents:

4661 Proposal to encode five religious and cultural symbols; Andrew West; 2015-01-11

4662 Comment on Religious Symbols in PDAM2.3 for ISO/IEC 10646:2012/Amd.2.; Suzuki Toshiya; 2014-04-03

Mr. Andrew West: The proposal in document N4661 is for some symbols. Examples of their use is given.

> Two – for Buddhist temples – STUPA and PAGODA
> Two - Fish Symbols – ICHTHYS and DARWIN FISH
> One - INDALO

Discussion:

a. Mr. Michael Everson: It makes sense to add these.
b. Mr. Andrew West: The STUPA may be an alternative to the removed DHIYANI BUDDHA
c. Dr. Deborah Anderson: Do you know if these are on the list of the emoji discussion group?
d. Mr. Andrew West: I am not very clear about that.
e. Dr. Ken Whistler: Stupa and Pagoda are not emoji. They are map symbols. The UTC had reviewed these. It would be nice to have them; but the conclusion was that it should be included in a larger more comprehensive collection of map symbols. The Fish symbols are potentially controversial. They are not necessarily emoji – but could become emoji. They could be added into religious symbols and would like to get some feedback. These symbols fight each other out in Car Bumper symbols etc. in the US. The instances cited here are not quite convincing to me that there is need for these as text symbols or not. I can see where these symbols appear.
f. Mr. Michael Everson: As to the STUPA and PAGODA, to me, should not be delayed awaiting the larger map symbol collection.
g. Mr. Andrew West: There is no urgency for these symbols. However, a delay is not particularly useful either. Most of these symbols are coming in bits and pieces. We do have transportation symbols block anyway.
h. Mr. Michel Suignard: I sort of agree with that. Some mapping symbols exist in the 1F680 Transportation and Map Symbols block. We could encode 1F6D2 STUPA and 1F6D3 PAGODA there.
i. Mr. Andrew West: These symbols are no different from several other symbols that have been encoded in terms of evidence of use as text characters etc. It looks like an internet petition is the only way to go show text use evidence etc.

Disposition: Accepted 1F6D3 STUPA and 1F6D4 PAGODA for next CD 5th edition. Await further review of the remaining three symbols.

See item a in relevant recommendation **M64.06** *on page 35.*

10.3.2   Additional Japanese TV symbols

Input document:

4671 Proposal to include additional Japanese TV symbols to ISO/IEC 10646; Japan; 2015-07-23

Mr. Masaru Takechi: from ARIB introduced the document. ARIB is developing a UHD standard. They are adding new services. We have several symbols in ISO/IEC 10646. The new services need more symbols for electronic versions of program guides and services. ARIB B62 is the new standard being defined. 19 additional symbols are proposed. All are items enclosed in squares. Two of these are single characters and others are multiple characters enclosed within a square. We would also like to have the least number of bytes for the data due to bandwidth limitation considerations. The proposal is for single symbols with enclosed text in them.

Discussion:

a. Mr. Michel Suignard: When do you need these?
b. Mr. Masaru Takechi: The limited trial is supposed to start in 2017.
c. Mr. Toshiya Suzuki: When are you intending to start the development work?
d. Mr. Masaru Takechi: It will be approximately 18 months before the trial.
e. Mr. Michel Suignard: From allocation point of view, it is not complicated process. The proposed symbols look similar to the previous ARIB set of symbols. I would need the font for being able to produce the charts.
f. Dr. Ken Whistler: I think these symbols would be OK for encoding. It does not matter where it is encoded. 18 of these could be at the end of existing similar symbols. The squared ideograph 914D would be along with other

similar squared ideographs. There is potentially naming issue – such as 2k, 4k etc. The sub-pieces of names do not start with a digit. You can spell these out as TWO K etc. similar to the FIVE POINT ONE name.

g. Mr. Tetsuji Orita: What is the reason for not having the number?
h. Dr. Ken Whistler: It is historical … the naming convention we have in place since the beginning.
i. Mr. Michel Suignard: We can accept the proposal for the CD – with the naming modifications.
j. Mr. Masaru Takechi: We have font under development.
k. Dr. Ken Whistler: We could go ahead with a temporary font for chart production.

Disposition: Accepted the 18 symbols for encoding at 1F23B, and 1F19B..1F1AC, in next CD 5th edition. Mr. Michael Everson will supply the font.

See item a in relevant recommendation **M64.06** *on page 35.*

10.3.3   Japanese HENTAIGANAs

Input document:
4674 HENTAIGANA proposal -A (SC2 N4419) (zip file containing proposal Summary Form and collection of files); Japan; 2015-09-18

Mr. Tetsuji Orita: Japan has a proposal for encoding Hentaigana in the standard. Professor Yada Tsutomu will introduce Hentaigana and the rationale behind the proposal.

Prof. Tsutomu YADA, Graduate School of Letters, Osaka University, gave a presentation on 'About the inclusion of standardized code points for Hentaigana'. A paper on the topic is part of the Hentaigana proposal.

7 syllables are written using Katakana and Hiragana. In the past, each syllable was written in different forMs. In addition to the syllable forms, Han characters were also used. Hentaigana is almost 1000 years old. They have been replaced with the current forms of Hiragana. Encoding of these in the standard is needed to preserve the Japanese heritage documents digitally. It is also needed for research on written material from the past.

Mr. Michel Suignard: Thank you for the presentation. We knew that the request for encoding of Hentaigana is coming along. Initial request came to us about a couple of years ago.

Discussion:

a. Dr. Shuichi Tashiro: Hentaigana is used for female person's first name before 1948. We have to keep these names in government records for 150 years.   These are required in e-government digitized records. The Hentaigana characters have different shapes and have evolved over the years. We have chosen to identify by their mother Hanzi characters.
b. Mr. Michel Suignard: What I saw in the presentation was that some characters have different forms at the beginning of a word versus the middle of a word. Does the proposal contain such variants?
c. Dr. Ken Whistler: Items 25 and 26 in the table are examples.
d. Mr. Peter Constable: There will be cases in which there will be multiple Hentaigana corresponding to same mother ideograph. Why is such distinction necessary?
e. Dr. Shuichi Tashiro: One of the important reason is their use in personal names. The names have to be distinguishable. There are other reasons as well.
f. Mr. Peter Constable: Were considerations given as to when a variation sequence could be used to represent such variants.
g. Mr. Tatsuo Kobayashi: Use of variation sequences is an option.
h. Mr. Michael Everson: I think using variation sequences is not a nice idea. I have worked with other syllabaries with large collections such as what is proposed. We have a set of old characters many of which are no longer in use – they are in use for various purposes. The only questions should be to how to proceed with their encoding. I think we should focus on different naming schemes. One refinement could be to filter on possible variants be eliminated … if they have the same mother ideograph (or single corresponding Hiragana).
i. Mr. Michel Suignard: No one is asking whether these should be encoded or not. Variation selectors could be used for some. Using font variants is a worse solution than using VS-s, especially when they have the same source ideograph. It would be a mixed model. You may create variants only for a subset, not for all. We can look at what is in the current Hentaigana block.
j. Dr. Shuichi Tashiro: For example, KA Variant 1 and KA Variant 2 are completely different characters in personal names.
k. Dr. Ken Whistler: We need to be careful about the terminology. The proposed KA variant 1 and KA variant 2 are two distinct glyphs. The two glyphs are distinct in personal name registries, for example. That distinction may be rationale enough for encoding separately. We have filter out such distinct ones.

l.   Mr. Peter Constable: It is important for us to understand how we decide when these are distinct versus just glyph variants. The VS mechanism can certainly be used also to distinguish.

m.   Dr. Ken Whistler: I would like to hear - what is the distinguishing criteria for 28 and 53 – KA Variant 6 and KE Variant 3? They have identical source ideograph and glyph, though pronunciation may be different. It looks like duplicate encoding proposal.

n.   Mr. Daniel Kobayashi-Betler: The rationale behind those is due to the sound for the same Han character in China versus in Japan.

o.   Mr. Michel Suignard: We do not encode Kanji twice. The phonetics for a given Kanji character could be many depending on the context.

p.   Dr. Ken Whistler: We can agree with the rationale. However, the glyph and source – item 28 could be pronounced in multiple ways. The same glyph could be KA or KE. If you just look at the glyph, you will not know which sound it represents. By encoding them twice, it would get worse.

q.   Mr. Peter Constable: We should not have duplicate encoding for alternate readings. One could have an arrangement in charts to indicate that there is a sound variant.

r.   Mr. Tatsuo Kobayashi: Can we name a character to indicate two different sounds associated with it?

s.   Mr. Michel Suignard: Yes - xxxx KA or KE in the name. Once you have a guideline for naming – it can be done.

t.   Mr. Michael Everson: We have precedents for these cases. Name indicates its potential sounds etc. You can also have an annotation about is alternate use. You could also include the source ideograph.

u.   Mr. Daniel Kobayashi-Betler: If we can indicate that, we can have KA or KE etc. we can accept that.

v.   Mr. Tatsuo Kobayashi: Our preference would be to indicate the potential use in the name itself. I like the suggestion of including the source ideograph in the name.

w.   Mr. Michel Suignard: We do have two Hentaigana characters in the Kana Supplement block. We cannot change their names.

x.   Dr. Ken Whistler: I personally do not like including the source ideograph information in the name. For example, variants of KA are several -- all having the same source ideograph. You will end up in multiple level variant identification.

y.   Mr. Tatsuo Kobayashi: I withdraw my preference I stated earlier.

z.   Mr. Michel Suignard: You have some feedback from this discussion – suggestions on how you could name, removing duplicate encoding etc. to make a revised proposal. I would encourage the authors to discuss these also with the Unicode technical committee – they meet more often than WG2.

aa.   Dr. Ken Whistler: These proposals are already given to the UTC. If we can get the duplicate encoding addressed in a revised proposal by a suitable naming scheme that will be progress.

bb.   Mr. Tetsuji Orita: We will take the input and revise the document.

cc.   Mr. Peter Constable: The UTC is meeting in two weeks from now.

dd.   Mr. Michael Everson: Item 14 in the table – is that the one already encoded.

ee.   Mr. Tatsuo Kobayashi: Where should these be encoded?

ff.   Dr. Ken Whistler: Suggestion is to start from 1B002 in the Kana Supplement block.

gg.   Mr. Toshiya Suzuki: In the Japanese committee, we had a discussion as to where these should be encoded. We may get some other small Kana characters for encoding also. Therefore, maybe we should start somewhere else.

hh.   Dr. Ken Whistler: There are already precedents such as the CJK punctuation etc. It is not significant where small collections are encoded. The important thing is to keep them all in one big chunk and do not be concerned about where it starts.

ii.   Mr. Tetsuji Orita: We have 299 or so characters in the proposal. Not all these may fit in the current Kana supplement block.

jj.   Mr. Michel Suignard: It depends on how much the revised proposal will have after removing duplicates etc. If needed we can create another block for the overflow.

Disposition:
Japanese national body is invited to prepare a revised proposal. The revised proposal could be a candidate for inclusion in the standard before the next meeting. It could be in a PDAM ballot before the next WG2 meeting.

10.3.4   15 miscellaneous emoji
Input document:
UTC L2/15-195 Emoji Additions Tranche 6: More Popular Requests and Gap Filling; Emoji SC; 2015-07-24

A collection of 15 emoji that have been requested by different user groups is requested for adding to the standard.
Mr. Andrew West: I have a question about the glyphs used.

Mr. Michel Suignard: Refer to Unicode emoji candidates URL http://www.unicode.org/emoji/charts/emoji-candidates.html -- snapshot of Oct 2015, for the glyphs. The Unicode emoji subcommittee maintains the page. It is a live page.

Disposition: Accepted for encoding – 15 emoji for next CD 5th edition.
Refer to the charts for code points, names etc. (will be document N4702).
See item a in relevant recommendation **M64.06** *on page 35.*

10.3.5   Sports-related emoji
Input document:
UTC L2/15-196 Proposal to add more sports-related emoji characters (revised); Hiroyuki Komatsu; 2015-07-30

There was no discussion.
Disposition: Accepted for encoding – 14 emoji for sports in next CD 5th edition.
See item a in relevant recommendation **M64.06** *on page 35.*

10.3.6   Vedic Sign Atikrama
Input document:
UTC L2/15-160 Proposal to encode 1CF7 VEDIC SIGN ATIKRAMA (revised); Shriramana Sharma; 2015-07-31

Dr. Deborah Anderson: This proposal is to add a single character to represent Vedic text. The document provides the rationale and evidence. The US and Unicode consortium recommend that we add this character to the standard.
Disposition: Accepted for encoding at 1CF7 in next CD 5th edition.
See item a in relevant recommendation **M64.06** *on page 35.*

10.3.7   Bengali Letter Vedic Anusvara
Input document:
UTC L2/15-161 Proposal to encode 09CF BENGALI LETTER VEDIC ANUSVARA (revised); Shriramana Sharma; 2015-07-31

Dr. Deborah Anderson: This proposal is for a single character to represent Vedic text in Bengali. The document provides the rationale and evidence. The US and Unicode consortium recommend that we add this character to the standard.
Dr. Ken Whistler: There is a similar character in Devanagari. Nevertheless, there is solid attestation of use in Bengali that this character in Bengali should be added.

Disposition: Accepted for encoding at 09FC in next CD 5th edition.
See item a in relevant recommendation **M64.06** *on page 35.*

10.3.8   Bengali abbreviation sign
Input document:
UTC L2/15-172 Proposal to Encode an Abbreviation Sign for Bengali (revised); Srinidhi; 2015-08-11

Dr. Deborah Anderson: This proposal is for a single character representing an abbreviation mark in Bengali. The document provides the rationale and evidence of use. The US and Unicode consortium recommend that we add this character to the standard. The Devanagari abbreviation mark could also be used, but it complicates the script runs etc. From the chart point of view, it could be the same glyph as in Devanagari. For encoding, it should be given a new code point in the Bengali block.

Disposition: Accepted for encoding at 09FD in next CD 5th edition.
See item a in relevant recommendation **M64.06** *on page 35.*

10.3.9   Typicon symbols
Input document:
UTC L2/15-173 Proposal to Encode some Additional Symbols used in Church Slavonic Text (revised); Aleksandr Andreev, et al; 2015-07-29

Dr. Deborah Anderson: Typicon symbols are used in Church Slavonic Text. They are grouped into three categories – Combining Diacritical Marks, Supplemental Punctuation and Symbols. A total of 21 characters are proposed. The UTC has reviewed these and recommends them for encoding.

Disposition: Accepted for encoding at 1DF6…1DF9, 2E45...2E49, 1F900...1F90B in the next CD 5th edition.
See item a in relevant recommendation **M64.06** *on page 35..*

10.4   Miscellaneous Proposals
10.4.1   Documentation of U+2060 WORD JOINER
Input document:
UTC L2/15-211 Suggested edits to the documentation of U+2060 WORD JOINER in ISO/IEC 10646; Laurențiu Iancu and Ken Whistler; 2015-07-29

This topic was dealt with under CD 5ᵗʰ edition ballot comment US E.5 under section 7.7.2.

10.4.2   Cherokee font

Input document:

UTC L2/15-214 Phoreus Cherokee type specimen sheet; Ken Lunde; 2015-07-30

The request to change the font for Cherokee has been going on for some time. It is updated in CD 5ᵗʰ edition.

Disposition: Accepted.

10.4.3   Futures Additions to ISO/IEC 10646 from Unicode

Input document:

4654 Future Additions to ISO/IEC 10646; Unicode Consortium; 2014-10-30

Item 10 in the document identifies two character names in error -- 2B7A and 2B7C. Since we cannot change the names in the standard, we add the proposed name aliases for these two.

Disposition: Accepted the two name aliases:

> 2B7A LEFTWARDS TRIANGLE-HEADED ARROW WITH DOUBLE VERTICAL STROKE
> 2B7C RIGHTWARDS TRIANGLE-HEADED ARROW WITH DOUBLE VERTICAL STROKE

See item a in relevant recommendation **M64.06** *on page 35.*

10.5   Progression of WG2 work

Amendment 2:

Relevant recommendation:

M64.04 (Progression of Amendment 2 to the 4ᵗʰ edition):

WG2 recommends that its project editor prepares the final text of Amendment 2 to the 4th edition of the standard, which will include the changes arising from recommendations **M64.03** above, along with the final disposition of comments (document N4691); and forward it to the SC2 secretariat for processing as an FDAM ballot. The final code charts are in document N4694. The target starting date is modified to: FDAM: 2015-12.

ISO/IEC 10646 5ᵗʰ edition:

Relevant recommendations:

M64.06 (Additional changes in 5ᵗʰ edition):

WG2 recommends that SC2 accepts the following additional changes in the CD for 5ᵗʰ edition of the standard:

a.   Additions

> -   Add following two name aliases (based on document N4654 item 10):
>   2B7A LEFTWARDS TRIANGLE-HEADED ARROW WITH DOUBLE VERTICAL STROKE
>   2B7C RIGHTWARDS TRIANGLE-HEADED ARROW WITH DOUBLE VERTICAL STROKE.
> -   Add the following **15** emoji characters with their glyphs based on document L2/15-195R2 and
>   http://www.unicode.org/emoji/charts/emoji-candidates.html (as of 2015-10-23):
>   1F927 SNEEZING FACE
>   1F939 JUGGLING
>   1F941 DRUM WITH DRUMSTICKS;
>   1F943 TUMBLER GLASS
>   1F944 SPOON
>   1F956 BAGUETTE BREAD
>   1F957 GREEN SALAD;
>   1F958 SHALLOW PAN OF FOOD
>   1F959 STUFFED FLATBREAD
>   1F98B BUTTERFLY, and,
>   1F98C DEER
>   (in the Supplemental Symbols and Pictographs block)
>   and,
>   1F6D2 SHOPPING TROLLEY (in the Transport and Map Symbols block).
> -   Add the following **14** sports-related emoji characters with appropriate glyphs from document L2/15-196R4 and
>   http://www.unicode.org/emoji/charts/emoji-candidates.html (as of 2015-10-23):
>   1F6F6 CANOE (in the Transport and Map Symbols block),
>   and,
>   1F938 PERSON DOING CARTWHEEL
>   1F93A FENCER
>   1F93B MODERN PENTATHLON;
>   1F93C WRESTLERS
>   1F93D WATER POLO

1F93E HANDBALL
1F945 GOAL NET;
1F946 RIFLE
1F947 FIRST PLACE MEDAL
1F948 SECOND PLACE MEDAL
1F949 THIRD PLACE MEDAL, and,
1F94A BOXING GLOVE, and, 1F94B MARTIAL ARTS UNIFORM
(in the Supplemental Symbols and Pictographs block)
- Add the following **21** Typicon symbols with their glyphs based on document L2/15-173R2:
  i. In the Combining Diacritical Marks Supplement block:
  1DF6 COMBINING KAVYKA ABOVE RIGHT
  1DF7 COMBINING KAVYKA ABOVE LEFT
  1DF8 COMBINING DOT ABOVE LEFT
  1DF9 COMBINING WIDE INVERTED BRIDGE BELOW
  ii. In the Supplemental Punctuation block:
  2E45 INVERTED LOW KAVYKA
  2E46 INVERTED LOW KAVYKA WITH KAVYKA ABOVE
  2E47 LOW KAVYKA
  2E48 LOW KAVYKA WITH DOT
  2E49 DOUBLE STACKED COMMA
  iii. In the Supplemental Symbols and Pictographs block:
  1F900 CIRCLED CROSS FORMEE WITH FOUR DOTS
  1F901 CIRCLED CROSS FORMEE WITH TWO DOTS
  1F902 CIRCLED CROSS FORMEE
  1F903 LEFT HALF CIRCLE WITH FOUR DOTS
  1F904 LEFT HALF CIRCLE WITH THREE DOTS
  1F905 LEFT HALF CIRCLE WITH TWO DOTS
  1F906 LEFT HALF CIRCLE WITH DOT
  1F907 LEFT HALF CIRCLE
  1F908 DOWNWARD FACING HOOK
  1F909 DOWNWARD FACING NOTCHED HOOK
  1F90A DOWNWARD FACING HOOK WITH DOT
  1F90B DOWNWARD FACING NOTCHED HOOK WITH DOT.
- Add 09FD BENGALI ABBREVIATION SIGN from document L2/15-172R.
- Add 09FC BENGALI LETTER VEDIC ANUSVARA from document L2/15-161R.
- Add 1CF7 VEDIC SIGN ATIKRAMA (a combining character) from document L2/15-160R.
- Add 1F6D3 STUPA and 1F6D4 PAGODA from document N4661 in the Transport and Map Symbols block.
- Add the following **19** TV symbols with appropriate glyphs from document N4671:
  i. In the Enclosed Ideographic Supplement block:
  1F23B SQUARED CJK UNIFIED IDEOGRAPH-914D
  ii. In the Enclosed Alphanumeric Supplement block:
  1F19B SQUARED THREE D
  1F19C SQUARED SECOND SCREEN
  1F19D SQUARED TWO K
  1F19E SQUARED FOUR K
  1F19F SQUARED EIGHT K
  1F1A0 SQUARED FIVE POINT ONE
  1F1A1 SQUARED SEVEN POINT ONE
  1F1A2 SQUARED TWENTY-TWO POINT TWO
  1F1A3 SQUARED SIXTY P
  1F1A4 SQUARED ONE HUNDRED TWENTY P
  1F1A5 SQUARED LATIN SMALL LETTER D
  1F1A6 SQUARED HC
  1F1A7 SQUARED HDR
  1F1A8 SQUARED HI-RES
  1F1A9 SQUARED LOSSLESS
  1F1AA SQUARED SHV
  1F1AB SQUARED UHD, and,
  1F1AC SQUARED VOD

b. Changes
- Change the status of Radical/Stroke information associated with ideographs from 'Informative' to 'normative' (based on document N4692); the project editor is to make the appropriate changes to the text of the standard.

- Accept the proposed glyph changes to the ideographs at 2B5AA, 2B9D7, 2BF4A and 2C88D in document N4682 (subject to verification by IRG).

M64.07 (Progression of 5th edition of 10646):
WG2 recommends that its project editor prepares a revised text of ISO/IEC 10646 (5th edition), which will include the changes arising from recommendations **M64.05** to **M64.06** above, along with the disposition of ballot comments (document N4698); and forward it to the SC2 secretariat for processing as a second CD ballot. The delta code charts will be in document N4702. The target starting dates are modified to: CD2 2015-12 DIS: 2016-04, FDIS: 2016-11.
WG2 notes that CJK Extension F2 is a candidate for inclusion in the CD ballot, based on next IRG meeting recommendations.

Amendment 1 to the 5th edition:
In order to continue the progression of work on the standard before the next WG2 meeting, new mature proposals can be included in the next amendment to the 5th edition of the standard.

Relevant recommendation:
M64.08 (Project subdivision for Amendment 1 to the 5th edition of the standard):
Anticipating the need for encoding additional scripts and characters that will have mature proposals prior to the next SC2 meeting, WG2 recommends to its convener and project editor to generate a new project subdivision proposal for the first amendment to the 5th edition of the standard, and submit it to SC2 for approval. WG2 notes that adding Japanese Hentaigana characters is a candidate for inclusion in Amendment 1. Tentative target starting dates for Amendment 1 to the 5th edition are: PDAM1 2016-04, DAM1 2016-11.

10.6   Proposals on the agenda that were not discussed
Input documents:
4668 Preliminary proposal to encode the Eebee Hmong script in the UCS; UC Berkeley Script Encoding Initiative (Universal Scripts Project); 2015-07-27
4687 Request for comment on encoding Oracle Bone Script (zip file with Proposal and associated files); TCA and China; 2015-10-21

The above documents were not discussed. They are for experts' review and feedback to the authors.

11   Defect reports

11.1   Glyph for Malayalam Vowel Sign Vocalic RR
Input document:
UTC L2/15-174 Request to change the representative glyph of MALAYALAM VOWEL SIGN VOCALIC RR; Srinidhi A, and Sridatta A; 2015-07-16

This correction was accepted under disposition of editorial comment US E.4 on CD for 5th edition, in section 7.7.2.

11.2   Error report for CJK Unified Ideographs
Input document:
4682 Error Report for CJK Unified Ideographs Extensions C and E; Andrew West and Ming Fan; 2015-10-12

Mr. Andrew West explained the errors they found in the representative glyphs for 2B5AA, 2B9D7, 2BF4A and 2C88D (in CJK Extensions C and E blocks).
Discussion:
   a.   Dr. Lu Qin: IRG would like to review and endorse it after checking for possible unifications.
   b.   Mr. Toshiya Suzuki: Changes to representative glyphs on already standardized characters should be reviewed carefully.
Disposition:
Accepted the glyph changes, subject to IRG endorsement. The radical/stroke information is to be verified also.
See item b in relevant recommendation **M64.06** *on page 35.*

11.3   Radical/Stroke status
Input document:
4692 CJK Ideographs Radical Stroke status update; Michel Suignard, project editor; 2015-10-21

Mr. Michel Suignard: This document is a request received from the Unicode consortium to make radical/stroke information for the ideographs as Normative. I would like to insert the appropriate text into the CD ballot. This will be extended to all ideographic scripts such as Tangut as well as any future ones.
Disposition:
Accepted.
See item b in relevant recommendation **M64.06** *on page 35.*

12   Liaison Reports
Input document:
UTC L2/15-244 Script Encoding Initiative Liaison report; Deborah Anderson; 2015-10-12

The above document is FYI. It was not discussed at the meeting.

13   WG2 document repository

Several contributions posted to this meeting's agenda (such as UTC L2/15-173R2 - Proposal to encode additional Typicon symbols) were from the Unicode consortium and were not given separate WG2 document numbers. This triggered some discussion at the meeting. In addition, there are concerns from several experts contributing to the progression of work of WG2 who do not have access to LiveLink postings of WG2 documents, unlike what used to be with the previous WG2 document repository on dkuug.

Discussion:

   a. Mr. Tetsuji Orita: Will the UTC documents be available as WG2 documents?
   b. Mr. Michel Suignard: It is better if we do not have double posting. In addition, the WG2 documents are not easy to show revisions on the global directory. My suggestion is that we use the references directly from the UTC. We can also have another repository of documents, which allows us to have revisions. We discussed some of these aspects at the SC2 meeting on Monday. I prefer not to have a double posting. Expert contributions are not accessible by many experts from the LiveLink site.
   c. Ms. Toshiko Kimura: You can have a separate folder and have WG2 documents posted there.
   d. Mr. Peter Constable: The WG2 documents are for use by experts for the work towards providing input to the project editor. Many of the experts who need access to the WG2 documents do not have access to the ISO LiveLink. We cannot maintain latest version for each document. The UTC document register is very stable and is available for every interested expert.
   e. Mr. Michel Suignard: It is doable with a mirror site similar to the dkuug site.
   f. Mr. Toshiya Suzuki: All the documents being discussed at the WG2 meetings should have a WG2 number.
   g. Mr. Peter Constable: The meeting agendas etc. can have a WG2 number. However, for proposals that are used as input to make recommendation to the editor we do not need a WG2 number if it already exists elsewhere.
   h. Mr. Michel Suignard: We have done the dual posting in the past. Many of the UTC-L2 documents were also given a WG2 number. Looking at the UTC document register – you can see that many of them do have the WG2 numbers also.
   i. Dr. Ken Whistler: My personal opinion is that the dual posting is an opportunity for getting out of synch … many of the UTC proposals do get revised keeping the same primary document number. To the extent we can keep single document references we should do that, and go for two numbers only when needed.

These concerns will be brought to SC2's attention to get some workable solution.

14   Future meetings:

Meeting 65:

Mr. Michel Suignard: Currently meeting 65 is scheduled for October 2016. USA is the host. I would like to see if we could move this meeting to September.

> Week of Sept 26th. 2016-09-26/30. Adobe, San Jose, CA, USA, was agreed to.

Meeting 66:

Mr. Michel Suignard: Meeting 66 is slated for Late September 2017, tentatively in China, pending confirmation.

We could also explore additional discussions of WG2 or IRG experts with UTC on specific subjects, between the annual WG2 meetings.

Meeting 67: Slated for Sept 2018. We are looking for a host.

Relevant recommendation:

M64.12 (Future meetings):

WG2 endorses the following schedule for future meetings:

> WG2 Meeting 65 - 2016-09-26/30, San José, CA, USA (co-located with SC2)
> WG2 Meeting 66 - Late 2017-09 (tentative), China (pending confirmation) (co-located with SC2)
> WG2 Meeting 67 - 2018-09 (Looking for host).
>
> IRG Meeting 46 - 2016-05-23/27, Beijing, China
> IRG Meeting 47 - 2016-10-17/21, Seoul, Korea; (backup Japan)

15   Closing

15.1   Approval of Recommendations of meeting 64

Output document:

4701 Recommendations from WG 2 meeting 64; WG 2 meeting 64, Kunibiki Messe, Matsue, Shimane, Japan; 2015-10-19/23; 2015-10-23

The draft recommendations prepared by Dr. V.S. Umamaheswaran, with assistance of the drafting committee, were reviewed, and were adopted with revisions. The final set of recommendations is in document N4701.

Appreciation:

Relevant items in the meeting recommendations:

M64.13 (Appreciation to DKUUG for web site support):

WG2 thanks DKUUG and its staff for its continued support of the web site for WG2 document distribution and the e-mail server.

M64.14 (Appreciation to Unicode Consortium for web site support):

WG2 thanks Unicode Consortium and its staff for its support of the web site for WG2 document distribution.

M64.15 (Appreciation to Host):

WG2 thanks the national body of Japan (JISC) for hosting the meeting. WG 2 expresses its appreciation to IPSJ/ITSCJ and the Japanese national committee for JTC 1/SC 2, in particular Dr. ShuichiTashiro, Ms. Ayuko Nagasawa and Ms. Toshiko Kimura, for arranging the meeting facilities and for the administrative support. WG2 expresses its appreciation to IPSJ/ITSCJ, Matsue Convention Bureau, Shimane Prefecture, and Matsue City, for the enjoyable Japanese dinner event held in Yuushien Garden.

15.2 Adjournment

The meeting adjourned approximately at 12:30h on 2015-10-23.

16 Action items

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

Meeting 25, 1994-04-18/22, Antalya, Turkey (document N1033)
Meeting 26, 1994-10-10/14, San Francisco, CA, USA (document N1117)
Meeting 27, 1995-04-03/07, Geneva, Switzerland (document N1203)
Meeting 28, 1995-06-22/26, Helsinki, Finland (document N1253)
Meeting 29, 1995-11-06/10, Tokyo, Japan (document N1303)
Meeting 30, 1996-04-22/26, Copenhagen, Denmark (document N1353)
Meeting 31, 1996-08-12/16, Québec City, Canada (document N1453)
Meeting 32, 1997-01-20/24, Singapore (document N1503)
Meeting 33, 1997-06-30/07-04, Heraklion, Crete, Greece (document N1603)
Meeting 34, 1998-03-16/20, Redmond, WA, USA (document N1703)
Meeting 35, 1998-09-21/25, London, UK (document N1903)
Meeting 36, 1999-03-09/15, Fukuoka, Japan (document N2003)
Meeting 37, 1999-09-17/21, Copenhagen, Denmark (document N2103)
Meeting 38, 2000-07-18/21, Beijing, China (document N2203)
Meeting 39, 2000-10-08/11, Vouliagmeni, Athens, Greece (document N2253)
Meeting 40, 2001-04-02/05, Mountain View, CA, USA (document N2353), and
Meeting 41, 2001-10-15/18, Singapore (document 2403)
Meeting 42, 2002-05-20/23, Dublin, Ireland (document N2453)
Meeting 43, 2003-12-09/12, Tokyo, Japan (document N2553)
Meeting 44, 2003-10-20/23, Mountain View, CA, USA (document N2653)
Meeting 45, 2004-06-21/24, Markham, Ontario, Canada (document N2753)
Meeting 46, 2005-01-24/28, Xiamen, China (document N2903)
Meeting 47, 2005-09-12/15, Sophia Antipolis, France (document N2953)
Meeting 48, 2006-04-24/27, Mountain View, CA, USA (document N3103)
Meeting 49, 2006-09-25/29, Tokyo, Japan (document N3153)
Meeting 50, 2007-04-23/27, Frankfurt-Am-Main, Germany (document N3253)
Meeting 51, 2007-09-17/21, Hangzhou, China (document N3353)
Meeting 52, 2008-04-21/25, Redmond, WA, USA (document N3453)
Meeting 53, 2008-10-13/17, Hong Kong SAR (document N3553)
Meeting 54, 2009-04-20/24, Dublin, Ireland (document N3603)
Meeting 55, 2009-10-26/30, Tokyo, Japan (document N3703)
Meeting 56, 2010-04-19/23, San José, CA, USA (document N3803)
Meeting 57, 2010-10-04/08, Busan, Korea (Republic of) (document N3903)
Meeting 58, 2011-06-06/10, Helsinki, Finland (document N4103)
Meeting 59, 2012-02-13/17, Mountain View, CA, USA (document N4253)
Meeting 60, 2012-10-22/27, Chiang Mai, Thailand, (document N4353)
Meeting 61, 2013-06-010/14, Vilnius, Lithuania, (document N4403)
Meeting 62, San Jose, CA, USA; 2014-02-24/28, (document N4553)
Meeting 63, Colombo, Sri Lanka, 2014-09-29/20-03, (document N4603)
Meeting 64, Matsue, Shimane, Japan, 2015-10-19/23, (document N47xx) (this document)

16.1 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	Status

	document N4253 for meeting 60 (with any corrections noted in section 3 in the minutes of meeting 61 in document N4403).	
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 and M62 -- in progress.	In progress.

16.2 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 section 3 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.	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.	In progress

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

Item	Assigned to / action (Reference resolutions in document N4604, and unconfirmed minutes in document N4603 for meeting 63 (with any corrections noted in section 3 in the minutes of meeting 64 in document N47xx).	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 items.	
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.	In progress
b.	M63.16 (Shuishu script): WG2 invites the authors of document N4638 to revise their proposal on the Shuishu script taking into account the feedback received at this meeting, working with other experts interested in this script.	In progress.
c.	M63.17 (Naxi Dongba script): WG2 invites the authors of document N4633 to revise their proposal on the Naxi Dongba script taking into account the feedback received at this meeting, working with other experts interested in this script.	In progress.

16.4 New action items from meeting 64, Matsue, Shimane, Japan; 2015-10-19/23

Item	Assigned to / action (Reference resolutions in document N4701, and unconfirmed minutes in document N4739 for meeting 64 - this document you are reading).	Status
AI-64-1	Recording Secretary - Dr. V.S. UMAmaheswaran	
a.	To finalize the document N4701 containing the adopted meeting resolutions and send it to the convener as soon as possible.	Completed; see document N4701.
b.	To finalize the document N4739 containing the unconfirmed meeting minutes and send it to the convener as soon as possible.	Completed; see document N4739.
AI-64-2	Convener - Mr. Michel Suignard	
	To take note of and act upon the following items:	
a.	To add relevant contributions carried forward from previous meetings to agenda of next meeting. (See list of documents under AI-64-7, items b and c below.)	
AI-64-3	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.	*M64.03 (Disposition of ballot comments of DAM 2 to the 4th edition):* WG2 recommends that SC2 accepts the disposition of DAM 2 ballot comments in document N4691. The following significant changes are noted:
	    a. The Tamil Supplement block (11FC0…11FFF, 55 characters) is moved out of Amendment 2 and inserted into the CD for 5th edition.
	    b. In the Tangut block, 186A2 is removed; two Tangut components (shown in N4667) are added at 18817 and 18818; and various other glyph changes, re-orderings and source reference changes are made.
		Completed; see documents N4691 and N4694.

	c.	2828 CJK Ideographs J-Sources were updated.	
	d.	08E2 is renamed to ARABIC DISPUTED END OF AYAH.	
b.		M64.04 (Progression of Amendment 2 to the 4th edition): WG2 recommends that its project editor prepares the final text of Amendment 2 to the 4th edition of the standard, which will include the changes arising from recommendations M64.03 above, along with the final disposition of comments (document N4691); and forward it to the SC2 secretariat for processing as an FDAM ballot. The final code charts are in document N4694. The target starting date is modified to: FDAM: 2015-12.	Completed; FDAM2 document SC2 N4447 (pw protected).
c.		*M64.05 (Disposition of ballot comments of CD 5th edition):* WG2 recommends that SC2 accepts the disposition of CD (5th edition) ballot comments in document N4698. The following significant changes are noted: a. The Tamil Supplement block (11FC0…11FFF, 55 characters) is moved out of Amendment 2 and inserted into the CD for 5th edition. b. Old Italic (based on document N4669): Added 1032D;OLD ITALIC LETTER YE Added 1032E;OLD ITALIC LETTER NORTHERN TSE, and, Changed the name of 1032F to OLD ITALIC LETTER SOUTHERN TSE. c. Removed CJK Unified Ideograph 2D138 (USAT-00061) from CJK Extension F; it is unified with 20991. d. Removed CJK Unified Ideograph 2CEF1 (JMJ-056848) from CJK Extension F. e. Added in Bopomofo block 312E BOPOMOFO LETTER O WITH DOT ABOVE with an annotation that it is BOPOMOFO LETTER E EARLY FORM (based on document N4695). f. Inserted the following 23 ideographs into CJK Extension F: UTC-01201 from document N4678, JMJ-068048 and JMJ-068049 from document N4680, and, 20 new ideographs from Macau SAR from document N4679. g. Removed 1F931 HERO, 1F932 CRIMINAL and 1F941 MAGIC WAND. h. Entire Nushu block is reordered and moved to new range 1B170…1B2FF, based on Nushu ad hoc report in document N4693 and the accompanying revised chart in document N4697. Several glyphs were changed. i. Shape of 11A33 ZANABAZAR SQUARE FINAL CONSONANT MARK is changed to a diamond shape. j. Several Zanabazar Square character names were corrected as proposed by UK ballot comments and the ad hoc report on Mongolian scripts (N4699). k. Several Soyombo character names were corrected or changed, one character (SOYOMBO TERMINAL MARK-3) was deleted, and three code positions were reserved for future encoding, per ad hoc report and attached revised code chart in document N4699, and in response to UK ballot comments. (See document N4698 for full list of dispositions and associated changes.)	Completed; see document N4698.
d.		*M64.06 (Additional changes in 5th edition):* WG2 recommends that SC2 accepts the following additional changes in the CD for 5th edition of the standard: a. Additions - Add following two name aliases (based on document N4654 item 10): 2B7A LEFTWARDS TRIANGLE-HEADED ARROW WITH DOUBLE VERTICAL STROKE 2B7C RIGHTWARDS TRIANGLE-HEADED ARROW WITH DOUBLE VERTICAL STROKE. - Add the following 15 emoji characters with their glyphs based on document L2/15-195R2 and http://www.unicode.org/emoji/charts/emoji-candidates.html (as of 2015-10-23): 1F927 SNEEZING FACE 1F939 JUGGLING 1F941 DRUM WITH DRUMSTICKS; 1F943 TUMBLER GLASS 1F944 SPOON 1F956 BAGUETTE BREAD 1F957 GREEN SALAD; 1F958 SHALLOW PAN OF FOOD 1F959 STUFFED FLATBREAD 1F98B BUTTERFLY, and, 1F98C DEER	Completed; see document N4702. Incorporated in CD-2 of 5th ed.

(in the Supplemental Symbols and Pictographs block)
and,
1F6D2 SHOPPING TROLLEY (in the Transport and Map Symbols block).
Add the following 14 sports-related emoji characters with appropriate glyphs from document L2/15-196R4 and http://www.unicode.org/emoji/charts/emoji-candidates.html (as of 2015-10-23):
1F6F6 CANOE (in the Transport and Map Symbols block),
and,
1F938 PERSON DOING CARTWHEEL
1F93A FENCER
1F93B MODERN PENTATHLON;
1F93C WRESTLERS
1F93D WATER POLO
1F93E HANDBALL
1F945 GOAL NET;
1F946 RIFLE
1F947 FIRST PLACE MEDAL
1F948 SECOND PLACE MEDAL
1F949 THIRD PLACE MEDAL, and,
1F94A BOXING GLOVE, and, 1F94B MARTIAL ARTS UNIFORM
(in the Supplemental Symbols and Pictographs block)
- Add the following 21 Typicon symbols with their glyphs based on document L2/15-173R2:
  i.   In the Combining Diacritical Marks Supplement block:
  1DF6 COMBINING KAVYKA ABOVE RIGHT
  1DF7 COMBINING KAVYKA ABOVE LEFT
  1DF8 COMBINING DOT ABOVE LEFT
  1DF9 COMBINING WIDE INVERTED BRIDGE BELOW
  ii.   In the Supplemental Punctuation block:
  2E45 INVERTED LOW KAVYKA
  2E46 INVERTED LOW KAVYKA WITH KAVYKA ABOVE
  2E47 LOW KAVYKA
  2E48 LOW KAVYKA WITH DOT
  2E49 DOUBLE STACKED COMMA
  iii.   In the Supplemental Symbols and Pictographs block:
  1F900 CIRCLED CROSS FORMEE WITH FOUR DOTS
  1F901 CIRCLED CROSS FORMEE WITH TWO DOTS
  1F902 CIRCLED CROSS FORMEE
  1F903 LEFT HALF CIRCLE WITH FOUR DOTS
  1F904 LEFT HALF CIRCLE WITH THREE DOTS
  1F905 LEFT HALF CIRCLE WITH TWO DOTS
  1F906 LEFT HALF CIRCLE WITH DOT
  1F907 LEFT HALF CIRCLE
  1F908 DOWNWARD FACING HOOK
  1F909 DOWNWARD FACING NOTCHED HOOK
  1F90A DOWNWARD FACING HOOK WITH DOT
  1F90B DOWNWARD FACING NOTCHED HOOK WITH DOT.
- Add 09FD BENGALI ABBREVIATION SIGN from document L2/15-172R.
- Add 09FC BENGALI LETTER VEDIC ANUSVARA from document L2/15-161R.
- Add 1CF7 VEDIC SIGN ATIKRAMA (a combining character) from document L2/15-160R.
- Add 1F6D3 STUPA and 1F6D4 PAGODA from document N4661 in the Transport and Map Symbols block.
- Add the following 19 TV symbols with appropriate glyphs from document N4671:
  i.   In the Enclosed Ideographic Supplement block:
  1F23B SQUARED CJK UNIFIED IDEOGRAPH-914D
  ii.   In the Enclosed Alphanumeric Supplement block:
  1F19B SQUARED THREE D
  1F19C SQUARED SECOND SCREEN
  1F19D SQUARED TWO K
  1F19E SQUARED FOUR K
  1F19F SQUARED EIGHT K

	1F1A0 SQUARED FIVE POINT ONE
	1F1A1 SQUARED SEVEN POINT ONE
	1F1A2 SQUARED TWENTY-TWO POINT TWO
	1F1A3 SQUARED SIXTY P
	1F1A4 SQUARED ONE HUNDRED TWENTY P
	1F1A5 SQUARED LATIN SMALL LETTER D
	1F1A6 SQUARED HC
	1F1A7 SQUARED HDR
	1F1A8 SQUARED HI-RES
	1F1A9 SQUARED LOSSLESS
	1F1AA SQUARED SHV
	1F1AB SQUARED UHD, and,
	1F1AC SQUARED VOD
	b. Changes
	    - Change the status of Radical/Stroke information associated with ideographs from 'Informative' to 'normative' (based on document N4692); the project editor is to make the appropriate changes to the text of the standard.
	    - Accept the proposed glyph changes to the ideographs at 2B5AA, 2B9D7, 2BF4A and 2C88D in document N4682 (subject to verification by IRG).	

e.	*Recommendation M64.07 (Progression of 5th edition of 10646):* WG2 recommends that its project editor prepares a revised text of ISO/IEC 10646 (5th edition), which will include the changes arising from recommendations M64.05 to M64.06 above, along with the disposition of ballot comments (document N4698); and forward it to the SC2 secretariat for processing as a second CD ballot. The delta code charts will be in document N4702. The target starting dates are modified to: CD2 2015-12 DIS: 2016-04, FDIS: 2016-11. WG2 notes that CJK Extension F2 is a candidate for inclusion in the CD ballot, based on next IRG meeting recommendations.	Completed; see CD-2 5th ed text in document SC2 N4446. (copy and paste Hyperlink in a browser).
f.	*M64.08 (Project subdivision for Amendment 1 to the 5th edition of the standard):* Anticipating the need for encoding additional scripts and characters that will have mature proposals prior to the next SC2 meeting, WG2 recommends to its convener and project editor to generate a new project subdivision proposal for the first amendment to the 5th edition of the standard, and submit it to SC2 for approval. WG2 notes that adding Japanese Hentaigana characters is a candidate for inclusion in Amendment 1. Tentative target starting dates for Amendment 1 to the 5th edition are: PDAM1 2016-04, DAM1 2016-11.	Completed; see SC2 N4444 (password protected).
AI-64-4	IRG Rapporteur and IRG Editor (Dr. Lu Qin)	
	To take note of and act upon the following items:	
a.	*M64.12 (Future meetings):* WG2 endorses the following schedule for future meetings: IRG Meeting 46 - 2016-05-23/27, Beijing, China IRG Meeting 47 - 2016-10-17/21, Seoul, Korea; (backup Japan)	
b.	*M64.11 (Review of CJK Unification Rules):* WG2 recommends that IRG reviews its CJK unification rules to minimize the number of glyph variants that are coded as. separate characters.	
c.	*M64.06 (Additional changes in 5th edition):* WG2 recommends that SC2 accepts the following additional changes in the CD for 5th edition of the standard: … Under item b. Changes: Accept the proposed glyph changes to the ideographs at 2B5AA, 2B9D7, 2BF4A and 2C88D in document N4682 (subject to verification by IRG).	
AI-64-5	Ad hoc group on roadmap (Dr. Umamaheswaran)	
a.	To update the Roadmaps with the results from this meeting.	Completed. See SC2 standing document SD1 SC2 Roadmaps.
AI-64-6	Experts from China (Chen Zhuang), UK (Andrew West), Japan (Toshiya Suzuki), Ireland (Mr. Michael Everson)	
	To take note of and act on the following items.	
a.	*M64.09 (Shuishu script):* WG2 invites the authors of document N4696 to revise their proposal on the Shuishu script taking into account the feedback received at this meeting, working with other experts interested in this script.	
b.	*M64.10 (Small Seal script):* WG2 invites the authors of document N4688 to revise their proposal on the Small Seal script taking into account the feedback received at this meeting, working with	

	other experts interested in this script.	
AI-64-7	Experts from all national bodies and liaison organizations	
	To take note of and provide feedback on the following items.	
a.	*M64.12 (Future meetings):* WG2 endorses the following schedule for future meetings: WG2 Meeting 65 - 2016-09-26/30, San José, CA, USA (co-located with SC2) WG2 Meeting 66 - Late 2017-09 (tentative), China (pending confirmation) (co-located with SC2) WG2 Meeting 67 - 2018-09 (Looking for host).	
b.	Following items are carried forward from earlier meetings - filtered at meeting 64: Scripts, new blocks or large collections (awaiting updated proposals from the authors): Afáka (N4292); Bagam (N4293); Balti 'B' (N4016); Balti scripts (N3842); Chinese Chess Symbols (N3910); Dhives Akuru (N3848); Diwani Siyaq Numbers (N4122); English Phonotypic Alphabet (EPA) (N4079); Eskaya (N4499); Garay (N4261); Indic Siyaq (N4123); Jenticha (N4028); Jurchen (N4077); Kawi (N4266); Khambu Rai (N4018); Khatt-i Baburi (N4130); Khitan (N4631); Kpelle (N3762); Landa (N3768); Leke (N4438); Loma (N3756); Moon (N4128); Mwangwego (N4323); Nandinagari (N4389); Naxi Dongba (N4633); Obsolete Simplified Chinese Ideographs (N3695); Old Yi (N3288); Ottoman Siyaq (N4124); Pau Cin Hau Syllabary (N4412); Persian Siyaq (N4125); Pyu (N3874); Ranjana (N4515); Rohingya (N4283); Tangsa Latsam Khimhun (N4497); Tangsa Lakhum Mossang script (N4496); Tolong Siki (N3811); Tulu (N4025); Woleai (N4146); Zou (N4044).	
c.	The following documents (that were flagged for experts' feedback at meeting 64): 4688 Proposal to encode Small Seal Script in UCS (zip file with Proposal and associated files); TCA and China; 2015-10-20 4696 Preliminary Proposal for encoding Shuishu in the SMP of the UCS (zip file with Proposal and presentation deck); China; 2015-10-21 4668 Preliminary proposal to encode the Eebee Hmong script in the UCS; UC Berkeley Script Encoding Initiative (Universal Scripts Project); 2015-07-27 4687 Request for comment on encoding Oracle Bone Script (zip file with Proposal and associated files); TCA and China; 2015-10-21 (See also documents under action AI-64-7-b above.)	

********************* END OF MEETING MINUTES *********************