



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

DOC TYPE: Meeting Minutes

TITLE: Unconfirmed minutes of WG 2 meeting no. 55
6th Floor, Kikai-Shinko-Kaikan, 3-5-8, Shiba-koen, Minato-ku, Tokyo
2009-10-26/30

SOURCE: V.S. Umamaheswaran, Recording Secretary, and Mike Ksar, 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: 2010-04-16

DISTRIBUTION: SC 2/WG 2 members and Liaison organizations

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

ISO/IEC JTC 1/SC 2 **N**_____
ISO/IEC JTC 1/SC 2/WG 2 **N3703**
2010-04-13

Title: Unconfirmed minutes of WG 2 meeting no. 55 6th Floor, Kikai-Shinko-Kaikan, 3-5-8, Shiba-koen, Minato-ku, Tokyo 2009-10-26/30
Source: V.S. Umamaheswaran (umavs@ca.ibm.com), Recording Secretary Mike Ksar (mikeksar@10646.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:

[3662](#) 1st Call for meeting 55 – Tokyo; Mike Ksar; 2009-07-08

The convener opened the meeting at 10:11h. A copy of the agenda had been printed and distributed to the delegates. He requested the Japanese national body to welcome the delegates.

Mr. Masahiro Sekiguchi: On behalf of ITSCJ or JIS I welcome all of you to Japan. You should have a package with information sheet for the delegates with all the logistics. Wireless networking is provided and information to connect is provided. ITSCJ will host a reception on Wednesday evening. Everyone is invited. You are requested to indicate your attendance at the reception in a paper to be circulated. If you know of others who will be arriving later and would likely be attending the reception please let me know. This building's main entrance opens at 8:30h and closes at 18:30h. If we really want to extend the meeting beyond these hours, the room is available till 21:00h. If the meeting ends after 18:00h we can exit via other exits than the main entrance. We will guide you to the exits. A guide and a list of nearby restaurants are also provided.

Mr. Mike Ksar: Thank you Mr. Masahiro Sekiguchi. We will end each day hopefully by 6:30h. We will start at 9:00h from tomorrow - if we need to start earlier we can start at 8:30h – ad hoc meetings for example. Wednesday evening we need to close a little earlier for the reception. On Thursday, if there are any uncovered items we will postpone those to the next meeting. The resolutions will be adopted starting 8:30h on Friday. Hopefully WG2 can adjourn by noon on Friday. The SC2 plenary starts on Friday afternoon at 14:00h. OWG-Sort will meet on Thursday afternoon starting at 14:00h. Those who want to be in the OWG-Sort meeting, please inform Mr. Alain LaBonté.

1.1 Roll Call

Input document:

[3601](#) WG2 Experts List; Convener; 2009-04-22

Mr. Mike Ksar: Delegates are requested to identify themselves, the national body they represent and their affiliation. Invited experts should identify themselves as invited experts. The role of the invited experts is to contribute to the areas of their expertise. They can stay and participate on other topics also. They cannot vote when it comes to any voting. Some invited experts will be arriving today or tomorrow -- some of them from Japan. I would like to remind the delegates that if you want to provide a contribution, please give it to me; I will assign a number to it and usually post it during the break. Any contribution that contains material of personal nature will not be posted. A CD with all the documents from the WG2 site is available for delegates who may not have access to the network. Dr. Umamaheswaran will circulate a list of all the experts with addresses and phone numbers. Please indicate your attendance and make any corrections to the information. If your name is not on the list, please add it to the blank sheets at the end.

The drafting committee will draft the resolutions. The drafting committee will be Dr. Umamaheswaran, myself, Mr. Michel Suignard, Ms. Deborah Anderson and Mr. Masahiro Sekiguchi. Please let me

know if anyone else wants to be part of the drafting committee. (See the final list under the table of attendees below).

The attendees introduced themselves.

The following **34** attendees representing **9** national bodies, **3** liaison organizations, including **3** invited experts were present at different times during the meeting.

Name	Representing	Affiliation
Mike KSAR	.Convener, USA	Independent
Erich FICKLE	.Invited Expert, China	Independent
Peri BHASKARARAO	.Invited Expert, India	Tokyo University of Foreign Studies
Katsuhiko OGATA	.Invited Expert, Japan	USAPARA Corporation
LU Qin	.IRG Rapporteur	Hong Kong Polytechnic University
Tatsuo KOBAYASHI	.SC2 Chair	Scholex Co., Limited
Toshiko KIMURA	.SC2 Secretariat	IPSJ/ITSCJ
Bear S. TSENG	.TCA – Liaison	Academia Sinica
Caspar LEE	.TCA – Liaison	Paradigm Venture Partners
Lin-Mei WEI	.TCA – Liaison	Chinese Foundation for Digitization Technology
Alain LABONTÉ	Canada; Editor 14651	Independent
V. S. (Uma) UMAMAHESWARAN	Canada; Recording Secretary	IBM Canada Limited
CHEN Zhuang	China	Chinese Electronics Standardization Institute
Hillevi VUORI	Finland	Finnish Standards Association (SFS)
Tero AALTO	Finland	CSC – IT Center for Science Ltd
Swaran LATA	India	Ministry of Communications and IT, Government of India
Michael EVERSON	Ireland; Contributing Editor	Everttype
Tomokazu TAKADA	Japan	National Institute for Japanese Language and Linguistics
Masahiro SEKIGUCHI	Japan	Fujitsu Limited
Satoshi YAMAMOTO	Japan	Hitachi Limited
Suzuki TOSHIYA	Japan	Hiroshima University
Taichi KAWABATA	Japan	NTT Communications
Taro YAMAMOTO	Japan	Adobe Systems
Tetsuji ORITA	Japan	IBM Japan Limited
Yoshiki MIKAMI	Japan	Nagaoka University of Technology
KANG Mi-Young	Korea (Republic of)	National Institute of the Korean Language
KIM Kyongsok	Korea (Republic of)	Busan National University
Martin HOSKEN	UK	SIL International
Katsuhiko MOMOI	USA	Google
Markus SCHERER	USA	Google
Ken WHISTLER	USA; Contributing Editor	Sybase Inc.
Michel SUIGNARD	USA; Project Editor	Independent
Deborah ANDERSON	USA; SEI, UC Berkeley – Liaison	Dept. of Linguistics, UC Berkeley
Peter CONSTABLE	USA; Unicode Consortium – Liaison	Microsoft Corporation

Drafting committee: Messrs. Mike Ksar, Michel Suignard, Michael Everson, Masahiro Sekiguchi, Ken Whistler and Ms. Deborah Anderson, assisted in checking the draft resolutions prepared by the recording secretary Dr. Umamaheswaran.

2 Approval of the agenda

Input document:

[3693](#) Draft Agenda – Meeting 55; Mike Ksar; 2009-10-21

Mr. Mike Ksar: The focus of this meeting will be to review the ballot responses and discuss the draft disposition of comments. We will not be going through the agenda in the same sequence as is listed. I will go over the agenda quickly and highlight the agenda items. Document [N3713](#) is the last contribution that has been posted. The latest CD of ISO/IEC 10646 second edition is about 2200 pages - a partial printout without the Han charts is available in the room.

Discussion:

- a. Mr. Peter Constable: Do you want us to email the docs or give in a memory key.
- b. Mr. Mike Ksar: Either way.
- c. Dr. Ken Whistler: Formally acknowledging the name stability issue should be another item under the architecture issues.
- d. Mr. Masahiro Sekiguchi: Is there a written contribution?
- e. Dr. Ken Whistler: We can make it available.

- f. Dr. Umamaheswaran: We should add Meetei Mayek extension document N3498 as agenda item 9.25.
- g. Mr. Martin Hosken: We would like to have an agenda item on 'Indic issues' re: section 22.2 of the CD.
- h. Mr. Masahiro Sekiguchi: Expert from Japan on Nushu script will be available only on Tuesday. Request we can have the subject discussion on Tuesday.
- i. Mr. Chen Zhuang: There are two additional contributions on Nūshu and Jurchen, to be added to the agenda items.
- j. Mr. Mike Ksar: Agenda is approved as modified.

The agenda document N3693 was updated reflecting the above discussion. It was also updated and posted to the WG2 website as new items were identified as the meeting progressed.

All the changes made during the progress of the meeting are included in the appropriate sections in this document. Some of the agenda items have been reorganized or renumbered in these minutes. Some agenda items that were not discussed have been deleted. The following table of contents reflects where the items are discussed and recorded.

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Possible ad hoc meetings:

Mr. Mike Ksar: Regarding possible ad hoc meetings agenda item 7.1:

- a. On Hungarian - one of the contributors on the topic is not here. We have a new document on the topic.
- b. On Emoji - we had an ad hoc in Dublin. There are some contributions related to it on the agenda. If an informal conversation among delegates can be done it would be better. An ad hoc could be arranged if needed. Emoji could be discussed Tuesday before 1:30pm. Some Japanese experts on Emoji symbols will be attending. If there are still unresolved issues we can have an ad hoc on Wednesday.
- c. Mr. Michel Suignard: The Japanese experts are interested only on a subset of Emoji symbols... we should be able to deal with issues on the rest of the symbols during the discussion of disposition of comments. We may need an ad hoc only if there are unresolved items.
- d. The ad hoc in Dublin on Jurchen in Dublin was chaired by Mr. Andrew West. Mr. Michael Everson will chair at this meeting. Ms. Deborah Anderson, Messrs. Chen Zhuang and Martin Hosken indicated they would attend.

- e. On Miao script - Mr. Erich Fickle, an invited expert is here. Ms. Deborah Anderson will chair the ad hoc. Messrs. Erich Fickle, Ken Whistler, Peter Constable, Michael Everson, Martin Hosken and Chen Zhuang indicated they will participate.

The ad hoc chairs are requested to provide a written report of their meetings.

3 Approval of minutes of meeting 53

Input document:

[3603](#) *Draft Minutes Meeting 54; Uma; 2009-07-08*

Dr. Umamaheswaran: Neither the convener, nor I have received any feedback on the minutes. There was no discussion. The minutes were adopted without any modifications.

4 Review action items of previous meeting

Input document:

[3603-AI](#) *Action items from Meeting 54; Uma; 2009-07-08*

Dr. Umamaheswaran reviewed the action items list in document [N3603-AI](#). Of the forty nine (49) action items, forty one (41) were marked as either completed or noted and eight (8) were carried over. The following sections show the status of various action items after the review.

4.1 Outstanding action items from meeting 48, 2006-04-24/27, Mountain View, CA, USA

Item	Assigned to / action (Reference resolutions in document N3104 , and unconfirmed minutes in document N3103 for meeting 48 - with any corrections noted in section 3 of in the minutes of meeting 49 in document N3153).	Status
AI-48-7	US national body (Ms. Deborah Anderson)	
b.	To prepare updated Arabic Math proposal(s) based on documents N3085 to N3089 . M48, M49, M50, M51, M52, M53 and M54 - in progress.	In progress.

4.2 Outstanding action items from meeting 51, 2007-09-17/21, Hangzhou, China

Item	Assigned to / action (Reference resolutions in document N3354 , and unconfirmed minutes in document N3353 for meeting 51 – with any corrections noted in section 3 in the minutes of meeting 52 in document N3454).	Status
AI-51-4	IRG Convener and IRG Editor (Dr. Lu Qin)	
	To act on the resolution below.	
c.	<i>M51.38 (IRG ideographs for Names):</i> With reference to item 8 in document N3283 , WG2 endorses the IRG activity to investigate and report back to WG2 on the issues and recommendations on ideographs for names of persons, places and the like. M52, M53 and M54 - in progress.	In progress.
i.	IRG convener and IRG editor to assist the project editor in preparing the relevant source-reference data for Amd. 4, Amd. 5 and Amd. 6, the Ext. C charts for Amd. 5, and the multiple-column unified CJK charts for the text of the second edition, respecting the schedules adopted in the relevant resolutions at this meeting. M52, M53 and M54 (partly completed) - TCA, DPRK, Vietnam are in progress.	Completed. See document N3655 - CD of next edition.
AI-51-6	China (Mr. Chen Zhuang)	
	To take note of and act upon the following items.	
c.	<i>M51.31 (Simple Miao script):</i> With reference to document N3335 on Simple Miao script, WG2 invites national bodies and liaison organizations to review and provide feedback to China and invites the Chinese national body to submit a revised proposal incorporating the feedback for consideration at WG2 meeting 52. M52, M53 and M54 - in progress.	Completed. See document N3669 .

4.3 Outstanding action items from meeting 52, 2008-04-21/25, Redmond, WA, USA

Item	Assigned to / action (Reference resolutions in document N3454 , and unconfirmed minutes in document N3453 for meeting 52 – with any corrections noted in section 3 in the minutes of meeting 53 in document N3553)	Status
AI-52-4	IRG Convener and IRG Editor (Dr. Lu Qin)	
	To take note of and act upon the following items:	

b.	M52.27 (IRG matters): WG2 requests IRG <ul style="list-style-type: none"> a) to prepare and present plans for their work on 'Annex S revision' and 'IRG Principles and Procedures' b) to study and report on the request regarding Ideographic Description Sequences (IDS) from document N3459 (Unicode Liaison Report) towards inclusion in the standard c) to review and report on request for HKSCS extensions in document N3445 for consideration at WG2 meeting 53. M53, M54 (item a. is in progress).	Completed. See document N3660 - IRG summary.
AI-52-7	Ireland (Mr. Michael Everson)	
<i>To take note of and act upon the following items.</i>		
a.	M52.5 (Principles for Dandas): WG2 adopts the principles guiding the encoding of Dandas in Brahmic scripts from document N3457 , and instructs its ad hoc group on P&P to incorporate these into its document on Principles and Procedures (along with the additions from resolution M52.4 above). WG2 further invites the Irish national body to investigate and report on the current practice on use of currently encoded Dandas in relevant scripts towards finalizing the list of scripts and their corresponding Dandas. M53, M54 – in progress.	In progress.

4.4 Outstanding action items from meeting 53, 2008-10-13/17, Hong Kong SAR

Item	Assigned to / action (Reference resolutions in document N3454 , and unconfirmed minutes in document N3453 for meeting 52 – with any corrections noted in section 3 in the minutes of meeting 54 in document N3603)	Status
AI-53-4	IRG Convenor and IRG Editor (Dr. Lu Qin)	
<i>To take note of and act upon the following items:</i>		
a.	M53.30 (Access to CJK Ext. B glyphs): The IRG is requested to make the CJK Ext. B glyphs from the current single-column format available from the IRG website to facilitate their future referencing, after the multiple-column format for CJK Extension B is published. M54 - in progress.	Completed.
c.	M53.32 (Japanese compatibility ideographs): The IRG, and all national bodies and liaison organizations, are requested to review and provide feedback on the request for additional compatibility ideographs in document N3530 from Japan. M54 - in progress.	Completed; see document N3706 .
AI-53-6	Ireland (Mr. Michael Everson)	
<i>To take note of and act upon the following items.</i>		
a.	To provide the collation information related to the two Tai Lue characters in resolution M53.12 (Tai Lue): WG2 accepts to encode the two characters: 19AA NEW TAI LUE LETTER HIGH SUA 19AB NEW TAI LUE LETTER LOW SUA with their glyphs as shown in document N3546 . M54 - in progress.	Completed.
b.	With reference to the proposal for four Devanagari characters for Kashmiri in document N3480 , to work with India (Ms. Swaran Lata) to prepare a revised proposal to WG2 by end of Feb 2009 M54 - in progress.	Completed; see documents N3710 and N3673 .
AI-53-7	India (Ms. Swaran Lata)	
<i>To take note of and act upon the following items.</i>		
a.	With reference to the proposal for four Devanagari characters for Kashmiri in document N3480 , to work with Ireland (Mr. Michael Everson) to prepare a revised proposal to WG2 by end of Feb 2009. M54 - in progress.	Completed; see documents N3710 and N3673 .

4.5 New action items from meeting 54, 2009-04-20/24, Dublin, Ireland

Item	Assigned to / action (Reference resolutions in document N3604 , and unconfirmed minutes in document N3603 for meeting 54, this document you are reading).	Status
AI-54-1	Recording Secretary - Dr. V.S. UMaaheswaran	
a.	To finalize the document N3604 containing the adopted meeting resolutions and send it to the convener as soon as possible.	Completed; see document N3604 .
b.	To finalize the document N3603 containing the unconfirmed meeting minutes and send it to the convener as soon as possible.	Completed; see document N3603 .

AI-54-2	Convener - Mr. Mike Ksar	
	<i>To take note of and act upon the following items:</i>	
a.	M54.24 (Roadmap snapshot): WG2 instructs its convener to post the updated snapshot of the roadmaps (in document N3608) to the WG2 web site and communicate the same to SC2 secretariat.	Completed.
b.	M54.23 (Response on African languages): WG2 thanks Ms. Deborah Anderson for the report on African languages in document N3641 , and instructs its convener to send it to the SC2 secretariat for forwarding to JTC1 in response to Resolution 34 from JTC1 plenary in November 2008.	Completed.
c.	To add to the agenda proposals carried over from meeting 54: i. Meetei Mayek Extended Block in document N3478 ii. Any revised document based on action item AI-54-g on all national bodies later in this table.	Completed.
AI-54-3	Editor of ISO/IEC 10646: (Mr. Michel Suignard with assistance from contributing editors)	
	<i>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:</i>	
a.	M54.01 (Canadian Aboriginal Syllabics Extended): With reference to ballot comments regarding Canadian Aboriginal Syllabic characters in FPDAM6 (in document N3609) and in PDAM7 (in document N3610) WG2 resolves to combine, reorder and consolidate the set of 29 characters encoded in 18E0 to 18FC in Amd. 6 and the set of 41 characters encoded in 18B0 to 18D1, 18D3 to 18D7, 18D9 and 18DA in Amd. 7, and include the combined set in Amd. 6. The new code positions, the corresponding character glyphs and names are as shown in pages 2 and 3 of document N3533 .	Completed.
b.	M54.02 (Note re: KS X 1026-1): With reference to document N3611 from Korea (republic of) regarding KS X 1026-1, WG2 accepts to add the following note in clause 26.1 of the standard and include it in Amendment 6. "NOTE 3 - Hangul text can be represented in several different ways in this standard. Korean Standard KS X 1026-1: Information Technology - Universal Multiple-Octet Coded Character set (UCS) - Hangul - Part 1, Hangul processing guide for information interchange, provides guidelines on how to ensure interoperability in information interchange."	Completed.

c.	<p>M54.03 (Disposition of FPDAM6 ballot comments): WG2 accepts the disposition of ballot comments on FPDAM6 in document N3631 and instructs its editor to prepare the final text of Amendment 6 incorporating the dispositions, including all the changes accepted in resolutions M54.01 and M54.02 above. The editor is to take note of additional glyph changes per section 2, items a through f in document N3623. The significant accepted changes are noted below:</p> <p>14 name changes:</p> <ul style="list-style-type: none"> - 1CD4 to VEDIC SIGN YAJURVEDIC MIDLINE SVARITA - A9C0 to JAVANESE PANGKON - 10A6A to OLD SOUTH ARABIAN LETTER SAT - 10A6F to OLD SOUTH ARABIAN LETTER SAMEKH - 1F157 to NEGATIVE CIRCLED LATIN CAPITAL LETTER H - 1F15F to NEGATIVE CIRCLED LATIN CAPITAL LETTER P - 1F179 to NEGATIVE SQUARED LATIN CAPITAL LETTER J - 1F17B to NEGATIVE SQUARED LATIN CAPITAL LETTER L - 1F17C to NEGATIVE SQUARED LATIN CAPITAL LETTER M - 1F17F to NEGATIVE SQUARED LATIN CAPITAL LETTER P - 1F18A to CROSSED NEGATIVE SQUARED LATIN CAPITAL LETTER P - 1F18B to NEGATIVE SQUARED IC - 1F18C to NEGATIVE SQUARED PA - 1F18D to NEGATIVE SQUARED SA <p>51 code position changes:</p> <ul style="list-style-type: none"> - 1F14F SQUARE DJ is moved to 1F190 - 1F200 to 1F2FF block; and 32FF The 43 enclosed ideographs added in Amd. 6 in this block and KATAKANA DE ENCLOSED IN SQUARE from 32FF are rearranged to follow the order in ARIB STD-B24; into two groups (see final charts in document N3625) - 26CE HEAVY EXCLAMATION MARK SYMBOL is moved to 2757 - 26E2 HEAVY LARGE CIRCLE is moved to 2B55 - 26E4 HEAVY OVAL WITH OVAL INSIDE is moved to 2B56 - 26E5 HEAVY CIRCLE WITH CIRCLE INSIDE is moved to 2B57 - 26E6 HEAVY CIRCLE is moved to 2B58 - 26E7 HEAVY CIRCLED SALTIRE is moved to 2B59 <p>4 character additions:</p> <ul style="list-style-type: none"> - 1F12E CIRCLED WZ with its glyph from document N3579 - 110BE-110BF 110BE - KAITHI SECTION MARK - 110BF - KAITHI DOUBLE SECTION MARK, with their glyphs from document N3574 - AA7B MYANMAR SIGN PAO KAREN TONE as shown in document N3625 	Completed.
d.	<p>M54.04 (Progression of Amendment 6): WG2 instructs its project editor to forward the final text of Amendment 6 along with the disposition of comments document N3631 to the SC2 secretariat for an FDAM ballot. The final set of charts and names lists are in document N3625. The unchanged target starting date for FDAM6 is 2009-06.</p>	Completed; see document N3656 (SC2 N4075)
e.	<p>M54.05 (Tangut script): WG2 accepts the recommendation to remove Tangut script currently encoded in code positions 17000 to 18715 from Amd. 7, and accepts the action items towards further refining its repertoire, contained in the Tangut ad hoc report in document N3629.</p>	Completed.

f.	<p>M54.06 (Disposition of PDAM7 ballot comments): WG2 accepts the disposition of ballot comments on PDAM7 in document N3632 and instructs its editor to prepare the final text of Amendment 7 incorporating the dispositions, including moving of Canadian Syllabics accepted in resolution M54.01 and removal of Tangut script accepted in resolution M54.05 above. The editor is to take note of additional glyph changes per sections 1 and 3 in document N3623. The significant accepted changes are noted below:</p> <p>16 name changes:</p> <ul style="list-style-type: none"> - FBB2 to ARABIC SYMBOL DOT ABOVE - FBB3 to ARABIC SYMBOL DOT BELOW - FBB4 to ARABIC SYMBOL TWO DOTS ABOVE - FBB5 to ARABIC SYMBOL TWO DOTS BELOW - FBB6 to ARABIC SYMBOL THREE DOTS ABOVE - FBB7 to ARABIC SYMBOL THREE DOTS BELOW - FBB8 to ARABIC SYMBOL THREE DOTS POINTING DOWNWARDS ABOVE - FBB9 to ARABIC SYMBOL THREE DOTS POINTING DOWNWARDS BELOW - FBBA to ARABIC SYMBOL FOUR DOTS ABOVE - FBBB to ARABIC SYMBOL FOUR DOTS BELOW - FBBC to ARABIC SYMBOL DOUBLE VERTICAL BAR BELOW - FBBD to ARABIC SYMBOL TWO DOTS VERTICALLY ABOVE - FBBE to ARABIC SYMBOL TWO DOTS VERTICALLY BELOW - FBBF to ARABIC SYMBOL RING - FBC0 to ARABIC SYMBOL SMALL TAH ABOVE - FBC1 to ARABIC SYMBOL SMALL TAH BELOW <p>1 character addition:</p> <ul style="list-style-type: none"> - 1B000 KATAKANA LETTER ARCHAIC E with the glyph (of KATAKANA LETTER ORIGINAL E) from document N3388 in a new block 1B000 to 1B0FFF named Historic Kana. <p>1 code position change with name change:</p> <ul style="list-style-type: none"> - 3097 is moved to 1B001 with new name HIRAGANA LETTER ARCHAIC YE <p>2 character deletions:</p> <ul style="list-style-type: none"> - 1BFA BATAK SYMBOL BINDU GODANG - 1BFB BATAK SYMBOL BINDU PINARJOLMA 	Completed.
g.	<p>M54.07 (Progression of Amendment 7): WG2 instructs its project editor to forward the final text of Amendment 7 along with the disposition of comments document N3632 to the SC2 secretariat for an FPDAM ballot. The final set of charts and names lists are in document N3626. The unchanged target starting dates are FPDAM 2009-06, and FDAM 2009-11.</p>	Completed; see document N3657 (SC2 N4077)
h.	<p>M54.08 (CJK Extension D): WG2 accepts to create a new block named CJK Unified Ideographs Extension D in the range 2B740 to 2B81F in the SIP, and populate it with 223 CJK unified ideographs in code positions 2B740 to 2B81E, with their glyphs and code positions in the order presented in document N3560 on 'urgently needed characters' from the IRG.</p>	Completed.
i.	<p>M54.09 (Bamum supplement): WG2 accepts to create a new block named Bamum Supplement in the range 16800 to 16A3F in the SMP, and populate it with 569 characters with their code positions, names and glyphs as shown in document N3597.</p>	Completed.
j.	<p>M54.10 (Alchemical symbols): With reference to document N3584, WG2 accepts to create a new block named Alchemical Symbols in the range 1F700 to 1F77F in the SMP, and populate it with 116 characters in the range 1F700 to 1F773 with their code positions, names and glyphs as shown on pages 62 to 65 in document N3580.</p>	Completed.
k.	<p>M54.11 (Ethiopic Extended-A): WG2 accepts to create a new block named Ethiopic Extended-A in the range AB00 to AB2F in the BMP, and populate it with 32 characters in code positions in the ranges AB01-AB06, AB09-AB0E, AB11-AB16, AB20-AB26, and AB28-AB2E, and an additional 2 combining marks at code positions 135D and 135E in the Ethiopic block, with their code positions, names and glyphs as shown on page 3 of document N3572.</p>	Completed.
l.	<p>M54.12 (Emoji symbols): WG2 accepts the ad hoc report on Emoji symbols in document N3636, and its recommendation for encoding a selection of 748 characters in several existing blocks and in the four new blocks named Playing Cards in the range 1F0A0-1F0FF, Miscellaneous Pictographic Symbols in the range 1F300-1F5FF, Emoticons in the range 1F600-1F64F and Transport and Map Symbols in the range 1F680-1F6FF. The names, glyphs and code positions for these characters and the ranges for the new blocks are as shown in document N3626.</p>	Completed.

<p>m.</p>	<p>M54.13 (Miscellaneous character additions): WG2 accepts to encode in the standard the following:</p> <p>a. Two (2) Cyrillic letters for Birch-Bark writing with their glyphs from document N3563, in the Cyrillic Extended-B block: A660 CYRILLIC CAPITAL LETTER REVERSED TSE A661 CYRILLIC SMALL LETTER REVERSED TSE</p> <p>b. Two (2) heavy low quotes for German with their glyphs from document N3565, in the Dingbats block: 275F HEAVY LOW SINGLE COMMA QUOTATION MARK ORNAMENT 2760 HEAVY LOW DOUBLE COMMA QUOTATION MARK ORNAMENT</p> <p>c. One (1) middle dot letter for Phags-pa transliteration with its glyph slightly larger than the one shown in document N3567: A78F LATIN LETTER MIDDLE DOT</p> <p>d. Four (4) Tibetan letters for Sanskrit transliteration with their glyphs from document N3568, in the Tibetan block: 0F8C TIBETAN SIGN INVERTED MCHU CAN 0F8D TIBETAN SUBJOINED SIGN LCE TSA CAN 0F8E TIBETAN SUBJOINED SIGN MCHU CAN 0F8F TIBETAN SUBJOINED SIGN INVERTED MCHU CAN</p> <p>The last three of these are combining marks.</p> <p>e. Two (2) Tibetan annotation marks with their glyphs from document N3569, in the Tibetan block: 0FD9 TIBETAN MARK LEADING MCHAN RTAGS 0FDA TIBETAN MARK TRAILING MCHAN RTAGS</p> <p>f. Three (3) Bopomofo letters for representing Hmu and Ge languages, with the glyphs of XX for GH, of LL for LH, and of ZZ for ZY, from document N3570 in the Bopomofo Extended block: 31B8 BOPOMOFO LETTER GH 31B9 BOPOMOFO LETTER LH 31BA BOPOMOFO LETTER ZY</p> <p>(Note: the names are changed from those in document N3570)</p> <p>g. One (1) combining mark for use in Uralic Phonetic Alphabet with the glyph shown for 1DFA in document N3571 in the Combining Diacritical Marks Supplement block with its glyph from document N3571: 1DFC COMBINING DOUBLE INVERTED BREVE BELOW</p> <p>h. Nine (9) additional Uralic Phonetic characters with their glyphs from document N3571 in the Latin Extended-D block: A7F2 LATIN SUBSCRIPT SMALL LETTER H A7F3 LATIN SUBSCRIPT SMALL LETTER K A7F4 LATIN SUBSCRIPT SMALL LETTER L A7F5 LATIN SUBSCRIPT SMALL LETTER M A7F6 LATIN SUBSCRIPT SMALL LETTER N A7F7 LATIN SUBSCRIPT SMALL LETTER P A7F8 LATIN SUBSCRIPT SMALL LETTER S A7F9 LATIN SUBSCRIPT SMALL LETTER T A7FA LATIN LETTER SMALL CAPITAL TURNED M</p> <p>i. Two (2) Latin letters for Janalif with their glyphs from document N3581: A790 LATIN CAPITAL LETTER N WITH DESCENDER (with an additional cross reference to Capital letter NG at 014A) A791 LATIN SMALL LETTER N WITH DESCENDER</p>	<p>Completed.</p>
<p>n.</p>	<p>M54.14 (Amendment 8 – subdivision and PDAM text): WG2 instructs its project editor and convener to prepare a project sub division proposal (see document N3630) and PDAM text based on resolutions M54.08 to M54.13 above, and forward them to the SC2 secretariat for ballot. The proposed start dates for the progression of this work item are: PDAM 2009-06, FPDAM 2009-12, and FDAM 2010-06.</p>	<p>Completed; see documents N3630 and N3658 (SC2 N4078)</p>
<p>o.</p>	<p>M54.15 (Jamo fillers): With reference to document N3638, WG2 accepts the following change in clause 22.1 in the working draft for the second edition (document N3593): Replace the sentence: "An incomplete syllable which starts with a Jungseong or a Jongseong shall be preceded by a CHOSEONG FILLER (0000 115F)." with the following two sentences: "An incomplete syllable which starts with a Jungseong shall be preceded by a CHOSEONG FILLER (0000 115F). An incomplete syllable composed of a Jongseong alone shall be preceded by a CHOSEONG FILLER (0000 115F) and JUNGSEONG FILLER (0000 1160)."</p>	<p>Completed.</p>

p.	M54.16 (CD of 2nd edition): WG2 instructs its project editor to prepare text for the next edition of the standard, based on documents N3593 and N3627 and the feedback from this meeting, and changes resulting from resolutions M54.02 on Amendment 6, M54.06 on Amendment 7, M54.15 on Jamo fillers, and other changes to glyphs and annotations requested of the names lists in the ballot feedbacks, and to forward it for processing as a CD to SC2 secretariat. The editor is to take note of additional glyph changes per sections 4 in document N3623. The updated start dates for the next edition of standard are: CD: 2009-06, FCD: 2009-12 and FDIS: 2010-06.	Completed; see document SC2 N4079 (103MB zipped file).
AI-54-4	IRG Convenor and IRG Editor (Dr. Lu Qin)	
	<i>To take note of and act upon the following items:</i>	
a.	M54.20 (IRG Principles and Procedures): WG2 takes note of the IRG Principles and Procedures in document N3562, and invites all national bodies and liaison organizations to review and provide feedback to the IRG rapporteur by 2009-05-15 in time for the next IRG meeting.	In progress.
b.	M54.21 (Annex S revision): The IRG is instructed to review and finalize the content of revised text for Annex S by 2009-07-17. All IRG members are requested to assist the IRG rapporteur in this effort. The outcome can be input as national body comments to the ballot on CD for the next edition of ISO/IEC 10646.	Completed; see document N3661.
c.	M54.22 (Fonts for DPRK ideographs): The IRG rapporteur is requested to contact the SC2 secretariat to reach DPRK for getting the fonts suitable to print the DPRK ideographs in the multi-column CJK charts in the standard. All IRG members are also requested to assist the IRG rapporteur in this effort.	Completed.
AI-54-5	Ad hoc group on roadmap (Mr. Michael Everson)	
a.	To update the roadmaps reflecting changes to block allocations through the various resolutions at this meeting 54, including CJK Extension D in the range 2B740-2B81F.	Completed; see document N3655.
AI-54-6	Ireland (Mr. Michael Everson)	
a.	Invited to submit a proposal on enclosed alphanumeric supplement additions (see document N3599-1) taking into consideration discussion at meeting M54.	Completed; see document N3671.
AI-54-7	China (Mr. Chen Zhuang)	
	<i>To take note of and act upon the following items:</i>	
a.	M54.18 (Nüshu script): WG2 accepts the ad hoc report in document N3635 on Nüshu script and invites the Chinese national body to provide a revised contribution by 2009-07-31, including considerations for items in the ad hoc report.	In progress; see document N3705.
b.	M54.19 (Jurchen script): WG2 accepts the ad hoc report in document N3639 on Jurchen script and invites the Chinese national body to provide a revised contribution, including considerations for items in the ad hoc report.	In progress; see documents N3688 and N3696.
AI-54-8	Germany (Mr. Karl Pentzlin)	
	<i>To take note of and act upon the following items:</i>	
a.	Invited to submit a revised proposal on Florin currency symbol (see document N3588) taking into consideration discussion at meeting M54.	In progress.
b.	Invited to revised proposal on Latin letters for pre-1921 Latvian orthography (see document N3587) taking into consideration discussion at meeting M54.	Completed; document N3587 was revised.
c.	Invited to revised proposal for Yeru characters (see document N3581) taking into consideration discussion at meeting M54.	In progress.
AI-54-9	All national bodies and liaison organizations	
	<i>To take note of and provide feedback on the following items.</i>	
a.	M54.17 (Hungarian Runic script): WG2 accepts the ad hoc report in document N3640 on the Hungarian Runic, with revisions made during the discussions on it, and invites the authors to provide a revised contribution including considerations for items in the ad hoc report..	Completed; see documents N3664, N3670 and N3697.
b.	M54.18 (Nüshu script): WG2 accepts the ad hoc report in document N3635 on Nüshu script and invites the Chinese national body to provide a revised contribution by 2009-07-31, including considerations for items in the ad hoc report.	Completed; see document N3705.
c.	M54.19 (Jurchen script): WG2 accepts the ad hoc report in document N3639 on Jurchen script and invites the Chinese national body to provide a revised contribution, including considerations for items in the ad hoc report.	Completed; see document N3688 and N3696.

d.	M54.20 (IRG Principles and Procedures): WG2 takes note of the IRG Principles and Procedures in document N3562 , and invites all national bodies and liaison organizations to review and provide feedback to the IRG rapporteur by 2009-05-15 in time for the next IRG meeting.	Noted.
e.	Information on the Unicode Ideographic Variation Database in document N3591 .	Noted.
f.	M54.25 (Future meetings): WG2 endorses the following schedule for future meetings of WG2 and of IRG: WG 2 meetings: - Meeting 55 - 2009-10-26/30, Tokyo, Japan (along with SC2 plenary) - Meeting 56 - 2010-04-19/23, Mountain View, CA, USA (pending confirmation); Canada and Finland (as backups). - Meeting 57 - Fall 2010, Korea (Republic of) (pending confirmation of date and location) - Meeting 58 - Spring 2011, Finland (pending confirmation) (along with SC2 plenary) - Meeting 59 - Fall 2011, Mountain View, CA, USA (pending confirmation), Germany (as backup) IRG meetings: - IRG 32 - 2009-06-15/19; Hong Kong SAR - IRG 33 - 2009-11-23/27; Danang, Vietnam	Noted.
g.	To review and feedback the following proposals for consideration at the next meeting M54: - Manichaeian script proposal in document N3486 - Sorang Sompeng script in documents N1957 and N3410 - Varang Kshiti script in documents N1958 and N3411 - Naxi Dongba pictographs in documents N3425 , N3442 and N3543 - Chakma script in document N3428 - Old Yi script in document N3288 - Meroitic script in document N3484 - Pahawh Hmong script in the UCS in document N3616 - Germanicist, Nordicist, and other phonetic characters in document N3555 - Khojki script in document N3596 - Sharada script in document N3595 - Mro script in document N3589 .	Some feedback; see documents N3644 on Manichaeian, N3647 on Sorang Sompeng, N3668 on Warang Citi (renamed), N3645 on Chakma, N3646 and N3665 on Meroitic, Sharada revised N3595 , and N3667 on Pahawh Hmong.

5 JTC1 and ITTF matters

5.1 Amendment 6

Mr. Michel Suignard: I would like to let WG2 know that there was one source reference added from HKSCS in the Amendment 6 to ISO/IEC 10646: 2003 prior to its publication on 2009-09-22.

6 SC2 matters

The following were for information to the WG2 experts / delegates:

- The program of work of SC2 is available at the SC2 web site – see <http://www.itscj.ipsj.or.jp/sc2/open/pow.htm>.
- The preliminary agenda for the next SC2 plenary (on Friday of this week) is available as document [N3663](#).

6.1 Ballot results

Input documents:

[3683](#) FPDAM 7 - Summary of Voting/Table of Replies; SC2 Secretariat; 2009-09-22

[3684](#) PDAM8 –SC2 Secretariat; 2009-09-22

[3686](#) Summary of Voting/Table of Replies-CD next edition; SC2 Secretariat; 2009-09-28

6.1.1 FPDAM7 ballot results

The ballot responses for FPDAM7 to ISO/IEC 10646 ballot is in document [N3683](#).

There were 20 national bodies who voted. Of these there were 5 who abstained, one who disapproved (Japan) and two approved with comments (Ireland and UK). See discussion on disposition of ballot comments under section 11.2 on page 27.

6.1.2 PDAM8 ballot results

The ballot responses for PDAM8 to ISO/IEC 10646 ballot is in document N3684 (SC2 N4087). There were 20 national bodies who voted. The German vote was first accounted as Disapproval with comments, but a subsequent communication with SC2 secretariat (message dated Sep 22nd 2009) (see document N3684) changed it to Approval with comments. There were 2 who abstained, two who approved with comments (UK, Germany) and four who disapproved with comments (Greece, Ireland, Japan and USA).

See discussion on disposition of ballot comments under section 11.2 on page 30.

6.1.3 CD ballot results

The ballot responses for CD ballot on ISO/IEC 10646 second edition is in document N3686. There were 19 national bodies who voted. Of these there were 3 who abstained, 3 who approved with comments (India, UK and USA) and five who disapproved with comments (Germany, Greece, Ireland, Japan and Republic of Korea). See discussion on disposition of ballot comments under section 11.3 on page 45.

6.2 Letter from Script Encoding Initiative (SEI)

Input document:

[3724](#) ISO DEVCO letter; Debbie Anderson; 2009-10-28

Ms. Deborah Anderson introduced document N3724; it is a letter drafted by Ms. Deborah Anderson to DEVCO, a policy committee of ISO to address the needs of developing countries. The letter requests the members of DEVCO that they circulate a list of scripts which need more information from countries / minority languages etc. towards getting them into ISO/IEC 10646.

Disposition:

WG2 endorsed the letter and appointed Ms. Deborah Anderson as the contact point in SC2 for this topic.

Relevant resolution:

M55.33 (Letter to ISO DEVCO members):

Unanimous

WG2 endorses the letter addressed to ISO DEVCO in document N3724, nominates Dr. Deborah Anderson as the SC2 representative, and instructs its convener to send it to the SC2 secretariat for endorsing and forwarding to ISO DEVCO.

6.3 Letter from SC2 to SC6 re: ASN.1 in 10646

Input document:

[3732](#) Letter to SC 6 regarding revision of ISO/IEC 10646; SC2/WG2; 2009-10-28

Mr. Masahiro Sekiguchi introduced the document N3732. It contains a liaison letter from SC2 to SC6 on the topic of 'Revision of ISO/IEC 10646 including ASN.1 related specification'. It points out to SC6 some of the changes related ASN.1 in Annex N of the 2nd edition of 10646 and invites SC6 to comment on the next ballot.

Disposition:

WG2 endorsed the letter and identified Mr. Masahiro Sekiguchi as the contact point in SC2.

Note that resolution missed identifying the contact point; also the hyperlink for document N3732 in the resolutions document N3704 is pointing to the wrong document. (Recording Secretary).

Relevant resolution:

M55.32 (Letter to SC6):

Unanimous

WG2 endorses document N3732 addressed to JTC 1/SC 6, and instructs its convener to send it to the SC2 secretariat for forwarding to SC6.

7 WG2 matters:

7.1 Principles and Procedures

7.1.1 Proposed additions to Principles and Procedures

Input document:

[3675](#) Proposed Additions to Principles and Procedures; Uma; 2009-09-14

Dr. Umamaheswaran presented the document N3675 proposing to add two paragraphs related to reserved code points for right to left scripts and to default ignorable code points, to the principles and procedures document. The proposed text reflects the current practice of WG2.

Disposition:

WG2 accepted the document with some edits and instructed Dr. Umamaheswaran to prepare and send to the convener an update to the P&P document including the accepted text.

See relevant resolution M55.35 on page 15.

7.1.2 Proposed changes to Proposal Summary Form

Input document:

[3709](#) Proposed Change to Proposal Summary Form; Debbie Anderson; 2009-10-18

Ms Deborah Anderson: Document [N3709](#) proposes some clarifications about questions related to the Fonts in the Proposal Summary Form. It ensures the purpose of using the font and permission for using the font. New wording is proposed for questions 5a and 5b.

Discussion:

- a. Mr. Masahiro Sekiguchi: I have some concerns about the wording. I need some time to evaluate the meaning.
- b. Mr. Michel Suignard: To some degree as the editor I am sensitive to the license issues of providers of the fonts. For the Far East I do not modify them. Sometimes I have to open the fonts and re-index them to be able to produce the charts. I do not send the font to anyone else. I use it to get the charts correct. As editor I would like to have the privilege of being able to modify the font. If the license prohibits my ability to do the touch ups I will not do it.
- c. Mr. Masahiro Sekiguchi: I have no intention of making it difficult for the editor. I just want to make sure I understand the wording of the proposed text. After hearing what the editor said, with the example of Japan providing fonts for the J column in the BMP, we provided commercial fonts. That font vendor's license had some clause about modification of the font which allowed what you needed to do. In the future the proposers may have purchased the font from some vendor who may have more restrictive clauses. Japan tries to ensure the editor has the flexibility as needed.
- d. Mr. Peter Constable: There are two distinctive issues; one is the availability of the font, and the other is about the license issues. Question 5a addresses the first item. As to question 5b, it is not clear to me as to whether it spells out. We could clarify what an inbound license should contain for publication of the standard and address permitting the editor to do the needed adjustments without redistribution.
- e. Dr. Ken Whistler: It is all good discussion -- but is moving off the topic. The whole issue about font licensing etc. should be addressed separately in the P&P outside of the Proposal Summary Form. Let us focus on the proposed modification of the wordings in the form and handle the licensing-related issues separately. We could remove the parenthetical text in the proposal. For the first question - proposer says who is going give the font in support of the proposal. For the second, the proposer identifies the grantor of the license for the font.
- f. Mr. Michel Suignard: If the source is identified I can communicate with the submitter of the font if any adjustment is needed in the production of the charts for the standard. If no adjustment is allowed, I may have to reject the font. In the past I had some issues with charts in the early stages of standard - in PDAM stage usually.
- g. Mr. Peter Constable: I agree that the form is not the right place to clarify the licensing terms etc.
- h. Dr. Umamaheswaran: There is a separate place for the licensing of the fonts and related issues. It does not belong in the P&P.

Document [N3709](#) was updated to respond to the feedback in the discussion.

Q 5a - who will provide the font to the project editor?

Q 5b was revised and is shortened version. The licensing is related to use of the fonts by the editors.

Disposition:

WG2 accepted the revised wording in document [N3709R](#) to update the proposal summary form.

Relevant resolution:

M55.35 (Updates to Principles and Procedures):

Unanimous

WG2 accepts

- the proposed additions (with minor edits) to the Principles and Procedures from document [N3675](#), and,
- the proposed rewording of questions 5a and 5b related to fonts in the proposal summary form from document [N3709](#)

and instructs Dr. Umamaheswaran to prepare an updated principles and procedures document ([N3702](#)) and submit it to the convener to post to the WG2 web site and communicate to SC2 secretariat.

7.2 Roadmaps

7.2.1 Roadmapping the scripts of Nepal

Input document:

[3692](#) Roadmapping the scripts of Nepal ; SEI (Everson); 2009-09-28

Document [N3692](#) contains information on some Nepalese scripts. It is for information to WG2 and for the roadmap ad hoc to consider for including in the roadmaps.

Action item:

The roadmap ad hoc is to take note of document [N3692](#) on scripts of Nepal.

7.2.2 Roadmap snapshot

Input document:

[3652](#) Snapshot of Pictorial view of Roadmaps to BMP, SMP, SIP, TIP and SSP; Uma; 2009-10-06

Dr. Umamaheswaran presented document [N3652](#). It is the latest snapshot of the roadmaps for the different planes of 10646 taken prior to WG2 meeting number 55. A listing of changes from the previous snapshot is in the History of Changes section in the document.

Disposition:

WG2 endorsed it for circulation to SC2.

Relevant resolution:

M55.36 (Roadmap snapshot):

Unanimous

WG2 instructs its convener to post the updated snapshot of the roadmaps (in document [N3652](#)) to the WG2 web site and communicate the same to SC2 secretariat.

8 IRG status and reports

8.1 IRG Meeting 32

Input documents:

[3659](#) IRG 32 Resolution; IRG; 2009-06-18

[3660](#) Summary of IRG 32 resolutions; IRG; 2009-06-19

Dr. Lu Qin introduced the document [N3660](#), which is a summary of items from IRG meeting #32. The IRG 32 resolutions are listed in WG2 [N3659](#) (from IRGN1685).

IRG 32.1 - Future Meetings (for endorsement)

Dr. Lu Qin: This resolution lists the set of planned future meetings of IRG. Document [N3699](#) has the logistics for meeting #32 at Japan Nagaoka University of Technology, 2010-06-21/25. WG2 is requested to approve meetings #35 in Macao SAR, November 2010 and #36 in Kuala Lumpur, Malaysia in May or June 2011.

Disposition:

WG2 approved the request for the two IRG meetings.

See relevant resolution M55.37 on page 64.

IRG 32.2 - Renaming of CJK Extension D (WG2M54.08)

Dr. Lu Qin: This is for information. Per WG2 resolution M54.08, CJK Extension D is renamed to CJK Extension E.

IRG 32.3 - TrueType Font for Ideograph Charts and update on CJK TrueType Font submission

Dr. Lu Qin: The IRG members have been informed to provide the fonts to WG2 before the specified deadline for the multiple-column CJK charts.

IRG 32.4 - CJK Extension D Work

Dr. Lu Qin: This item is for your information. The IRG members' chief editors were requested to provide the source information by July 17, 2009. They have been sent to the project editor.

IRG 32.5 - CJK Extension E (old CJK_D) Project

Dr. Lu Qin: This item is for your information. Work on extension E is planned for completion by IRG meeting #34, with input requested for review and expected to be frozen by meeting #33.

IRG 32.6 – Macao SAR submission

Lu Qin: This item is for your information. Some problems were discovered in the submission from Macao SAR; more evidence is needed. Those characters may not be included in Ext. E.

IRG 32.7 – Review of Annex S

Dr. Lu Qin: The revision of Annex S was approved by IRG and has been submitted to WG2. There is another agenda item for this topic. (See discussion under section 8.2 on page 17.)

IRG 32.8 - Development of IRG Principles and Procedures

Dr. Lu Qin: There are two items that are for information and any feedback from WG2 experts. We have drafted the specification for the standing document series for work of IRG, with Mr. Taichi Kawabata as the editor for this set of documents. The specification for this information will be finalized at meeting #33. We have also updated the previous draft of the IRG P&P document which WG2 has seen earlier. If anyone is interested I could send that. This document will be finalized at meeting #33.

IRG 32-9 - Old Hanzi (Oracle Bone) Encoding

Dr. Lu Qin: IRG can have a review on the consolidated list. Meeting #33 will discuss it and we expect to stabilize by meeting #34 and then submit to WG2.

Mr. Taro Yamamoto: Any expectation of code space for the allocations?

Dr. Lu Qin: IRG does not discuss the code point allocations. WG2 decides those.

Discussion:

- a. Mr. Mike Ksar: I have a couple of questions. Based on the discussion related to fonts this morning, there is a lot of work to be done to verify the fonts to be submitted and verify the charts; why do we need to work on extension E when it is more important to verify the charts.
- b. Dr. Umamaheswaran: I want to point out that IRG has not been instructed to verify the charts yet.
- c. Mr. Mike Ksar: One of the items of work for IRG will be to verify the charts and the quality of fonts.
- d. Dr. Lu Qin: I have no problems with what you say; what I have reported is based on the last IRG meeting. The extension E work may get delayed.
- e. Mr. Mike Ksar: The other question I have is - you are talking about standing document. As far as I know, there is no such thing as standing document in JTC1 procedure.
- f. Dr. Lu Qin: It is an internal working document and will be kept up to date.
- g. Dr. Umamaheswaran: You can call it as an internal reference document.
- h. Mr. Masahiro Sekiguchi: You should be aware that JTC1 is introducing the notion of Standing Documents.
- i. Ms. Toshiko Kimura: Are these documents procedures document?
- j. Dr. Umamaheswaran: There are two kinds of documents -- there is a reference document that IRG will keep up to date. There is another document on procedures on how to keep the IRG reference documents up to date.

Disposition:

WG2 also notes that the IRG convener has to be reconfirmed by SC2 plenary. WG2 will endorse the re-nomination.

Relevant resolution:

M55.30 (IRG rapporteur):

Unanimous

WG2 re-nominates Dr. Lu Qin as the rapporteur of IRG and instructs its convener to request SC2 to confirm the appointment.

8.2 Annex S Revision

Input document:

[3661](#) Annex S Revision; IRG; 2009-06-17

Dr. Lu Qin described the proposed changes to Annex S in document [N3661](#).

The document has text and examples to insert into Annex S.

Discussion:

- a. Mr. Michel Suignard: I will need some help in ensuring if there are any pictures to be inserted they are done correctly.
- b. Mr. Mike Ksar: Do you have a copy of Annex S with marked up changes.
- c. Dr. Lu Qin: I asked Mr. Michel Suignard; the original Annex S had different images and fonts etc. We provided only the changes needed.
- d. Mr. Michel Suignard: I have some concerns about fonts for some characters. If you know where the characters are in the fonts we use today it will be helpful. I have already asked Mr. John Jenkins to use the fonts and not pictures.

Disposition:

WG2 accepts the proposed changes for incorporation into the FCD of 2nd edition.

Relevant resolutions:

M55.12 (Annex S revision):

Unanimous

WG2 accepts the changes to Annex S proposed by the IRG in document N[3661](#) for inclusion in the next edition of the standard.

M55.21 (Code points for ideographs in Annex S):

Unanimous

IRG is instructed to review Annex S of the second edition and provide to the project editor the code point values for all the encoded ideographs that appear in the various examples, with the objective of replacing the images with actual characters for these ideographs in the Annex before the next WG2 meeting in 2010-04.

9 Contributions not related to current ballots

9.1 Request for additions to ISO/IEC 10646: 2003

Input document:

[3679](#) Request for additions to ISO/IEC 10646:2003; USNB; 2009-08-15

Document [N3679](#) contains the input from the US national body on several contributions that are discussed in the following sections. The US has reviewed them and consider them to be mature enough for inclusion in the standard, with no objection to including them in Amendment 8 if WG2 so decides. The items in this document are all covered separately under various agenda items in these minutes.

9.2 Sharada script

Input document:

[3595](#) Proposal to Encode the Sharada Script in ISO/IEC 10646 Anshuman Pandey
2009-03-25

Ms. Deborah Anderson: There was an earlier document with preliminary information. 83 characters are proposed in document N[3595](#) for Sharada script. There are two characters with special rendering behaviour. Digits - zero is with a dot glyph and one is a circle glyph.

Discussion:

- a. Mr. Peter Constable: The UTC has reviewed this script and we support it for a future amendment.
- b. Mr. Taro Yamamoto: In the proposal - the font was originally designed for LaTeX. Is there any difference in encoding in metafont versus what is proposed?
- c. Mr. Peter Constable: Tex systems in general use glyph based encodings and do not follow the character glyph model. There is no need for UCS to follow what LaTeX has done.
- d. Mr. Mike Ksar: We do have a Technical Report on Character Glyph Model. You can reference that.

Disposition:

WG2 accepted to include the script in a future amendment.

Relevant resolution:

M55.27 (Sharada script):

Unanimous

With reference to document N[3595](#), WG2 accepts to create a new block named Sharada in the range 11180 to 111DF in the SMP, and populate it with 83 characters in code positions 11180 to 111D9 with their code positions, names and glyphs as shown on pages 4 and 5 in document N[3595](#).

9.3 Chakma script

Input document:

[3645](#) Proposal for encoding the Chakma script in the UCS; UC Berkeley SEI, Michael Everson, Martin Hosking; 2009-08-13

Mr. Michael Everson: The Chakma people speak an Indo European language. The script proposed in document N[3645](#) for Chakma is similar to the Burmese. There are different orthographies – the older ones use conjuncts, the modern one does not use the conjuncts. The script is in modern use.

Discussion:

- a. Mr. Peter Constable: The UTC has reviewed this also and we are in support of accepting it for a future amendment.
- b. Mr. Suzuki Toshiya: The code charts show glyphs are shrunken.
- c. Mr. Michael Everson: the chart was prepared by fonts given to us. It is used by some in the user community. Some users prefer more rounded characters.

Disposition:

WG2 accepted Chakma script as proposed for a future amendment.

Relevant resolution:

M55.26 (Chakma script):

Unanimous

With reference to document N3645, WG2 accepts to create a new block named Chakma in the range 11100 to 1114F in the SMP, and populate it with 67 characters in code positions 11100 to 11134, and 11136 to 11143 with their code positions, names and glyphs as shown in the charts in document N3645. It contains some combining marks.

9.4 Meroitic script

Input documents:

[3646](#) Proposal for encoding the Meroitic script in the SMP of the UCS; UC Berkeley SEI Michael Everson; 2009-05-06

[3665](#) Proposal for encoding Meroitic Hieroglyphs and the cursive Meroitic script in the SMP of the UCS ; UC Berkeley Script Encoding Initiative; 2009-07-29

Mr. Michael Everson: The Meroitic kingdom had a writing that was contemporary with the Egyptian writing. Meroitic was inspired by the Egyptian – it has hieroglyphic and cursive forms. The proposal is to encode both forms separately, since the repertoires do not match and are used in a different ways. Two columns of 32 characters for the hieroglyphs and more columns for the 66 cursives are proposed. Not all the numbers are attested at this time. A hole is left for number 60. Examples are provided with comparison with Egyptian hieroglyphs; however, Meroitic hieroglyphs should not be unified with the Egyptian ones. It is a Right to Left script. We proposed this script in 1998 and in 1999 and later in 2008. A total of 98 characters are proposed - 32 in Hieroglyph block, 66 in the other block.

Discussion:

Mr. Peter Constable: The UTC experts have reviewed these and agree with it; we should change one of the block names to Meroitic Hieroglyphs - 10980 to 1099F.

Mr. Michael Everson: I can live with it.

Disposition:

WG2 accepts the proposed Meroitic script in two new blocks hieroglyphs and cursive for inclusion in a future amendment to the standard.

Relevant resolution:

M55.25 (Meroitic script):

Unanimous

With reference to document N3665, WG2 accepts to

- create a new block named Meroitic Hieroglyphs (changed from proposed block name) in the range 10980 to 1099F in the SMP and populate it with 32 characters in code positions 10980 to 1099F
- create another new block named Meroitic Cursive in the range 109A0 to 109FF in the SMP, and populate it with 66 characters, in code positions 109A0 to 109B7, 109BE to 109CA, 109CC to 109D9, 109DB, 109DC, 109DE to 109E5, 109E7 to 109E9, 109EB and 109F0

with their code positions, names and glyphs as shown in the charts and names lists in document N3665. This is a right-to-left script.

9.5 Sora Sompeng script

Input document:

[3647](#) Proposal for encoding the Sora Sompeng script in the UCS; UC Berkeley SEI Michael Everson; 2009-05-02

Mr. Michael Everson: One of the modern Messianic scripts devised around 1936 in tribal areas of India. It is part of Munda family used in Orissa and Andhra Pradesh area.

We have worked with experts in Munda languages in the UK and one in Hawaii. It is a simple straight forward alphabetical script, a set of digits, one modifier letter. No combining characters. It is proposed for the SMP.

Discussion:

- a. Mr. Toshiya Suzuki: Do you have other examples?
- b. Mr. Michael Everson: There are pamphlets etc. could not get hold of them. There are no newspapers using the script yet. When I get more examples I will add to the contribution.
- c. Ms. Deborah Anderson: We are quite aware of need for more examples etc. We will provide more examples as soon as they are available.
- d. Mr. Peter Constable: The UTC has reviewed it and we are in agreement to go forward with it.

Disposition:

WG2 accepted the Sora Sompeng script for inclusion in a future amendment.

Relevant resolution:

M55.24 (Sora Sompeng script):

Unanimous

With reference to document N3647, WG2 accepts to create a new block named Sora Sompeng in the range 110D0 to 110FF in the SMP, and populate it with 35 characters in code positions 110D0 to 110E8 and 110F0 to 110F9, with their code positions, names and glyphs as shown on the last page of document N3647.

9.6 Additional Sundanese characters

Input document:

[3666](#) Proposal for encoding additional Sundanese characters for Old Sundanese in the UCS; UC Berkeley Script Encoding Initiative (Everson & Hosken); 2008-09-05

Mr. Michael Everson: Some years ago the Sundanese authorities revived their script for use in schools. The modern orthography has already been encoded. In addition to those, historical characters have been found in older manuscripts and stone inscriptions. One of these is a virama - which will cause conjunct formations. The modern script does not use the conjuncts. Sundanese for historical reasons use the encoding model as Myanmar. Two subjoint consonants have been proposed. There is an Avagraha symbol. There are some Sanskrit letters also. Some are used in pairs or in threes etc. depending on the manuscripts. The request is for 17 characters - a second block of one column is also proposed.

Discussion:

- a. Mr. Peter Constable: UTC experts have reviewed these and agree with the proposal.

Disposition:

WG2 accepted the proposed additions to Sundanese for a future amendment.

Relevant resolution:

M55.22 (Sundanese additions):

Unanimous

With reference to document N[3666](#), WG2 accepts to:

- add **9** characters in code positions 1BAB to 1BAD and 1BBA to 1BBF in the existing Sundanese block, and,
- create a new block named Sundanese Supplement in the range 1CC0 to 1CCF in the BMP, and populate it with **8** characters in code positions 1CC0 to 1CC7

with their code positions, names and glyphs from pages 6 to 8 in document N[3666](#).

9.7 Hungarian

Input documents:

[3664](#) Proposal for encoding generic punctuation used with the Hungarian Runic script; Michael Everson & Andr  Szabolcs Szelp; 2009-07-22

[3670](#) Proposal for encoding generic punctuation used with the Szekler Hungarian Rovas script; G bor Hossz ; 2009-08-08

[3697](#) Proposal for encoding the Hungarian Runic script in the UCS; Michael Everson & Andr  Szabolcs Szelp; 2009-10-14

Mr. Michael Everson: I am reporting on the status of what was given as an action item to the authors. The updates are in document N[3697](#). The earlier proposal contained two generic punctuations; these are now in a separate proposal document N[3664](#). The other Hungarian contribution document N[3670](#) includes these two characters with similar glyphs. They also propose additional characters.

Mr. Mike Ksar: The other Hungarian experts are not here. I suggest we carry this forward to the next meeting.

Mr. Peter Constable: I agree with the convener that it is not appropriate to take any action at this meet

Disposition:

Postpone for next meeting;

Action item:

Convener to add to agenda for next meeting.

9.8 Miao script

Input documents:

[3669](#) Proposal for encoding the Miao script; China – Erich Fickle; 2009-10-01

[3730](#) Miao Ad hoc report; Miao ad hoc – Debbie Anderson; 2009-10-28

Ms. Deborah Anderson: Experts who were interested in the Miao script met in an ad hoc and resolved many of the outstanding issues. The ad hoc report in document N[3730](#) contains explicit principles to be followed in the next update to the proposal.

Disposition:

WG2 accepts the ad hoc report. Authors are to update the document for next WG2 meeting.

Relevant resolution:

M55.29 (Miao script):

Unanimous

WG2 accepts the ad hoc report in document N[3730](#) on Miao script and invites the national bodies of China, Ireland and UK, to provide a revised contribution, following the principles detailed in the ad hoc report.

9.9 *Astronomical symbol for Uranus*

Input document:

[3672](#) Proposal to Encode the Astronomical Symbol for Uranus; SEI -Iancu/Sargent/Anderson; 2009-08-14

Document N[3672](#) proposes to add one new character; 26E2 - Astronomical Symbol for Uranus is proposed to reflect its contrastive use with the standardized character 2645 URANUS. Background and rationale are included.

Disposition: WG2 accepted the new character as proposed.

See relevant resolution **M55.9 item g** on page 44.

9.10 *Additional Arabic characters for Kashmiri:*

Input documents:

[3673](#) Proposal to add two Kashmiri characters; SEI: Pournader, Anderson, et al.; 2009-05-14

[3686-I](#) Comments from India (BIS) - Summary of Voting/Table of Replies-CD next edition

Ms. Deborah Anderson: Two characters for Kashmiri using Perso Arabic are proposed in document [N3673](#) - from PASCII standard. We have consulted with other experts also. One of the proposed characters is Wavy Hamza Below; it is the same character as requested by India in document [N3686-I](#). The second proposed character is Letter Kashmiri Yeh. The proposal from India was to add an annotation for Kashmiri instead of adding a separate character.

Discussion:

- a. Mr. Martin Hosken: I am in favour of encoding Arabic Letter Kashmiri YEH.
- b. Mr. Peter Constable: If there is no disagreement on proposal in [N3673](#) from India, we can use it.
- c. Dr. Ken Whistler: The Indian comment on the CD is to add an annotation in 06EA. That annotation is inappropriate - it has the wrong shape and wrong character. The reason for this annotation was in response to Arabic Letter Kashmiri Yeh. The encoding of a separate character would answer the request from India re: 06EA.
- d. Ms. Swaran Lata: We need the annotation on 06EA – as additionally required for Palatalization. We have no objection to new encoding Kashmiri Yeh.
- e. Mr. Peter Constable: I want to make it clear that 06EA should NOT be used for Palatalization at all - due to different shape etc. The solution should be to have another character.
- f. Mr. Michael Everson: We need to have an inventory of consonants for palatalization.
- g. Prof. Peri Bhaskararao: Almost every Kashmiri letter gets palatalized.
- h. Mr. Michael Everson: If that is the case we may have to encode each one of them because of our current Arabic encoding model.
- i. Ms. Swaran Lata: We need to get back on those - if 06EA is not suitable.
- j. Mr. Mike Ksar: India should note that new characters are not to be requested as part of ballot responses. Separate contributions will be needed.

Disposition:

WG2 accepted the new characters from [N3673](#) for inclusion in Amendment 8.

Mr. Peter Constable: There was an ad hoc on the annotation request for 065A from India. The ad hoc decided not to take any action.

Ms. Swaran Lata: India is withdrawing annotation request on 06CC.

Relevant resolution:

M55.8 (Arabic additions for Kashmiri):

Unanimous

With reference to document [N3673](#), WG2 accepts the following 2 additional Arabic characters for inclusion in Amendment 8:

- 0620 ARABIC LETTER KASHMIRI YEH (with its glyph as shown for entry 187 for PASCII)
- 065F ARABIC WAVY HAMZA BELOW (with its glyph as shown at the end of page 2 in the document)

9.11 *Additional Devanagari characters for Kashmiri*

Input documents:

[3480](#) Proposal to add four characters for Kashmiri to the BMP of the UCS; Michael Everson & Pravin Satpute; 2008-07-03

[3710](#) Proposal to add Six characters in the Devanagari block for representation of Kashmiri language in Devanagari script; Ministry of Communications & IT, Government of India Through: Laxman Swarup at Bureau of Indian Standards; 2009-10-14

3725 Comments on India's Proposal to Add Devanagari Characters for Kashmiri (N3710 L2/09-369); Anshuman Pandey - Individual Contribution; 2009-10-26

Discussion:

- a. Mr. Mike Ksar: Four of the characters proposed in document [N3710](#) are already in document [N3480](#). Document [N3725](#) has some feedback on document [N3710](#).
- b. Mr. Michael Everson: We had already introduced this proposal in document [N3480](#) a few meetings ago. I would have expected at least some contact with me from India on this proposal.
- c. Ms. Swaran Lata: We had no argument about the four characters. You have to understand that people using Devanagari from Kashmir have been displaced and it is difficult to coordinate.
- d. We support the four proposed by Mr. Michael Everson. Six more characters have been identified by the Kashmiri Devanagari experts.
- e. Prof. Peri Bhaskararao: Expounded on the sounds of the proposed vowels. The proposal is based on a meeting with respected Kashmiri linguists in India. The first four items on page 4.
- f. Ms. Deborah Anderson: Response in [N3725](#) on [N3710](#) from Mr. Anshuman Pandey indicates that the six characters are also used in Maithili and Bhojpuri. He had some comments on the names which can be discussed. For example, 'Mid central unrounded characters O and OO' should perhaps be considered as a combination with Devanagari A.
- g. Prof. Peri Bhaskararao: As to the character 5 it looks like it could be constructed from Udatta Vedic sign with A. One of the problem is the Vedic sign has different function. If a Kashmiri has to use the Udatta sign with this letter it will be on top of the 5 letter. Per Kashmiri sign it is to be considered an atomic letter. It can take on the Udatta sign in addition.
- h. Mr. Michael Everson: Where will the Udatta sign appear with no. 5?
- i. Prof Peri Bhaskararao: it will appear next to the current mark.
- j. Ms. Deborah Anderson: Do you have printed examples of use of 9 and 10?
- k. Prof Peri Bhaskararao: The people in Kashmir don't want to touch the Devanagari letters for Kashmiri. They are used by displaced people in other parts in India. The fonts do not exist yet. Only handwritten examples exist.
- l. Ms. Swaran Lata: There is a publication in Kushur Samachar for Devanagari Kashmiri. Fonts would be released by India and these will contain them.
- m. Mr. Peter Constable: Mr. Anshuman Pandey had suggested different spellings for names for the independent vowel letters. There is some work needs to be done to agree on the names.
- n. Prof. Peri Bhaskararao: I had the same question to the experts. I had suggested Devanagari Vowel etc.
- o. Mr. Peter Constable: We can discuss this during the break.
- p. Mr. Martin Hosken: Considering that these characters are used also in other languages, please include consideration for how these are pronounced in other languages also, while coming up with these names. They may be the same.
- q. Dr. Ken Whistler: ideally these should fit into the Devanagari block; if there is not enough space they will go into Devanagari Extended Block.
- r. Mr. Mike Ksar: Once the final agreed upon names, glyphs and code positions are arrived at we could accept them and include in Amendment 8 which will have one more round of balloting.

An ad hoc of experts interested on the Devanagari additions for Kashmiri met. Mr. Michael Everson: presented the ad hoc report in document [N3731](#). The ad hoc recommended the names, glyphs and code positions for 10 Devanagari characters from document [N3710](#) for inclusion in Amendment 8.

Disposition:

WG2 accepted the proposed ten characters in the ad hoc report for Amendment 8.

Note: This resolution was accepted Unanimously – though the word Unanimous is missing in error in the resolution document [N3704](#) - Recording Secretary.

Relevant resolution:

M55.7 (Devanagari additions for Kashmiri):

Unanimous

With reference to document [N3731](#) (result of ad hoc deliberations on Devanagari character additions for Kashmiri), WG2 accepts for inclusion in Amendment 8, **10** additional characters at code positions 093A, 093B, 094F, 0956, 0957, and 0973 to 0977 in the Devanagari block in the BMP, with their code positions, names and glyphs as shown on pages 3 and 4 in document [N3731](#).

9.12 PENTAGRAM characters

Input document:

[3674](#) Proposal for PENTAGRAM characters; SEI: Lazrek and Anderson; 2009-05-14

Ms. Deborah Anderson: The pentagrams are used in different contexts in different flags and occult symbols. Some are solid and some are interlaced. Three pentagram characters are proposed in document [N3674](#), including the left handed interlaced and right handed interlaced pentagrams, are also proposed. The authors had proposed 269D - Outlined White Star - an annotation it is an alternate representation of a symbol for Morocco is proposed.

Dr. Ken Whistler: The US and the UTC have reviewed these and are in favour of accepting these.

26E7 – INVERTED PENTAGRAM proposed in PDAM 8 ballot comment T.1 from Ireland with the background information provided in document [N3684-I](#) was also considered in addition.

Disposition: WG2 accepted the four proposed characters from the above discussion.

See relevant resolution M55.9 item a on page 44.

9.13 Malayalam character Dot-Reph

Input document:

[3676](#) Proposal to encode Malayalam Dot-Reph character; USNB; 2009-05-01

Ms. Deborah Anderson: Document [N3676](#) proposes addition of a single character Dot Reph for Malayalam. It is an archaic character - no longer in use. Different options for encoding it are possible and are explored in the document... The recommendation is to use a separate code point.

Discussion:

- a. Ms. Swaran Lata: The Government of Kerala has not used these for modern use. If it is used for historical purpose it is ok with them.
- b. Mr. Peter Constable: There are no restrictions on use of any encoded character.
- c. Ms. Swaran Lata: We would like to have some annotation to discourage use of this character.
- d. Dr. Ken Whistler: We can annotate - Not in contemporary Use. It is a character that precedes the character on which it is to be used - with special rendering behaviour similar to the Syriac abbreviation mark.

Disposition: Accepted for inclusion in Amendment 8. This also addressed the US request in PDAM8 ballot comment T.1.

See relevant resolution M55.9 item c on page 44.

9.14 Additional Mathematical symbols

Input document:

[3677](#) Proposal to Encode Two Mathematical Symbols; lancu/USNB; 2009-07-28

Ms. Deborah Anderson: Document [N3677](#) proposes to add two mathematical symbols used in Scientific Publications, AI etc. These are 'Squared Logical AND' and 'Squared Logical OR' symbols. The proposal explores different possibilities. The squared math symbols do not decompose. The proposal is to encode these as individual characters.

Discussion:

- a. Mr. Michael Everson: Good idea.
- b. Dr. Ken Whistler: It is well documented. I think we should accept these. They are not problematical and could go into Amendment 8.
- c. Mr. Michel Suignard: There will be a long wait before the next amendment will come along. Amendment 8 still gets one more cycle of review and if it is controversial we can take them out. Minor additions can go in to Amendment 8. Full scripts should not.

Disposition:

WG2 accepted the two proposed symbols for inclusion in Amendment 8.

See relevant resolution M55.9 item b, on page 44.

9.15 New character collection MIS-1 (Multilingual International subset-1)

Input document:

[3685](#) New Character Collection "MIS-1" (Multilingual International Subset-1; German NB; 2009-09-13

Document [N3685](#) from Germany request for new subset MIS-1, It is updating the collection MES-1 from before and renaming to MIS-1.

Discussion:

- a. Dr. Ken Whistler: It will have new name and new collection identifier.
- b. Mr. Masahiro Sekiguchi: One possible comment from Japan, why it is called International when it does not contain scripts like Japanese.
- c. Dr. Ken Whistler: It covers only Latin keyboards - including letters outside of Europe. If we include it now it will get some time for the feedback or review with a note to indicate the name can be reviewed.

Note: Collection number 284 is already taken; the name would be Multilingual Latin instead of Multilingual International.

Disposition:

WG2 accepted the new collection but with a different number 288 with (changed) name Multilingual Latin Subset (MLS), for inclusion in the FCD for the next edition of the standard.

Relevant resolution:

M55.11 (Multilingual Latin Subset):

Unanimous

WG2 accepts the proposed subset of Latin characters in document N3685 as collection number 288 named Multilingual Latin Subset (changed from the name in the proposal) for inclusion in the next edition of the standard.

9.16 Additional Latin letters for pre-1921 Latvian orthography

Input document:

[3587](#) Proposal to encode 10 Latin letters for pre-1921 Latvian orthography; German NB; 2009-03-26

Mr. Michael Everson: Document N3587 contains responses to the questions raised in Dublin meeting. I would propose the ten characters in the proposal be accepted at the code positions and glyphs as in the document.

Discussion:

- a. Dr. Ken Whistler: The US national body has reviewed the revised proposal - and we suggest these be added.
- b. Mr. Mike Ksar: The character properties have also been added.
- c. Mr. Martin Hosken: On page 2 - under properties two small characters are uppercasing to the same character.
- d. Dr. Ken Whistler: The case mappings are out of scope for 10646. The ten characters described here are appropriate.

Disposition:

WG2 accepted to add the ten characters to Amendment 8.

Relevant resolution:

M55.4 (Latin letters for pre-1921 Latvian):

Unanimous

With reference to document N3587, WG2 accepts 10 additional Latin characters for inclusion in Amendment 8 at code positions A7A0 to A7A9 in the Latin Extended-D block in the BMP, for pre-1921 Latvian orthography with their code positions, names and glyphs from document N3587.

9.17 Compatibility Ideographs for Government Use in Japan

Input document:

[3706](#) Follow-up on [N3530](#) (Compatibility Ideographs for Government Use); Japan NB; 2009-10-16

Mr. Masahiro Sekiguchi: Document N3706 is for your information, regarding compatibility ideographs Japan had submitted about a year ago in document N3530. We had further discussion in Japan. We have received valuable comments on our earlier proposals and we appreciate it. One item was about the policy of encoding. It was the suggestion to use IVS-s and registering as IVD. The Japanese national body discussed that option and we agreed to register these compatibility ideographs in the IVD as IVS-s.

Mr. Peter Constable: The Unicode consortium is pleased with the decision Japan has taken and we will provide the needed support for the registration to go forward.

Disposition:

WG2 takes note.

Relevant resolution:

M55.34 (Compatibility Ideographs for Government Use in Japan):

Unanimous

WG2 notes the decision by the Japanese national body (reported in document N3706) to register Ideographic Variation Sequences in the Ideographic Variation Database, for encoding the compatibility ideographs identified in document N3530.

9.18 Meetei Mayek Extension

Input document:

[3478](#) **Proposed Encoding for Meetei Mayek Extended Block; Irish/US National Body; 2008-08-12**

Dr. Umamaheswaran: The extension characters in document [N3478](#) for Meetei Mayek were in an earlier ballot, they were taken out for reasons given by Government of India at that time. We have the option of putting it into Amendment 8 if we choose.

Discussion:

- a. Dr. Ken Whistler: At this point in time we would propose not to process it in Amendment 8. Keep it for a future Amendment.
- b. Ms. Deborah Anderson: The Indian representative had indicated to hold off on it.

Disposition:

WG2 agreed to add these in a future amendment.

Relevant resolution:

M55.23 (Meetei Mayek extensions):

USA - Abstention

Canada, China, Finland, India, Ireland, Japan, Korea (Republic of) and UK - Acceptance

With reference to document [N3478](#), WG2 accepts to create a new block named Meetei Mayek Extensions in the range AAE0 to AAFF in the BMP, and populate it with the 23 characters in code positions AAE0 to hAAF6, with their code positions, names and glyphs as shown on the last page of document [N3478](#). It contains some combining marks.

9.19 Named Sequence for Bengali Khinya

Input document:

[3729](#) **Proposal to add a Named UCS Sequence Identifier BENGALI LETTER KHINYA; Peter Constable; 2009-10-27**

Mr. Peter Constable: Bengali experts sent input to UTC about a character Khinya. It is considered to be highly culturally relevant text element - it is represented as a sequence in UCS. The details about the named sequence are provided in [N3729](#). The request was received from Professor Chaudhry of West Bengal.

Mr. Masahiro Sekiguchi: I have a comment on the name.

Mr. Peter Constable: Bengali Letter Khinya is the new name.

Disposition:

WG2 accepted the proposed named sequence for inclusion in Amendment 8.

Relevant resolution:

M55.2 (Named sequence for Khinya):

Unanimous

WG2 accepts the named UCS sequence identifier for inclusion in Amendment 8

BENGALI LETTER KHINYA <0995, 09CD, 09B7>

based on the request in document [N3729](#).

9.20 Documents carried over to next meeting

The following contributions were not discussed at this meeting and are carried over for the next meeting:

- Manichaeian script ([N3644](#))
- Rañjana script ([N3649](#))
- Pahawh Hmong script ([N3667](#))
- Warang Citi script ([N3668](#))
- Jurchen script ([N3688](#), [N3696](#) and [N3720](#))
- Obsolete Simplified Chinese characters ([N3695](#), [N3721](#))
- Hentaigana characters ([N3698](#))
- Nushu script ([N3705](#), [N3719](#))

10 Script contributions related to ballots FPDAM7 and PDAM8

10.1 On A78F-LATIN LETTER MIDDLE DOT

Input documents:

[3567](#) **Proposal to encode a Middle Dot letter for Phags-pa transliteration; Andrew West; 2009-04-04**

[3678](#) **On the proposed U+A78F LATIN LETTER MIDDLE DOT; Anderson/USNB; 2009-08-05**

[3694](#) **Rationale for Encoding Latin Letter Middle Dot; Andrew West; 2009-10-05**

Document N3567 was the basis for inclusion of A78F-Latin Letter Middle Dot in Amendment 8 at meeting 54 in Dublin. Document N3678 elaborates on the different uses of the middle dot in transliterations and concludes that other existing middle dots in the standard should be used instead. Document N3694 elaborates on the four different usages of middle dots, and concludes that the various usages are needed to be standardized as distinct from each other.

An ad hoc group of Ireland, US and UK with Mr. Peter Constable as the chair discussed the issue. The above three documents were considered in response to Ireland (comment T.3) reiterating support for keeping the character in and the US national body (comment T.5) proposing to removing it from Amendment 8.

Discussion:

- a. Dr. Ken Whistler: Ad hoc did not reach any consensus. The suggestion is to accept UK and Ireland position to keep the character in. The US position stays NO.
- b. Mr. Mike Ksar: For WG2's objective to arrive at consensus this is not correct. I prefer to keep it out of the Amendment 8 and it can be added later. My understanding is that UK has no objection to keep it out.
- c. Dr. Ken Whistler: One national body wants to keep it in the other wants it out.
- d. Mr. Martin Hosken: UK did not vote NO. It is Ireland versus US ballots.
- e. Mr. Michel Suignard: We will keep it in; and note that US vote stays Negative.

Disposition: The net of the discussion was to keep the character in Amendment 8 as encoded.

10.2 Additional enclosed Latin alphabetic characters

Input document:

[3671](#) Proposal to encode additional enclosed Latin alphabetic characters to the UCS; Irish/German NBs; 2009-09-16

Discussion:

- a. Mr. Michel Suignard: Several enclosed Latin alphabetic characters were added from ARIB set and more from Emoji set. The proposal in document N3671 completes the set even though these are not completely attested. Ireland had proposed these in Dublin, and was requested to provide a contribution.
- b. Mr. Michael Everson: We are adding several characters from Emoji and others. The charts were made with explicit holes and we knew what these holes were for. Ireland and Germany feel that it is false economy to leave these vacant and go ahead and fill these holes. It did not make sense for getting attestations for each one of these.
1F177 slight modification to annotation; should be Haltestelle (bus stop).
- c. Dr. Ken Whistler: The US has no position on whether these are accepted or not. We had requested for the document.

Disposition:

Accepted with one modification to annotation. Final chart in document N3723 is to be referenced.

Relevant resolution:

M55.6 (Enclosed Alphanumeric Supplement):

Unanimous

With reference to document N3671, WG2 accepts 66 additional enclosed Latin alphabetic characters for inclusion in Amendment 8, at code positions 1F130, 1F132 to 1F13C, 1F13E, 1F140, 1F141, 1F143 to 1F145, 1F147 to 1F149, 1F14F to 1F156, 1F158 to 1F15E, 1F160 to 1F169, 1F172 to 1F178, 1F17A, 1F17D, 1F180 to 1F189 and 1F18F, in the Enclosed Alphanumeric Supplement block in the SMP, with their names and glyphs as shown in document N3723.

10.3 Feedback and comments on Emoji-symbols

An ad hoc on Emoji related contributions and ballot comments dealt with contributions and items that were not disposed off during the discussion of draft disposition of comments on Amendment 8 (in section 11.2 on page 30). The ad hoc was chaired by Mr. Peter Constable.

The following documents were covered by the ad hoc group's discussions:

- Proposal to encode symbols for ISO 3166 two-letter codes (N3680)
- Proposed Emoji symbols plus changes (N3681) (used as reference for Emoji data)
- Encode two additional Mailbox symbols complementing the Emoji set (N3687)
- A proposal to revise a part of Emoticons in PDAM 8 (N3711, N3713)
- Comments on proposal to revise a part of emoticons in PDAM8

Document N3726 contains the ad hoc report.

Mr. Peter Constable: I would like to thank all the participants in the ad hoc. We met from 11:00h to 16:00h with a break. Most of the discussion focussed on open issues related to PDAM8 responses. Two additional documents N3711 and N3713 were also considered. In relation to Irish ballot

comments - there was consensus on adding 20 symbols; one was not accepted at present. A name change and possible additions for mail boxes from Germany were also accepted. Regional indicators - US was asking for 10, Ireland and Germany were proposing alternate ones. The consensus was to provide 26 symbols which could be used in combinations to map to Emoji symbols in use by Japanese carriers. The proposal is detailed in document [N3727](#). A source mapping to Emoji symbols is recommended to be added to FPDAM8. On the question of completeness of coverage there was agreement that there were 65 additions postponed for later. On additional contributions from Germany and Mr. Katsuhiko Ogata et al (documents [N3711](#) and [N3713](#)). Mr. Katsuhiko Ogata will work with the editor on some of the glyph changes. The name changes proposed in these additional documents should be left for FPDAM8 comments. See the ad hoc report for details.

Discussion:

- a. Mr. Mike Ksar: I thank you for the report and to the participants.
- b. Mr. Markus Scherer: A request to change to mapping that may affect the data in FPDAM8 was not discussed. We are making a change in the data for the sources file.
- c. Mr. Peter Constable: That topic was not discussed and the suggestion is that Mr. Markus Scherer should work with the editor on the mapping changes.
- d. Mr. Mike Ksar: We will pick up the topic with PDAM8 later. I will upload the report later to the website.
- e. Mr. Peter Constable: Mr. Markus Scherer is supposed to provide an updated document to editor.

Disposition: WG2 accepted the recommendations in the ad hoc report document [N3726](#).

Document [N3728](#) is the updated document provided to the editor.

See *relevant resolution M55.10 on page 45* that includes document [N3728](#) as part of progression of Amendment 8.

11 Ballots disposition of comments

11.1 FPDAM7

Input documents:

[3657](#) FPDAM7; SC2 Secretariat; 2009-05-20

[3683](#) FPDAM 7 Summary of Voting/Table of Replies; SC2 Secretariat; 2009-09-22

[3683-I](#) FPDAM 7 ballot comments, Ireland; 2009-09-22

[3683-J](#) FPDAM 7 ballot comments, Japan; 2009-09-22

[3683-UK](#) FPDAM 7 ballot comments, UK; 2009-09-22

[3689](#) Proposed disposition of comments FPDAM7; Michel Suignard; 2009-10-01

Output documents:

[3712](#) Updated version of [N3585](#) , updated to reflect the N3690 draft disposition of PDAM8 ballot comments; Markus Scherer – expert contribution; 2009-10-21

[3717](#) Disposition of Comments – Amendment 7; Michel Suignard; 2009-10-29

[3718](#) Summary of Repertoire and Charts for FDAM 7; Michel Suignard; 2009-10-26

Mr. Michel Suignard: From the results of the ballot on FDAM7 (see document [N3683](#)) there was one negative vote. Two positive votes included comments. The proposed dispositions are in document [N3689](#).

11.1.1 Ireland: Approval with comments (document [N3683-I](#))

T.1 - Annex F.2 – proposes new more clear wording related to Tifinagh Consonant Joiner 2D7F. *Accepted.*

T.2 - Batak

- a. Noted. Nothing was done in this Amendment ballot.
- b. Two characters were removed from the Amendment 7. They were complex glyphs -- to represent these on the charts we had to reduce by quite a bit to 10% of the actual glyph. Ireland is requesting these to be added. No new evidence is provided.

Discussion:

- a. Mr. Michael Everson: The US national body had commented on this. In Dublin meeting we had a discussion on these. Was it a requirement that a rendering engine be able to represent these? The contacted expert - confirmed that they were important for historic use by scholars. They are not in current use. They need to have something to represent these. The proposed glyphs are simplified in the Irish comment -- for use as text element. Are there any comments?

- b. Dr. Ken Whistler: If the scholars want to use these, I would like to see evidence on how the scholars use these. It is not the issue about manuscripts about these. I would like to see the range of graphic variations in introducing these as text elements. I would like to see a document that pulls out what the scholars are actually using and in what context. We don't want to close the door on these, but we need more evidence. We could make the glyphs simpler. My preference would be to invite more information on their use.
- c. Mr. Michael Everson: In the original contribution, there was a typeset in 1920s example. That author agreed the glyph need not be so long etc. We should not wait another two years to give them a solution to include in a font etc. He had something there - indicating its use as a text element. I could go back to the author and ask for a shorter glyph.
- d. Mr. Michel Suignard: (Michel projected the example from the original submission - N3320R). We can re-typeset those with shorter glyphs and the authors can use these for text elements.
- e. Mr. Alain LaBonté: To me it is a picture -- not a character.
- f. Mr. Michael Everson: It appears at the beginning of a text. To them it is a text element. The user is not concerned with the size.
- g. Mr. Michel Suignard: If another document is to be prepared - it has to be entertained as part of next FPDAM8. I think it is fair to give it another round of review. We could still entertain it in Amendment 8 and not into another new Amendment. The US proposal is to postpone it.
- h. Mr. Michael Everson: The experts were hoping to use these right away.
- i. Mr. Mike Ksar: What is the urgency?
- j. Mr. Michael Everson: Batak script has been subject to a number of clarifications from the authors and users. They are awaiting a solution.
- k. Dr. Ken Whistler: The examples are showing as graphics and it is claimed that these are text elements. If you can convince this committee that these are text elements then we can go ahead. The proposed glyphs are still not suitable to include in the fonts.
- l. Mr. Michael Everson: We had some glyphs in cuneiforms which are similar. If I have to get a new document it will be similar with a shorter glyph. The author wants to develop a font and release to the users -- he has been delaying this. He can release the font without these two characters now -- but will be incomplete.
- m. Mr. Mike Ksar: How many users are impacted by these? It is an urgency question. What would be the impact of a few months' delay?
- n. Mr. Michael Everson: There are 100s of thousands of users. In Dublin the discussion was there on the length of these glyphs -- and the glyphs don't have to be long glyphs. It has been a decade since we have been developing this script. I think we have responded to the questions that were raised at the Dublin meeting.
- o. Mr. Peter Constable: The questions in Dublin that you referred were indicative of the deeper issue as to whether these characters are to be encoded as text elements? Can we present these as texts because these appear not to behave as text elements? Shortening the glyphs - still does not answer that question. There are other things in manuscript which are similar to these and are not proposed as characters. There are other instances of zigzagging lines in several of the manuscript scans.
- p. Mr. Michael Everson: These two proposed ones appear at the beginning of the text. Short smaller glyphs that are proposed would satisfy the author for its use. We have an example in Tibetan text.
- q. Mr. Alain LaBonté: There might be a case -- marked as the beginning of a text. If you have to search for the next beginning of text it could be a text element.
- r. Dr. Ken Whistler: Part of the problem is that we are dealing with a script that does not have a long history of typography. With the standardization we are aiding in its typography. The two items under discussion have the question of whether modern typography would be treating these as text elements. It may be right thing to do. However I don't see the urgency as the convener has asked. The status of these as characters in typography is not yet clear. I don't see the urgency of these at this time.
- s. Mr. Michael Everson: I don't see the objections raised as credible -- the user wants to include these in the typography today. We have been working with the authors since 1996.
- t. Mr. Michel Suignard: We will not be forcing waiting for ever. I would say that we need more evidence before we can accept the comment.

Disposition:

WG2 decided not to include the two characters in question – 1BFA and 1BFB - in Amendment 7. It is postponed for Amendment 8.

See relevant resolution M55.9 item d on page 44.

Editorial comments:

E.1 – subtitle headings in charts; *Accepted in principle*. The editor is to work with Mr. Michael Everson for the final wording.

E.2 - request is to change the font for Malayalam chart. Not accepting it at this time. No changes to Malayalam charts in Amendment 7. *Moved for consideration in the next edition*.

E.3 – align annotation of Tifinagh with comment T.1 above. *Accepted*.

11.1.2 Japan: Disapproval with comments (document N3683-J)

JP.1 – suggests a new name be found for Historic Kana block

Discussion:

- a. Mr. Michel Suignard: Japan has not proposed an alternate name. I need some input.
- b. Mr. Masahiro Sekiguchi: Japan apologizes not proposing an alternate name. I remember that we could add more characters into this block -- they may not be the archaic ones. If we do add Hentaigana which are not of historic use -- they have modern use -- the block name may not be appropriate. The historic/variant would be even worse. More neutral term would be appropriate.
- c. Dr. Ken Whistler: How about Kana Supplement?
- d. Mr. Masahiro Sekiguchi: It may be OK with me. But other Japanese experts may have other opinions.
- e. Dr. Ken Whistler: We use extension, extended or supplement; not additions.
- f. Mr. Michel Suignard: Japanese experts can think about it; at this point in time we can go with Supplement. You can come back to it before end of the meeting if an alternate suitable name is preferred. We don't use the term additions. Prefer to use one of the three we have been using.

Accepted in principle; Japan confirmed later that they can accept *Kana Supplement* as new block name.

E.1 - Glyph in chart is different from what was proposed by the author.

Discussion:

- a. Mr. Michel Suignard: We have to work with Japan on the correct glyph. I did receive a new shape from the original submitter. We can review that too.
- b. Mr. Michael Everson: In Dublin Japan did not like the glyph of the original proposer.
- c. Mr. Masahiro Sekiguchi: I have a memo describing what is essential from the glyph point of view.

Disposition: Editor will work with Japan and get the correct glyph.

E.2 – request to fix glyphs for FDF2 and FDFB – Arabic presentation forms-A

Mr. Michel Suignard: The glyphs can be moved down a bit.

Accepted.

Mr. Masahiro Sekiguchi: Based on the above dispositions, Japan - reverses its ballot to Acceptance.

11.1.3 UK: Approval with comment (document N3683-J)

E.1 – Typo on page 1351. *Accepted*.

11.1.4 Feedback from ITTF

Mr. Michel Suignard: Got a feedback from ITTF through SC2 secretariat - that there are some editorial changes. Amendment 6 had already changed the references and hence is not needed in Amendment 7. It is a minor point but was a request from ITTF. This will be noted in the final disposition document.

Disposition:

WG2 accepts the above dispositions. The editor will prepare the final disposition document and text for FDAM7 ballot incorporating these dispositions. Changes to the content of FDAM7 will also be reflected in the next version of the 2nd edition text.

Relevant resolutions:

M55.1 (Progression of Amendment 7):

Unanimous

WG2 instructs its project editor to forward the final text of Amendment 7 along with the disposition of comments document N3717 to the SC2 secretariat for an FDAM ballot. The final set of charts and names lists are in document N3718. The unchanged target starting date for FDAM is 2009-11.

Count: (unchanged) - addition of 225 in Amd. 7

11.2 PDAM8

Input documents:

- [3658](#) PDAM8; SC2 Secretariat; 2009-05-20
- [3684](#) PDAM8 –SC2 Secretariat; 2009-09-22
- [3684-G](#) Germany (DIN) NB comments; 2009-09-22
- [3684-GR](#) Greece (ELOT) NB comments; 2009-09-22
- [3684-I](#) Ireland (NSAI) NB comment; 2009-09-22
- [3684-J](#) Japan (JISC) NB comments; 2009-09-22
- [3684-UK](#) United Kingdom (BSI) NB comments; 2009-09-22
- [3684-US](#) USA (ANSI) NB comments; 2009-09-22
- [3690](#) Proposed disposition of comments PDAM8; Michel Suignard; 2009-10-01

Output documents:

- [3722](#) Disposition of comments – Amendment 8; Michel Suignard; 2009-10-26
- [3723](#) Summary of Repertoire and Charts – Amendment 8; Michel Suignard; 2009-10-28

Mr. Michel Suignard: Comments were received from Germany, Greece, Ireland, Japan, United Kingdom, and USA. Document N[3690](#) contains the proposed disposition for these comments.

11.2.1 Germany: Approval with comments (document N[3684-G](#))

E.1 – Emoji General

Requests that the information about mapping to Emoji sources, currently in the form of short annotations in the names list, be expanded and preserved in a more useful and meaningful manner.

Mr. Michel Suignard: The intent of the current annotations is for bookkeeping during the Amendment balloting process and to be removed in the final publication. Note that the US in its comments T.3.e is asking to incorporate Emoji source data as a linked data file. Accepting the US comment will satisfy in principle the German requirement. The intent was to provide a more detailed mapping and the temporary mechanism used will be replaced.

Accepted in principle.

T1. Emoji symbols in general

Requests for additional annotations to explain the differentiation between characters that are named -1, -2 etc. in the Emoji set.

Mr. Michel Suignard: The convention in the Amendment names list was to distinguish similar characters with names with -1, -2 etc. See Irish E.3 comment also. The representative glyphs are hatched. This convention has been commented by others also, like T.5 from Ireland. The names will be changed to express the names. A note will be added at the head of the block in the names list. The draft Disposition charts show changes in names and glyphs. There will be a note but not in the same location Germany wants.

Accepted in principle.

T2. U+A7A0 ff: (Latin Extended-D)

Germany requests the inclusion of the 10 Latin letters for pre-1921 Latvian orthography, as described in N[3587](#).

Disposition: They were accepted after the proposal was reviewed by WG2.

See discussion and disposition under section 9.16 on page 24 on this proposal.

E2. U+1F170 ff., negative squared letters; U+1F179 ff., white on black squared letters:

Proposes changes towards eliminating confusion between names of such characters and the grouping of these.

Mr. Michel Suignard: This is a production issue. For consistency with other similar groups, the term 'White on black squared Latin letters' will be used as the overall header. In other words, the header text between 1F171 and 1F179 will be moved and replace the header text in front of 1F170.

Accepted in principle.

T3. Regarding U+1F30F EARTH GLOBE ASIA-AUSTRALIA, Germany requests the two other earth globe characters contained in document N[3607](#) to be retained:

U+1F30E EARTH GLOBE EUROPE-AFRICA and U+1F310 EARTH GLOBE AMERICAS

Mr. Michel Suignard: In Dublin we had discussed other continents. This request is also part of comment T.6 from Ireland, but at different location (1F30D and 1F30E). We had left holes for these two while discussing document N3607 in Dublin meeting.

Accepted in principle. They are accepted at 1F30D and 1F30E as proposed by Ireland.

See relevant resolution M55.9 item e on page 44.

T4. Requests changing the name for U+1F368 ICE CREAM to something like CUP WITH ICE CREAM or ICE CREAM IN DISH WITH SPOON to show the difference to the other proposed ice cream symbols, and to an ICE-CREAM CONE which may be proposed separately.

Mr. Michel Suignard: The other ice cream related symbols are called SOFT ICE CREAM and SHAVED ICE. They do not describe precisely content and container as suggested. At the same time, it is true that ICE-CREAM is very often served on cone. There are several ways of identifying different kinds of ice cream. Using a cone is one way of representing it.

Dr. Ken Whistler: The current name is good enough; it is the translation of the Japanese.

Mr. Michael Everson: If we need to add ice cream cone - we could add it later.

Not accepted. The character ice cream cone can be added later when it is requested.

E3. Requests additional information on U+1F38E GIRLS DOLL FESTIVAL; U+1F391 MOON VIEWING CEREMONY – such as · Japanese.

Mr. Michel Suignard: This character reflects the Japanese culture.

The comment T.5 from Ireland requests a name change and new annotation for 1F38E such as:

1F38E JAPANESE DOLLS; = Japanese Hinamatsuri girls' festival

In the same line a new annotation could be added for 1F391:

1F391 MOON VIEWING CEREMONY; = Japanese Otsukimi harvest celebration

Accept in principle to add proposed annotations.

T5. Proposes name changes to the set of U+1F3A0 ff - entertainment symbols, to be more consistent; most of them are the names for the things pictured, while others are the names of abstract concepts to be denoted by the things, preserving the denoted abstract concepts as alternative names.

U+1F3A3, U+1F3A5, U+1F3A8 and U+1F3AA are called out for in particular.

Mr. Michel Suignard: We are not always perfect in naming symbols. See similar comment T5 from Ireland which deals with the first three of these. U+1F3AA is unique to Germany but consistent with others.

Accept in principle; see also Ireland T.5 disposition.

1F3A3 FISHING POLE AND FISH (original name was FISHING).

Change the name for 1F3A5 to MOVIE CAMERA with a new glyph.

Change the name for 1F3A8 to ARTIST PALETTE.

Reverse name and annotation for 1F3AA (CIRCUS TENT, =event).

E4. Fix typo in the note for U+1F3AB TICKET

Accepted.

T6. Change glyph for U+1F3E6 BANK to look similar to adjacent characters with building structure. This request is also a part of comment E3 from Ireland.

Accepted.

T7. Expand name for U+1F3E7 ATM to Automatic Teller Machine.

See also request for annotation in comment E2 from Ireland.

Accepted in principle: Name changed to: Automated Teller Machine.

T8. Glyph change for U+1F3EC DEPARTMENT STORE

See also comment E3 from Ireland.

Accepted; glyph change.

E5. Add annotations to U+1F3ED FACTORY: = industrial production site; = date of production.

Accepted.

T9. Change name of U+1F3F0 WESTERN CASTLE to EUROPEAN CASTLE

Accepted name change.

T10. U+1F420 CAMEL

Germany requests a name change to U+1F420 DROMEDARY CAMEL (or DROMEDARY) if the glyph is of a single humped Camel; or U+1F420 BACTRIAN CAMEL if it is two humped. Preference is to have both names and corresponding glyphs – from document N3607.

Mr. Michel Suignard: I propose acceptance in principle. Ireland in its comments T.7 and T.8 has alternative proposals.

Discussion:

- a. Mr. Masahiro Sekiguchi: The discussion here on naming according to the glyphs is an artificial one, just for publishing the standard. They are not used as actual mobile phone Emoji. If we are naming it on basis of the invented glyphs, we may come to the wrong decision. In Japanese language there is no distinction between the two types of camels. Camel alone is used.
- b. Dr. Ken Whistler: We can use the proposed disposition in document N3690.
- c. Mr. Peter Constable: Will the Japanese users not really care if the Camel Glyph has one hump or two humps?
- d. Mr. Taichi Kawabata: There are two carriers having icons for these -- they use two- humped glyphs.
- e. Mr. Peter Constable: The character mapped from the Emoji set should have two humps. The question we are dealing with is what should be the name of the second camel? Should there be two different symbols needed for distinguishing the two camels?
- f. Mr. Mike Ksar: Why should these be distinguished?
- g. Dr. Ken Whistler: The European perception is that these camels are different -- Dromedary and Bactrian camels are different. It is a culturally relevant perception. The single humped camel may not be appropriate for the Emoji set. Another Camel may not be required for the Emoji set but I have no problem in adding another one to address the European perception.
- h. Dr. Lu Qin: If we look at a symbol of a crow for a bird, and someone prefers to call it a crow are we going to distinguish between these?
- i. Mr. Michel Suignard: My proposal is to accept the request for the second camel - the single humped one.
- j. Mr. Michael Everson: If we are going to add another character we propose the names Bactrian Camel and Dromedary Camel.
- k. Mr. Markus Scherer: On the question of whether we need two camels or not have we come up with an agreement?
- l. Mr. Peter Constable: Given the single name Camel seems to be confusing with single versus double humped camels we need to distinguish between them.

Disposition: WG2 accepted two characters with new names. The two-humped BACTRIAN will map to CAMEL in Emoji set. Accepted: 1F420 BACTRIAN CAMEL and 1F43E DROMEDARY CAMEL. See also relevant resolution **M55.9 item i** on page 44. (Note: final code positions were decided after all the dispositions were dealt with together).

T11. Change the name for U+1F46F WESTERN PERSON to BLOND-HAIRED WOMANS HEAD. Rationale is given along with this request. Also points to BLOND-HAIRED MANS HEAD that was proposed in document N3607 in Dublin. Also suggests possible mapping of Emoji symbol e-1A4 to both of these.

This item was considered by the ad hoc on Emoji. Also, the suggested mapping of two UCS characters to a single Emoji symbol is not considered to be a good idea. See also Ireland comment E.4 related to this character.

Disposition: Request for the name change and addition of another character are not accepted, per Emoji ad hoc group's recommendation item 8 in document N3726.

E6. Request to change the heading for the set of symbols starting U+1F4AE ff. from School grade symbols to Japanese School Grade Symbols.
Accepted.

T12. Requests change in glyph for U+1F4B1 CURRENCY EXCHANGE to show bank notes and coins.

Also part of comment E.5 from Ireland.

Accepted; change glyph.

T13. Requests to move U+1F4B2 HEAVY DOLLAR SIGN to Dingbats block for example to U+27B0. Mr. Michel Suignard: If we move it, the only caveat is that the first column does not contain heavy symbols, but the more appropriate columns are full.

Discussion:

- a. Mr. Michael Everson: I don't think this should be moved to the dingbat.
- b. Dr. Ken Whistler: It does not help moving it to Dingbat block.

Not accepted. The character is better where it is.

T14. Requests another suitable name for U+1F4BB COMPUTER. Suggests several possible names. Mr. Michel Suignard: There are for sure many computers that look exactly like the picture; it is not uncommon to have the main unit integrated in the display or in the keyboard. In many other cases the main unit is hidden, leaving the monitor, keyboard, and mouse to represent the concept of a computer set on a desktop. At the same time 'COMPUTER WORKSTATION' or 'DESKTOP COMPUTER' could be acceptable to differentiate from a laptop computer picture.

This item was considered by the ad hoc on Emoji.

Accepted in principle. WG2 accepted to change the name to PERSONAL COMPUTER, per Emoji ad hoc group's recommendation item 9 in document [N3726](#).

E7. Requests annotation for U+1F4B0 MONEY BAG; · Glyph may show any currency symbol instead of a dollar sign.

Accepted.

E8. Requests annotations for U+1F4D6 OPEN BOOK:

- = read operator's manual
- similar to ISO/IEC 7000-0790 "Read operator's manual"

Accepted.

E9. Requests annotation for U+1F4E8 E-MAIL SYMBOL; Glyph may show a @-symbol instead of an E.

Accepted.

T15. Requests name change for U+1F4EA ENVELOPE WITH ARROW to ENVELOPE WITH BLACK DOWN-POINTING ARROW ABOVE

Accepted in principle. The name ENVELOPE WITH DOWNWARDS ARROW ABOVE was accepted instead (consistent with name formed in a similar fashion such as 1F508 TOP WITH UPWARDS ARROW ABOVE).

T16. Requests name change for U+1F4EB MAILBOX; U+1F4EC MAILBOX WITH RAISED FLAG, to U+1F4EB OPEN MAILBOX WITH LOWERED FLAG and U+1F4EC CLOSED MAILBOX WITH RAISED FLAG. Document [N3687](#) has further information on this proposal, which proposes two more characters to complete the set of OPEN and CLOSED mail boxes with RAISED and LOWERED flags. Mr. Michel Suignard: The proposal having the four symbols proposed in the supporting contribution in document [N3687](#) makes sense.

Mr. Taichi Kawabata: These symbols had fall back mappings. The current Emoji symbols have been differently implemented by KDDI and Softbank. The proposed names will conflict with one of the carriers' use of the symbol.

This item was considered by the ad hoc on Emoji.

Accepted in principle. WG2 accepted to change the names of the two in the current Amendment and addition of two more characters, along with changing the mappings to Emoji source characters per Emoji ad hoc group's recommendation item 10 in document [N3726](#).

See relevant resolution M55.9 item f on page 44.

T17. Requests name change for U+1F4F1 PHONE WITH ARROW to MOBILE PHONE WITH BLACK RIGHT-POINTING ARROW LEFT

Mr. Michel Suignard: Comment T7 from Ireland also asks to insert 'MOBILE' in front of PHONE. A possible name could be MOBILE PHONE WITH RIGHTWARDS ARROW LEFT, using the same rules as in T15.

Accepted in principle. WG2 accepts to rename it as 1F4F1 MOBILE PHONE WITH RIGHTWARDS ARROW AT LEFT

T18. Requests name change by adding BLACK in front of the names for each of U+1F4FC SPEAKER WITH CANCELLATION STROKE, U+1F4FD SPEAKER, U+1F4FE SPEAKER WITH ONE SOUND WAVE, and U+1F4FF SPEAKER WITH THREE SOUND WAVES.

Mr. Michel Suignard: It is not clear whether these depictions should be dis-unified, including one set of variant which does not exist today.

This item was considered by the ad hoc on Emoji.

Not accepted, per Emoji ad hoc group's recommendation item 11 in document [N3726](#).

T19. Requests name change for U+1F51C DIM SCREEN SYMBOL and U+1F51D BRIGHT SCREEN SYMBOL to 1F51C LOW BRIGHTNESS SIGN and 1F51D HIGH BRIGHTNESS SIGN. An alternative set of names along with annotations are also proposed.

Mr. Michel Suignard: If the names are to be changed, the first option seems preferable:

This item was considered by the ad hoc on Emoji.

Accepted in principle. WG2 accepted the name changes to 1F51C LOW BRIGHTNESS SYMBOL 1F51D HIGH BRIGHTNESS SYMBOL per Emoji ad hoc group's recommendation item 11 in document [N3726](#).

T20. Requests moving U+1F533 SIX POINTED STAR WITH MIDDLE DOT to U+2B4F (near U+2B50 WHITE MEDIUM STAR) or another place in the "Miscellaneous Symbols and Arrows" block.

Mr. Michel Suignard: My preference is not to move it; it is there for Emoji context only.

Dr. Ken Whistler: I don't see anything to be gained by moving this one.

Not accepted.

T21. Requests changing names for U+1F536 BLACK ROUNDED SQUARE and U+1F537 WHITE ROUNDED SQUARE: to U+1F536 BLACK SQUARE BUTTON and U+1F537 WHITE SQUARE BUTTON; also suggests corresponding change to the header for these symbols in the names list.

Mr. Michel Suignard: This is in accordance with the SoftBank source where the symbols are called (button in Japanese).

Discussion:

- a. Mr. Taichi Kawabata: What do we do with colours?
- b. Mr. Michael Everson: We do not have colours.
- c. Mr. Markus Scherer: They animate them with changing colours.

Accepted.

T22. Suggests moving the 10 characters U+1F538 ... U+1F543, Geometric shapes and User interface symbols to the "Miscellaneous Symbols and Arrows" block; and suggests some heading changes.

Dr. Ken Whistler: These are Emoji symbols with shading / colours; to be used with Emoji set.

Not accepted.

T23. Votes against U+1F560 ff. - Emoji compatibility symbols, if these are considered for addition based on other ballot comments. Suggests using the proposal in document [N3680](#) to fulfill the intent of representing these symbols.

Noted. Strictly speaking, this is not part of the ballot, but a feedback to another NB comment. See disposition of comment T1.d from USA.

This item was considered by the ad hoc on Emoji.

Disposition: WG2 accepted the Emoji ad hoc group's recommendation item 15 in document [N3726](#), to resolve this topic. Another alternative proposal in document [N3727](#) to add 26 characters with names REGIONAL INDICATOR SYMBOL LETTER A .. REGIONAL INDICATOR SYMBOL LETTER Z.

Relevant resolution:

M55.3 (Regional indicator symbols):

Unanimous

With reference to documents [N3726](#) and [N3727](#), WG2 accepts 26 symbols for inclusion in Amendment 8 at code positions 1F1E6 to 1F1FF, in the Enclosed Alphanumeric Supplement block in the SMP, with their names and glyphs as shown in document [N3727](#).

T24. Requests changing name of U+1F6AB NO ENTRY SIGN to something like SIGN INDICATING NO, with an annotation → 20E0 COMBINING ENCLOSING CIRCLE BACKSLASH

Mr. Michel Suignard: This is not a general symbol to indicate prohibition. It is not an overlay. 20E0 is to be used for general purpose usage, leaving the new character for Emoji usage.

Not accepted.

E10. Requests deletion of the annotation "+ plus sign" for U+1F70A ALCHEMICAL SYMBOL FOR VINEGAR:
Accepted.

T25. Requests a clearer glyph for U+1F759 ALCHEMICAL SYMBOL FOR BRICK:
Accepted. A better glyph with more regular shading will be used.

E11. Requests deletion of the annotation "260A ascending node" for U+1F75E ALCHEMICAL SYMBOL FOR SUBLIMATION, and suggests addition of annotation "-> 264E LIBRA" due to the similarity of the glyph.
Partially accepted. WG2 decided to keep the current annotation because it is based on document WG2 N3584 (basis for these additions) which describes 260A as the symbol for Sublimate. WG2 accepted to add the requested cross reference. Germany can have another discussion on this disposition if they choose.

E12. Requests adding cross references for U+1F772 ALCHEMICAL SYMBOL FOR HALF DRAM, to → 0292 LATIN SMALL LETTER EZH and → 00DF LATIN SMALL LETTER SHARP S.
Partially accepted; Accept only cross reference to EZH, since 0292 - EZH has an alias to 'dram'. Correlation between Semis and Eszett is not clear.

E13. Requests adding cross references for U+1F773 ALCHEMICAL SYMBOL FOR HALF OUNCE: to → 2125 OUNCE and → 00DF LATIN SMALL LETTER SHARP S
Partially accepted; Accept only cross reference to OUNCE; correlation between Semis and Eszett is not clear.

11.2.2 Greece: Disapproval with comments (document N3684-GR)

(Greece did not mention whether the comments were technical or editorial, nevertheless, given that they all relate to character name issues, they are deemed to be technical).
All the characters Greece has commented on are already in the published Amendment 1 to ISO/IEC 10646:2003, sourced from the input contribution in document N2642, which contains the rationale and references for the choice of names. They are not related to Amendment 8 additions. Per WG2 principles and procedures, character names cannot be changed once standardized. However annotation can be inserted in the chart pages. Greece can suggest any annotations to these characters as input for the second edition of the standard.

T1. Requests changing "CORONIS" to "KORONIS".

Mr. Michel Suignard: This concerns 2E0E EDITORIAL CORONIS; this character already has the cross reference to 1FBD greek koronis. Also the source document N2642 had a note for this character: "Note: name 'Editorial Coronis' used to distinguish character from 1FBD (Greek Koronis)".

T2. Requests changing of "HYPODIASTOLE" to "YPODIASTOLI"

Mr. Michel Suignard: This concerns 2E12 HYPODIASTOLE. Name cannot be changed. However, an annotation such as = ypodiastoli could be added.

T3. Observes that OBELOS they cannot recognise the name but the glyph.

Mr. Michel Suignard: This concerns 2E13 DOTTED OBELOS. A common definition that can be found searching on the internet, is: "The obelos symbol gets its name from the spit or sharp end of a lance".

T4. Observes they could not recognize the name ANCORA and suggest that should perhaps be the very rare ANGYRA.

Mr. Michel Suignard: This concerns 2E15 UPWARDS ANCORA. See N2642 for the term.

Discussion:

Mr. Masahiro Sekiguchi: Greece is not attending this meeting. I doubt if they know our way of working or not. I would like to see a clear resolution with the background information and why their comments could not be accommodated.

Mr. Michel Suignard: I could give correct references to the P&P clauses for Greece's reference. I will be adding more rationale received from Debbie Anderson in the final disposition of comments.

Dr. Umamaheswaran: Even though Greece has not attended our meetings recently they are quite familiar with the WG2 principles and procedures.

Action item:

Greece national body is invited to take note of the above disposition to their comments, and to contribute on annotations to the four characters for the next edition of the standard.

[*Note: We missed creating a relevant resolution at meeting 54. Recording Secretary*]

11.2.3 Ireland: Disapproval with comments (document [N3684-I](#))

E1 Requests change of glyph for 23F0 to more similar to glyphs for 23F1 and 23F2; also to harmonize for glyph for 231A WATCH.

Accepted.

T1. Proposes five additional Miscellaneous Symbols; Astronomical Symbol for Uranus (proposed in document [N3672](#)), three PENTAGRAM characters (proposed in document [N3674](#)) and the INVERTED PENTAGRAM (rationale in document [N3684-I](#)) to add to the set.

See discussion in sections 9.9 on page 21, and 9.12 on page 23.

Accepted.

T2. Requests to move 2E32 LOOPED LENGTH MARK to 27B0 with Dingbats at position, renamed as CURLY LOOP (= kururi; = e-80B) (removing the Supplemental Punctuation block from PDAM 8).

Also proposes a new a similar character, DOUBLE CURLY LOOP at 27BF (= e-82B) mapped to the Emoji character e-82B listed in document in [N3681](#)

Accepted. Move 2E32 and rename it - 27B0 CURLY LOOP; add 27BF DOUBLE CURLY LOOP

*See relevant resolution **M55.9 item h** on page 44.*

T3. Reiterates is support for A78F - LATIN LETTER MIDDLE DOT and expresses opposition to any proposal to remove the same from Amendment 8, with explanatory text included.

Mr. Michel Suignard: See also opposite view exposed in comment T.5 from USA. One national body wants it and another is opposed to it. I propose that we move it out of Amendment 8 and keep it for the next Amendment.

Discussion:

- a. Mr. Michael Everson: There is no reason to take it out. Ireland will not agree to it.
- b. Mr. Peter Constable: We agree to take it out of Amendment 8 and postpone it for a future Amendment.
- c. Mr. Martin Hosken: UK has a contribution by Mr. Andrew West on this item.

See also section 10.1 on page 25.

An ad hoc met and there was no consensus. Two national bodies UK and Ireland were in support and US was not in favour of keeping it in Amendment 8.

Disposition: Keep the character as it is encoded. The Irish comment is *noted*.

T4. Proposes to add 66 additional Enclosed Latin Alphabetic characters with reference to contribution in document [N3671](#).

See discussion and disposition under section 10.2 on page 26.

Accepted with one minor annotation modification:

1F177 NEGATIVE SQUARED LATIN CAPITAL LETTER H

= Haltestelle (bus stop)

T5. Requests a number of name changes (list of old and new included) with some changed or additional annotations to characters in the Miscellaneous Pictographic Symbols block. A chart with blue-highlighted glyph cells was also included in document [N3684-I](#).

Mr. Michel Suignard: I have corrected the entries for 1F3A3 (missing old name), 1F3A5 (incorrectly shown as 1F3AF), 1F3A8 and 1F3AC (missing old name) in the charts provided by Ireland. Change of name for 1F3A5 is also requested in comment T3.a from USA. An ad hoc group of some experts had discussed prior to the meeting and should be acceptable after discussion within WG2. Refer to Pages 59 to 62 in document [N3690](#).

Accepted in principle.

E2 Requests annotation changes to 1F319 CRESCENT MOON (* may indicate either the first or last quarter moon) (**changed annotation**), 1F340 FOUR LEAF CLOVER four leafed clover (**annotation deleted**); 1F381 WRAPPED PRESENT (x 1F4E7 package (**cross reference added**)), 1F3E7 ATM * automated teller machine (**new annotation**).

Accepted in principle.

In the disposition of comment T.7 for Germany, the name for 1F3E7 was changed to Automated Teller Machine with ATM as annotation. See the charts in document [N3690](#).

T6. Requests three additional GLOBE symbols: 1F30D EARTH GLOBE EUROPE-AFRICA, 1F30E EARTH GLOBE AMERICAS, and 1F310 EARTH GLOBE WITH MERIDIANS (= used to indicate international input source, world clocks with time zones, etc.).

Mr. Michel Suignard: The two first characters were also requested by Germany (comment T3), and were accepted. 1F310 was in document [N3607](#). It was postponed in Dublin, and is being proposed to be added.

Dr. Ken Whistler: Name of character 1F310 is GLOBE WITH MERIDIANS.

Accepted in principle. All three characters are accepted with one name changed from the request.

*See relevant resolution **M55.9 item e** on page 44.*

E3 Requests glyph changes and one new annotation to 1F34D, 1F34E, 1F34F, 1F361 DANGO, 1F362, 1F367, 1F375, (x 2615 hot beverage (**new annotation**)), 1F3A5, 1F3B7, 1F3BA, 1F3BF, 1F3E6, and 1F3EC.

In a number of cases the glyph change is related to a character name relating to the colour of the glyph in certain contexts; Traditional European heraldic hatching is used to indicate the colours in the attached charts. Also requests the following note to appear at the head of the block:

“@+ In the case of characters that are associated in typical usage with a particular colour, conventions of European heraldry are used to represent those colours in monochromatic line drawings. This aspect of the representative glyphs is informative, not normative.”

Mr. Michel Suignard:

The glyph changes for 1F3E6 and 1F3EC are also requested by Germany (comment T6 and T8).

Accepted. All the glyph changes were accepted. Note that some of these characters had their names changed from previous dispositions. See final charts to be prepared by the editor showing the consolidated dispositions for the net results (document [N3723](#)).

T7. Requests name changes for 37 Miscellaneous Pictographic Symbols. A list of old and new names is included; changes or additions to annotations to some characters are shown; a chart with the glyph cells highlighted was also included (document [N3684-I](#)).

Mr. Michel Suignard: I have corrected some entries; 1F47B (incorrectly shown as 1F47C), 1F4A6 (incorrect old name), 1F4E5, and 1F4E6 ('TRAY' missing in both old and new name) comparing the list with the chart provided by Ireland. 1F420 CAMEL to BACTRIAN CAMEL name change is missing a corresponding request for glyph change; the chart provided has it correctly.

Germany T.10 has similar comment on the CAMEL symbols.

Name change for 1F4AA FLEXED BICEP to FLEXED BICEPS is also part of comment T3.a from USA.

For 1F4E5 and 1F4E6 it is questionable whether a hyphen should be introduced in the names as in-box and out-box.

Accepted in principle.

The in-box and out-box will not be hyphenated in the names.

1F420 BACTRIAN CAMEL and 1F43E DROMEDARY CAMEL were added to dispose comment T.10 from Germany. The two-humped BACTRIAN will map to the CAMEL symbol in the Emoji set.

*See also relevant resolution **M55.9 item i** on page 44. (Note: final code positions were decided after all the dispositions were dealt with together).*

E4 Requests a number of annotation changes to 1F465 (= accounts (**new annotation**)), 1F46F (~~woman with blond hair~~ (**annotation deleted**)), 1F4C0 (= digital video disc (**new annotation**)) in the Miscellaneous Pictographic Symbols block.

Accepted in principle. Comment T11 from Germany concerning 1F46F was not accepted by Emoji ad hoc. The annotation for 1F4C0 should say: '= digital video or versatile disc' to be comprehensive.

T8. Requests addition of 5 new characters - 1F43E DROMEDARY CAMEL, 1F470 TWO MEN HOLDING HANDS, 1F49F TWO WOMEN HOLDING HANDS, 1F4B7 BANKNOTE WITH POUND SIGN, and 1F4E2 CAMERA WITH FLASH., to the Miscellaneous Pictographic Symbols block.

Mr. Michel Suignard: We have talked about the Camels; from discussion of German comment T.10. 1F420 BACTRIAN CAMEL and 1F43E DROMEDARY CAMEL were added; with the two-humped BACTRIAN mapping to the CAMEL symbol in the Emoji set. Banknote with Pound Sign was proposed in document [N3607](#) in Dublin.

Three other characters don't have source documents. The glyphs are in Irish comment document [N3684-I](#).

Mr. Masahiro Sekiguchi: I can understand the rationale for 1F470 and 1F49F for gender equality etc. But I am not comfortable with 1F4E2. You have to indicate that CAMERA with FLASH is intended to be used with photography.

These proposed characters (except the Camel) were considered by the ad hoc on Emoji.

Disposition: WG2 accepted item 1 in the ad hoc report document [N3726](#) for accepting 1F470 and 1F49F, along with the given rationale; item 3 to accept 1F4B7, along with the rationale; and, item 2 to not accept 1F4E2 at this time inviting Ireland to provide a proposal with more rationale.

*See also relevant resolution **M55.9 item i** on page 44. (Note: final code positions were decided after all the dispositions were dealt with together).*

T9. Requests rearranging the chart moving characters and modified annotations the entire set of Row 1F40: Miscellaneous Pictographic Symbols to group the symbols in a more rational way, assuming the proposed changes to the previous comments were all acceptable. The proposed rearranged chart is included in document [N3684-I](#).

Accept in principle. Some rearrangement makes sense; with all the additions and changing code points etc. we have accepted so far. The chart will need to be modified based on the final disposition of all the comments. Refer to new charts incorporating the final disposition of comments at the end of the meeting (document [N3723](#)) for the end result.

E5. Requests changes to glyphs for 49 symbols in row 1F4 of Miscellaneous Pictographic Symbols block. A list of code positions with names and a chart with new proposed glyphs for these is included in document [N3684-I](#). It assumes all the proposed changes by Ireland would have been accepted. The code positions corresponding to values before applying the moves suggested by T9 are shown in parenthesis.

Mr. Michel Suignard: Note that the code positions content for 1F407, 1F408, 1F40A, and 1F40C have been changed and reordered to match the chart from Ireland and other Irish comments. The chart from Ireland has the glyphs for the whale and the snail mixed up. The proposed glyph for the whale is still far from optimal. Doing a web search on whale icon gets many more acceptable outlines. The entry 1F42B (1F420) BACTRIAN CAMEL is missing but is implied by the chart from Ireland. See also comment T12 from Germany for a glyph change to 1F4B1 – Currency Exchange that was accepted earlier.

Accepted in principle. Refer to document [N3723](#) that will be prepared consolidating the final set of dispositions.

T10. Requests name changes for 38 characters in Row 1F50 of Miscellaneous Pictographic Symbols block.

Changes or additions to annotations are also proposed for some of these characters.

Ireland objects in principle to names like Emoji Compatibility Symbol -1, -2 ... -5.

Mr. Michel Suignard: While the changes proposed make sense, I have corrected entries for 1F50A-1F50D (shuffled), 1F515 (incorrectly shown as 1F519 and 1F508 (new name changed from TOP WITH UP-POINTING ARROW ABOVE to TOP WITH UPWARDS ARROW ABOVE to be consistent with chart and comment T12 from Ireland. Note also that the annotation for 1F52E is different from the annotation mentioned in T12 and the chart. Accordingly, the chart version: 'Japanese kitchen knife' has been retained. Strictly speaking, the character at 1F50B could be 'ON WITH EXCLAMATION MARK WITH LEFT RIGHT ARROW ABOVE. Should the punctuation exclamation mark be captured in the name, as in many other occurrences?'

Accept in principle. WG2 accepted the proposed changes as corrected by the editor; see charts on page 67 of document [N3690](#).

E6. Requests annotation changes or additions to 1F516 (= shuffle (**new annotation**), 1F517 (= repeat (**new annotation**), and 1F518 (= repeat one over and over (**new annotation**))

Mr. Michel Suignard: Change for 1F516 and 1F517 are OK.

Concerning 1F518, note that its full name is CLOCKWISE RIGHTWARDS AND LEFTWARDS OPEN CIRCLE ARROWS WITH CIRCLED ONE OVERLAY. A preferred annotation is suggested.

Accepted in principle with changed annotation for 1F518 (= repeat one item over).

T11. Requests 13 new symbols, including 12 clock faces at the half hour in Row 1F50 of Miscellaneous Pictographic Symbols block.

Mr. Michel Suignard: The name for 1F519 is changed to 'ANTICLOCKWISE DOWNWARDS AND UPWARDS OPEN CIRCLE ARROWS' to match the chart. The code positions 1F560 to 1F564 are not available. They will be allocated new code positions with all the rearrangements in the final disposition charts. No rationale document is provided.

These proposed characters were considered by the ad hoc on Emoji.

Disposition: WG2 accepted item 4 in the ad hoc report document [N3726](#) for accepting 1F519 as complementing 1F515 already in Amendment 8 (with the common semantic of 'reload') and the 12 clock face characters that complement other clock face characters currently in the amendment and are used in Wingdings fonts.

Relevant resolution:

M55.5 (Clock-face and other symbols):

Unanimous

Based on Irish comment T11 on PDAM8 and the Emoji ad hoc report in document [N3726](#), WG2 accepts the following 13 additional Miscellaneous Pictographic Symbols for inclusion in Amendment 8:

1F504 ANTICLOCKWISE DOWNWARDS AND UPWARDS OPEN CIRCLE ARROWS
1F55C CLOCK FACE ONE-THIRTY
1F55D CLOCK FACE TWO-THIRTY
1F55E CLOCK FACE THREE-THIRTY
1F55F CLOCK FACE FOUR-THIRTY
1F560 CLOCK FACE FIVE-THIRTY
1F561 CLOCK FACE SIX-THIRTY
1F562 CLOCK FACE SEVEN-THIRTY
1F563 CLOCK FACE EIGHT-THIRTY
1F564 CLOCK FACE NINE-THIRTY
1F565 CLOCK FACE TEN-THIRTY
1F566 CLOCK FACE ELEVEN-THIRTY
1F567 CLOCK FACE TWELVE-THIRTY

with their glyphs as shown in document [N3723](#).

T12. Proposes to rearrange 58 characters with some annotation changes in the Miscellaneous Pictographic Symbols block resulting in more consistent grouping of symbols. Lists of these as well as a chart showing the glyphs and the rearrangement were included.

Mr. Michel Suignard: (in the proposed disposition document [N3690](#))

There are many discrepancies between the list of changes and the chart part in document [N3684-I](#) containing the ballot comments from Ireland. 1F194 entry incorrectly set to 1F514; 1F50F entry missing (compared to the chart and as accepted in Irish comment T11); 1F510 to 1F535 entries incorrectly set (compared to the chart); 1F536-1F539 entries missing (compared to the chart), Instruction for the range 1F567-1F56C is missing. It can be moved back to 1F560-1F567 (as originally intended) once Mount Fuji, Tokyo Tower, etc. are moved down; 1F196 entry has the incorrect name: using 'NO GOOD' instead of 'NG'.

Accepted in principle. The final charts reflecting all the dispositions and fixing the errors noted by the editor should be referenced (document [N3723](#)).

E7. Requests changes to glyphs for 23 characters in the Miscellaneous Pictographic Symbols block. The new proposed glyphs are in the accompanying chart.

Mr. Michel Suignard: There are few discrepancies to fix between the list and the chart in the Irish comment document; these can be fixed.

Accepted in principle. The final charts will show the accepted glyphs; the request for change in 1F50F will be ignored.

T13. Requests name changes for 10 characters in Row 1F6: Emoticons.

Ireland requests a number of name changes:

Discussion:

- a. Mr. Markus Scherer: Document [N3711](#) has some of these characters commented on.
- b. Mr. Michael Everson: Most of the comments in [N3711](#) are related to glyphs. We should accept all these name changes.
- c. Dr. Ken Whistler: I agree - these are mostly fixing spelling changes etc.

Disposition: WG2 accepted the proposed name changes for the 10 Emoticons symbols. These new names should be kept in mind by Emoji ad hoc while considering comments in document [N3711](#).

T14. Requests new annotations to 2639 WHITE FROWNING FACE (* used for the South House in Mahjong (**new annotation**), 263A WHITE SMILING FACE(= have a nice day!, * used for the East House in Mahjong (**new annotation**), 1F606 EXPRESSIONLESS FACE (* used for the North House in Mahjong (**new annotation**)). Ireland also requests a new character with annotation: 1F629 FACE WITHOUT MOUTH (* used for the West House in Mahjong (**new annotation**), x 2687 white circle with two dots) to be added.

A picture showing an example of these characters as the rationale for Mahjong related annotations is also included.

Mr. Michel Suignard: The expression 'House in Mahjong' seems to be common to all four requested annotations. It should be replaced with 'Wind in some Mahjong annotation'.

Partially accepted.

The proposed emoticon for FACE WITHOUT MOUTH was considered by the ad hoc on Emoji. WG2 accepted item 6 in the ad hoc report document [N3726](#) for accepting 1F629 along with the rationale provided. WG2 also accepted the accompanying recommendation for Not Adding any of the requested Mahjong-related annotations.

See also relevant resolution **M55.9 item j** on page 44.

E9. Requests rearranging locations for 1F637 HEAR-NO-EVIL MONKEY (moved up from 1F638) 1F638 SPEAK-NO-EVIL MONKEY (moved down from 1F637).

Mr. Michel Suignard: This is really a Technical change (though marked as Editorial). This rearrangement makes sense.

Accepted in principle.

T15. Requests name changes for 1F687, 1F68C, 1F68D, 1F693 to 1F698. Both old and new names are listed.

Mr. Michel Suignard: The proposed change for 1F687 from SUBWAY to UNDERGROUND TRAIN is controversial. A Subway network is not necessarily underground; in fact most have large sections above ground. The list in the Irish comment does not include name change for 1F69A from TRUCK to DELIVERY TRUCK that is shown in the accompanying charts from Ireland. The change for 1F69A is also requested in the USA in comment T3.a.

Accepted partially. WG2 accepted all the proposed changes except SUBWAY. After discussion in an ad hoc, the name for 1F687 is changed from SUBWAY to METRO with 'subway' and 'underground train' as annotations.

T16. Page 81, Row 1F68: Transport and Map Symbols.

Ireland requests a character addition.

1F6C5 BATHTUB

Accepted. WG2 accepted the character based on Item 7 in Emoji ad hoc report document [N3726](#).

See also relevant resolution **M55.9 item k** on page 44.

T17. Requests rearrangement of locations for TOILET, WATER CLOSET, SHOWER, BATH, BATHTUB, PASSPORT CONTROL, CUSTOMS, BAGGAGE CLAIM and LEFT LUGGAGE in the Transport and Map Symbols block.

Accepted in principle. Refer to the final charts reflecting all the dispositions (document [N3723](#)) for the new locations.

E10. Requests glyph changes for 1F68F BUS STOP and 1F6C0 BATH symbols.

Partially accepted. It is not clear whether the change of the sign content on top the pole of the bus stop, being so tiny, is necessary. Refer to the final chart reflecting all the dispositions (document [N3723](#)) for the changed glyphs.

T18. Requests correction or changing the spelling in names for 7 Alchemical Symbols 1F708, 1F709, 1F70D, 1F70E, 1F70F, 1F715 and 1F76C.
UK comment T2 supports the proposed changes for the last five of these.
Accepted.

Mr. Michael Everson: As a result of the above dispositions, Ireland's vote is changed to Acceptance.

11.2.4 Japan: Disapproval with comments (document N[3684-J](#))

JPT1: Corrected reference for JH source is provided; the Japanese name within the parentheses is part of the source reference.
Accepted.

JPT2: Requests removal of character JH-IB0680 (u+2B779 in CJK D), according to the conclusion of IRG #32 (IRG N1587).

Mr. Michel Suignard: This character should be removed because JH- was the only source reference for it. It will cause the chart for CJK-D to be rearranged with all the characters moving up one position after removing this character. From the editing point of view I would like to get the fonts to contain the glyphs at the new code positions of the resulting charts, to make the production process easier.
Accepted. Current 2B779 will be vacated and all the subsequent CJK-D characters will be moved up by one location.

JP.T3 - The character JH-444550 (U+2B7EB in CJK D) on the code chart is wrong. The character is correct in the font submitted to the editor. Looks like a production error.

Mr. Michel Suignard: This is the result of a mapping error. The editor wants to remind the submitters to provide their fonts with actual code positions used for the amendment. Otherwise, he has to use mapping tables or redo the internal font mapping table. Neither solution is optimal and is prone to error as attested here.

Accepted.

See also relevant resolution M55.9 item I on page 44.

JP.E4 - Requests checking the glyphs for Bopomofo - 031B8, 031B9 and 031BA; they differ in style with the rest.

Mr. Michel Suignard: This is a style issue. The styles are different from the base Bopomofo characters.

Mr. Michael Everson: Can you give me a font that contains all the characters?

Mr. Michel Suignard: We should try to get better fonts and do a good job. The extension proposals usually come from different sources than the original scripts and the editors have to try to do a better job to match the styles.

Accepted.

JP.G5 (general): Emoji – Expresses general concerns that WG2 may need more time to study the Emoji set before inclusion in the amendment.

Noted. Because this is only the PDAM ballot, there is still time to fix concerns. It is to be noted that various opinions have been converging through several ad hoc meetings.

JP.G5a: Requests inclusion of mapping between Emoji symbols in code sets of JP mobile operators and UCS in the standard. This is particularly important where UCS has names like EMOJI COMPATIBILITY SYMBOL-XX or HEART-X etc. where it is impractical to convey their intended meaning with the names and associated glyphs alone, and hence the correspondence to the Japanese carriers' code sets.

Noted. The concerns expressed here are covered in the dispositions; mapping information will be added; character names have been changed to include colours in the names and standardized hatching.

JP.G5b: Conveys complaints received by Japan national body, on the glyphs for Emoji characters in the amendment – 'some graphics are inappropriate', 'shape does not match original Emoji character', 'never invent novel symbols – just use existing ones' etc.

Discussion:

- a. Mr. Markus Scherer: Document N[3711](#) addresses some of these concerns.

- b. Mr. Peter Constable: It would have been more helpful if there was a document which would have pointed out the glyphs that are of concern. For example some of the animal symbols were different. I would like to know which symbols were of concern to the users.
- c. Mr. Michel Suignard: Different carriers were using different glyphs also. Other national bodies have proposed further refinements to names and glyphs which all appearing to converge. More specific concerns from Japan would be welcome. I would like to know Japan's concerns on the charts we will be producing at the end of this meeting.
- d. Mr. Masahiro Sekiguchi: We don't have details; but we are just recording our concerns.
- e. Mr. Taichi Kawabata: Document [N3711](#) provides some details on the concerns from Japan.

Accepted in principle.

JP.G5c - points out that the current Emoji set does not cover all the Emoji characters in use in Japan, leading to concern about lack of round trip integrity due to incompleteness, and hence questions the value of inclusion of the incomplete set in UCS.

Discussion:

- a. Mr. Michel Suignard: The mapping document would address how complete the coverage is. We will be adding a few more through the dispositions of comments from Ireland, Germany and USA. I would like to know more details on the Japanese concerns.
- b. Mr. Peter Constable: The US has been asking for some 10 region indicators and 65 others. Would like to know if JP has concerns on more characters or not.
- c. Mr. Masahiro Sekiguchi: We have concerns on both sets.
- d. Mr. Taichi Kawabata: We can discuss these sets.

Accepted in principle.

JP.G5d: Requests the word JAPANESE be added to pictorial characters that are unique to Japanese folklore.

Specifically name changes are proposed for 1F478 OGRE to JAPANESE OGRE and 1F479 GOBLIN to JAPANESE GOBLIN. The current glyphs match the Japanese folklore.

Mr. Michael Suignard: There have been other such proposals such as 1F38E GIRLS DOLL FESTIVAL to JAPANESE DOLLS proposed in comment T.5 from Ireland. The alternative is to have annotations.

Mr. Masahiro Sekiguchi: We don't have a strong preference. But OGRE and GOBLIN symbols in Japan are different from European ones. These two at least should have JAPANESE on these.

Accepted the two proposed name changes.

JP.G5e: Points out inconsistency between the glyphs and names for 1F35C STEAMING BOWL, 1F4E7 PACKAGE, 1F381 WRAPPED PRESENT, 1F4D5 VERTICAL CLOSED BOOK, 1F4D6 OPEN BOOK, 1F362 SEAFOOD CASSEROLE, 1F4A0 DIAMOND SHAPE WITH A DOT INSIDE.

Mr. Michel Suignard: The proposed disposition to the above are:

1F35C STEAMING BOWL: remove 'rice donburi' annotation

1F4E7 PACKAGE: add cross reference to 1F381 WRAPPED PRESENT (Irish comment E2 and T9), changing the name to GIFT PACKAGE would make the characters too close in purpose.

1F4D5 VERTICAL CLOSED BOOK to CLOSED BOOK (Irish comment T7)

1F362 SEAFOOD CASSEROLE to ODEN (Irish comment T5)

1F4A0 DIAMOND SHAPE WITH A DOT INSIDE: add 'kawaii' in annotation.

Accepted in principle.

JP-G5g. (there was no G5f) Requests a note that explains why and how they are encoded as separate characters; for characters with names such as APPLE-1, APPLE-2 etc. with glyphs that differ only in their shading.

Mr. Michel Suignard: This comment is similar to T.1 from Germany and several other comments from Ireland. Characters with various grey shading will have names including colors and a standardized hatching as a result of disposition of comment T1 from Germany and of comments T5, E3, T7, E5, T10, and E7 from Ireland. The note is provided as a block header (see comment E3 from Ireland).

Accepted in principle.

Note that the Emoji ad hoc also considered and has commented on some of the comments from Japan. See the ad hoc report in document [N3627](#).

Mr. Masahiro Sekiguchi: Japan's vote changes to Acceptance, based on the above dispositions.

11.2.5 United Kingdom: Approval with comments (document [N3684-UK](#))

T.1. Requests adding 1F4B7 BANKNOTE WITH POUND

Also requested by comment T8 from Ireland.

Accepted – based on item 3 in Emoji ad hoc report in document [N3726](#).

*See also relevant resolution **M55.9 item i** on page 44.*

T.2. Proposes changes in names from SULFUR to SULPHUR, NITER to NITRE and VAPORS to VAPOURS for five Alchemical Symbols at 1F70D, 1F70E, 1F70F, 1F715 and 1F76C

Also requested in comment T18 from Ireland.

Accepted.

T.3. Proposes name change for 1F722 SUBLIMATE OF COPPER to ALCHEMICAL SYMBOL FOR SUBLIMATE OF COPPER

Accepted.

11.2.6 USA: Disapproval with comments (document [N3684-US](#))

T.1 Requests addition of one MALAYALAM character 0D4E MALAYALAM LETTER DOT REPH, based on the proposal in document [N3676](#).

Accepted per discussion of the contribution in section 9.13 on page 23.

T.2. Requests addition of U+26E2 ASTRONOMICAL SYMBOL FOR URANUS, with glyph and background as given in document [N3672](#).

See discussion in sections 9.9 on page 21, and 9.12 on page 23.

Accepted.

T.3a. Requests name changes for: U+1F4AA FLEXED BICEP to: FLEXED BICEPS, U+1F69A TRUCK to: DELIVERY TRUCK, and U+1F3A5 MOVIES to: MOVIE CAMERA

See also Irish comment T7 (1F4AA), disposition of comment T15 (1F69A), and comment T5 (1F3A5)

Accepted. All were addressed while disposing Irish comments.

T.3b. Requests a corresponding annotation change for U+1F3A5 MOVIE CAMERA (with the new name) from "film, movie projector" to "film, movies". See also Irish comment T5.

Accepted.

T.3c. Requests three glyph changes – for U+1F526 BOOKMARK (to more like a bookmark versus the current luggage tag), for U+1F3A5 MOVIE CAMERA (to reflect comments T.3a and T.3b above), and for U+1F420 CAMEL (should be a 2-hump camel to reflect Japanese Emoji sources).

Accepted in principle. Have been covered in earlier discussion on German and Irish comments.

See also disposition of comment T10 from Germany concerning the 'Camel' symbols.

See also Irish comment E7 (re: 1F526), E3 (re: 1F3A5), and disposition of comment T7 and E5 (re: 1F420).

T.3d. Requests addition of eleven characters named Emoji Compatibility Symbol-6 through -16. A list of proposed locations, names, annotations and equivalent Emoji source for each, is included. The glyph for each of these is proposed to be, similar to U+FFFC and U+1680.

Mr. Michel Suignard: The 10 first characters are related to the comment T23 from Germany.

These were disposed of by the Emoji ad hoc. See the ad hoc report item 15 in document [N3726](#) along with the proposal for 26 Regional Indicator Symbols A to Z in document [N3727](#).

The eleventh character is also proposed in Irish comment E7 as 27BF DOUBLE CURLY LOOP, which was accepted. See disposition for T.3e below for annotations.

Accepted in principle.

T.3e. Requests the inclusion of the Emoji source data as documented in [N3585](#), as a linked data file named EmojiSources.txt, and addition of an appropriate clause in the standard that refers to the data file.

Accepted in principle. The proposed code points have all changed with various dispositions.

Document [N3712](#) contains the updated source data file. See also disposition of comment JP.G5a) from Japan.

See *relevant resolution M55.10 on page 45* that includes the updated Emoji source data file as part of Amendment 8 progression.

T.4. Requests eight phonetic subscripts located at U+A7F2–U+A7F9 in the Latin Extended D block be moved to the Superscripts and Subscripts block. The new proposed locations are 2095 to 209C, to be populated with Latin Subscript Small Letters H, K, L, M, N, P, S and T, respectively.
Accepted. The eight characters will be moved.

T.5. Requests removal of U+A78F LATIN LETTER MIDDLE DOT per justification contained in [N3678](#). See also opposite view expressed in comment T3 from Ireland.
Not accepted. See discussion under section 10.1 on page 25.

T.6. Strongly recommends that documentation of the source references for Ext. D be provided. For example, U-source data could refer to the character's index within UTR#45 with a URI for the TR.
Mr. Michel Suignard: What am I supposed to do with the US comment? What we are doing to date is good enough. I don't know what additional information is needed. US is requested to come up with more precise request if anything more is needed.
Noted.

US ballot response had indicated that 'If comments T.3.d, T.3.e., and T5 are accommodated, the U.S. will change its vote to Yes.' Since T.5 was not accepted the US vote will stay as 'Disapproval'.

Relevant resolutions:

M55.9 (Miscellaneous character additions for Amd. 8):

Unanimous

WG2 accepts the following additions and deletions of characters for inclusion in Amendment 8:

- a. 4 Pentagon characters based on Irish comment T.1 on PDAM8 in the Miscellaneous Symbols block:
26E4 PENTAGRAM
26E5 RIGHT-HANDED INTERLACED PENTAGRAM
26E6 LEFT-HANDED INTERLACED PENTAGRAM
26E7 INVERTED PENTAGRAM
with their glyphs and code positions as shown in document [N3723](#).
- b. 2 Mathematical Symbols at code positions 27CE and 27CF as shown on the last page of document [N3677](#).
- c. 1 character - 0D4E MALAYALAM LETTER DOT REPH, with its glyph as shown under item E in document [N3676](#), based on US comment T.1 on PDAM8.
- d. 2 Batak characters from Irish comment T.2 on PDAM8 at code positions 1BFA and 1BFB with their names and glyphs as shown in document [N3723](#).
- e. 3 characters, based on German comment T2 and Irish comment T.6 on PDAM8:
1F30D EARTH GLOBE EUROPE-AFRICA
1F30E EARTH GLOBE AMERICAS
1F310 GLOBE WITH MERIDIANS
with their glyphs as shown in document [N3723](#).
- f. Based on German comment T.16 on PDAM8 and the Emoji ad hoc report in document [N3726](#), Delete the following 2 symbols:
1F4EB MAILBOX, 1F4EC MAILBOX WITH RAISED FLAG
Add the following 4 symbols:
1F4EA CLOSED MAILBOX WITH LOWERED FLAG
1F4EB CLOSED MAILBOX WITH RAISED FLAG
1F4EC OPEN MAILBOX WITH RAISED FLAG, and
1F4ED OPEN MAILBOX WITH LOWERED FLAG
with their glyphs as shown on page 47 in document [N3723](#).
- g. 1 character based on Irish comment T1 and US comment T.2 on PDAM8:
26E2 ASTRONOMICAL SYMBOL FOR URANUS with its glyph as shown in document [N3672](#).
- h. 1 character based on Irish comment T.2 on PDAM8
27BF DOUBLE CURLY LOOP its glyph as shown in document [N3723](#).
- i. 4 Miscellaneous Pictographic Symbols based on Irish comment T8 and the UK comment T.1 on PDAM8, and the Emoji ad hoc report in document [N3726](#):
1F42A DROMEDARY CAMEL
1F46C TWO MEN HOLDING HANDS
1F46D TWO WOMEN HOLDING HANDS
1F4B7 BANKNOTE WITH POUND SIGN
With their glyphs as shown in document [N3723](#).
- j. 1 Emoticon symbol - 1F629 FACE WITHOUT MOUTH - based on Irish comment T14 and the Emoji ad hoc report in document [N3726](#):

- k 1 Transport and Map symbol - 1F6C1 BATHTUB - based on Irish comment T16 and the Emoji ad hoc report in document N3726:
- l Delete 1 CJK Extension D ideograph at 2B779 and move the following Extension D ideographs up by one position, and correct the J-column glyph for CJK Extension D ideograph 2B7EB, based on Japan comment T2 on PDAM8.

M55.10 (Progression of Amendment 8):

Unanimous

WG2 notes and accepts various name changes, glyph changes and changes to code positions of characters resulting from the disposition of PDAM8 ballot comments. The mapping information for Emoji symbols in document N3728 (*revised to use the final FPDAM8 code point allocations*) is also accepted. WG2 instructs its project editor to forward the final text of Amendment 8, including all the additions and deletions mentioned in resolutions M55.2 to M55.9 above, along with the disposition of comments document N3722 to the SC2 secretariat for an FPDAM ballot. The final set of charts and names list are in document N3723. The unchanged target starting dates are FPDAM 2009-12, and FDAM 2010-06.

count: addition of 1864 in Amd. 8

11.3 CD 2nd edition 10646

Input documents:

- [3655](#) New Edition CD; SC2 Secretariat; 2009-05-25
[3686](#) Summary of Voting/Table of Replies-CD next edition; SC2 Secretariat; 2009-09-28
[3686-I](#) Ballot comments from Ireland on CD next edition; 2009-09-28
[3686-J](#) Ballot comments from Japan on CD next edition; 2009-09-28
[3686-K](#) Ballot comments from Korea (Republic of) on CD next edition; 2009-09-28
[3686-UK](#) Ballot comments from UK on CD next edition; 2009-09-28
[3686-US](#) Ballot comments from US on CD next edition; 2009-09-28
[3691](#) Proposed disposition of comments – CD next edition; Michel Suignard; 2009-10-14

Output documents:

- [3716](#) CD disposition of comments; Michel Suignard; 2009-10-29

11.3.1 India: Approval with comment (document N3686-I)

T.1 - A proposal including proposal summary form on Arabic letters for Kashmiri was included, with a request for one addition and annotations for 06EA, 065A and 06CC. Refer to document N3686-I. Mr. Michel Suignard: This comment is out of scope for the FCD ballot. Proposals for new characters should be in a separate proposal document and not part of a ballot response, especially when there is no related content in the ballot.

Out of scope.

There was a separate contribution and agenda item on the topic. *See section 9.10 on page 21 for the discussion and disposition.*

11.3.2 Japan: Disapproval with comments (document N3686-J)

JP1 (Editorial): Words "Multiple-Octet" are missing in the title of the standard.

Discussion:

- a. Mr. Michel Everson: We are moving away from the streaming model of octets etc. and abstract values are not indicated as octets any more. The change in the title is intentional to reflect the standard better and to synchronize the standard closer to Unicode.
- b. Mr. Mike Ksar: The scope of WG2 was redefined to take 'Multiple Octet' out of it a few years ago.
- c. Mr. Masahiro Sekiguchi: This change of title was not approved within WG2. Japan is still opposed to it. The scope defines the work of the WG. The standard's title was not specifically discussed.
- d. Mr. Mike Ksar: When the scope was changed, the title of the standard was not changed.
- e. Mr. Masahiro Sekiguchi: If plenary accepts the change in title and scope I would not have objection. But at this time I cannot agree to it.
- f. Dr. Umamaheswaran: WG2 was certainly aware of the proposed changes to the standard through the Working Drafts of the next edition, including the title. We may not have spent enough time addressing the issue.
- g. Mr. Masahiro Sekiguchi: The Japanese national body members were not advised of the change and hence it is not accepted at this time.
- h. Mr. Peter Constable: Is it a procedural issue or other problems.
- i. Mr. Masahiro Sekiguchi: The term Multiple-Octet distinguishes UCS from the other SC2 Standards in coded character sets arena.

- j. Mr. Mike Ksar: The body of the standard does not talk about multiple octets etc. any more. We are arguing about the title only.
- k. Mr. Masahiro Sekiguchi: The title of UCS has been for a long time - with Multiple Octet - and we don't see any reason to change it.
- l. Mr. Michel Suignard: There was a time when 10646 was focused on stream encoding; we have moved away from it. The encoding forms are used to stream the data while the encoding itself is in terms of up to 17 bits of data. I also would like to point out that Japan has given this as an Editorial comment. It should have been made a Technical comment - if it was serious.
- m. Mr. Masahiro Sekiguchi: For Japan the title of the standard is important.
- n. Mr. Markus Scherer: The term Multiple-Octet does not really distinguish it from many other standards.
- o. Mr. Mike Ksar: I will bring this up to the SC2 plenary and we can have a discussion at the plenary.
- p. Mr. Masahiro Sekiguchi: It is important for Japan. I am very sorry that I did not realize that Japan has input this comment as editorial.
- q. Mr. Michel Suignard: There is another FCD stage. We can still take it up later.
- r. Mr. Michael Everson: I always refer to it as UCS; nothing to do with Multiple-Octet.

Not accepted: Title Remains Unchanged.

Relevant resolution (to get SC2 to formally approve the change to the title of 10646):

M55.15 (Change in the title of the next edition of the standard):

Japan - Abstention

Canada, China, Finland, India, Ireland, Korea (Republic of), UK and USA - Acceptance

WG2 approves the change in the title of the next edition of the standard to:

"Information technology – Universal Coded Character Set (UCS)"

removing the words multiple-octet from the title of the current edition.

WG2 further instructs its convener to inform SC2 to endorse this change and get approvals from JTC1 and ITTF if needed.

JP.2 (Technical): Requests deletion of UAX#44 as a normative reference as well as text of clause 6.3.1 on Classification, as not appropriate for 10646.

Discussion:

- a. Mr. Michel Suignard: For various characters such as combining, format characters etc. one had to go to Unicode standard properties definitions -- it was missing from 10646. UAX44 defines many more properties than what is needed in 10646. One could cherry pick only those properties that are needed. We could explicitly call for the properties needed in 10646 for algorithms, combining characters, format characters etc. that are used indirectly. For example, BiDi algorithm uses the property of characters from UAX 44, normatively.
- b. Mr. Masahiro Sekiguchi: One of the core points of this comment -- we are not saying we should not use the BiDi etc.; we formally refer to Bidi algorithms - and they in turn refer to the Unicode database.
- c. Mr. Michel Suignard: There are some properties like Gc- General Category - is required in 10646. Bidi and Normalization related properties. I could point to explicit properties in UAX 44.
- d. Mr. Masahiro Sekiguchi: Where do we need references to Gc?
- e. Mr. Michel Suignard: I need it for defining the base character for a combining sequence definition in the CD.
- f. Dr. Ken Whistler: If there is a normative reference to Unicode Standard would be sufficient instead of individual UAXs.
- g. Mr. Michel Suignard: There are normative references only to parts of Unicode Standard - like UAXs.
- h. Dr. Ken Whistler: One could refer to the Unicode Standard Version xxx instead of pieces of the standard. It will be much cleaner that way instead of referring to specific UAXs or property databases etc.
- i. Mr. Masahiro Sekiguchi: If we refer to the entire Unicode Standard normatively I am very much afraid that 10646 could become just a small set of pages with a pointer to the charts etc. in the Unicode Standard.
- j. Mr. Michael Everson: Regardless of whether we are referencing Unicode normatively or not, the charts and names lists are in synch --- are identical with the latest content.
- k. Mr. Michel Suignard: I would like to give countries a little bit more time to think about whether Unicode Standard should be the main normative reference. For now I would like to keep the

current references in clause 3. Japan has a valid concern. I will replace UAX 44 with relevant properties from UAX 44 that are needed in 10646.

- l. Prof. Kyongsok Kim: We may have similar problems as expressed by Japan, if Unicode is to be made normative. If some properties are needed in 10646 it should be called out for explicitly. If the entire Unicode is made normative, one will not need 10646 at all. We need to make some change - I do not quite agree with Dr. Ken Whistler in referencing the entire Unicode. We need to point out to specific aspects from Unicode.
- m. Mr. Peter Constable: An alternative would be to reference specific sections in the Unicode Standard like Chapter 4, clause 4.5, where the Gc is detailed.
- n. Mr. Martin Hosken: If you need only a few annexes you will be pulling out a whole lot more by referencing the entire standard.

Disposition: Mr. Michel Suignard: We will replace the current UAX #44 reference with a reference to clause 4.5 of the Unicode Standard.

Partially accepted.

JP.3 (Technical): Proposes rewording of definition for Base Character in clause 4.1 as "A graphic character that does not graphically combine with preceding characters."

Discussion:

- a. Mr. Michel Suignard: The base character definition was not changed. It is not a combining character.
- b. Dr. Ken Whistler: The old definition was not correct. It is especially true with Indic scripts and conjoining Jamo. There is no hard and fast line between characters that graphically combine and those that are not in complex scripts. One has to rely on the general category property to get the behaviour correct.
- c. Mr. Masahiro Sekiguchi: I understand that the text proposed by Japan is inappropriate. We are uncomfortable by defining terms based on character properties.
- d. Dr. Umamaheswaran: An informative note to explain the formal definition may be useful.
- e. Mr. Martin Hosken: One can have a formal definition in terms of properties. Then we can add some explanatory text to expand on it.
- f. Mr. Masahiro Sekiguchi: It is ok for now; Japan may come back with an alternative definition.

Partially accepted. Will add a note regarding exceptions for complex writing systems, for now. A more precise definition will involve using the General Category properties.

JP.4 (Technical): Proposes changing 4.4 Canonical Representation back to Canonical Form (as in current edition).

Discussion:

- a. Mr. Michel Suignard: the term 'form' and 'representation' are separated out to be more precise.
- b. Mr. Masahiro Sekiguchi: I am not objecting to the clear distinction between the concepts. We prefer the term Canonical Form instead of Canonical Representation.
- c. Mr. Peter Constable: The concern from Japan is one of continuity of terminology between editions. We can put in a pointer to the previous use of Canonical Form while defining Canonical Representation.
- d. Mr. Michel Suignard: Concern about confusing Canonical Form being a 'preferred encoding' is there.
- e. Dr. Ken Whistler: You can add a note that it is not a preferred in anyway as opposed to other encoding forms.

Accept in principle: We will use Canonical Form along with a note 'not to confuse with encoding forms'.

JP.5 (Technical): Proposes rewording definition in 4.18, Control Character to "A control function the coded representation of which consists of a single code position".

Accepted in principle; will use 'code point' instead of 'code position' to have better synchronization with Unicode.

JP.6 (Technical): Suggests shortening '4.58, Unpaired surrogate code unit 'to something like: "unpaired surrogate", to be short like Unpaired RC-Element of previous edition.

Mr. Michel Suignard: The term 'surrogate' by itself is ambiguous because it can either represent a pair of code units as in 'surrogate pair' or a single code unit when it is unpaired. Therefore the definition as stated in the CD should stay.

Not accepted.

JP.7 (Editorial): Reports that 10A3F KHAROSHTHI VIRAM A is missing from the list under 16.3 Format Characters.

Mr. Michel Suignard: Several characters moved in and out of this list from the previous edition. 10A3F was one of those that were removed. The Format Characters were not defined precisely earlier. We are using Gc property to define these formally. Previously we based these only the rectangular box around the glyphs etc. The glyph is not really important but the property governs these. The list is currently small and hence we enumerate these in Annex F (see final disposition of comments document N3716).

Not accepted.

JP.9 (Technical): points out inconsistencies in use of abbreviated names for source references in different places in the CD.

Discussion:

(See document N3691 for longer explanation and a chart of proposed new identifiers.)

- a. Mr. Michel Suignard: I agree that we should be consistent. The trouble with the G source is that these are long in some cases. The G as a prefix of G source could be understood as from China. KX are the longest. We can try GKX by removing the dots etc. We can have six digits without the dot. It is a production issue - and we have to keep the length short enough in production. This will satisfy the Korean comment T.2 also.
- b. I am also pointing out other related issues - there are few G sources with no indexes in it!! We would like to get the IRG to provide indices for the missing ones. Many Ext. B characters are missing source references.
- c. Dr. Lu Qin: We need to go back to the editors
- d. Mr. Suzuki Toshiya: My question is whether the identifiers are owned by WG2 or IRG? Is the syntax of the identifiers is reviewed by the IRG members.
- e. Mr. Mike Ksar: WG2 approves the IRG recommendations. We can override what IRG does.
- f. Mr. Michel Suignard: It is a production constraint; it is a new thing to show these in the charts. The changes are pretty small not radical; slightly shorter; removing underscore etc. Also asking for consistency. WG2 has the authority to ask IRG to do what we need.
- g. Mr. Suzuki Toshiya: The source value is the only way to identify the IRG source. Does this refer to IRG documentation only or the original sources? (Original source.)
- h. There is a character in Ext.. C / indexed to G..W. If you investigate the original sources the character was not included there.
- i. Mr. Michel Suignard: We have several mistakes in the source references -- IRG is requested to help us fix the errors. There is some work in synchronizing the Unihan database with the source references from IRG. For the CD the format of the CJK references may change to harmonize with Unihan.

Accepted in principle. Table of new source identifiers proposed in N3691 will be used. IRG to assist in getting all the missing indices in source references particularly for Ext. A and Ext. B.

Relevant resolution:

M55.20 (Missing source references for CJK Extensions A and B): Unanimous

With reference to the discussion on comment JP9 in document N3716 (disposition of CD ballot comments), IRG is instructed to review and provide to the project editor all the missing indices in source references for unified CJK ideographs, specifically Extensions A and B before the next WG2 meeting in 2010-04.

JP.10 (Technical) – Include the Japanese name in parentheses for JH source reference in clause 23.1 – JH Hanyo-Denshi Program (.....) (see document N3716 for the Japanese name with ideographs).

(This was also requested for PDAM8).

Accepted.

JP.11 (Editorial): Suggests possible correction of J_ARIB to JARIB in reference on page 39, in Clause 23.

Accepted in principle. See disposition of comment to JP.9 above.

JP.12 (General): Suggest replacing pointing to UAX#34 for Named UCS Sequence Identifiers, with a new annex possibly with a linked file containing the NUSIs defined to date. Also suggests deleting UAX#34 as a normative reference in the standard.

Mr. Michel Suignard: We can accept this in principle for now. Add the NUSI for now - will remove references to UAX 34. It will be a linked file.

Accepted in principle.

JP.13 (Editorial): Requests changing "code position" in clause 30.2 Character names list, 3rd line to the new term "code point".

Accepted.

JP.14 (General): J column font for 20B9F (from Ext. B) and all of Ext. D need appropriate update.

Mr. Michel Suignard: 20B9F was not in the font package from Japanese national body. The Ext. D will be fixed resulting from accepting relevant Japanese comments in Amendment 8. I am waiting for fonts

Mr. Masahiro Sekiguchi: Japan is checking as to when we can provide the missing font.

Accepted in principle.

JP.15 (Editorial): Reports on page 2182 in Table I.1, broken "IDS example represents" column.

Accepted.

JP.16 (General): Points out that some information from Annex P, such as the paragraph about S with comma below versus S with Cedilla below, are missing in the new format of the charts, and should be somehow brought back

Mr. Michel Suignard: The new character names list does have equivalent information in very much tersed form. (See document N3691 for example proposed disposition.) A names list segment is included highlighting the proposed changes.

Discussion:

- a. Dr. Ken Whistler: It is appropriate for 'used when distinct ..' in the names list. The other annotations like mapping to 8859-2 are inappropriate in the names list -- the names of characters already carry the mapping information.
- b. Mr. Masahiro Sekiguchi: What I really want to know is what happens to all the information in Annex P in the new format. We added text in Annex P for various things. In the transition to the new style we discussed how to preserve the Annex P information. I think this example shows that the strategy did not keep all the information that was in Annex P in the synchronized names list.
- c. Dr. Ken Whistler: In my opinion this is a ten-year old information. No one is going to take these characters out - the Romanians and Turks know what they have to do. The implementers know what they have to do. There is no need to carry forward this information.
- d. Mr. Michel Suignard: We had to make changes for the Romanians in Unicode 5.1 etc. tables.
- e. Mr. Masahiro Sekiguchi: I am not sure of modern situation in Romania. If there are no problems in Romania or Turkey I will not have objections to removing the information. Even if a national body has no opportunity to ballot they should be aware of the implication of removing such information in the names list.
- f. Dr. Ken Whistler: If we decide to bring back the Annex P with the information as is for Romanian etc. it may cause more problems rather than solving the problem. The names list annotation adjustments for Romanian were recently made.

Accepted in principle.

Remove the Mapping 8859-2 related annotation from the proposed disposition. Keep the rest.

JP.17 (Editorial): In the last line on page 2153 in A.3.2 299, "IO/IEC 10646-1" should read "ISO/IEC 10646-1" -

Accepted.

JP.18 (Editorial): Typo - remove on page 2160, in A.6.2 304 the 'and A.1' in "from A.1 and A.1 and several ranges".

Accepted.

JP.19 (General): On page 2178 in Annex G - the file name "Allnames.txt" in NOTE 1 has been amended at every amendment. Has this been done by design?

Mr. Michel Suignard: Each amendment requests that a new file called Amxnames.txt (x standing for the amendment number) be inserted

Noted.

JP.20 (Editorial): Asks if the wording change in Annex L, Guideline 2, NOTE, from “as for the control characters” to “as control characters” intentional?

Mr. Michel Suignard: Need some clarification on this comment.

Japan: We need to send a pointer to the correct note.

Noted.

JP.21 (Editorial): On page 2188 in Annex M, the vertical space before the first line starting with the words “ISO 233:1984” is too small.

Accepted.

JP.22 (Editorial): On page 2193 in N.3, the items “BMP-form (2)” and “ISO 10646 form 2” are missing.

Mr. Michel Suignard: The intent is to deprecate these forms in 2nd edition. Clause 9.2, Note 2 in N.3 has a note on it. We can add an additional note at the end of N.3 as follows:

NOTE 3 – Previous versions of this standard supported the “ISO 10646 form 2” object descriptor which is now deprecated

Partially accepted.

See section 6.3 on page 14 for a liaison letter on the above deprecation to SC6 as users of these object descriptors in ASN.1.

JP.23 (Editorial): Typo on page 2195 in Annex Q, the second line in the NOTE; remove the extra period in “code .point”.

Accepted.

JP.24 (General): Asks why Annex Q cannot be removed entirely because it is empty – now that we have removed the mapping tables.

- a. Mr. Michel Suignard: Users referring to the standard know the Annexes by their letters. When we remove the content of the Annex we keep the Annex Number / Letter but empty. Several ISO standards do this as a practice to preserve the sequencing. We have recycled Annex I with slightly different content.
- b. Prof. Kyongsok Kim: If Annex Q is removed, we will have concerns.
- c. Mr. Masahiro Sekiguchi: Japan has two comments - is removal of content of Annex Q acceptable for Korea? It is acceptable for Japan. The second part of the comment was if the content is removed why not remove the entire Annex and renumber. The editor has explained that we will keep the empty Annex with the reasoning.

Noted.

JP.25 (General): Asks if the users of PDF formatted tables that have been removed from Annex R, will impact users of the previous edition.

Mr. Michel Suignard: The information is not removed - it is kept in one format - in plain text format, considered to be more useful to developers than two. It was also in the previous working drafts.

Noted.

JP.26 (Editorial): First line on page 2197, in Annex S, “30” should read “clause 30”.

Accepted.

JP.27 (Technical): Seeks a rationale for why several ideograph glyph shape examples on page 2199-2200, in Annex S, S.1.4 have been deleted or swapped and reordered.

Discussion:

- a. Mr. Michel Suignard: Thanks for noticing the errors etc. Some of the pictures in the Annex are not even encoded. The intent is to minimize pictures. If more examples are needed, please send it to me in plain text with encoded characters using some of the fonts from IRG.
- b. Mr. Masahiro Sekiguchi: The current Annex S - I made it about 10 years ago. It is a tough job to create it. I used bit map figures at that time. It is not easy to get the fonts for all those examples. I have some sympathy with the editor. However Japan is not comfortable with removing these for production reasons. IRG is in the process of replacing the Annex S with the new text -- I think we can continue using the pictures till the revised version is available.

- c. Mr. Michel Suignard: The entire Annex S is editorial. As long as the intent of the text in the Annex is preserved we should be OK. For those where only components exist I have not touched them.
- d. Dr. Lu Qin: We will be supplying the text only for the revised part. Do you want us to supply the code points for the existing characters in Annex S also?
- e. Mr. Michel Suignard: In the current draft of Annex S in the CD we have already done it. We are using the fonts already. It is also important the font has to be stable - given a name. I understand some of these examples are different from previous edition -- but showing the same intent.
- f. Mr. Masahiro Sekiguchi: This is OK.

Noted.

Relevant resolution:

M55.21 (Code points for ideographs in Annex S):

Unanimous

IRG is instructed to review Annex S of the second edition and provide to the project editor the code point values for all the encoded ideographs that appear in the various examples, with the objective of replacing the images with actual characters for these ideographs in the Annex before the next WG2 meeting in 2010-04.

JP.28 (Technical): Change back the reference to KangXi dictionary (on page 2200, in S.2.1) to 7th edition with 'Beijing' as part of the edition.

Mr. Michel Suignard: This is a copy and paste error.

Accepted.

JP.29 (General): Points out several errors in the code chart for CJK Unified Ideographs, believes that more errors will be found, and questions if the new code charts for CJK should be included in the next edition.

(See document [N3691](#) for editor's detailed proposed disposition.)

1) KP-source glyphs are entirely missing.

Discussion:

- a. Mr. Michel Suignard: Except for Ext C, KP-source glyphs have never been provided. So this is not a regression. We have to either keep it blank (with an explanation as to why), or remove the column altogether.
- b. Dr. Lu Qin: If anyone does not have a font will not have a reference. They supplied the font and the mapping data. We should keep Ext. C mappings.
- c. Mr. Masahiro Sekiguchi: There is no separate column for KP. Will there be a KP source reference for a code point having a mapping?

Noted.

2) Glyph of K4-0005 (U+200CE) is missing.

Discussion:

- a. Mr. Michel Suignard: The font from Korea has a defect.
- b. Prof. Kyongsok Kim: We plan to provide a revised font. There are some errors in the font.
- c. Mr. Mike Ksar: When will you be providing the font?
- d. Prof. Kyongsok Kim: The font will be available by 10th of November.

Accepted.

3) Glyph of J3-7A6D (u+08362) is wrong. Japan has verified the font it submitted was correct.

Mr. Michel Suignard: This is a production issue using the two fonts submitted by Japan.

Accepted.

4) Serious problems on unification criteria of CJK Unified Ideographs

The changes of following glyphs in the new fonts caused serious problems on unification criteria of CJK Unified Ideographs.

Discussion:

- a. Mr. Michel Suignard: All the errors are due to non-availability of fonts. There is no official national body provided fonts / glyphs for Vietnam. You have to tell me which font to use with the correct the glyphs for V column.
- b. Mr. Masahiro Sekiguchi: IRG has a long history of providing code charts block by block. Every time a font is changed, there are mistakes for different reasons. Sometimes it is mistakes in the production etc., but sometimes the national bodies change the glyphs by

making the unification questionable. The IRG editors check the charts carefully every time a chart is created. Since the production has been taken over by the editor, we have to provide the review comments to the editor directly instead of to the IRG editor. Japan believes that chart production and verification of CJK charts should have been left with the IRG editors.

- c. Mr. Michel Suignard: I agree that Ext. A is the 2003 version and is well established; but for everything else the status is in flux. What has changed by me doing it versus someone else? The fonts are the source of the problems. As far as the IRG members are concerned as long as the fonts are done right they should be OK. Whether it is done by IRG editors or someone else, it does not matter. The charts have also to be produced for Unicode as well as 10646. You can critique the fonts - and the charts are result of the font used. If the fonts provided are changing contents/glyphs then obviously we should be all concerned. I will not go back to the old way; otherwise we will be waiting for 5 years every time the charts are produced. Things were delayed -- we have delays from Taiwan. Japan, Korea and China have done good job. Vietnam and TCA are the two sore points. Everything else is of pretty reasonable quality.
- d. Dr. Lu Qin: IRG has to review the charts produced by the editor using the fonts provided by IRG members. We will take time to verify the quality. Basically Japan has been doing this work even before the IRG has started.
- e. Mr. Michel Suignard: I have inserted the glyphs in many instances. Each IRG member is responsible to do a good job of reviewing their fonts.
- f. As to the missing fonts: China has provided fonts for everything. Japan has detected differences. Japan and Korea are OK.
- g. TCA - lot of missing characters; no font for main block A; got fonts for Ext B; Ext. C and D are fine. Vietnam font is only commercial fonts - there are lots of mistakes in these fonts.
- h. Dr. Lu Qin: Review process by IRG is still needed. Just getting the fonts is not adequate.
- i. Mr. Michel Suignard: I have the fonts for Ext. B from TCA; Korea is going to provide new font - there may be some regression issue. IRG has to deal with it.
- j. Mr. Masahiro Sekiguchi: IRG will review the charts - will also check the fonts used. Japan has reviewed the J column. For the other columns we have only checked a few due to lack of resources. There may be lot more errors in the non-J columns.
- k. Mr. Michel Suignard: Provide me a web site where I can upload the charts for IRG to review. You can provide the ftp access. I have no way of sending you 90 MB of .pdf charts.

Accepted.

Relevant resolution:

M55.17 (Unified CJK Charts for 2nd edition):

Unanimous

WG2 notes that the glyphs for the TCA source for the unified CJK multiple column charts need finalization based on correct fonts being made available to the project editor. There are also missing or incorrect glyphs for other sources. WG2 instructs its project editor to produce the CJK charts of the 2nd edition with fonts to be provided by IRG members and send to the IRG rapporteur. The IRG is instructed to review and correct any errors in the glyphs for the various sources and report back to the project editor, with the objective of replacing the current CJK charts with the verified version in the FDIS (2010-07) of the second edition.

5) Lists a number of characters having significantly different shape from the current standard, requesting input from IRG to ensure the new shapes are correct.

Mr. Michel Suignard: As mentioned before fonts for some of these from T and V sources have not been provided by national bodies and may have errors. I have corrected some of the characters in the list from Japan and shown the glyphs using the fonts used in the CD. I have received a new font from TCA for Ext. B after CD was sent out for ballot.

(See document N[3716](#).)

Noted. IRG to review and feedback.

6) Three characters have the source references of KangXi dictionary, but their new shapes look different from that of KangXi dictionary: KX0956.36 (u+04389), KX1030.13 (u+044bb) and KX1319.05 (u+04949).

Noted. IRG to review and feedback.

Mr. Mike Ksar: It is a very valuable review of the CD provided by Japan.

Mr. Masahiro Sekiguchi: We are still very uncomfortable with many items. But based on the discussion here, Japan changes the ballot to Approval.

11.3.3 Korea (Republic of): Disapproval with comments (document N3686-K)

T1. Proposes changing references for Hanja K sources in clause 23.1 to latest documents.

Discussion:

- a. Mr. Michel Suignard: Updating source references without due consideration for the stability of the identity established by the source reference, could make the updated reference unusable. Identities were established from the reference as it existed, leading us to keep many of the IRG references with original dates. I suggest accepting the Korean input, but keeping also the previous names in the references.
- b. Prof. Kyongsok Kim: Except for K0 and K1 the PKS are not yet formal standards. The previous references are not there; they don't exist. PKS C5700 etc. do not exist.
- c. Mr. Michel Suignard: Good or bad the only references we had were the previous ones.
- d. Mr. Masahiro Sekiguchi: Since current editions exist with PKS C5700 etc. some experts may know what it may mean and we should probably retain these - you can add note ... formerly known as ..
- e. Dr. Ken Whistler: If the PKS C 5700 etc. did not exist how can we verify the existence of K2 ... K5 sources? Does anyone in the IRG have the previous lists from 1994 etc.?
- f. Prof. Kyongsok Kim: Korea is reverse engineering the mappings back to 10646. The list may have existed in the past in 1994.
- g. Dr. Ken Whistler: I suggest we keep the source references for K2-K5 as they are. Add a note that indicates that content of K2-K5 sources are in the process of republication as Korean standards KS. If we can find the sources in the archives they can use those documents instead of reengineering from 10646.
- h. Prof. Kyongsok Kim: We will be publishing the KS-s next year and will have standard numbers for the K2-K5 sources.

Partially accepted. Use new references for K0 and K1; keep old references for K2 to K5 with a note to say these are being transformed to new Korean standards.

Relevant resolution:

M55.18 (Missing documents for Korean source references K2 to K5):

Unanimous

WG2 requests the convener and the Korean national body to search the WG2 document archives for the missing source reference documents PKS C5700-1 1994, PKS C5700-2 1994, PKS 5700-3 1998 and Korean IRG Hanja Character Set 5th edition 2001 and make it available for IRG archives and reference.

T2. Proposes to change KXdddd.dd to GKXdddd.dd (or G_Kdddd.dd or G_Xdddd.dd or G_KXdddd.dd) in clause 23.2, third bullet for the 3rd field.

Accepted in principle. See disposition of comment JP9 from Japan above, proposing to use 'GKXdddd.dd'.

T3. proposes to change in clause 23.3, third paragraph the order of appearance from G, T, J, K, V, KP, H, U, and M, to G, T, J, K, KP, V, H, M, and U (for the block 4E00-9FFF of CJK)

Mr. Michel Suignard: Clause 23.3 needs correcting. The order is the same for all blocks.

Accepted.

T4. Change in clause 23.3.2 '*If more than four sources exist, an additional row is used*' to '*... three sources ...*'; there are two occurrences of such.

Mr. Michel Suignard: We had to drop down to three per row from four for production reasons. See also comment E.8 from UK.

Accepted.

T5. Points out that (in p. 43) standard does not mention fonts for CJK Compatibility characters shared by more than one country. Cites KJ 6, KPJ 1, KH 1, PT 49, PTH 1, TH 4 - total of 62 such out of 1000 CJKC charts that are shared. RoK volunteers to provide fonts for F900 – FA0B to use for printing. Requests WG2 to address this item and provide a solution.

Mr. Michel Suignard: To date we show only single column charts for CJK Compatibility ideographs. I agree it is desirable to have multicolumn format for compatibility characters also. But it is more complicated. See discussion under comment T.3 from US.

Noted.

T6. Suggests explanation on how to interpret correctly decompositions preceded by '≡', or '≈' (in p. 53), describing various mapping between characters.

Discussion:

- a. Mr. Michel Suignard: This is to do with notation in the unified charts. The symbols and terms are really there for Unicode consumption -- Canonical and compatibility equivalents. These concepts are not in 10646 proper. We have two options - Option 1 is to clean 10646 and remove the items not needed. The other option is to add some terms that explain the notations used in the charts. This would explain understanding of these for Korea and others (see document [N3691](#) under Korea comment T.6)
- b. Dr. Ken Whistler: I am strongly opposed to Option 2. Lots of information is already in UAX #15; we may be chasing our tails here. The explanation is not self contained.
- c. Dr. Umamaheswaran: We can provide minimum information to explain the use of the symbols in the charts - pointing to UAX #15 for the details.
- d. Mr. Martin Hosken: Is normalization a 10646 concept?
- e. Mr. Michel Suignard: Yes - it is in a clause xx, by reference.
- f. Dr. Ken Whistler: One can refer to Unicode standard section 17.1 which explains the notation in the charts.
- g. Prof. Kyongsok Kim: Minimum information will be helpful.

Accepted. Editor will add minimum explanatory information about the notation pointing to section 17.1 of TUS for details.

T7. Proposes compatibility mapping related annotations under 3131 to 3163 (Hangul letters) in the names lists adding annotations for mapping with Halfwidth Hangul letters.

Mr. Michel Suignard: See discussion on Korea comment T.6 above for the notations for compatibility mappings etc. Proposed changes will impact stability of composition and decompositions for normalization.

We cannot change existing compatibility mappings or decompositions.

Not accepted.

T8. Requests change in compatibility mappings for 3164 and changing the alias from cae om to chaeum.

Mr. Michel Suignard: We can do the new alias; but we cannot change the decompositions.

Partially accepted. Change alias to chaeum.

T9. Change in p.369, right column, 'Archaic' to 'Old' letters reflecting current usage in ROK.

Accepted.

T10. Proposes to remove all annotations on 3131 to 318E in the names list, citing difficulty in verification of correctness of changes in the new format.

Mr. Michel Suignard: See discussions under T.6 to T.8 above. Related comment with a more drastic solution is proposed. Removing information about compatibility mappings in the names lists is not possible because it is part of the standard, even though we did not have shown these in this format in the previous edition.

Not accepted.

T11. Proposes to remove annotation archaic velar nasal on 3181 and archaic glottal stop on 3186.

Partially accepted. They will not be removed; but changed to these to old velar nasal and old glottal stop, per disposition to Korean T.9 above.

T12. Proposes changing compatibility mapping on 3200 (and to 3201-320D and 3261-326D) from ≈0028 (1100 0029) to ≈0028 (3131 0029) etc.

Not accepted. See disposition of comment Korean T6 above. Also, the compatibility mapping content is about compatibility decomposition, not about independent representation of Jamo characters.

T13. Proposes to change O HU in the name of 321E to OHU like in the name of 321D.

Dr. Ken Whistler: A formal alias is needed when the formal identity of the character is questioned. This is really a spelling preference, which is OK in an annotation but not in the standardized name.

Not accepted; Name stability will be violated. However, a new annotation will be added:

* preferred spelling for the name is ohu

T14. Requests that an explanation about notations such as <narrow> in the annotation for FFA0 be added to properly interpret the mappings etc. in the names lists.
Accepted in principle. See disposition of comment Korean T6 above.

T15. replace e reference on p. 2189 to KS C5601-1992 to right column with KS X 1001:2004 (formerly, KS C 5601), Korean Industrial Standards Association. Jeongbo gyohwanyong buhogye (Code for Information Interchange (Hangeul and Hanja)).
Accepted. At the same the editor would welcome new entries for the additional Korean repertoire added after KS X 1002:2001.

T16. Proposes to use either U0- or UTC for consistency between CJKU_SR.txt and CJKC_SR.txt entries.
Accepted. UTC will be used for both; Clause 23.4 already refers to the UTCdddd format. UTC is to provide the correct information. Has been communicated to Mr. John Jenkins.
See also resolution of comment Korea T17 below.

T17. Questions use of references like U0-FA0C in entries like 0FA0C;05140;;;;;U0-FA0C; in CJKC_SR.txt file; suggesting if it does not provide additional information, U0-FA0C at the end could perhaps be removed when the code point is the same as in the reference. There 21 more such entries.

Mr. Michel Suignard: These cannot be removed. The fact that they have the same value is no consequence - it is in a different namespace. And U0 will be replaced with UTC. We need to have values after the source; the only exception has been for KP. All but one CJK ideographs have at least one source reference. The only exception is FAD4 which is in essence a deprecated character. Also, it was discovered that the UTC source reference repository (UTR#45) does not contain these 22 entries and will need to be updated.
Not accepted.

T18. Requests that 2nd CD of the 2nd edition be issued, to give them more time to review the extensive changes between the current edition and the 2nd edition
Mr. Michel Suignard: Several versions of the WD were circulated to the national bodies. The CD schedule has been pushed back several times. Even though there is more work on the multicolumn format, I do not think we really need to do another CD. It is a 2000 page document.
Noted.

T19. Requests change to mapping entry on page 1218 for F9B8 and corresponding entry in CJKC_SR.txt, from 0F9B8;096B8;;;;;K0-6766;; to 0F9B8;096B7;;;;;K0-6766;;. The rationale is provided.

Mr. Michel Suignard: This comment is really an erratum on what exists in the current edition of the standard. Even though 96B7 may be a better mapping, canonical mapping cannot be changed in order to preserve normalization stability. The annotation already shows the better mapping. The only way out of this is to use an alternate UCS representation for the source K0-6766, either through a new compatibility CJK ideograph or through the usage of variation sequences.

Dr. Ken Whistler: Adding another compatibility character for this would mess up existing mappings. Exploration of variation sequence is probably appropriate. Annotations already exist to warn the users.

Not accepted. The supporting rationale provided by ROK is noted.

T20. Reports error in glyph for F92C – should have 11 strokes instead of 10. Associated changes to mappings to K0-522B are also proposed, along with the rationale and examples.

Mr. Michel Suignard: These are also considered to be mistakes in unifications. The stability reasons prevent us from changing these. The glyph as currently shown in the standard is correctly mapped to 90CE. If you change the glyph it will invalidate the compatibility mapping, and for reasons of stability we cannot do it. Korea is also showing clearly that the source reference K0-522B has a different glyph than for F92C. One possible solution is to remove the K0-522B source from F92C; essentially deprecating the character similar to FAD4; create a new compatibility character with new glyph (11 strokes), with canonical mapping to 90DE and source reference to K0-522B. Other examples of unification of characters with similar differences were also found – 84C8 and 5ECA entries. IRG members may want to take a look at these.

Noted.

Editorial comments:

E1. Notes that the KP columns are different on page 42 figure 2 and page 528, and asks if the discrepancy will be addressed by fonts.

Mr. Michel Suignard: The KP column will go away. See also disposition of Japan comment JP29a. Description will synch with the columns.

Accept in principle.

Prof. Kyongsok Kim: Several of our issues are not resolved. Our vote remains Disapproval.

11.3.4 United Kingdom: Positive with comments (document [N3686-UK](#))

T.1. Points out that the range of code points in Clause 6.3.3 Format characters includes some non-format characters like FFFC, E0100-E01EF, and to suggest excluding these in the ranges.

- a. Mr. Michel Suignard: Range reserved for format characters - some of these are in fact not format characters. With further discussions with other members - the reserved areas could be removed.
- b. Dr. Umamaheswaran: There are some areas for 'default ignorable' and Right-to-Left to watch out for in the Principles and Procedures document; not for format characters.
- c. There was a suggestion that terminology related to reserving format character ranges should be removed from the standard. Then we will not be tying our hands to only use those ranges. There is no particular advantage from implementation point of view.

Accepted in principle. Remove terminology related to specific ranges for format characters.

T.2. Suggests correcting in Clause 16.5 <A868, FE00> PHAGS-PA SUBJOINED LETTER reversed shaping YA to <A868, FE00> PHAGS-PA LETTER reversed shaping SUBJOINED YA; to match entry 'A868 FE00; phags-pa letter reversed shaping subjoined ya' in StandardizedVariants.txt and to harmonize with Unicode.

Discussion:

- a. Mr. Michel Suignard: I think the Unicode Standard is wrong and 10646 is correct. I would invite input from Unicode liaison. We will keep whichever is the right one.
- b. Mr. Suzuki Toshiya: Should we postpone the decision because we don't have Phags-pa experts here?
- c. Mr. Michel Suignard: We can resolve it here.
- d. Dr. Ken Whistler: The text version of the names list has the correct name. The UK request is correct.

Accepted.

T.3. Similar to T.2 above suggests correcting the ranges for format characters in Clause 29 for SSP. *Accepted in principle.* Apply 'no reserved range for format characters', disposition for UK comment T.1 above, also to SSP.

T.4. Proposes to loosen any restrictions in Annex I for using the IDs with non-CJK scripts, as proposed in document [N3643](#).

Mr. Michel Suignard: See also comment E7 from USA. There are no restrictions explicitly stated. There is also a separate contribution on it. The examples are certainly only ideographs. I need to know what text needs modification.

Discussion:

- a. Mr. Masahiro Sekiguchi: Japan wants to keep the IDS to be restricted only to ideographs. The text says only Ideographs. We want the restriction to be only for CJK.
- b. Mr. Suzuki Toshiya: I want to hear comment from China about Nushu or Yi. IDC application in standardization work is what is proposed; not for interchange of the data. For such kind of applications, use of IDCs should not be a problem. The final characters encoded will be the one that is exchanged. Use of IDCs is only towards arriving at the final standards.
- c. Mr. Michel Suignard: It is interesting to discuss the use of IDCs for other purposes etc. In the context of the CD ballot, it is not interesting. I think the consensus was not to change anything for any of the scripts encoded to date in the CD. I would like to postpone such discussions for the future.

Not accepted. See more discussion on document [N3643](#) in section 12.1 on page 60.

- E.1. Requests changing 99000 characters to 11000 characters in Introduction
Accepted.
- E.2. Requests changing Unicode Version 5.2 to Version 6.0 in Clause 1 Scope.
Accepted.
- E.3. Typo; remove extraneous '0' in Clause 2.3 Conformance of devices, Note 2, '... see also 0'
Accepted.
- E.4. Suggests rewording in Clause 4.5 CC-data-element "Unlike ...standard, this version does not use anymore" to "Unlike ... standard, this version no longer uses ...".
Accepted.
- E.5. Suggests inserting the word 'unified' in Clause 6.4 – "... except for CJK ideographs ..." to read "... except for CJK unified ideographs ...".
Accepted.
- E.6. change "inter-work" to "interwork" in Clause 8.1.
Accepted.
- E.7. Reword Note 6 in Clause 16.5 – "The exhaustive list of standardized variants is also ..." to "The exhaustive list of defined variation sequences other than ideographic variation sequences is also ...". Also reminds that the URI link will need updating to Unicode 6.0 in the future.
Accepted.
- E.8. Change 'four sources' to 'three sources' in Clause 23.3.2; "... Up to four sources per characters ..." to "... Up to three sources per characters ..."
Accepted. See also comment T4 from Korean NB.
- E.9. Suggests correction - putting the asterisk after the code point range not the collection name – for collections 74 and 116 in Annex A.
Accepted.
- E.10. Update reference to Unicode 5.0 to Unicode 6.0 in Annex F.4.
Accepted.
- E.11. Requests inserting the missing entry for CJK Ext. D in the sorted list in Annex G
Accepted.
- E.12. Suggest using the correct font for column 6 in Annex I Table I.1; column 6 is corrupt now.
Accepted. See also Japanese comment JP15.
- E.13. Suggests corrected reference entries in Annex M, for three references:
Nuo-su bbur-ma shep jie zzit: Syp-chuo se nuo bbur-ma syt mu curx su niep sha zho ddop ma bbur-ma syt mu wo yuop hop, Bburx Ddie da Su
Nuo-su bbur-ma shep jie zzit. = Yi wen jian zi ben. Chengdu: Sichuan minzu chubanshe, 1984. Nip huo bbur-ma ssix jie. = Yi Han zidian. Chengdu: Sichuan minzu chubanshe, 1990. ISBN 7-5409-0128-4.
Accepted.
- E.14. Suggests updating and expanding bibliographical references in Annex M to synch with Unicode Standard section R.3 to include scripts added since the publication of the first edition of the standard. Mr. Michel Suignard: In general, the submitters are expected to provide relevant bibliographic references they would like to be included in Annex M. I am not going to chase all the missing entries or lost entries etc. for documents being up to date. National bodies are invited to investigate and comment on these. I am going to do some checking with Unicode Standard.
Accepted in principle.
- E.15. Suggests informal aliases for 17 musical note symbols in the list of character names in Clause 30 reflecting British English names for these.

Accepted in principle. Pending further review by the editor.

UK ballot stays YES

11.3.5 USA: Acceptance with comments (document [N3686-US](#))

T.1. Proposes to replace explicit list of code points for the Unicode collections with a pointer to DerivedAge.txt file in clause A.6 Unicode collections.

Discussion:

- a. Mr. Michel Suignard: It will be possible for up to Unicode V 5.2. However, it will be necessary to maintain a hybrid solution for any future version till the relevant DerivedAge.txt is updated.
- b. Dr. Umamaheswaran: As long as we are talking about Unicode collections we would be OK.
- c. Mr. Masahiro Sekiguchi: Collection name is followed by the list of code points.
- d. Dr. Ken Whistler: What is proposed is not to remove any of the definitions; but not to maintain explicit lists of code points. It would be replaced by a pointer to derivedAge.txt, to get at the needed data.

Accepted in principle.

T.2. Welcomes and appreciates the work that has gone into the multicolumn CJK unified ideograph charts for the CD; expresses concern about glyph errors with reference to current edition in the production of these; requests an assessment of possible differences from WG2.

Discussion:

- a. Mr. Michel Suignard: I don't quite understand what is requested here. A formal assessment will delay the publication of the next edition unnecessarily. We have discussed the issue at the meeting. IRG is the right expertise to review the charts. (See discussion under section xx on page xx, and in previous disposition of Japanese comment JP29 on the CD ballot.)
- b. Dr. Ken Whistler: What the IRG needs from TCA is the known set of ideographs that warrant changes to the mappings. The information from TCA should be made available to other national bodies for review.
- c. Mr. Mike Ksar: Once the information is available from the IRG, I can post it as a document to WG2.
- d. Dr. Lu Qin: The changes will be classified into minor glyph changes, mapping changes etc.

Noted.

T.3. Requests presentation of CJK Compatibility Ideographs also in multiple column format. (Document [N3691](#) has a set of items that need to be considered and suggested avenues for producing such a chart.)

Discussion:

- a. Mr. Michel Suignard: I will like to keep the format as is for the current CD due to the time needed to produce the needed charts. I don't have the fonts either. We can entertain producing the charts at a future date. I agree it is a good idea to get the compatibility ideographs also in multiple column format. There are some issues with some of the compatibility characters. We have the information but do not appear in the charts today. The unified ideographs don't have the additional mapping to the canonical equivalent entry for each. The format is for further study. There is also a names list entry for these with a few exceptions. The reference glyph is the G-source of the canonical equivalent. It opens up use of any of the glyphs for the U+ .. source. Feedback is requested on the items presented in document [N3691](#).
- b. Dr. Ken Whistler: The US understands the scheduling and font issues. We will keep asking for it again at the next opportunity.
- c. Dr. Lu Qin: IRG has no knowledge of the request for multiple column charts for compatibility ideographs. At this point in time we don't have any work items on our plate for it.
- d. Mr. Michel Suignard: Two of the IRG members had requested for such a chart. Korea had volunteered the fonts (see Korea comment T.5 on the CD ballot). I would request RoK to provide the font sooner than later. We do have the DPRK fonts. We have some from UTC. We do have the TCA fonts as well. I received the BMP fonts on Monday. IRG will be requested to review these when we are ready. For the ideographs with multiple sources we may have some checking to do.
- e. Dr. Lu Qin: If you want to produce the multiple column charts you will need the fonts from IRG members.

Noted.

T.4. Reports problems in glyph contours for H source (3B19, 549E) and KX source (2054B, 238A7, 24C36, 2597C, 270D2, 29B30); in the PDFs of the code charts, rendered on screen, some of the stroke crossings are white.

Mr. Michel Suignard: This is not a Technical problem. These are production issues. Newer fonts have been received. We have to be careful with minor changes -- can end up in regression problems.
Accepted in principle.

T.5. Requests that font for Sundanese is updated in the CD, using the font as provided for the Sundanese proposal N3666.

Accepted. The editor has received the font.

E.1. Suggests an editor's note to remind to update references to Unicode V5.2 to later version (in page 9, note).

Accepted. See also comment E2 from UK.

E.2. Recommends removal of square brackets in the Backus-Naur form for the short identifier in page 21.

Accepted.

E.3. Suggests rewording in p 33, note 5: from "The variation selector only selects a different appearance of an already encoded character." to: "The variation selector only selects a specific appearance among those acceptable for an encoded character."

Accepted.

E.4. Correct 00AD to 00A0 for NO-BREAK SPACE in the example for grave accent, on p 34, 20.1.

Accepted.

E.5. Suggests changing SPACE to NO-BREAK SPACE in the Note related to Indic matras, on p 34, 20.1, note:

Accepted in principle. Will also change the word matras in the note.

E.6. Suggests rewording and to have correct examples in p 37, last paragraph of clause 22.2:

The text as it currently reads is misleading about two-part vowels.

Accepted. New wording for clause 22.2 is included in final disposition of comments document N3716.

E.7. Requests restrictions that an IDS can contain only CJK ideographs, in Annex I.

See also comment T4 from UK.

The editor could not find any such restriction in the current text of Annex I.

Not accepted.

E.8. Requests adding missing decompositions for three Kaithi characters from Amendment 6 to the names list:

110AB KAITHI LETTER VA: 110A5 KAITHI LETTER BA 110BA KAITHI SIGN NUKTA

1109C KAITHI LETTER RHA: 1109B KAITHI LETTER DDHA 110BA KAITHI SIGN NUKTA

1109A KAITHI LETTER DDDHA: 11099 KAITHI LETTER DDA 110BA KAITHI SIGN NUKTA

Accepted.

Dr. Ken Whistler: The US changes its vote from Yes to an Enthusiastic Yes!

The CD has one negative ballot outstanding -- RoK.

Relevant resolution:

M55.14 (Progression of CD of 2nd edition):

Korea (Republic of) - Abstention

Canada, China, Finland, India, Ireland, Japan, UK and USA - Acceptance

WG2 instructs its project editor to forward the final text of second edition of the standard, including the changes from resolutions M55.11 to M55.13 above, along with the disposition of comments document N3716 to the SC2 secretariat for an FCD ballot. The revised target starting dates are: FCD: 2009-12 and FDIS: 2010-07.

12 Architecture issues

12.1 Scope of Ideographic Description Sequences and additional IDC-s.

Input document:

[3643](#) Proposal to redefine the scope of Ideographic Description Sequences and to encode four additional Ideographic Description Characters; Andrew West; 2009-04-30

Discussion:

- a. Mr. Michel Suignard: This topic was also part of UK disposition of comments on the CD ballot. The Unicode Standard is more restrictive – limits IDSs only to CJK.
- b. Dr. Ken Whistler: The UTC had reviewed a similar request. The response from the UTC is - difference between Unicode V5.1 and V5.2. There is a paragraph added - to state that the scheme can be extended to other East Asian ideographs such as Tangut etc. That was compromise position taken by UTC, without a formal change to the syntax. The current syntax is restricted to CJK.
- c. It recognizes that the mechanism may be used also for others such as Jurchen or Tangut. No formal change has been made pending standardization of such characters. People can try the mechanism and demonstrate its usefulness.
- d. Mr. Mike Ksar: Should we add a restriction or can we permit others to experiment with it.
- e. Mr. Masahiro Sekiguchi: Japan's view is that there is an implied restriction even though the current text does not explicitly state it. We think that the views between 10646 and TUS are identical and are in synch. Japanese national body reviewed the proposal in document [N3643](#) and the conclusion is that we don't want to extend the IDS usage to non CJK ideographs such as Tangut or Jurchen etc. We could define an IDC-like character for those instead of using the existing IDC. Although the mechanisms are similar a detailed examination of the CJK and Tangut etc. show significant differences from CJK, and the current IDC should not be used for those. If we need such a mechanism for non-CJK ideographs our position is that a script-specific Description Character could be used.
- f. Dr. Ken Whistler: What I described before was the US position so far. As an expert my take on the direction proposed by Japan should not be the direction to take. IDC is already a structural hack. It is a rough and ready glyph description language -- with known limitations. It is not a full glyph-description language. It will be a great mistake in the standard to say that the poor mechanism should be extended for other scripts in a script-specific way. There was no consensus in the US that we should have additional constructors similar to IDC. On the other hand, I don't see any validity for our committee to say to others that they cannot experiment with similar mechanisms. If members of UK or some other national body find it useful the standard should not prohibit others to do what they want to do. If it has to be done properly we need to come up with a typology-based language to do it correctly.
- g. Mr. Martin Hosken: Responding to the need for xDC for other scripts -- it describes new or newly discovered CJK characters as one of the requirements. Having an IDS description for large character sets would be useful.
- h. Dr. Ken Whistler: I see some advantages in using similar descriptors. But what UK wants is to formally bless it in 10646 as a conformant IDS for use with non-CJK ideographs. The proposer can use the IDS anyway he needs for Han. But when he comes up with extensions for using with Yi etc. then one ends up towards having script-specific ones.
- i. Mr. Chen Zhuang: I am not opposed to add more IDS characters. I like to state that some examples in the document are not suitable for the proposed enhancements for Yi and Nushu. These were not normalized or specified by any government etc. There is a debate in China that a glyph encoding of Yi can be decomposed like this. I don't want Yi and Nushu to be included in the descriptions.
- j. Mr. Martin Hosken: There is no intention to include Yi or Nushu etc. The request is to be able to use IDS for others.
- k. Mr. Chen Zhuang: The document mentions Yi, Nushu etc.
- l. Mr. Mike Ksar: As stated, one can use the IDS anyway one pleases. The standard need not formally be extended.
- m. Mr. Michel Suignard: By not adding any restrictions the freedom to use the IDS is there, with the current text, though not formally blessed in the standard.
- n. Dr. Ken Whistler: Regarding document [N3643](#) on IDS sequences - there was a discussion under CD ballot and we have covered it.

Disposition: No further action for WG2.

12.2 Name Stability Issues

Input document:

[3715](#) Proposal to Make Character Stability Normative; USNB; 2009-10-26

Mr. Peter Constable: We all work under the assumption of character names stability - that is stated in the Principles and Procedures document. There is an informative note in the latest CD that hints at it. We propose new wordings in document [N3715](#) to replace clause 7.

Disposition: Accept the new wording for clause 7 to include in FCD of 2nd edition.

Relevant resolution:

M55.13 (Character stability):

Unanimous

WG2 accepts the proposal in document [N3715](#) to make the stability of the names and code points for characters as normative in the second edition of the standard, by replacing the current note under clause 7 with the following paragraph:

"The names and code point allocation of all characters in this coded character set shall remain unchanged in all future editions and amendments of this standard."

13 Publication issues

13.1 On use of fonts from Japan

Output document:

[3733](#) A Letter regarding uses of Japanese fonts; Japan NB; 2009-10-28

Mr. Michel Suignard: In one of the IRG documents [IRG 1591](#), Japan Standards Association is specifically licensing use of fonts for use of 10646. The same document mentions that if other parties such as the Unicode Consortium have to use the font, they need to contact the Japanese organization. I had contacted Mr. Jun Oota, and he had said they will look into it -- but have no response for the last two months. I prefer to get licenses with no restrictions for standards publication both by ISO and Unicode Consortium. This is a great concern if restrictions will prevent publication by both ISO and Unicode. This document is a bit problematic. I have been following the direction in the document so far.

Discussion:

- a. Mr. Masahiro Sekiguchi: I am surprised to know that Mr. Jun Oota has not responded. We actually spoke with Mr. Jun Oota about Unicode Publication use. He is under negotiation on the licensing agreement. At this moment I don't have direct answer. If you want I can arrange for Mr. Jun Oota to communicate with you directly.
- b. Mr. Michel Suignard: The terms I am asking for on behalf of Unicode Consortium are exactly the same as what was granted to SC2 in document [IRG N1591](#). There is no need for complicated negotiation here.
- c. Mr. Masahiro Sekiguchi: SC2 and Unicode Consortium are different. We have permission to publish the ISO/IEC charts. We see no problems in using the code charts produced for ISO charts, also for Unicode publication. If it is for publishing anything other than the code charts you may need to negotiate separate license. We need the first license for using the charts for both 10646 and Unicode. Doing more than that we may need to negotiate further.
- d. Mr. Michel Suignard: I would like to see something in writing clarifying that we can reuse the charts in both standards.
- e. Mr. Peter Constable: This is one of the issues that I have raised in my liaison report from Unicode.
- f. Mr. Mike Ksar: I invite Japanese national body to give a document clarifying the above.
- g. Mr. Masahiro Sekiguchi: I will try -- if not you can have an action item on Japan.

Document [N3733](#) regarding use of fonts by 10646 and Unicode was prepared and submitted.

Mr. Masahiro Sekiguchi: Document [N3733](#) is a response to the request made on Japan. This clarifies that the code chart prepared by using the fonts supplied by Japan can be used by Unicode consortium for chart production.

Relevant resolution:

M55.31 (Clarification on use of Fonts from Japan):

Unanimous

WG2 notes the clarification from the Japanese national body in document [N3733](#) on the use of Japanese fonts for the production of code charts for ISO/IEC 10646 as well as the Unicode Standard.

13.2 CJK Extension A font from TCA

Mr. Michel Suignard: I need to get the fonts for CJK Ext. A in the BMP for the T-sources and would like to know when we can get them to produce the charts.

Discussion:

- a. Mr. Bear Tseng: I need to check with Selena - may be I can give response next week.
- b. Mr. Mike Ksar: Every meeting we have been postponing. TCA should have supplied the font already.
- c. Mr. Lu Qin: The education ministry in Taiwan is reviewing all the T-source entries. The font is ready - but there are some issues. The ministry of education is trying to change some of the mappings. I have told them that it will cause problems. In principle if there is an error in mapping they have to add another character or find a different mapping. The corrections they are trying to do are for commonly used characters. Example - of a character associated with water.
- d. Mr. Michel Suignard: I am using Ming-yu font right now. We are not talking about obscure characters - the ones that are used today. If I don't get the correct font the FCD will still have the older glyphs.
- e. Dr. Lu Qin: I suggest you continue using Ming-Yu font. There are minor glyph changes - but they are the same characters. Some are mapping changes.
- f. Mr. Michel Suignard: Japan has reported differences with the 1993 publication. The situation is not right. If changes are required you cannot do in the CD and will need to be entertained in an Amendment. Why can't I get the latest reviewed version of the font?
- g. Dr. Lu Qin: The project is supposed to end by 15 November. In principle you would like to use the new font.
- h. Mr. Mike Ksar: We cannot wait till then. I need to know when the fonts will be delivered.
- i. Mr. Bear Tseng: I will try to push the person in charge to get the font delivered by next week. I am not sure if the font is 100% correct.
- j. Mr. Mike Ksar: Whatever you have - it need not be 100% correct -- send the fonts to the editor by end of next week.
- k. Dr. Lu Qin: TCA should be requested to identify explicitly any mapping changes.
- l. Mr. Martin Hosken: One of the issues related to the font is that the latest version should be made available to the editor. If the final version is available later it should be sent to the editor.
- m. Mr. Michel Suignard: I need the font as close as possible to the final version to produce the charts so that the IRG can review the close to final version. IRG can bring forward further review comments on any corrections needed. The T-source must be mostly right. There is no point in IRG members reviewing the Ming-Yu font.
- n. Mr. Masahiro Sekiguchi: I have a great concern about what will happen after the FCD ballot. Some of the TCA font glyphs may not be correct. It would mean that the FCD ballot charts will contain errors. During the FCD ballot some national bodies may bring out errors. If the fonts change again any errors in the final charts may get into the standard and national bodies like Japan will have to vote against. I want the FCD charts be reviewed by experts - IRG or others. I don't want the TCA fonts to be sent to the editor directly without experts reviewing the glyphs before it gets into the FCD.
- o. Mr. Mike Ksar: I understand your concerns. How can we solve the problem?
- p. Mr. Bear Tseng: Some characters have changed between older version of CNS and the newer one. I need to find out how to accommodate the differences -- they have been working for the last 7 or 8 months. May be some characters need to change the mapping -- or just minor glyph differences. If it is only a T-source character, we can change the glyph alone. We need time to do it. I can give you the font we have -- but it can have errors.
- q. Mr. Masahiro Sekiguchi: I will not object to any glyph changes. If it is a minor change it should be OK. Please be very careful while making the changes.
- r. Mr. Bear Tseng: A stroke change may be considered minor. If the character cannot be unified it will be a problem. This would mean a new code point in the CNS standard and new mapping etc.
- s. Dr. Lu Qin: The issue here is that the CNS standard revision is being reviewed. Some of the changes lead to mapping changes to UCS. These are serious.
- t. Mr. Michel Suignard: How many of these are we talking about?
- u. Mr. Bear Tseng: Around a 1000 for unifiable ones -- no more than 100 for the other kind. I don't have the exact numbers.

- v. Mr. Mike Ksar: Japan has suggested that all changes should be reviewed by IRG. IRG meets end of next month. The suggestion is to put these in the FCD charts only after the review.
- w. Dr. Lu Qin: The document has to be printed - multicolumn charts. I can have the IRG members to have a preview before the IRG meeting. At the next meeting I can use most of the meeting time to review the charts -- I have no confidence that the final review could be done at the meeting. Since I have not seen the charts for review, I don't know the size of the problem.
- x. Mr. Michel Suignard: The original plan was to publish what we had in 2003 version for the T-source. Is there any sense in going ahead with that plan or not?
- y. Mr. Bear Tseng: There is no 2003 true type font.
- z. Mr. Masahiro Sekiguchi: I want to comment on the way IRG reviews the font. IRG first distributes the charts to the member editors. The editors provide the comments. The list is compiled and each of the member editors cross check the comments and they meet at IRG to arrive at a consensus on the final recommendation. With that two step cycle of reviews I don't think that we can get the job done by the next IRG meeting.
- aa. Dr. Ken Whistler: Looks like we have fallen into a procedural black hole. I suggest that editor proceeds with Ming Yu font for the T sources with a clear notification that these charts will be updated with the finally reviewed and approved font. A corrigendum can be issued at a later date. The FCD can proceed knowing well that the T source glyphs will be updated after full review by IRG. We can let the CNS and IRG reviews to proceed at their pace.
- bb. Mr. Michel Suignard: That is one solution. The standard could be republished / a corrigendum is issued. The other option will be to delay the balloting by one cycle.
- cc. Dr. Ken Whistler: On behalf of US I will not support that delay - it raises other problems related to synchronization with Unicode 6.0 etc. No matter which font is used -- Ming Yu or the latest TCA font, we will be proceeding with the full knowledge that a corrigendum will be needed for the T Column.
- dd. Mr. Mike Ksar: Sounds like it is workable.
- ee. Mr. Masahiro Sekiguchi: I don't like the idea of assuming that a corrigendum will be needed. I would like to amend the proposal by Dr. Ken Whistler. First produce the charts and send to IRG; and as soon as the updated fonts are available editor can create a new set of charts and get that reviewed in parallel with IRG. IRG meets 21 June 2010.
- ff. Dr. Ken Whistler: The FCD ballot can proceed with whatever fonts are available. The proposal is to create a separate parallel review process to get the T Column finalized.
- gg. Mr. Mike Ksar: The FDIS ballot will not go ahead without the finally IRG-approved T-column.
- hh. Dr. Lu Qin: The suggestion is to use the Ming-Yu font to progress the code charts for the FCD. TCA will have finished the work by IRG meeting and identify the changes needed ... IRG can review the charts produced using the updated font from TCA.
- ii. Mr. Michel Suignard: TCA still has to send me the font so that I can produce the multi-column charts for IRG review.

Disposition:

TCA is to send the latest set of fonts for T-sources in CJK ideographs in the BMP. The editor will continue using the currently available fonts to produce the charts for the FCD ballot. The editor will produce the charts using the updated font for IRG to review. IRG will review the new charts and work with TCA to update and finalize the fonts to be used for FDIS charts.

Relevant resolution:

M55.16 (Fonts for T-source from TCA for the second edition): **Unanimous**

WG2 requests TCA to provide the needed revised fonts urgently for the T-sources in the unified CJK multiple column charts to the project editor (the editor will continue to use the currently available fonts for production of FCD charts). TCA is further requested to classify the differences in glyphs into minor glyph changes versus mapping changes, and to inform the project editor, IRG rapporteur and the WG2 convener of any mapping related issues that need review and recommendations to WG2.

14 Liaison reports

Input documents:

- [3708](#) Liaison report from UC Berkeley (Script Encoding Initiative); SEI – Debbie Anderson; 2009-10-18
- [3714](#) Unicode Liaison Report; Unicode Consortium – Peter Constable; 2009-10-26

There was neither introduction of the documents nor any discussion on these reports. They are FYI for WG2 delegates.

15 Other business

15.1 Future meetings

- Meeting 56 – 19-23 April Spring 2010, CA, U.S. (pending confirmation)
The US will host the meeting. It will be in San Jose, CA, UA. Further information about the meeting will be circulated as soon it is available.
- Meeting 57 – Fall 2010, R.O. Korea (pending confirmation of location)
4 to 8 October 2010 in Busan.
- Meeting 58 – Spring 2011, Helsinki, Finland, with SC2 plenary (pending)
11-15 April 2011 in Helsinki.
- Meeting 59 – Fall 2011, Mountain View, CA, USA (pending)

Relevant resolution:

M55.37 (Future meetings):

Unanimous

WG2 endorses the following schedule for future meetings of WG2 and of IRG:

WG 2 meetings:

Meeting 56 - 2010-04-19/23, San Jose, CA, USA

Meeting 57 - 2010-10-04/08, Busan, Korea (Republic of)

Meeting 58 - 2011-04-11/15, Helsinki, Finland (along with SC2 plenary)

Meeting 59 - Fall 2011, Mountain View, CA, USA (pending confirmation), Germany (as backup)

IRG meetings:

IRG 34 - 2010-06-21/25, Nagaoka, Japan

16 Closing

16.1 Approval of resolutions of meeting 55

Output document:

[3704](#) Reserved for Resolutions meeting 55; Ksar; 2009-10-30

Draft resolutions prepared by the recording secretary with the help of the drafting committee were reviewed and adopted with changes as identified during the review. Approved resolutions are in document [N3704](#).

A revision of the resolutions correcting some counts of characters was posted on 2009-11-04. The updated character counts at the end of the meeting M55 are:

Character count 107292(till end of Amd. 6)

Addition of 225 in FDAM7

Addition of 1864 in FPDAM8

Character count 109381 in CD of 2nd edition (till end of FPDAM8)

Total count: 109381 (after meeting M55)

Addition of 323 for WD of next Amd.

Appreciation

Relevant resolutions:

M55.38 (Appreciation to DKUUG for web site support):

By Acclamation

WG 2 thanks DKUUG and its staff for its continued support of the web site for WG 2 document distribution and the e-mail server.

M55.39 (Appreciation to Host):

By Acclamation

WG 2 thanks the Japanese national body, JISC, for hosting the meeting, ITSCJ and its staff, in particular Ms. Toshiko Kimura, for providing excellent meeting facilities, and Messrs. Masahiro Sekiguchi, Satoshi Yamamoto and ITSCJ for the kind hospitality.

16.2 Adjournment

The meeting was adjourned around 12:00h.

17 Action items

All the action items recorded in the minutes of the previous meetings from M25 to M47, M49, M50 and M53 have been either completed or dropped. Status of outstanding action items from previous meetings M48, M51, M52, M54, and new action items from the last meeting M55 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 N[1203](#))

Meeting 28, 1995-06-22/26, Helsinki, Finland (document N[1253](#))

Meeting 29, 1995-11-06/10, Tokyo, Japan (document N[1303](#))

Meeting 30, 1996-04-22/26, Copenhagen, Denmark (document N[1353](#))

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 N)
 Meeting 53, 2008-10-13/17, Hong Kong SAR (document N3453)
 Meeting 54, 2009-04-20/24, Dublin, Ireland (document N3603)
 Meeting 55, 2009-10-26/30, Tokyo, Japan (document N3703) (this document)

17.1 Outstanding action items from meeting 48, 2006-04-24/27, Mountain View, CA, USA

Item	Assigned to / action (Reference resolutions in document N3104, and unconfirmed minutes in document N3103 for meeting 48 - with any corrections noted in section 3 of in the minutes of meeting 49 in document N3153).	Status
AI-48-7	US national body (Ms. Deborah Anderson)	
b.	To prepare updated Arabic Math proposal(s) based on documents N3085 to N3089. M48, M49, M50, M51, M52, M53, M54 and M55 - in progress.	

17.2 Outstanding action items from meeting 51, 2007-09-17/21, Hangzhou, China

Item	Assigned to / action (Reference resolutions in document N3354, and unconfirmed minutes in document N3353 for meeting 51 – with any corrections noted in section 3 in the minutes of meeting 52 in document N3454).	Status
AI-51-4	IRG Convenor and IRG Editor (Dr. Lu Qin)	
	To act on the resolution below.	
c.	M51.38 (IRG ideographs for Names): With reference to item 8 in document N3283, WG2 endorses the IRG activity to investigate and report back to WG2 on the issues and recommendations on ideographs for names of persons, places and the like. M52, M53, M54 and M55 - in progress.	

17.3 Outstanding action items from meeting 52, 2008-04-21/25, Redmond, WA, USA

Item	Assigned to / action (Reference resolutions in document N3454, and unconfirmed minutes in document N3453 for meeting 52 - with any corrections noted in section 3 in the minutes of meeting 53 in document N3553)	Status
AI-52-7	Ireland (Mr. Michael Everson)	
	To take note of and act upon the following items.	
a.	M52.5 (Principles for Dandas): WG2 adopts the principles guiding the encoding of Dandas in Brahmic scripts from document N3457, and instructs its ad hoc group on P&P to incorporate these into its document on Principles and Procedures (along with the additions from resolution M52.4 above). WG2 further invites the Irish national body to investigate and report on the current practice on use of currently encoded Dandas in relevant scripts towards finalizing the list of scripts and their corresponding Dandas. M53, M54 and M55 – in progress.	

17.4 Outstanding action items from meeting 54, 2009-04-20/24, Dublin, Ireland

Item	Assigned to / action (Reference resolutions in document N3604, and unconfirmed minutes in document N3603 for meeting 54, – with any corrections noted in section 3 in the minutes of meeting 55 in document N3703)	Status
AI-54-4	IRG Convenor and IRG Editor (Dr. Lu Qin)	
	To take note of and act upon the following items:	

a.	M54.20 (IRG Principles and Procedures): WG2 takes note of the IRG Principles and Procedures in document N3562 , and invites all national bodies and liaison organizations to review and provide feedback to the IRG rapporteur by 2009-05-15 in time for the next IRG meeting. M55 - in progress.	
AI-54-7	China (Mr. Chen Zhuang)	
	<i>To take note of and act upon the following items:</i>	
a.	M54.18 (Nüshu script): WG2 accepts the ad hoc report in document N3635 on Nüshu script and invites the Chinese national body to provide a revised contribution by 2009-07-31, including considerations for items in the ad hoc report. M55 - in progress.	
b.	M54.19 (Jurchen script): WG2 accepts the ad hoc report in document N3639 on Jurchen script and invites the Chinese national body to provide a revised contribution, including considerations for items in the ad hoc report. M55 - in progress.	
AI-54-8	Germany (Mr. Karl Pentzlin)	
	<i>To take note of and act upon the following items:</i>	
a.	Invited to submit a revised proposal on Florin currency symbol (see document N3588) taking into consideration discussion at meeting M54. M55 - in progress.	
c.	Invited to revised proposal for Yeru characters (see document N3581) taking into consideration discussion at meeting M54.	
AI-54-9	All national bodies and liaison organizations	
	<i>To take note of and provide feedback on the following items.</i>	
g.	To review and feedback the following proposals for consideration at the next meeting M54: <ul style="list-style-type: none"> - Naxi Dongba pictographs in documents N3425, N3442 and N3543 - Old Yi script in document N3288 - Germanicist, Nordicist, and other phonetic characters in document N3555 - Khojki script in document N3596 - Mro script in document N3589. M55 - in progress.	

17.5 New action items from meeting 55, 2009-10-26/30, Tokyo, Japan

Item	Assigned to / action (Reference resolutions in document N3704 , and unconfirmed minutes in document N3703 for meeting 55, this document you are reading).	Status
AI-55-1	Recording Secretary - Dr. V.S. UMaaheswaran	
a.	To finalize the document N3704 containing the adopted meeting resolutions and send it to the convener as soon as possible.	Completed; see document N3704 .
b.	To finalize the document N3703 containing the unconfirmed meeting minutes and send it to the convener as soon as possible.	Completed; see document N3703 .
AI-55-2	Convener - Mr. Mike Ksar	
	<i>To take note of and act upon the following items:</i>	
a.	<i>M55.18 (Missing documents for Korean source references K2 to K5):</i> WG2 requests the convener and the Korean national body to search the WG2 document archives for the missing source reference documents PKS C5700-1 1994, PKS C5700-2 1994, PKS 5700-3 1998 and Korean IRG Hanja Character Set 5th edition 2001 and make it available for IRG archives and reference.	
b.	<i>M55.30 (IRG rapporteur):</i> WG2 re-nominates Dr. Lu Qin as the rapporteur of IRG and instructs its convener to request SC2 to confirm the appointment.	Completed at SC2 plenray on 2009-10-30.
c.	<i>M55.32 (Letter to SC6):</i> WG2 endorses document N3732 addressed to JTC 1/SC 6, and instructs its convener to send it to the SC2 secretariat for forwarding to SC6.	Completed at SC2 plenray on 2009-10-30.
d.	<i>M55.33 (Letter to ISO DEVCO members):</i> WG2 endorses the letter addressed to ISO DEVCO in document N3724 , nominates Dr. Deborah Anderson as the SC2 representative, and instructs its convener to send it to the SC2 secretariat for endorsing and forwarding to ISO DEVCO.	Completed at SC2 plenray on 2009-10-30.
e.	<i>M55.36 (Roadmap snapshot):</i> WG2 instructs its convener to post the updated snapshot of the roadmaps (in document N3652) to the WG2 web site and communicate the same to SC2 secretariat.	Completed.

f.	<p>To carry forward the following documents to next meeting agenda:</p> <ul style="list-style-type: none"> • Manichaeian script (N3644) • Rañjana script (N3649) • Pahawh Hmong script (N3667) • Warang Citi script (N3668) • Jurchen script (N3688, N3696 and N3720) • Obsolete Simplified Chinese characters (N3695, N3721) • Hentaigana characters (N3698) • Nushu script (N3705, N3719) • Hungarian related (N3664, N3670 and N3697) 	Completed. See document N3805-A. (? Hungarian)
AI-55-3 Editor of ISO/IEC 10646: (Mr. Michel Suignard with assistance from contributing editors)		
<i>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:</i>		
a.	M55.1 (Progression of Amendment 7): WG2 instructs its project editor to forward the final text of Amendment 7 along with the disposition of comments document N3717 to the SC2 secretariat for an FDAM ballot. The final set of charts and names lists are in document N3718. The unchanged target starting date for FDAM is 2009-11.	Completed. See documents N3717, N3718, and N3737 (FDAM).
b.	M55.2 (Named sequence for Khinya): WG2 accepts the named UCS sequence identifier for inclusion in Amendment 8 BENGALI LETTER KHINYA <0995, 09CD, 09B7> based on the request in document N3729.	Completed; included in document N3723.
c.	M55.3 (Regional indicator symbols): With reference to documents N3726 and N3727, WG2 accepts 26 symbols for inclusion in Amendment 8 at code positions 1F1E6 to 1F1FF, in the Enclosed Alphanumeric Supplement block in the SMP, with their names and glyphs as shown in document N3727.	Completed; included in document N3723.
d.	M55.4 (Latin letters for pre-1921 Latvian): With reference to document N3587, WG2 accepts 10 additional Latin characters for inclusion in Amendment 8 at code positions A7A0 to A7A9 in the Latin Extended-D block in the BMP, for pre-1921 Latvian orthography with their code positions, names and glyphs from document N3587.	Completed; included in document N3723.
e.	M55.5 (Clock-face and other symbols): Based on Irish comment T11 on PDAM8 and the Emoji ad hoc report in document N3726, WG2 accepts the following 13 additional Miscellaneous Pictographic Symbols for inclusion in Amendment 8: 1F504 ANTICLOCKWISE DOWNWARDS AND UPWARDS OPEN CIRCLE ARROWS 1F55C CLOCK FACE ONE-THIRTY 1F55D CLOCK FACE TWO-THIRTY 1F55E CLOCK FACE THREE-THIRTY 1F55F CLOCK FACE FOUR-THIRTY 1F560 CLOCK FACE FIVE-THIRTY 1F561 CLOCK FACE SIX-THIRTY 1F562 CLOCK FACE SEVEN-THIRTY 1F563 CLOCK FACE EIGHT-THIRTY 1F564 CLOCK FACE NINE-THIRTY 1F565 CLOCK FACE TEN-THIRTY 1F566 CLOCK FACE ELEVEN-THIRTY 1F567 CLOCK FACE TWELVE-THIRTY with their glyphs as shown in document N3723.	Completed; included in document N3723.
f.	M55.6 (Enclosed Alphanumeric Supplement): With reference to document N3671, WG2 accepts 66 additional enclosed Latin alphabetic characters for inclusion in Amendment 8, at code positions 1F130, 1F132 to 1F13C, 1F13E, 1F140, 1F141, 1F143 to 1F145, 1F147 to 1F149, 1F14F to 1F156, 1F158 to 1F15E, 1F160 to 1F169, 1F172 to 1F178, 1F17A, 1F17D, 1F180 to 1F189 and 1F18F, in the Enclosed Alphanumeric Supplement block in the SMP, with their names and glyphs as shown in document N3723.	Completed; included in document N3723.
g.	M55.7 (Devanagari additions for Kashmiri): With reference to document N3731 (result of ad hoc deliberations on Devanagari character additions for Kashmiri), WG2 accepts for inclusion in Amendment 8, 10 additional characters at code positions 093A, 093B, 094F, 0956, 0957, and 0973 to 0977 in the Devanagari block in the BMP, with their code positions, names and glyphs as shown on pages 3 and 4 in document N3731.	Completed; included in document N3723.

h.	<p><i>M55.8 (Arabic additions for Kashmiri)</i>: With reference to document N3673, WG2 accepts the following 2 additional Arabic characters for inclusion in Amendment 8:</p> <ul style="list-style-type: none"> - 0620 ARABIC LETTER KASHMIRI YEH (with its glyph as shown for entry 187 for PASCII) - 065F ARABIC WAVY HAMZA BELOW (with its glyph as shown at the end of page 2 in the document) 	Completed; included in document N3723.
i.	<p><i>M55.9 (Miscellaneous character additions for Amd. 8)</i>: WG2 accepts the following additions and deletions of characters for inclusion in Amendment 8:</p> <p>a. 4 Pentagon characters based on Irish comment T.1 on PDAM8 in the Miscellaneous Symbols block:</p> <ul style="list-style-type: none"> 26E4 PENTAGRAM 26E5 RIGHT-HANDED INTERLACED PENTAGRAM 26E6 LEFT-HANDED INTERLACED PENTAGRAM 26E7 INVERTED PENTAGRAM <p>with their glyphs and code positions as shown in document N3723.</p> <p>b. 2 Mathematical Symbols at code positions 27CE and 27CF as shown on the last page of document N3677. (<i>M55.9 - Continued from previous row</i>)</p> <p>c. 1 character - 0D4E MALAYALAM LETTER DOT REPH, with its glyph as shown under item E in document N3676, based on US comment T.1 on PDAM8.</p> <p>d. 2 Batak characters from Irish comment T.2 on PDAM8 at code positions 1BFA and 1BFB with their names and glyphs as shown in document N3723.</p> <p>e. 3 characters, based on German comment T2 and Irish comment T.6 on PDAM8:</p> <ul style="list-style-type: none"> 1F30D EARTH GLOBE EUROPE-AFRICA 1F30E EARTH GLOBE AMERICAS 1F310 GLOBE WITH MERIDIANS <p>with their glyphs as shown in document N3723. (<i>M55.9 - Continued from previous row</i>)</p> <p>f. Based on German comment T.16 on PDAM8 and the Emoji ad hoc report in document N3726, Delete the following 2 symbols: 1F4EB MAILBOX, 1F4EC MAILBOX WITH RAISED FLAG Add the following 4 symbols: 1F4EA CLOSED MAILBOX WITH LOWERED FLAG 1F4EB CLOSED MAILBOX WITH RAISED FLAG 1F4EC OPEN MAILBOX WITH RAISED FLAG, and 1F4ED OPEN MAILBOX WITH LOWERED FLAG with their glyphs as shown on page 47 in document N3723.</p> <p>g. 1 character based on Irish comment T1 and US comment T.2 on PDAM8: 26E2 ASTRONOMICAL SYMBOL FOR URANUS with its glyph as shown in document N3672. (<i>M55.9 - Continued from previous row</i>)</p> <p>h. 1 character based on Irish comment T.2 on PDAM8 27BF DOUBLE CURLY LOOP its glyph as shown in document N3723.</p> <p>i. 4 Miscellaneous Pictographic Symbols based on Irish comment T8 and the UK comment T.1 on PDAM8, and the Emoji ad hoc report in document N3726:</p> <ul style="list-style-type: none"> 1F42A DROMEDARY CAMEL 1F46C TWO MEN HOLDING HANDS 1F46D TWO WOMEN HOLDING HANDS 1F4B7 BANKNOTE WITH POUND SIGN <p>With their glyphs as shown in document N3723.</p>	Completed; included in document N3723.

	<p>(M55.9 - Continued from previous row)</p> <p>j 1 Emoticon symbol - 1F629 FACE WITHOUT MOUTH - based on Irish comment T14 and the Emoji ad hoc report in document N3726:</p> <p>k 1 Transport and Map symbol - 1F6C1 BATHTUB - based on Irish comment T16 and the Emoji ad hoc report in document N3726:</p> <p>l Delete 1 CJK Extension D ideograph at 2B779 and move the following Extension D ideographs up by one position, and correct the J-column glyph for CJK Extension D ideograph 2B7EB, based on Japan comment T2 on PDAM8.</p> <p><i>Note: Some of these additions have caused movement of other characters in the Amendment.</i></p>	
j.	<p><i>M55.10 (Progression of Amendment 8):</i> WG2 notes and accepts various name changes, glyph changes and changes to code positions of characters resulting from the disposition of PDAM8 ballot comments. The mapping information for Emoji symbols in document N3728 (<i>revised to use the final FPDAM8 code point allocations</i>) is also accepted.</p> <p>WG2 instructs its project editor to forward the final text of Amendment 8, including all the additions and deletions mentioned in resolutions <i>M55.2 to M55.9</i> above, along with the disposition of comments document N3722 to the SC2 secretariat for an FPDAM ballot. The final set of charts and names list are in document N3723. The unchanged target starting dates are FPDAM 2009-12, and FDAM 2010-06.</p>	Completed; see documents N3722 , N3723 , and N3738 (FPDAM8).
k.	<p><i>M55.11 (Multilingual Latin Subset):</i> WG2 accepts the proposed subset of Latin characters in document N3685 as collection number 288 named Multilingual Latin Subset (changed from the name in the proposal) for inclusion in the next edition of the standard.</p>	Completed; included in FCD text.
l.	<p><i>M55.12 (Annex S revision):</i> WG2 accepts the changes to Annex S proposed by the IRG in document N3661 for inclusion in the next edition of the standard.</p>	Completed; included in FCD text.
m.	<p><i>M55.13 (Character stability):</i> WG2 accepts the proposal in document N3715 to make the stability of the names and code points for characters as normative in the second edition of the standard, by replacing the current note under clause 7 with the following paragraph:</p> <p>"The names and code point allocation of all characters in this coded character set shall remain unchanged in all future editions and amendments of this standard."</p>	Completed; included in FCD text.
n.	<p><i>M55.14 (Progression of CD of 2nd edition):</i> WG2 instructs its project editor to forward the final text of second edition of the standard, including the changes from resolutions <i>M55.11 to M55.13</i> above, along with the disposition of comments document <i>N</i> to the SC2 secretariat for an FCD ballot. The revised target starting dates are: FCD: 2009-12 and FDIS: 2010-07.</p>	Completed; see documents N3716 and N3739 (link to FCD text).
o.	<p><i>M55.15 (Change in the title of the next edition of the standard):</i> WG2 approves the change in the title of the next edition of the standard to:</p> <p>"Information technology – Universal Coded Character Set (UCS)"</p> <p>removing the words multiple-octet from the title of the current edition.</p> <p>WG2 further instructs its convener to inform SC2 to endorse this change and get approvals from JTC1 and ITTF if needed.</p>	Noted; reflected in FCD.
p.	<p><i>M55.22 (Sundanese additions):</i> With reference to document N3666, WG2 accepts to:</p> <ul style="list-style-type: none"> - add 9 characters in code positions 1BAB to 1BAD and 1BBA to 1BBF in the existing Sundanese block, and, - create a new block named Sundanese Supplement in the range 1CC0 to 1CCF in the BMP, and populate it with 8 characters in code positions 1CC0 to 1CC7 <p>with their code positions, names and glyphs from pages 6 to 8 in document N3666.</p>	Completed; see document N3735 .
q.	<p><i>M55.23 (Meetei Mayek extensions):</i> With reference to document N3478, WG2 accepts to create a new block named Meetei Mayek Extensions in the range AAE0 to AAF6 in the BMP, and populate it with the 23 characters in code positions AAE0 to hAAF6, with their code positions, names and glyphs as shown on the last page of document N3478. It contains some combining marks.</p>	Completed; see document N3735 .

r.	<i>M55.24 (Sora Sompeng script)</i> : With reference to document N3647, WG2 accepts to create a new block named Sora Sompeng in the range 110D0 to 110FF in the SMP, and populate it with 35 characters in code positions 110D0 to 110E8 and 110F0 to 110F9, with their code positions, names and glyphs as shown on the last page of document N3647.	Completed; see document N3735.
s.	<i>M55.25 (Meroitic script)</i> : With reference to document N3665, WG2 accepts to <ul style="list-style-type: none"> - create a new block named Meroitic Hieroglyphs (changed from proposed block name) in the range 10980 to 1099F in the SMP and populate it with 32 characters in code positions 10980 to 1099F - create another new block named Meroitic Cursive in the range 109A0 to 109FF in the SMP, and populate it with 66 characters, in code positions 109A0 to 109B7, 109BE to 109CA, 109CC to 109D9, 109DB, 109DC, 109DE to 109E5, 109E7 to 109E9, 109EB and 109F0 with their code positions, names and glyphs as shown in the charts and names lists in document N3665. This is a right-to-left script.	Completed; see document N3735.
t.	<i>M55.26 (Chakma script)</i> : With reference to document N3645, WG2 accepts to create a new block named Chakma in the range 11100 to 1114F in the SMP, and populate it with 67 characters in code positions 11100 to 11134, and 11136 to 11143 with their code positions, names and glyphs as shown in the charts in document N3645. It contains some combining marks.	Completed; see document N3735.
u.	<i>M55.27 (Sharada script)</i> : With reference to document N3595, WG2 accepts to create a new block named Sharada in the range 11180 to 111DF in the SMP, and populate it with 83 characters in code positions 11180 to 111D9 with their code positions, names and glyphs as shown on pages 4 and 5 in document N3595.	Completed; see document N3735.
v.	<i>M55.28 (Working draft of future amendment)</i> : WG2 instructs its project editor to create a Working Draft of accepted characters and charts covering resolutions <i>M55.22 to M55.27 above for the next WG2 meeting in 2010-04.</i>	Completed; see document N3735.
AI-55-4 IRG Convener and IRG Editor (Dr. Lu Qin)		
<i>To take note of and act upon the following items:</i>		
a.	<i>M55.17 (Unified CJK Charts for 2nd edition)</i> : WG2 notes that the glyphs for the TCA source for the unified CJK multiple column charts need finalization based on correct fonts being made available to the project editor. There are also missing or incorrect glyphs for other sources. WG2 instructs its project editor to produce the CJK charts of the 2nd edition with fonts to be provided by IRG members and send to the IRG rapporteur. The IRG is instructed to review and correct any errors in the glyphs for the various sources and report back to the project editor, with the objective of replacing the current CJK charts with the verified version in the FDIS (2010-07) of the second edition.	
b.	<i>M55.19 (Unification/mapping concerns reported by Korea)</i> : WG2 requests the IRG to review the ballot comments T19 and T20 on the CD of second edition from Korea (Republic of) in document N3716 and recommend any action to be taken by WG2 to resolve the unification and mapping concerns before the next WG2 meeting in 2010-04.	
c.	<i>M55.20 (Missing source references for CJK Extensions A and B)</i> : With reference to the discussion on comment JP9 in document N3716 (disposition of CD ballot comments), IRG is instructed to review and provide to the project editor all the missing indices in source references for unified CJK ideographs, specifically Extensions A and B before the next WG2 meeting in 2010-04.	
d.	<i>M55.21 (Code points for ideographs in Annex S)</i> : IRG is instructed to review Annex S of the second edition and provide to the project editor the code point values for all the encoded ideographs that appear in the various examples, with the objective of replacing the images with actual characters for these ideographs in the Annex before the next WG2 meeting in 2010-04.	
AI-55-5 Ad hoc group on Principles and Procedures (Dr. Umamaheswaran)		
a.	<i>M55.35 (Updates to Principles and Procedures)</i> : WG2 accepts <ul style="list-style-type: none"> - the proposed additions (with minor edits) to the Principles and Procedures from document N3675, and, - the proposed rewording of questions 5a and 5b related to fonts in the proposal summary form from document N3709 and instructs Dr. Umamaheswaran to prepare an updated principles and procedures document (N3702) and submit it to the convener to post to the WG2 web site and communicate to SC2 secretariat.	Completed; see document N3702.
AI-55-6 Ad hoc group on roadmap (Mr. Michael Everson)		

a.	To update the roadmaps reflecting changes to block allocations, status of various scripts and reference documents through the various resolutions at this meeting 55.	Completed.; on Unicode website roadmap pages.
b.	The roadmap ad hoc is to take note of document N3692 on scripts of Nepal and update the roadmaps appropriately.	Noted.
AI-55-7	Ireland (Mr. Michael Everson)	
a.	<i>M55.29 (Miao script)</i> : WG2 accepts the ad hoc report in document N3730 on Miao script and invites the national bodies of China, Ireland and UK, to provide a revised contribution, following the principles detailed in the ad hoc report.	
AI-55-8	China (Mr. Chen Zhuang)	
	<i>To take note of and act upon the following items:</i>	
a.	<i>M55.29 (Miao script)</i> : WG2 accepts the ad hoc report in document N3730 on Miao script and invites the national bodies of China, Ireland and UK, to provide a revised contribution, following the principles detailed in the ad hoc report.	
AI-55-9	UK (Mr. Martin Hosken)	
	<i>To take note of and act upon the following items:</i>	
a.	<i>M55.29 (Miao script)</i> : WG2 accepts the ad hoc report in document N3730 on Miao script and invites the national bodies of China, Ireland and UK, to provide a revised contribution, following the principles detailed in the ad hoc report.	
AI-55-10	TCA (Mr. Bear Tseng)	
	<i>To take note of and act upon the following items:</i>	
a.	<i>M55.16 (Fonts for T-source from TCA for the second edition)</i> : WG2 requests TCA to provide the needed revised fonts urgently for the T-sources in the unified CJK multiple column charts to the project editor (the editor will continue to use the currently available fonts for production of FCD charts). TCA is further requested to classify the differences in glyphs into minor glyph changes versus mapping changes, and to inform the project editor, IRG rapporteur and the WG2 convener of any mapping related issues that need review and recommendations to WG2.	
AI-55-11	Greek national body	
	<i>To take note of the following item:</i>	
a.	With reference to ballot comments from Greece in document N3684-GR , to take note of the discussion on PDAM8 disposition of comments in document N3703 , and in particular to the referenced source document N2642 , and is invited to contribute to the annotations for the four greek characters.	
AI-55-12	All national bodies and liaison organizations	
	<i>To take note of and provide feedback on the following items.</i>	
a.	<i>M55.15 (Change in the title of the next edition of the standard)</i> : WG2 approves the change in the title of the next edition of the standard to: "Information technology – Universal Coded Character Set (UCS)" removing the words multiple-octet from the title of the current edition. WG2 further instructs its convener to inform SC2 to endorse this change and get approvals from JTC1 and ITTF if needed.	
b.	<i>M55.34 (Compatibility Ideographs for Government Use in Japan)</i> : WG2 notes the decision by the Japanese national body (reported in document N3706) to register Ideographic Variation Sequences in the Ideographic Variation Database, for encoding the compatibility ideographs identified in document N3530 .	
c.	<i>M55.37 (Future meetings)</i> : WG2 endorses the following schedule for future meetings of WG2 and of IRG: WG 2 meetings: Meeting 56 - 2010-04-19/23, San Jose, CA. USA Meeting 57 - 2010-10-04/08, Busan, Korea (Republic of) Meeting 58 - 2011-04-11/15, Helsinki, Finland (along with SC2 plenary) Meeting 59 - Fall 2011, Mountain View, CA, USA (pending confirmation), Germany (as backup) IRG meetings: IRG 34 - 2010-06-21/25, Nagaoka, Japan	

END OF MINUTES DOCUMENT